



Running Contract Details	
Equipment Name	CSSD equipments of turnkey basis Type II
Running Contract Valid Till	10-06-2026
Tender Ref No	KMSCL/EP/T515/581B/2023
Tendered Quantity	30
Supplier Name	M/s Blaze Systems & Services
GST No	32AFPPA3959N1Z2
Installation & Delivery Period	15 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
Kallanchira Bldgs Madappally PO Changanacherry Kottayam - 686 546	Contact Person	Anto Thomas
	Phone	0484-2424311
	Mobile No	9605456624
	Email	bssanto@hotmail.com,info@blazesystems.in

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	<b>CSSD equipments of turnkey basis Type II</b>	0.01 Incl.GST :0%	0	0.01
2	<b>Horizontal Double Door Steam Sterilizer (Rectangular) 400 to 600 Liters.</b> <i>Model &amp; Make : Medister 600x600x1200/Machin Fabrik</i>	3127000 Incl.GST :18%	218890	3345890
3	<b>Horizontal Double Door Steam Sterilizer (Rectangular) 800 to 1000 Liters.</b> <i>Model &amp; Make : Medister 750x750x1500/Machin Fabrik</i>	3363000 Incl.GST :18%	235410	3598410
4	<b>Washer Disinfector</b> <i>Model &amp; Make : WD Dryer 600x600x800/ Machin Fabrik</i>	2301000 Incl.GST :18%	161070	2462070
5	<b>Ultrasonic Cleaner</b>	354000 Incl.GST :18%	24780	378780
6	<b>Table Top Sterilizer</b> <i>Model &amp; Make : SEA 23L-B-LED/ Machin Fabrik branded</i>	259600 Incl.GST :18%	18172	277772
7	<b>Drying Cabinet</b> <i>Model &amp; Make : 600x600x600/Machin Fabrik branded</i>	323320 Incl.GST :18%	22632.4	345952.4

Item-wise Price Details				
8	<b>Sealing Machine</b> <i>Model &amp; Make : SF 150/ Machin Fabrik branded</i>	88500 Incl.GST :18%	6195	94695
9	<b>Gauze Cutting Machine</b> <i>Model &amp; Make : SN 200/Machin Fabrik branded</i>	141600 Incl.GST :18%	9912	151512
10	<b>Wash Stations With 2 Sinks</b> <i>Model &amp; Make : 450x250x70 mm/Blaze Systems</i>	147500 Incl.GST :18%	10325	157825
11	<b>Work Table for Dry &amp; Wet Goods</b> <i>Model &amp; Make : 1500 x 650 x 900 mm./Blaze Systems</i>	78706 Incl.GST :18%	5509.42	84215.42
12	<b>Packing Table with Two shelves</b> <i>Model &amp; Make : 1800 x 800 x 900 mm/Blaze Systems</i>	171100 Incl.GST :18%	11977	183077
13	<b>Linen Inspection Table</b> <i>Model &amp; Make : 2130 x 900 x 950/Blaze Systems</i>	103840 Incl.GST :18%	7268.8	111108.8
14	<b>Closed Transport Trolley</b> <i>Model &amp; Make : 1200 x 750 x 900/Blaze Systems</i>	113280 Incl.GST :18%	7929.6	121209.6
15	<b>Double Column Basket Rack</b> <i>Model &amp; Make : 1200 x 400 x 2100/Blaze Systems</i>	97114 Incl.GST :18%	6797.98	103911.98
16	<b>Mesh Rack</b> <i>Model &amp; Make : 1000 x 500 x 2100 mm/Blaze Systems</i>	84960 Incl.GST :18%	5947.2	90907.2
17	<b>Storage cabinet</b> <i>Model &amp; Make : 1000 x 450 x 1900mm/Blaze Systems</i>	129800 Incl.GST :18%	9086	138886
18	<b>Static Pass Box with electrical interlocking</b> <i>Model &amp; Make : 800 x 600 x 800 mm/Blaze Systems</i>	108914 Incl.GST :18%	7623.98	116537.98
19	<b>Sterilizing Wire Baskets - Big</b> <i>Model &amp; Make : 550 x 350 x 200 mm/Blaze Systems</i>	14160 Incl.GST :18%	991.2	15151.2
20	<b>Sterilizing Wire Baskets - Medium</b> <i>Model &amp; Make : 550 x 350 x 100 mm/Blaze Systems</i>	11800 Incl.GST :18%	826	12626
21	<b>Sterilization Container - Small</b> <i>Model &amp; Make : 300 x 290 x 110 mm/Blaze Systems</i>	11800 Incl.GST :18%	826	12626
22	<b>Sterilization Container - Medium</b> <i>Model &amp; Make : 300 x 290 x 140 mm/Blaze Systems</i>	18644 Incl.GST :18%	1305.08	19949.08
23	<b>Sterilization Container - Large</b> <i>Model &amp; Make : 590 x 280 x 260 mm/Blaze Systems</i>	24308 Incl.GST :18%	1701.56	26009.56
24	<b>Instrument Tray - Small</b> <i>Model &amp; Make : 340x250x70 mm/Blaze Systems</i>	2596 Incl.GST :18%	181.72	2777.72
25	<b>Instrument Tray - Big</b> <i>Model &amp; Make : 450x250x70 mm/Blaze Systems</i>	4602 Incl.GST :18%	322.14	4924.14
26	<b>Stool (SS)</b> <i>Model &amp; Make : Height. 450mm to 680 mm/Blaze Systems</i>	6490 Incl.GST :18%	454.3	6944.3
27	<b>Cladding with service doors for Sterilisers</b>	1150.5 Incl.GST :18%	80.54	1231.04

Item-wise Price Details				
28	<b>Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar (NOT TAKEN FOR EVALUATION)</b>	9440 Incl.GST :18%	660.8	10100.8
29	<b>Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) (NOT TAKEN FOR EVALUATION)</b>	20650 Incl.GST :18%	1445.5	22095.5
30	<b>Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth upto 50 m and lift up to 1.5 m, disposed soil to be levelled and neatly dressed : All kinds of soil (NOT TAKEN FOR EVALUATION)</b>	802.4 Incl.GST :18%	56.17	858.57
31	<b>Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand) (NOT TAKEN FOR EVALUATION)</b>	18880 Incl.GST :18%	1321.6	20201.6
32	<b>50.6.1.2 : Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 ( 1 cement: 6 coarse sand) etc (NOT TAKEN FOR EVALUATION)</b>	16520 Incl.GST :18%	1156.4	17676.4
33	<b>12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand) (NOT TAKEN FOR EVALUATION)</b>	767 Incl.GST :18%	53.69	820.69
34	<b>Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08%and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm (NOT TAKEN FOR EVALUATION)</b>	1911.6 Incl.GST :18%	133.81	2045.41

Item-wise Price Details				
35	<p><b>Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer ) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete. (NOT TAKEN FOR EVALUATION)</b></p>	<p>2006 Incl.GST :18%</p>	140.42	2146.42
36	<p><b>Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron) (NOT TAKEN FOR EVALUATION)</b></p>	<p>1180 Incl.GST :18%</p>	82.6	1262.6
37	<p><b>For shutters of doors, windows &amp; ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately). Powder coated aluminium (minimum thickness of powder coating 50 micron) (NOT TAKEN FOR EVALUATION)</b></p>	<p>118 Incl.GST :18%</p>	8.26	126.26
38	<p><b>Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS:12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides. (NOT TAKEN FOR EVALUATION)</b></p>	<p>1062 Incl.GST :18%</p>	74.34	1136.34

Item-wise Price Details				
39	<b>Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.50 mm thickness (NOT TAKEN FOR EVALUATION)</b>	1416 Incl.GST :18%	99.12	1515.12
40	<b>Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000mm) with double speed adjustment with necessary accessories and screws etc. complete. (NOT TAKEN FOR EVALUATION)</b>	2950 Incl.GST :18%	206.5	3156.5
41	<b>Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete. (NOT TAKEN FOR EVALUATION)</b>	5310 Incl.GST :18%	371.7	5681.7
42	<b>Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete : 125 mm (NOT TAKEN FOR EVALUATION)</b>	295 Incl.GST :18%	20.65	315.65
43	<b>Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete : 250x10 mm (NOT TAKEN FOR EVALUATION)</b>	236 Incl.GST :18%	16.52	252.52
44	<b>Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade : One or more coats on old work (NOT TAKEN FOR EVALUATION)</b>	118 Incl.GST :18%	8.26	126.26
45	<b>Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : One or more coats on old work (NOT TAKEN FOR EVALUATION)</b>	177 Incl.GST :18%	12.39	189.39
46	<b>Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade Old work (Two or more coats applied @ 1.43 ltr/ 10 sqm) over existing cement paint surface. (NOT TAKEN FOR EVALUATION)</b>	283.2 Incl.GST :18%	19.82	303.02

Item-wise Price Details				
47	<b>18.7.3 : Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot &amp; cold water supply, including all CPVC plain &amp; brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes &amp; fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall25 mm nominal outer dia pipes (NOT TAKEN FOR EVALUATION)</b>	531 Incl.GST :18%	37.17	568.17
48	<b>18.7.4 : Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot &amp; cold water supply, including all CPVC plain &amp; brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes &amp; fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall32 mm nominal outer dia pipes (NOT TAKEN FOR EVALUATION)</b>	590 Incl.GST :18%	41.3	631.3
49	<b>18.7.6 : Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot &amp; cold water supply, including all CPVC plain &amp; brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes &amp; fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall50 mm nominal outer dia pipes (NOT TAKEN FOR EVALUATION)</b>	796.5 Incl.GST :18%	55.76	852.26
50	<b>Providing and fixing CPVC moulded fittings/ accessories for CPVC Valves including jointing with solvent cement - 25 mm dia (NOT TAKEN FOR EVALUATION)</b>	1652 Incl.GST :18%	115.64	1767.64
51	<b>Providing and fixing PVC moulded fittings/ accessories for PVC ball Valves including jointing with solvent cement - 32 mm dia (NOT TAKEN FOR EVALUATION)</b>	2360 Incl.GST :18%	165.2	2525.2
52	<b>"Supply, conveyance and fixing the following types &amp; current rated control gears &amp; switchgears conforming to IS 13947 suitable for 440 V, 50 Hz, AC supply in the existing panel assembly as required. 16 A-100A, 25/35 kA (Ics=100%Icu), 4 pole, current limiting type MCCB having thermal setting range of 80 - 100% with thermal magnetic release having adjustable OL (NOT TAKEN FOR EVALUATION)"</b>	131959.4 Incl.GST :18%	9237.16	141196.56

Item-wise Price Details				
53	"Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63 amps (NOT TAKEN FOR EVALUATION)"	7080 Incl.GST :18%	495.6	7575.6
54	"Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 100 amps (NOT TAKEN FOR EVALUATION)"	7080 Incl.GST :18%	495.6	7575.6
55	"Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored aluminum power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 4 core 10 sq mm with factory made clamp (NOT TAKEN FOR EVALUATION)"	4720 Incl.GST :18%	330.4	5050.4
56	"Supply of LT Switch board cubicle type, made out of 2 mm thick CRCA sheet, totally enclosed, IP42, free standing, wall/floor mounting, dust and vermin proof, powder coated, indoor, compartmentalized, suitable for operation on 3 phase and neutral , 415 V, 50Hz AC system with bus-bars extendable on both sides, including all the necessary internal wiring , suitable spreader etc. The panel shall be fabricated from a firm having CPRI certification with test certificates for similar panel(required for short circuit rating, temperature rise and IP classification) and with following switchgears, metering instruments and accessories etc. complete as required as per drawing & specification. RYB indicating lamps LED type 4A SP MCB (0-500) V Class 1 with 90 deg defl. Scale.(0-200)A Class 1 with 90 deg defl. Scale, Voltmeter selector switch 200/5 A 5 VA Class .5S CTs ON/OFF INDICATION LAMP, Digital multi-function meter to read V,A.Hz,PF,Kwh, Incomer 200A FP Molded Case Circuit Breaker with thermal release with OL and SC protection neutral link (Ics =100%Icu= 25kA) -1 No's 200A Copper TPN busbar chamber with Copper busbar. Out Goings 100 A FP Molded Case Circuit Breaker with Microprocessor based release with OL and SC protection neutral link (Ics =100%Icu= 25kA) - 3 No's 63 A FP Molded Case Circuit Breaker with Microprocessor based release with OL and SC protection neutral link (Ics =100%Icu= 25kA) - 3 No's The panel shall be Top Entry/Exit and suitable for termination of cable system as per SLD and technical specification. (NOT TAKEN FOR EVALUATION)"	399347.4 Incl.GST :18%	27954.32	427301.72



Item-wise Price Details				
57	"Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored aluminum power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 4 core 35 sq mm with factory made clamp (NOT TAKEN FOR EVALUATION)"	731.6 Incl.GST :18%	51.21	782.81
58	"Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored aluminum power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 4 core 95 sq mm (NOT TAKEN FOR EVALUATION)"	1545.8 Incl.GST :18%	108.21	1654.01
59	"Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armored copper power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, color washing etc. as required. 4 core 6 sq mm with factory made clamp (NOT TAKEN FOR EVALUATION)"	944 Incl.GST :18%	66.08	1010.08
60	"Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single pole (NOT TAKEN FOR EVALUATION)"	7233.4 Incl.GST :18%	506.34	7739.74
61	"Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63 amps (NOT TAKEN FOR EVALUATION)"	5883.48 Incl.GST :18%	411.84	6295.32
62	"Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall, making good the damages, color washing etc. as required 4 way (8+12) - three phase double cover (IP 42/43) (NOT TAKEN FOR EVALUATION)"	28396.7 Incl.GST :18%	1987.77	30384.47



Item-wise Price Details				
63	"Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2X 2.5 sq.Â mm + 1 X 2.5 sq.Â mm earth wire (NOT TAKEN FOR EVALUATION)"	167.56 Incl.GST :18%	11.73	179.29
64	"Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2 X 4 sq.Â mm + 1 X 4 sq.Â mm earth wire (NOT TAKEN FOR EVALUATION)"	271.4 Incl.GST :18%	19	290.4
65	"Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2 X 6 Sq.mm + 1 x 6 sq.mm earth wire (NOT TAKEN FOR EVALUATION)"	395.3 Incl.GST :18%	27.67	422.97
66	"Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required. 3 x 2.5 sq.Â mm (NOT TAKEN FOR EVALUATION)"	159.3 Incl.GST :18%	11.15	170.45
67	"Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required. 3 x 4 sq.Â mm (NOT TAKEN FOR EVALUATION)"	261.96 Incl.GST :18%	18.34	280.3
68	"Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required. 3 x 6 sq.Â mm (NOT TAKEN FOR EVALUATION)"	381.14 Incl.GST :18%	26.68	407.82
69	"Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 20mm (NOT TAKEN FOR EVALUATION)"	154.58 Incl.GST :18%	10.82	165.4
70	"Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 25 mm (NOT TAKEN FOR EVALUATION)"	201.78 Incl.GST :18%	14.12	215.9

Item-wise Price Details				
71	"Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 5/6 amp switch (NOT TAKEN FOR EVALUATION)"	940.46 Incl.GST :18%	65.83	1006.29
72	"Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 15/16 amp switch (NOT TAKEN FOR EVALUATION)"	2436.7 Incl.GST :18%	170.57	2607.27
73	"Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 3 pin 5/6 amp socket outlet (NOT TAKEN FOR EVALUATION)"	2312.8 Incl.GST :18%	161.9	2474.7
74	"Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 6 pin 15/16 amp socket outlet (NOT TAKEN FOR EVALUATION)"	4263.34 Incl.GST :18%	298.43	4561.77
75	"Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 1 or 2 Module (75mmX75mm) (NOT TAKEN FOR EVALUATION)"	1335.76 Incl.GST :18%	93.5	1429.26
76	"Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 3 Module (100mmX75mm) (NOT TAKEN FOR EVALUATION)"	800.04 Incl.GST :18%	56	856.04
77	"Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 6 Module (200mmX75mm) (NOT TAKEN FOR EVALUATION)"	1121 Incl.GST :18%	78.47	1199.47
78	"Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 8 Module (125mmX125mm) (NOT TAKEN FOR EVALUATION)"	328.04 Incl.GST :18%	22.96	351
79	"Supply of superior quality copper earth socket for the following size of earth conductor including crimping etc. as required. 2.00 mm (14 SWG) (NOT TAKEN FOR EVALUATION)"	522.74 Incl.GST :18%	36.59	559.33

Item-wise Price Details				
80	"Supply of superior quality copper earth socket for the following size of earth conductor including crimping etc. as required. 2.65mm(12SWG) (NOT TAKEN FOR EVALUATION)"	1154.04 Incl.GST :18%	80.78	1234.82
81	"Supply of superior quality copper earth socket for the following size of earth conductor including crimping etc. as required. 3.15 mm (10 SWG) (NOT TAKEN FOR EVALUATION)"	2000.1 Incl.GST :18%	140.01	2140.11
82	"Supply of superior quality copper earth socket for the following size of earth conductor including crimping etc. as required. 4.00 mm (8 SWG) (NOT TAKEN FOR EVALUATION)"	395.3 Incl.GST :18%	27.67	422.97
		<b>11793361.33</b>	<b>825535.29</b>	<b>12618896.62</b>

**Annual / Comprehensive Maintenance Charges (Exl.Tax)**

Rate	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
<b>Horizontal Double Door Steam Sterilizer (Rectangular) 400 to 600 Liters.</b>							
AMC	1,59,000.00	1,85,500.00	2,12,000.00	2,38,500.00	2,65,000.00	2,91,500.00	3,18,000.00
CAMC	3,18,000.00	3,44,500.00	3,71,000.00	3,97,500.00	4,24,000.00	4,50,500.00	4,77,000.00
<b>Horizontal Double Door Steam Sterilizer (Rectangular) 800 to 1000 Liters.</b>							
AMC	1,71,000.00	1,99,500.00	2,28,000.00	2,56,500.00	2,85,000.00	3,13,500.00	3,42,000.00
CAMC	3,42,000.00	3,70,500.00	3,99,000.00	4,27,500.00	4,56,000.00	4,84,500.00	5,13,000.00
<b>Washer Disinfector</b>							
AMC	1,17,000.00	1,36,500.00	1,56,000.00	1,75,500.00	1,95,000.00	2,14,500.00	2,34,000.00
CAMC	2,34,000.00	2,53,500.00	2,73,000.00	2,92,500.00	3,12,000.00	3,31,500.00	3,51,000.00
<b>Ultrasonic Cleaner</b>							
AMC	18,000.00	21,000.00	24,000.00	27,000.00	30,000.00	33,000.00	36,000.00
CAMC	36,000.00	39,000.00	42,000.00	45,000.00	48,000.00	51,000.00	54,000.00
<b>Table Top Sterilizer</b>							
AMC	13,200.00	15,400.00	17,600.00	19,800.00	22,000.00	24,200.00	26,400.00
CAMC	26,400.00	28,600.00	30,800.00	33,000.00	35,200.00	37,400.00	39,600.00
<b>Drying Cabinet</b>							
AMC	16,440.00	19,180.00	21,920.00	24,660.00	27,400.00	30,140.00	32,880.00
CAMC	32,880.00	35,620.00	38,360.00	41,100.00	43,840.00	46,580.00	49,320.00
<b>Sealing Machine</b>							
AMC	4,500.00	5,250.00	6,000.00	6,750.00	7,500.00	8,250.00	9,000.00
CAMC	9,000.00	9,750.00	10,500.00	11,250.00	12,000.00	12,750.00	13,500.00

## **Other terms & conditions**

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).
2. The supplier shall submit performance security amounting to 5.00% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

## **Technical Specification**

### **Equipment :CSSD equipments of turnkey basis Type II**

- |   |  |
|---|--|
| I | GENERAL  |
| 1 | Scope of Work  |
| 1 | The work to be performed under this Contract consists of design, supply, construction, testing and commissioning of Central Sterile Supply Department (CSSD) in accordance with NABH Standards, Technical specifications and bill of quantities including necessary Turnkey work and providing warranty for thirty six (36) months from the date of commissioning including free routine and preventive maintenance services as per OEM standards.   |
| 2 | The CSSD forms the backbone of any hospital with the responsibility to reprocess surgical and other re-usable instruments and plays a crucial role in infection control in hospitals in reducing Nosocomial infections in hospitals. The CSSD shall be designed scientifically in the available space and should have facilities to receive, wash, disinfect, pack, sterilize, store and distribute instruments to various departments and Operation Theatres. CSSD.   |
| 3 | The design and construction of CSSD shall be with objectives of Infection control, promoting high standard of asepsis, facilitating coordinated services, ensuring maximum standard of safety, optimizing utilization with flexibility and staff time, optimizing working condition, ensuring functional separation of spaces, patient and staff comfort in terms of thermal, acoustic and lighting requirements, minimizing maintenance and regulating flow of traffic  |
| 4 | On approval of submitted drawings, the successful tenderer shall supervise the works of pre installation requirements of CSSD department by providing necessary support to existing contractors of Civil, Electrical, Plumbing, Medical gas pipe line works, Air conditioning system and any other works as may be required for complete installation and trouble free functioning of the department. Tenderer shall also make necessary arrangements for the supply, testing, installation and commissioning of all equipments and furniture as per the tender conditions after completion of interior works. |
| I | Horizontal Double Door Steam Sterilizer (Rectangular) 400 to 600 Liters.   |
| 1 | It should be fully automatically controlled double door Steam Sterilizer and should be horizontal in size with pre and post-vacuum treatment having chamber capacity of 400 - 600 liters. The sterilizer should have inbuilt electric Steam Generator and vacuum pump.   |
| 2 | It should be ergonomic and user-friendly design. In-built to use touchscreen at ergonomic height for user  |
| 3 | The sterilizer should have double door pneumatically / electrically operated vertical sliding doors. Pneumatic / electric door cylinder should be used for eliminating the risk for particles which can be a problem when the door is operated via chains that has been lubricated..   |

- 4 DoorSafetySystems:
1. Door chamber should not be opened when chamber is pressurized.
  2. A cycle should not start if the door is open or not properly locked.
  3. Emergency stop should be there for door obstruction safety mechanism while the door is closed.
- 5 The door seal should be made of silicon rubber gasket & on commencement of the process the door gasket is pressed against the rear face of the door by Air to ensure the door remains closed during the process
- 6 Construction:  
The chamber, doors and steam generator should be made of solid, high quality 316L Stainless steel. Water level indicator should be made of Stainless Steel and jacket should be made of hi graded SS like AISI 304.
- 7 The chamber should be jacketed to ensure the temperature uniformity in chamber. The chamber floor should be slightly sloped towards an internal drain to facilitate drainage.
- 8 The drain should be dimpled. A stainless steel mesh strainer protects the drain port from blockage by debris. The chamber should be mounted on a stainless steel framework.
- 9 The sterilizer jacket and doors should be completely insulated with 50 to 80 mm chloride free mineral wool thereby keeping the autoclave cool on the outside
- 10 The insulation should be completely encased in removable/ fixed stainless steel sheet housing. A Stainless Steel flush mounting is fitted into the sterile area wall to avoid any cross flow of air between the sterile and non-sterile side.
- 11 All hot Piping should be of SS 304. The pipeline should have 2% adequate slope for complete drain to prevent contamination.
- 12 Pressure Vessel :The pressure vessel should be designed as per ASME SEC VII / Pressure Equipment Directive (PED)2014/68/EU and welding joints are partially radio graphed for high security
- 13 Valves & Gauges: Control valve in the process lines should ball valves with pneumatic rotary actuators. These valves should have S. S. 304 contact part with Teflon seal.  
Manual valves whenever used should be S. S. 304 Ball Valves with Teflon seat.  
Solenoid valve should be used for actuating control valves as response to an electric signal from the control panel.  
Jacket and chamber should be provided with pressure gauge and compound gauge / on digital display .
- 14 Validation Port:Provision should be made to fix a validation port.
- 15 Steam Generator:The sterilizer should have an inbuilt steam generator of adequate capacity. It should be mounted under the sterilizer chamber & should be made of SS316L. The steam generator pressure vessel should be made of stainless steel SS316L. All connecting pipes and valves shall be made of good quality stainless steel. Process valves should be pneumatic. Chamber should be mounted on a stainless steel stand.
- 16 Vacuum Pump:  
The Sterilizers should have a high capacity efficient liquid ring vacuum pump.  
It should also have low water levelalarm to protect it from dry run. Disposable air filter should be provided for filtering the atmospheric air before entering in the chamber.
- 17 Railing, Carriage & Trolley:  
There should be a pair of S.S. 316 L railings inside the chamber. Rail design should be suited for smooth and easy loading and unloading of the carriage. The rail should be removable for ease of cleaning.
- 18 The sterilizer should be provided with one carriage with stainless steel pull out trays for flexible loading of

packs and two floor trolleys. The carriage is fabricated from SS 316L while the trolleys are fabricated from SS 304. The top frame of the trolley has heavy studs for height adjustment. The trolley is provided with four swiveling castor wheels made of Polypropylene and fitted in a stainless steel bracket for easy maneuverability

- 19 Control System & Operating Panel:  
The Sterilizer should be equipped with Microprocessor PLC control system which is dedicated to control the sterilizer including Digital Input Output for Sterilizer control Analog measuring Inputs COM ports for printer & PC communications. The Control System should be operated via approx. 7 inch color touch screen. As a default the operator should have access to select cycle, start cycle & to close door.
- 20 Should have digital display of Chamber Pressure, temperature, cycle no., Batch no., Time & date, alarm indicator, Low water indicator. Remaining cycle time also should be visible. The operator should be able to run only type tested cycles. It should have visual and audible alerts for the operator of program malfunctions and provides visual indication of process status
- 21 Access to other functions such as setting parameters, calibration servicing and maintenance should be controlled using pre-defined access level which prevents unauthorized access.
- 22 Control system should have built in battery backup so that it can support the controller and operator panel for up in case of power loss.
- 23 Automatic Operation With Printer :The sterilizer shall be fitted with suitable PLC (Microprocessor) for fully automatic cycle operation instead of manual operating valve with 2 – 4 inch fascia panel printer (mounted on control side)
- 24 Alarms:  
The Control System should have comprehensive alarm/alert systems which automatically trigger pre-programmed information alerts (preventive maintenance schedule etc.)
- 25 In the event of any deviation in the type tested cycle, the control system should register an alarm
- 26 The range of alarms should include
- v Temperature & pressure sensor failure
  - v Phase time-outs
  - v Door(s) not properly closed
  - v Power failure (less than 10 seconds will be ignored)
  - v Continuous self-checking of all safety devices
  - v Low water level (seal water to vacuum pump)
- 27 The Sterilizer should be equipped with following Pre-programmed cycles Programs should include:  
Wrapped solid and hollow instruments, textiles, porous load (134°C). Type tested program for sterilization of medical devices, e.g. textiles, utensils.  
Wrapped, heat sensitive solid and hollow goods, rubber, plastic, porous load (121°C).  
Bowie & Dick test,  
Automatic Leak rate test,  
Heavy load (134°C),  
Specific goods (134°C)
- 28 The Sterilizer should meet following Directive and standards

- Should be ISO 13485:2016
- ISO 14971:2019
- ISO 9001:2015
- Should be CE Compliant.
- Model should be ISI Marked
- PED certificate to be provided with the model.
- Product should have ASME-U certificate.

- 29 After commissioning supplier shall conduct Bowie & Dick Test and obtain commissioning certificate from the hospital
- II Horizontal Double Door Steam Sterilizer (Rectangular) 800 to 1000 Liters.
- 1 It should be fully automatically controlled double door Steam Sterilizer and should be horizontal in size with pre and post-vacuum treatment having chamber capacity of 800 - 1000 liters. The sterilizer should have inbuilt electric Steam Generator and vacuum pump.
- 2 It should be ergonomic and user-friendly design. In-built to use touchscreen at ergonomic height for user
- 3 The sterilizer should have double door pneumatically / electrically operated vertical sliding doors. Pneumatic / electric door cylinder should be used for eliminating the risk for particles which can be a problem when the door is operated via chains that has been lubricated.
- 4 Door Safety Systems:
1. Door chamber should not be opened when chamber is pressurized.
  2. A cycle should not start if the door is open or not properly locked.
  3. Emergency stop should be there for door obstruction safety mechanism while the door is closed.
- 5 The door seal should be made of silicon rubber gasket & on commencement of the process the door gasket is pressed against the rear face of the door by Air to ensure the door remains closed during the process
- 6 Construction:  
The chamber, doors and steam generator should be made of solid, high quality 316L Stainless steel. Water level indicator should be made of Stainless Steel and jacket should be made of hi graded SS like AISI 304.
- 7 The chamber should be jacketed to ensure the temperature uniformity in chamber. The chamber floor should be slightly sloped towards an internal drain to facilitate drainage.
- 8 The drain should be dimpled. A stainless steel mesh strainer protects the drain port from blockage by debris. The chamber should be mounted on a stainless steel framework.
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- 10 The insulation should be completely encased in removable/ fixed stainless steel sheet housing. A Stainless Steel flush mounting is fitted into the sterile area wall to avoid any cross flow of air between the sterile and non-sterile side
- 11 All hot Piping should be of SS 304. The pipeline should have 2% adequate slope for complete drain to prevent contamination.
- 12 Pressure Vessel :The pressure vessel should be designed as per ASME SEC VII / Pressure Equipment Directive (PED)2014/68/EU and welding joints are partially radiographed for high security
- 13 Valves & Gauges: Control valve in the process lines should ball valves with pneumatic rotary actuators. These valves should have S. S. 304 contact part with Teflon seal.



Manual valves whenever used should be S. S. 304 Ball Valves with Teflon seat.

Solenoid valve should be used for actuating control valves as response to an electric signal from the control panel.

Jacket and chamber should be provided with pressure gauge and compound gauge / on digital display .

- 14 Validation Port:Provision should be made to fix a validation port.
- 15 Steam Generator:The sterilizer should have an inbuilt steam generator of adequate capacity. It should be mounted under the sterilizer chamber & should be made of SS316L. The steam generator pressure vessel should be made of stainless steel SS316L. All connecting pipes and valves shall be made of good quality stainless steel. Process valves should be pneumatic. Chamber should be mounted on a stainless steel stand.
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It should also have low water levelalarm to protect it from dry run. Disposable air filter should be provided for filtering the atmospheric air before entering in the chamber.
- 17 Railing, Carriage & Trolley:  
There should be a pair of S.S. 316 L railings inside the chamber. Rail design should be suited for smooth and easy loading and unloading of the carriage. The rail should be removable for ease of cleaning.
- 18 The sterilizer should be provided with one carriage with stainless steel pull out trays for flexible loading of packs and two floor trolleys. The carriage is fabricated from SS 316L while the trolleys are fabricated from SS 304. The top frame of the trolley has heavy studs for height adjustment. The trolley is provided with four swiveling castor wheels made of Polypropylene and fitted in a stainless steel bracket for easy maneuverability
- 19 Control System &Operating Panel:  
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- 20 Should have digital display of Chamber Pressure, temperature, cycle no., Batch no., Time & date, alarm indicator, Low water indicator. Remaining cycle time also should be visible. The operator should be able to run only type tested cycles. It should have visual and audible alerts for the operator of program malfunctions and provides visual indication of process status
- 21 Access to other functions such as setting parameters, calibration servicing and maintenance should be controlled using pre-defined access level which prevents unauthorized access.
- 22 Control system should have built in battery backup so that it can support the controller and operator panel for up in case of power loss.
- 23 Automatic Operation With Printer :The sterilizer shall be fitted with suitable PLC (Microprocessor) for fully automatic cycle operation instead of manual operating valve with 2 – 4 inch fascia panel printer (mounted on control side)
- 24 Alarms:  
The Control System should have comprehensive alarm/alert systems which automatically trigger pre-programmed information alerts (preventive maintenance schedule etc.)
- 25 In the event of any deviation in the type tested cycle, the control system should register an alarm
- 26 The range of alarms should include

- v Temperature & pressure sensor failure
  - v Phase time-outs
  - v Door(s) not properly closed
  - v Power failure (less than 10 seconds will be ignored)
  - v Continuous self-checking of all safety devices
  - v Low water level (seal water to vacuum pump)
- 27 The Sterilizer should be equipped with following Pre-programmed cycles Programs should include:  
 Wrapped solid and hollow instruments, textiles, porous load (134°C). Type tested program for sterilization of medical devices, e.g. textiles, utensils.  
 Wrapped, heat sensitive solid and hollow goods, rubber, plastic, porous load (121°C).  
 Bowie & Dick test,  
 Automatic Leak rate test,  
 Heavy load (134°C),  
 Specific goods (134°C)
- 28 The Sterilizer should meet following Directive and standards
- Should be ISO 13485:2016
  - ISO 14971:2019
  - ISO 9001:2015
  - Should be CE Compliant/ ISI.
  - PED certificate to be provided with the model.
- 29 After commissioning supplier shall conduct Bowie & Dick Test and obtain commissioning certificate from the hospital
- III WasherDisinfector– (DoubleDoorWithDrying)250 to 300 Liter capacity.
- 1 The washer disinfector shall be suitable for cleaning and disinfection of surgical instruments/goods. The process shall include pre wash, detergent wash, rinse, hot water disinfection and drying cycles.
  - 2 The unit shall be suitable for electrical operation and would be complete with water circulation pump, necessary valves & fittings.
  - 3 It should be microprocessor based so as to ensure correct program sequence and irregularities or deviations which are displayed immediately
  - 4 Chamber Capacity: Chamber Volume should be 250 to 300 Liter capacity. The chamber and circulation piping should be made of S.S. 304 quality with electro polished washed surfaces. The chamber edges should not have the pockets & folds so as to avoid bacterial growth. The wash chamber should also be fitted with bright light for clear visibility of the washing process.
  - 5 Washer should have following features:  
 For shortest possible filling and draining phases, higher capacity quick opening valves should be used so that short total process time is achieved. The design should focus on saving the environment through reduced consumptions of all utilities. The water consumption should not be more than 60 Liters per phase of the cycle.
  - 6 Cleansable spray arms should be located at the top, middle and bottom of the chamber
  - 7 Wash carts should be equipped with cleansable spray arms between each shelf so as to facilitate water to reach all the surfaces which needs to be cleaned
  - 8 Injection wash carts should be automatically connected to water and drying air in order to clean and dry the inside of the tubular instrument

- 9 The drying air should be pre-heated.
- 10 The washer should be equipped with independent temperature monitoring and validation test port
- 11 Data interface RS232 should be available.
- 12 All electrical components should be easily accessible for easy service
- 13 Double door should be made of toughened glass for see through & should facilitate the loading process
- 14 The washer should have 3 dosing pumps (detergent, alkaline & lubrication) for process chemicals, instrument lubricants/ enzymatic cleaners
- 15 The washer should perform: Pre-rinses with cold water. Main washes with hot water (60C) and detergent
- 16 Final rinse with water (55C) and Disinfection with hot water (85C)
- 17 Unit should have LCD display and operating console to have membrane key pad for durability
- 18 Unit should feature safety measures such as: Automatic door lock
- 19 Automatic temperature regulation. Electronic adjustment of water level. The unit should also have an interface as standard for an optional batch printer
- 20 The washer disinfectant shall be supplied with racks for instrument tray, kidney bowls, and glass articles. Should ensure essential washing accessories
- 21 The Washer Disinfectant should meet following Directive and standards
  - Should be ISO 13485:2016
  - ISO 14971:2019
  - ISO 9001:2015
  - Should be CE Compliant.

#### IV Table Top Sterilizer

- 1 Should be a class B table top autoclave for Dental and ophthalmic applications
- 2 Two automatic programmes approx. at 2.2 bar at 134 degrees C and 1.1 bar at 121 degree C. The equipment should have automatic pressure control switch / automatic water control device to ensure that the equipment does not run dry
- 3 Should have flash cycle for rapid sterilization and should have an option for liquid cycle.
- 4 Should have Vacuum Pump for closed door drying
- 5 Should have rapid warm up facility. Built in reservoir to store water required to produce steam, and used water separately, for easy decantation
- 6 The system should be equipped with required safety features. The door should have double locking safety feature and should open only with atmospheric pressure in the chamber
- 7 Should have automatic cut-off to prevent overheating and cut-off for insufficient water, the machine should not start without sufficient water
- 8 Should have a minimum chamber capacity of 19 litres or above.
- 9 Should have pressure display and temperature display
- 10 Unit should function with 200-240Vac, 50/60 Hz input power supply
- 11 The system should comply with National quality certification or International standards for sterilization safety
- 12 Following accessories should be supplied along with the equipment.

- a. 1 set of 3 removable shelves – stainless steel.
  - b. 1 instrument basket – stainless steel.
  - c. 1 set of 2 Drum for sterilization – stainless steel.
  - d. 1 Roll of sterilization indicator.
  - e. 1 box paper sheet 100 nos crepe for sterilization packs.
  - f. 2 spare silicone gaskets.
  - g. 1 sets of spare fuses.
- 13 Equipment should be provided with a line cord (power cord) of acceptable durability, quality, length and current carrying capacity and should be compatible with Indian standard power socket
- 14 Controls should be visible and clearly defined.
- 15 Labels and markings should be clear and visible.
- 16 Should have air filters.
- 17 Gaskets should be replaced at free of cost whenever required in the comprehensive Warranty and CMC period.
- V Drying Cabinet 200 Litres
- 1 The capacity of the Drying Cabinet should be approximately 200L
  - 2 Control system should be automatic with Micro PID controller with built in timer and sensor. Digital safety controller
  - 3 Construction of the Drying Cabinet should consist of mild steel frame work supporting the outer cover and inner chamber. The inner chamber should be fabricated from stainless steel SS 304. The outer chamber from epoxy painted CRCA sheets. All inside edge should be curved and all joints are welded and ground flush. All surfaces should be imparted with reflective mirror finish
  - 4 The drying cabinet should be provided with a quick lock door with heat resistant gasket
  - 5 The chamber design should ensure uniform air circulation. The air should be circulated by a centrifugal impellar
  - 6 The drying temperature inside the cabinet should be selectable to:
    - a. 70°C – for tubing and sensitive plastic material
    - b. 90°C – for instruments & other medical devices
  - 7 The drying time for the load should be selectable in intervals of 5 minutes. The temperature and remaining time should be displayed on the display panel
  - 8 An Exhaust should be provided at the top of the unit. The exhaust opens to ensure complete removal of moisture
  - 9 2 Nos. equi-spaced S. S. 304 shelves are provided
  - 10 The item should meet following Directive and standards
    - Should be ISO 13485:2016
    - ISO 14971:2019
    - ISO 9001:2015
- VI Sealing Machine
- 1 Suitable for sealing various reusable supplies and medical devices for sterilization and storage.
  - 2 The continuous band heat-sealing machine with conveyer is suitable for hospital sterile packing
  - 3 It adapts electronic constant temp control system. (Temp control)
  - 4 It has speed adjusting transmission mechanism. (Speed control)

- 5 It can emboss up to 15 interchangeable characters for batch recording, date etc.(embossing mechanism)
- 6 It can seal plastic film of various materials such as PE, PP, Aluminum foil etc
- 7 It has height adjustments as well as sealing width adjustments
- 8 Sealing speed of 0 - 12m/min. Sealing width of 6 - 15 mm. Sealing thickness of 0.02 - 0.80 mm

9 Electricity 230 V/ 50 HZ/1 Phase /AC Supply

10 The system should have printing facility for expiry dates etc

#### VII Gauze Cutting Machine

- 1 To mechanically and elegantly cut cotton gauze material
- 2 Cutting capacity of 165 mm, Blade size of 200 mm
- 3 The machine is elegant, sturdily built to cut the thickest of Cotton gauze material. It helps you do away with the tedious, time-consuming conventional method of manual cutting, giving way to new improved cutting quality
- 4 This machine is operated on a Single phase Motor and consists of a cutting unit and a knife sharpening unit that gives a finely honed edge to the cutting blade on the touch of a control lever/button
- 5 Blade can be sharpened by the automatic sharpening unit only when the lever is pressed down, ensuring safety
- 6 The motor cooling fan dissipates heat build-up and directs the hot air-flow away from the operator

7 Power 220-240 V/0.75 HP/ Single Phase

#### VIII Wash Stations With 2 Sinks completely made of SS 304 size : 1800 x 650 x 900 mm(±10%)

- 1 Preliminary manual cleaning of instruments with water and cleaning solutions
- 2 To remove all visible soil and dirt such as blood tissues and other body fluids
- 3 To reduce bio burden e.g. removal of invisible soil, pathogens and microorganisms.
- 4 To protect instruments from corrosion
- 5 The top of the wash station is fabricated out of S.S. 304 quality and ground and polished to a dull finish. The top is duly re-enforced against bending and treated for sound deadening.
- 6 The top will be fixed on a S.S. square tube frame. The frame will be provided with leveling plastic bush lugs
- 7 The unit will be provided with the following fittings:
  - Ø Separate hot and cold faucet above each sink.
  - Ø Demineralized water inlet for connecting to the spray gun rinser.
  - Ø Compressed air connection to the spray gun for air flushing
- 8 Drainage and overflow connections on the sink unit with manual drain valve.
- 9 A stainless steel splash guard is provided at the rear of the unit. The top side edges of wash station are raised to ensure that there is no spillage of water from sides.
- 10 Sink units should have a minimum dimension of 500 x 450 x 350 mm (L x W x H)
- 11 The sink should include a drain valve, removable strainer, manually operated drain-valve, overflow drain pipe, water trap and all required pipes to connect with water inlet and drain provided by hospital
- 12 Should have water drain control for enzymatic soaking.
- 13 Should have horizontal bottom platform with door for storing chemicals / supplies.
- 14 Should have a perforated SS brush holder.
- 15 Should provide Air gun with spiral PU tube.

16 Should provide Water gun designed for connection to water or compressed air supplied with 8 different tips and nozzles for assisted cleaning of syringes and cannulas with Record cone, measuring and blood pipettes, catheters and small pipes, drainage tubing, syringes and cannulas with Lure cone, spray jet for rapid instrument cleaning, bottles and Erlenmeyer flasks, water jet pumps for suction cleaning

IX WorkTable for Wet &dryGoods Size:1500 x 650 x 900 mm. (±10%)

1 Stainless steel 304 grade tables specially designed for work with dry and wet goods (heavy- duty sorting of wire baskets and containers and work with dry/wet goods, inspection, and packing various sets of surgical instruments in trays) and for general purpose pre-storage.

2 The work tables should have a rigid stainless steel construction which is easy to clean and without sharp edges or corners.

3 The table should be ergonomically worked up, should have easy to clean robust matt- finished (to reduce reflection of light from the surface) with minimum sheet thickness of 1.5 mm stainless steel (304) worktop/surface to withstand and carry out heavy work comfortably, either sitting or standing.

4 The edges along the front, back and sides should be reinforced and widened giving a rigid construction.

5 They are welded together and polished at all corners for good hygiene, as well as for the comfort and safety of the staff

6 The worktop should be supported by a complete assembly with full-length reinforcements along the front, back and ends, welded together at the corners

7 The support frame has to be mounted on a solid, stable floor stand, made of polished stainless steel square tubing, with horizontal braces 300 mm above floor level

8 There should be unobstructed access to the working space, since the only supports needed along the front of the table are the corner legs. This also facilitates cleaning of floors

X PackingTablewithtwoShelvesSize

1 Packing Table should have minimum size of 1800 x 800 x 900 mm (L x W x H) (±10%)

2 This table should be specially designed for sorting, inspection, functional control and packing of various sets for wards, clinics etc. and for surgical instrument sets in trays. The work could be done comfortably, either sitting or standing.

3 The worktop should be made of 1.2 mm 304 Grade Stainless steel top with Satin finish. All edges should be smooth. The extended width of the worktop should be designed to facilitate thorough inspection of instrument trays and allow the use of large wrapping material.

4 The rigid frame is made of stainless steel (304).

5 There should be unobstructed access to the working space, since the only supports needed along the front of the table are the corner legs. This also facilitates cleaning of floors.

6 The table should include a two-shelf console, mounted on the worktop, for storage of packaging materials.

7 Should have flexible holding baskets and storage shelves and inbuilt paper holding arms

8 The rigid supporting columns of the console include 3 electrical outlets.

9 There should be a free space of 450 mm between the lower shelf and the worktop, and 150 mm between the two shelves.

10 The table should have lockable drawer unit (both sides as double model) mounted under the worktop.

11 Each drawer unit should be 400 mm wide and should include a drawer and a sliding plate.

12 Should have 4 wheels

13 Should be supplied with 3" x 7" magnifying glass with illumination highly suitable for demanding work in CSSD for inspection of delicate instruments used in hospitals (surgical and medical).

14 The lamp should have standard +3-diopter circular glass lens which can provide a viewing field of 127 mm

- diameter and magnifies 1.75 times.
- 15 The circular energy-saving LED lamp surrounds the magnifying lens and provides effective lighting without annoying heat operable with an electrical connection of 220/240 V and should be easily available for replacement
- 16 The magnifying head should be made of ABS polymer, combining light weight with high impact strength.
- XI Linen Packing Table Size (LxWxH): 2130 x 1220 x 950 mm.
- 1 Linen Inspection Table should be made of SS 304 grade and have minimum size of 2130 x 900 x 950 mm (L x W x H) ( $\pm 10\%$ )
- 2 The table should be specially designed for sorting, inspection (each piece of linen can be moved over an illuminated inspection panel) and folding of surgical dressing sets and individually packaged towels/gowns. The extended width also facilitates work with large dressing sheets. Work can be carried out comfortably, either sitting or standing.
- 3 Worktop should be made of stainless steel SS 304 Grade with thickness 1.2mm, mat finished.
- 4 All edges of the worktop should be smooth.
- 5 The top should have a built-in opalescent (milky) plastic surface plate, 1000 x 700 mm, illuminated from underneath by two LED tubes located beneath the top in a laminated recess.
- 6 The table should have two electrical outlets (one on each side).
- 7 The rigid frame should be made of stainless steel (304).
- 8 There should be unobstructed access to the working space, since the only supports needed along the front of the table are the corner legs. This also facilitates cleaning of floors.
- 9 Should have 4 wheels
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- 12 The circular energy-saving fluorescent lamp surrounds the magnifying lens and provides effective lighting without annoying heat operable with an electrical connection of 220/240 V and should be easily available for replacement
- 13 The magnifying head should be made of ABS polymer, combining light weight with high impact strength.
- XII Closed Transport Trolley
- 1 Closed Transport Trolley should have minimum size of Size: 1200 x 750 x 900 (L x W x H) (External) ( $\pm 10\%$ )
- 2 A Closed Transport trolley is used for sterile goods handling, for which higher protection than normal dust protection is required, e.g. short transports between hospital buildings.
- 3 Closed transport trolley shall be suitable for handling baskets or containers having removable shelves of 3 Nos.
- 4 Should be made of fully welded stainless steel construction of minimum 1.2 mm Stainless Steel 304 grade with satin finish
- 5 The doors should open 270° for easy access and cleaning.
- 6 Trolley should have lockable doors and should include double side handle bars.
- 7 Should have 2 fixed and 2 swivel wheels of diameter of 125 mm with diagonal brakes.
- 8 Should have SS external hinges and knob lock
- XIII Double Column Basket Rack
- 1 Basket Rack should be double column type having minimum dimension of 1200 x 400 x 2100 (L x W x H) ( $\pm 10\%$ ) to store wire baskets in sterile storage and/or as pre storage of clean packed goods.



- 2 The rack should be designed as an open unit to promote aeration of sterilized goods and to make inspection of stored goods as easy as possible.
- 3 Should be made of fully welded stainless steel construction of minimum 1.5 mm Stainless Steel 304 grade with satin finish
- 4 Should provide rigid, horizontal guide-rails, consisting of 50 x 20 mm steel profiles for loading and unloading the baskets by sliding the baskets on rail.
- 5 The guide-rails should be welded to a robust support column mounted on a rigid floor stand.
- 6 The columns should be joined by support frames on top and below the base of the rack.
- 7 To facilitate cleaning of the floor, the base should have a rigid construction that minimizes the number of legs needed for support.
- 8 The double rack should be a free-standing section that holds minimum 8 baskets in each vertical.
- 9 Should have 4 wheels with diagonal brakes
- 10 Should be provided with SS stopper for preventing basket fall during transportation
- 11 Should be supplied with 16 numbers of baskets with each rack

#### XIV Mesh Rack

- 1 Mesh rack should have dimension of minimum 1000 x 500 x 2100 mm (L x W x H) size. ( $\pm 10\%$ ).
- 2 Construction should be based on single free-standing shelf modules for storage of clean linen, instruments, and packing material or sterilized goods, including disposables.
- 3 Should have provision to attach two single modules back to back and combined as a double module unit and should provide 10 S hooks for connecting the same with each racks.
- 4 The wire construction should allow good air circulation while permitting easy inspection of the goods.
- 5 The wire shelves should be made of special heavy-duty steel (304), chromium-plated and surface treated with clear epoxy varnish to facilitate cleaning.
- 6 The shelf unit should be easy to assemble on site and all parts should fit precisely.
- 7 Shelves should be mounted by means of plastic clamps onto circular rigid posts, with the adjustable height within a range of about 50 mm. Each post should include a height adjustable foot.
- 8 Should have 4 wheels with diagonal brakes

#### XV Storage Cabinet

- 1 Storage Cabinet should have double door with glass having minimum dimension of 1000 x 450 x 1900mm (LxWxH) ( $\pm 10\%$ )
- 2 All edges should be smooth and the rigid frame should be made up of minimum 1.5 mm sheet thickness stainless steel (304).
- 3 Should have lockable door having glass of 5 mm in two panes per leaf.
- 4 Should have SS bud hinges and paddle lock
- 5 Should have adjustable and removable shelves of 3 nos.

#### XVI Static Pass Box with Electrical Interlocking

- 1 Static pass box with electrical interlocking should have a minimum overall dimension of 800 x 600 x 800 mm and internal workspace of 600 x 500 x 650 mm (L x W x H) ( $\pm 10\%$ )
- 2 Pass box shall be specially designed for transfer of materials from Dirty to clean supply, ETO to Sterile supply and Sterile issue
- 3 Should be made up of SS 304 sheets with double wall construction satin finish
- 4 Should have UV lights for safe storage of components

- 5 UV light should automatically switch off when any one door is opened
- 6 Pass-through chamber should have audible buffer alert in case door kept open for long time.
- 7 The chamber should consist of two electrically operated sliding hatches / hinged door.
- 8 Each hatch should have its own 24 DC motor that powers a drive belt and ensures smooth operation, as well as its own convenient push-button control to ensure that both hatches cannot be opened at the same time.
- 9 The control should feature two modes of operation to open or close the hatch with a press button mechanism
- 10 Should have door interlocking to prevent simultaneous opening of both the doors
- 11 Should have toughened glass paneling for easy visibility.

XVII Sterilizing Baskets - Big

- 1 Sterilization wire baskets should have minimum size of 550 x 350 x 200 mm (L x W x H) ( $\pm 10\%$ )
- 2 It should be modular design with standard SPRI sizes and high precision and should be designed for sterilizing / processing as well as easy handling and management of the supply, storage and distribution of re-circulated sterilized goods.
- 3 It should be self-drying after disinfection in hot water (min.+85°C)
- 4 It should be sturdy, jig-welded trays maintain their size and shape even if handled carelessly.
- 5 It should be both nest able and stackable There should be special wire support to help making baskets both stackable (when the supports are folded into the basket) and nest able (when the supports are folded out)
- 6 The top frame should be designed such that it should serve as a handle grip for easy carrying even when heavily loaded.
- 7 There should be no sharp edges or wires.
- 8 The surfaces should be smooth to assure easy cleaning in a washer-disinfector.
- 9 The baskets should be made of heavy-duty stainless steel (304) and should have a rigid bottom frame that gives space for airing between goods and work surfaces and allow use on roller belt and chain conveyors.
- 10 It should be designed and manufactured in accordance with high quality specifications to assure long lifetime.

XVIII Sterilizing Baskets - Medium

- 1 Sterilization wire baskets should have minimum size of 550 x 350 x 100 mm (L x W x H) ( $\pm 10\%$ )
- 2 It should be modular design with standard SPRI sizes and high precision and should be designed for sterilizing / processing as well as easy handling and management of the supply, storage and distribution of re-circulated sterilized goods.
- 3 It should be self-drying after disinfection in hot water (min.+85°C)
- 4 It should be sturdy, jig-welded trays maintain their size and shape even if handled carelessly.
- 5 It should be both nest able and stackable There should be special wire support to help making baskets both stackable (when the supports are folded into the basket) and nest able (when the supports are folded out)
- 6 The top frame should be designed such that it should serve as a handle grip for easy carrying even when heavily loaded.
- 7 There should be no sharp edges or wires.
- 8 The surfaces should be smooth to assure easy cleaning in a washer-disinfector.
- 9 The baskets should be made of heavy-duty stainless steel (304) and should have a rigid bottom frame that gives space for airing between goods and work surfaces and allow use on roller belt and chain conveyors.

10 It should be designed and manufactured in accordance with high quality specifications to assure long lifetime

XIX Sterilization Container - Small

1 Sizes should be – 300 x 290 x 110 mm ( $\pm 10\%$ )

2 Should be made of Stainless Steel top / Aluminium top.

XX Sterilization Container - Medium

1 Sizes should be – 300 x 290 x 140 mm ( $\pm 10\%$ )

2 Should be made of Stainless Steel top / Aluminium top

XXI Sterilization Container - Large

1 Sizes should be – 590 x 280 x 260 mm ( $\pm 10\%$ )

2 Should be made of Stainless Steel top / Aluminium top

XXII Instrument Tray - Small

1 Sizes should be minimum of 340x250x70 mm ( $\pm 10\%$ )

2 It should be modular design with high precision and should be designed for use with modular wire baskets through all phases of instrument processing: washing and disinfection (both manual and in an automatic washer-disinfector), ultrasonic cleaning, inspection and packing, sterilization, storage, distribution and usage.

3 It should be self-drying after disinfection in hot water (min.+85°C)

4 Instrument trays should be sturdy, jig-welded trays maintain their size and shape even if handled carelessly.

5 It should be stackable.

6 The tray should be made of stainless steel (304) wire net, with a maximum mesh size of 6.5 mm and a wire diameter of 1.5 mm. This design gives optimal cleaning results and at the same time prevents instruments from penetrating the sides of the tray.

7 All cross-points in the network and vertical wires to top and bottom frames should be point welded.

8 All free wire ends should be soft-polished to prevent injury when handled.

9 The bottom wire construction should include a rigid, 3 mm diameter, stainless steel (304) wire frame to provide space for airing between goods and work surface and to allow use on roller, belt and chain conveyors.

10 It should be electro-polished for smooth, clean surfaces and also suitable for ISO modular wire baskets.

XXIII Instrument Tray - Big

1 Sizes should be minimum 450x250x70 mm ( $\pm 10\%$ )

2 It should be modular design with high precision and should be designed for use with modular wire baskets through all phases of instrument processing: washing and disinfection (both manual and in an automatic washer-disinfector), ultrasonic cleaning, inspection and packing, sterilization, storage, distribution and usage.

3 It should be self-drying after disinfection in hot water (min.+85°C)

4 Instrument trays should be sturdy, jig-welded trays maintain their size and shape even if handled carelessly.

5 It should be stackable.

6 The tray should be made of stainless steel (304) wire net, with a maximum mesh size of 6.5 mm and a wire diameter of 1.5 mm. This design gives optimal cleaning results and at the same time prevents instruments from penetrating the sides of the tray.

7 All cross-points in the network and vertical wires to top and bottom frames should be point welded.

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9 The bottom wire construction should include a rigid, 3 mm diameter, stainless steel (304) wireframe to provide space for airing between goods and work surface and to allow use on roller, belt and chain conveyors.

10 It should be electro-polished for smooth, clean surfaces and also suitable for ISO modular wire baskets.

#### XXIV Stool (SS)

1 Should have stainless Steel top made of SS 304 grade.

2 Should be height adjustable from 450mm to 680 mm, through mild steel threaded screws

3 Should have four legged base made of 25mm steel tube mounted on rubber shoes.

4 Should have Stainless steel ring for footrest.

5 Should be pre-treated Epoxy powder coated frame work.

#### XXV Cladding with Service Doors for Sterilizers

1 Should provide rigid paneling in between sterilizers facilitate easy access for servicing sterilizers

2 The Main structure will be made of Stainless Steel 304 grade square section 25 x 25 mm, 16 SWG

3 The paneling enclosure will be made of Stainless Steel 304 grade, 16 SWG with service doors, Hinge mounted and with magnetic lock and Handle

4 The gap filling between the sterilizer and partition wall be done by Silicon sealant

5 The Stainless Steel paneling should have Matte finish

#### XXVI. Ultrasonic Cleaner

1 The units should be a compact free-standing bench model, with a built-in tank manufactured from high-quality (316) stainless steel and a solid-state generator that sends ultrasonic (approx 40 KHz) impulses through wash water containing detergent and electrical heating; microprocessor controlled display with memory time and temperature functions

2 The electrical energy should be transformed into sound waves by transducers, fixed to the bottom of the tank.

3 The tank should be made of solid stainless steel (316).

4 The ultrasonic cleaner should have a display and control which could be easily seen and placed above any liquid for safety and reliability.

5 It should have digital read out timer and temperature setting (temperature adjustable from 20 to 60 °C) monitoring.

6 Capacity should be 20 to 25 L

7 Should work on 230V, 50 Hz AC Supply.

8 Ultrasonic cleaner should be European CE /US FDA certified.

9 Ultrasonic cleaner should supplied with Wire mesh basket of suitable size & Stainless steel lid

#### XXVII General – CSSD Equipments & Furniture.

1 Furniture manufacture should have ISO 13485:2016 certification.

2 ±10 % tolerance in measurement is accepted for all CSSD furniture items.

#### NOTE:

The unit rates shall be offered wherever mentioned in the BOQ. For evaluation the quantity mentioned in BOQ & the total rates offered will be considered. However, the actual quantity may increase or decrease.

The total rate offered for all the items together shall be considered for L1 evaluation. The quantity taken for evaluation is mentioned in the BOQ.