

**List of Instruments & Equipments with Specification for Annual Tender 2011-12**

**SCHEDULE – B ( Drug licence not required)**

<b>Sl. No</b>	<b>No. as per Approved TC List</b>	<b>Instruments / Equipments</b>	<b>Specification</b>	<b>Unit</b>
1.	1	S.S Wire Basket	8" X 8" X 8"	
2.	2	300 ml Poly Propylene Sterile Vaccine Bottle with rubber stopper & aluminium Cap	i) Round Bottom (enclosed) ii) Rectangular Bottom (enclosed)	
3.	3	Abdominal Retractor	Stainless Steel 8"	
4.	5	Aerosol Fumigator	Capacity 1.5 - 2 Ltr.	
5.	6	Aluminium Foil	30 cm. X 9 m. roll with packing	
6.	7	Artery Forceps	6" & 8" Straight & Curved SS	
7.	8	Semi-Auto Analyser with kits	Semi Auto Analyzer, Digital display with printing facility with kits	
8.	9	Autoclave (Portable)	Stainless Steel, Pressure Cooker Type, Gasket: Neoprene Rubber, Fully equipped with safety valve, Size 300mm X 300 mm, Electric heater running on 220V, 50 Hz, bakelite handle, Three leg Stand, with power cable	
9.	10	B.P. Handle	No.3 (120-125 mm.) , 4 (130 mm Length) Stainless Steel	
10.	11	Basin	(Stainless Steel)35 cm & 40 cm outer dia,	
11.	12	Beaker with spout	a ) Borosilicate glass 100ml, 250ml, 500ml b) Polypropylene, autoclavable, graduated	
12.	13	Bone Curette	Stainless Steel 6" & 8"	
13.	14	Bone Cutter	Stainless Steel	
14.	15	Bowl 3 Litre capacity	Stainless Steel	
15.	16	Bowl Clamps Intestinal	Stainless Steel	
16.	17	BP Blade	Sterile Individually packed, for handle no. 3 -blade no.10, 12 and for Handle No. 4 balde no. 23, 24	
17.	18	Breeders Thermometer	Alcoholic Breeders' Thermometer 0°C to 110° C	
18.	19	Bunsen Burner with adopter	Inlet tube 10mm, outlet 2.5 mm dia with regulator and size nozzle for 6.5 mm rubber tubing, plated brass tube, round base furnished in acrylic gloss paint.	

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19.	20	C- Arm X- ray machine with Monitor	16KW HF Mobile C Arm X Ray Machine HMC-160 Max. Power: 16Kw Photograph: 40~125kV 32~200mA Image intensifier: 9" Camera: CCD, 400 Thousand Pixel Monitor: 14"High definition medical monitor	
20.	21	Cardboard box with Partition	5 ply, suitable for packing of 20nos. Of 300 ml vaccine bottle.	
21.	22	Casting Rope	Cotton 1/2" X 15 yards & 1" X 15 yards.	
22.	23	Castrator (9")	Burdizzo type , Size - 9"	
23.	25	Centrifuse Tube 15 ml Graduated	Polypropylene / HDPE, autoclavable, conical , <i>sterile</i> , graduated at 0.5 ml interval with flat top leak proof screw cap, <i>capacity 15 ml</i> , Dimensions (d X h) =17 mm X 120mm having white writing area Polypropylene /HDPE, autoclavable, conical with skirt, graduated in 2.5 ml intervals, <i>sterile</i> with flat top leak proof screw cap, <i>capacity- 50ml</i> ,Dimensions (d X h) = 29-35 mm X 116-118 mm, having white writing area on side of the tube Polypropylene autoclavable, <i>non-sterile</i> , conical with rim, without cap, <i>capacity-15ml</i> , Dimensions (d X h)= 17mmx120mm	
24.	27	Clipping Scissor	6" Stainless steel (Straight / curved)	
25.	28	Conical Flask 250, 500, 1000 ml.	Borosilicate glass, flat bottom, narrow mouth with rim	
26.	29	Cotton Apron	Cotton, half sleeve, free size	
27.	30	Couplin Jar Screw Cap (PVC)	PVC	
28.	31	Cover slip a) Circular b) Square c) Rectangular	a) Diam. -19 mm , No. 1( 0.13 to 0.16 mm thickness) b) Size-18mmx18mm,Number and thickness same as above c) Size-22mm X 30mm, Number and thickness same as above	50's
29.	32	Cryo Box	Polycarbonate, autoclavable to hold 81 cryo vials of 1.8 ml and 4.5 ml, numbers moulded into grid system in the box corresponds to number printed in the lid	
30.	33	Cryo Vial	Polypropylene, sterile, graduated with leak proof screw caps, with self standing base, white writing area on side of the tube, capacity 12ml & 5ml pack of 100/216	
31.	34	Curette	Stainless steel, 6" & 8" long	
32.	35	Desiccator	Borosilicate glass with knob type cover ground to fit and perforated	

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			zinc disc, internal diameter of ground flang 200 mm	
33.	36	Digital Balance	Full digital calibration, sharp, easy to read fluorescent/ LCD display, sealed key pad protect against dusts and spills, round pan, calibration weight accurately to 05 decimal places with balance housing having door opening/ closing configuration to suit both right and left handed operators, built- in level and leveling feet, touch bottom operation, tare facility, capacity upto 180gm, operating temp. 0 <sup>o</sup> -50 <sup>o</sup> C, optional RS 232C interface, measurement date can be sent to a printer or to a computer, power supply 220-240V AC, 50 Hz, stabilization time approximately 2-5sec.	
34.	38	Disposable Head Cap	Surgeon's Head Cap, Cotton, Green Colour	50s
35.	39	Disposable Mask	Non-woven fabric, non-allergic, melamine free	100
36.	40	Disposable Petri Plates	Polystyrene, 90mm & 140mm in dia in sleeve pack	400
37.	41	Distill Water Plant ( Triple) Glass	Electrically heated, all borosilicate glass distillation unit (flask, condenser, connector) with all electric (switchboard, plug, wire) and rubber fittings and iron stand. Heating element of 1 kilowatt each, water output approx. 1lit per hour, capacity 5 litre	
38.	42	Douch Can	E.I. can with 2 meter long rubber/Polythene tube(1.5cm diam.) with blunt ends and controlled nozzle	
39.	43	Dressing Forceps	Stainless steel 6"	
40.	44	EDTA Coated Blood collecting vials	EDTA Coated Plastic blood collection vials	100's
41.	45	ELISA Plate	96 well Immunoassay plates are manufactured from optically clear polystyrene and provide more uniform absorption. The absorption error at 450nm-630nm is 0.004.	
42.	47	ESR Stand with tube (westergreen)	Graduated	
43.	48	Eye Hook (large, small)	Stainless steel with blunt ends	
44.	49	Filter Paper (qualitative)	Qualitative, ash content 0.6%, circular, 90 mm, 150mm 185mm dia	
45.	50	Flat Bottom Flask 100ml, 500 ml	Borosilicate glass, flat bottom, narrow mouth, long neck	
46.	51	Forceps Specimen Holder S.S. 10"	Stainless steel with blunt ends & serrated tips of 10" length	
47.	53	Glass Funnel	Borosilicate glass, 3" & 4" outside top diam., stem length 70mm Polypropylene with above specification	

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48.	54	Glass Pipette 100 ml	Borosilicate glass, graduated to tip zero mark at top or outlet, permanent amber markings, graduation interval 0.1ml	
49.	55	Glass Pipette 2.5 ml	Borosilicate glass	
50.	56	Glass slide	Length X width X thickness 76 mm X 26 mm X 1.3 mm, optically clear, distortion free surface, low iron content	
51.	57	Gloves-rubber gloves	Latex, autoclavable, for left & right hand fitting, size- No. 6 & 7	
52.	58	Gloves, Surgical	Surgical No. 6 ½ & 7,	
53.	59	Haemocytometer	Double cell counting chamber with improve naubauer ruling, two plain cover glasses, one each red and white cell pipettes with rubber tubing and mouth piece complete in a case	
54.	60	Haemoglobinometer	With permanent colour standard in comparator, graduated tube, pipette 0.02 ml, plain dropping pipette with teat, polystyrene/glass rod, lancets and dropping bottle complete in a case	
55.	61	High speed Centrifuge Machine	One non-removable swing out rotor complete with 8 tube carriers and rubber cushion, tube carriers to accommodate 15ml plain tubes, built in 4/5 step speed regulator, electrically operated.	
56.	62	Hoffkins Flask 4 lit capacity	Borosilicate glass, approximate O.D. X Height = 245 X 310mm	
57.	63	Instrument Cabinet	Instrument Cabinet built 38 x 38 x 3 cm. Angle Steel welded joints, white enamel, 4 mm. thick glass sheet, glass door & size 6 mm. thick polished edges. 5 glass shelves with 1.25 mm. Sheet or C.R. sheet back. Dust proof by providing good quality of felt in all inner side of the glass door. Size : 135 cm. x 60 cm. x 40 cm.	
58.	64	Instrument Steriliser	Stainless Steel Tray and fixed with drip handles, Automatic tray lifting arrangement. Heater electric immersion type rating between 1.5 KW and 3.0 KW, Energy regulator, Pilot light Size 43 X 20 X 15 cm	
59.	65	IV Infusion stand	Saline stand, adjustable height	
60.	66	Laminar Flow	a) Prefilter –95% efficient at 5 microns b) HEPA filter –99.9% efficient at 0.3 microns c) Air velocity-90 ft./ minute (0.45m/ sec + 20% at rated pressure drop) d) Operating filter resistance – maximum 32 mm WG e) Fan-double inlet, centrifugal, super silent f) Manometer and pressure gauge indicator g) Lighting –800 lux minimum at work surface h) Stainless steel work tops with gas taps/ vacuum points i) U.V. light facility j) <b>Structure – Steel Body, clear Perspex side screens with front sliding</b>	

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			panel, overall length-1200 to 1900 m	
61.	67	Measuring Cylinder 500ml, 100ml, 1 Ltr. Graduated	a) Borosilicate glass with sprout and graduated with hexagonal base b) Polymethyl pentene (TPX), autoclavable with spout and graduated with hexagonal base	
62.	68	Metal Detector	For Bovine	
63.	69	Micropipette (10-100 micro litre) Single Channel	Single channel – adjustable volume single channel air displacement pipette with soft touch tip ejector, extremely smooth piston movement, rotating plungersets volume within range, volume range-(a)0.5-10µl with 0.1µl increment (b) 10-100µl with 1µl increment(c) 100-1000µl with 1 µl increment <b>Multichannel :- adjustable volume , 8 channel air displacement pipette with plunger and convenient tip ejector, rotating plunger sets volume, volume range 25-250µl increment.</b>	
64.	70	Microscope (MONOCULAR)	Microscope Monocular: Straight with 3 eyepieces 5/6x, 10x, 15 x. Three objectives 10x, 40/45x & 100x. (Oil immersion) Condenser with Irish diaphragm and mirror, graduated mechanical stage, rack, pinion focusing arrangement in wooden box with keys.	
65.	71	Microscope (Binocular)	Binocular inclined pathological 4x,5x,10x,40x,45x,100x with ISI marked	
66.	72	Microscope Slide Box (plastic)	Made up of polystyrene base slotted to hold 50 (76 X 22mm) slides with close fitting lid and index	
67.	73	Microtips with Box	polypropylene. Sterile ( 0.1 - 200 Micro litre) with box	
68.	74	Microtips with Box	polypropylene. Sterile (200 - 1000 Micro litre) with box	
69.	75	Mug (stainless steel)	Stainless steel, 500 ml	
70.	76	Mayo Scissors 6" Straight	Stainless steel, straight, 6" long	
71.	78	Non-Absorbent Cotton	500 gm	
72.	79	Nylon Suture	Coarse, hank of 100 threads, each 35 cm	
73.	80	Operation Table for small animal Hydraulic	Automatic. Stainless Top of 4' long & 32" width, Hydraulic Facility. Height: 75 cm. min. & 90 cm. maximum, Foot puddle, side end control, detachable 4" cushion cover with high quality of Rexene. Easily movable, floor locking system & tilting lateral. Drainage hole in the extreme corner of the top of the table.	
74.	81	P.M. Set	Consisting of	

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			1) Amputation saw, stainless steel 2) Wire saw with handle, stainless steel (Gigli wire saw) 3) one spare wire for wire saw 4) Post-mortem knife 5) Full hand gloves, size- 6 & 7 6) Post-mortem gloves, latex, size- 6 & 7 7) Bone hammer 8) Bone chisel 9) Post-mortem scissors, stainless steel 10) Scalpel, stainless steel 11) Allis tissue forceps, stainless steel 15" 12) Sharpening stone 13) Probe, stainless steel 14) Scissors, Dressing, stainless steel 15) Bowel scissors, stainless steel 16) Retractor four prong sharp 17) Retractor four prong blunt 18) Dissecting forceps, toothed, stainless steel 19) Bone holding forceps, stainless steel 20) Abscess knife, stainless steel 21) Pharmacy scissors, stainless steel 22) Bone file 23) Measuring tape 24) Vice with two adjustable jaws made of iron for cutting heads of animals	
75.	82	Pasture Pipette Glass (disposable)	Pasteur Pipette. Sterile, Transparent, Graduated, capacity : 3 ml.	
76.	83	Pestle & Mortar (porcellian)	Mortar- porcelain, non- glazed with sprout, external diameter 70mm & 100mm, Pestle to suit mortar volume with oval nonglazed porcelain head	
77.	84	pH Colorimeter	5.9 to 8.2 pH, Resolution: 0.01 ppm, 0.1ppm, 0.1 pH, Accuracy: $\pm 0.02$ ppm, $\pm 0.2$ ppm, $\pm 0.1$ pH	
78.	85	pH Meter, Bench Top	Digital pH meter with LED / LCD display, range 0-14 pH with 0.01 resolution, auto/ manual calibration, temperature range 0 <sup>o</sup> –100 <sup>o</sup> C electrically operated with electrode and electrode holder.	
79.	86	Pipette Bulb	Rubber / PVC bulb to fit most pipette, 5ml, 10ml, 20ml each	
80.	87	Plaster Cutting Saw	Plaster cutting saw 316 LMV Steel	

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81.	88	Platinum loop	Platinum Loop with handle for bacteriological use	
82.	89	Probang Metal	All Metal	
83.	90	Rat Tooth Forcep Disecting	Stainless steel, straight, of 6", 8" length	
84.	91	Reagent Bottle with stopper 100 ml	Polypropylene, (a) Narrow mouth with leak proof screw cap (b) Wide mouth with leak proof screw cap (c) Amber colour narrow mouth leak proof screw cap	
85.	92	Round Bottom Flask 100, 200, 500 ml.	Borosilicate glass, flat bottom, narrow mouth, long neck	
86.	93	Rubber teat 5ml & 10 ml	Rubber / PVC bulb to fit most pipette, 5ml,10ml,20ml each	
87.	94	Rumenotomy Set	<ul style="list-style-type: none"> <li>1. Weingart pattern fixation frame for rumen made of non magnetic anti rust material having length : 27 cms and breadth 18 cms. 1 Pc</li> <li>2. Weingart pattern fixation hook with 7 cm long made of anti rust material 6 Pc.</li> <li>3. Weingart pattern vulsellum forcps 24 cms made of stainless steel material 2 Pc.</li> <li>4. Mayo Pattern Scissor both end blunt straight blades made of stainless steel material screw joint having total length 16 cms with comfort finger loops. 1 Pc.</li> <li>5. ....do.....curved blades made of stainless steel material screw joint having total length 16 cms with comfort finger loops. 1 Pc.</li> <li>6. B.P. Handle Commercial No.3 made of stainless steel material and should take Blade No.11 firmly without any play1 Pc.</li> <li>7. ....do.....4 made of stainless steel material and should take Blade No. 23 firmly without any play1 Pc.</li> <li>8. BP Blades No. 11 and 23 ISI Marked 100 Pc.EachSterilised and Disposa ble</li> <li>9. Tissue forcep jointless with 2x1 teeth ,stainless steel having total length 15 cms. 1 Pc.</li> <li>10. Allis Tissu Forceps screw joint 4x5 teeth stainless steel having total length 15 cms 2 Pc.</li> <li>11. Backhaus Towel Clamp screw joint 14 cms length made of SS</li> </ul>	

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			<p>4 Pc.</p> <p>12. Halstead Mosquito Forcep with screw joints jaws having antiskid serrations straight , made of stainless steel total length : 13 cms 4 Pc.</p> <p>13. Spencerwell's Artery Forcep Screw Joint straight jaws with antiskid serrations 15 cms length stainless steel. 2Pc.</p> <p>14. ....do.....curved blades 2 Pc.</p> <p>15. Mathew Pattern Needle Holder made of stainless steel, having total length 17 cm and screw jointed. 1 Pc.</p> <p>16. GroveDirector stainless steel winged 14 cms length 1 Pc.</p> <p>17. Suture Needle Traumatic reverse cutting triangular straight made of Stainless steel material having length of 93 mm and diameter 1.6mm 12 Pc.</p> <p>18. Suture Needle Traumatic reverse cutting triangular ½ circle made of stainless steel material having length of 102 mm and diameter 1.6mm 12 Pc.</p> <p>19. Suture Needle Atraumatic straight made of stainless steel material having length 93mm and diameter 1.6mm 12 Pc.</p> <p>20. Suture Needle Atraumatic curved ½ circle made of stainless steel material having length 102mm and diameter 1.6 mm12 Pc.</p> <p>21. Surgical Gloves ISI Marked Disposable /Sterile size 6 10Pairs  .....do.....size. 7 10 pairs  .....do..... size 7.1/2" 80 Pairs</p> <p>22. Surgical Gown(Latha Green Color 100x 60mm with sleeves)2 Nos.</p> <p>23. Face Mask 10 x 5 cms with arrangement for knots Green Latha Make 2 Nos.</p> <p>24. Surgical shroud (75x105cms) of latha green color with 17x2 cm slit in centre 2 Nos.</p> <p>25. Surgical shrouds 75 x 105 cms of latha green color 2 Nos.</p> <p>26. Surgical Towels white color 20 x 30 cms pakced in 6 Pc 3 pkt of 6 Pc</p>	

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			27. Surgical Pack wrapper (90 x 120 cms ) of latha Cloth Green Color 2 Nos. 28. Surgical Tray with Cover ISI Marked size 15x 12" 1 No. All the items should be packed separately and be placed in dust proof cover with zipper.  Rate should be quoted for complete kit and not for individual item. Sample should be submitted along with tender.	
88.	95	S S. Bucket 10" & 12"	Stainless Steel 10" & 12"	
89.	96	Scissor Straight 10"	Stainless Steel, Straight 10"	
90.	97	Serum Vial	Polypropelene	100
91.	98	Shadowless Light	Shadowless light (top / ceiling mounted- four pointed, dual focus)	
92.	99	Silk Suture	Black braided, 25m reel	
93.	100	Slide Dispenser	Slide Box Capacity to accommodate 50 slides.	
94.	101	Slide Mailing Box ( 5 slide & 2 slides)	Slide Mailer. Capacity to accommodate 2 & 5 slides	
95.	102	Speculum steel for small & large animal	Stainless Steel for large animal & small animal	
96.	103	Spirit lamp	Stainless steel with screw caps and metal wick holder fitted with wick, capacity -100ml	
97.	104	Staining Rack	Rack for staining of microscopic slides,	
98.	105	Stethoscope	Stethoscope with good aquostic facility with round dial and flexible rubber tube of MDF make.	
99.	106	Straw Cutter	Stainless Steel	
100.	107	Strip Cup	Plastic	
101.	108	Suturing Needle Traumatic	Stainless steel, straight, cutting Stainless steel, curved , cutting & non-cutting "S" shaped with eye for prolapsed	6's
102.	109	Stabiliser	5.0 KVA, input- 90-300 volts, output- 220-240V (Automatic)	
103.	111	Teat Surgery Instrument Set	Teat surgery set containg all following items in dust proof cover with zipper :- Furstenberg's teat siphon with round head and side openings ,9 cms length Nickel plated of diameter 2mm along with stillet. 2 Pc. Do.....2.5mm dia 2 Pc. Do.....3.0 mm dia 1 Pc	

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			2. Hug's Teat Tumor extractor stainless steel 12.5 cms length x 4mm dia 2 Pc. 3. Teat Dilator with screw action 17 cms 1pc 4. Teat Slitter with screw and 2 blades Danish Pattern 19cms length , 3mm dianickel plated 1 pc  5. Teat slitter Swiss Model 9.5cms length ,4 mm dia . 1 pc 6. Lichy Teat Knife with sharp point made of stainless steel to cut the extra growth in teat canal. Total length with handle 18 cm. Made of stainless steel material	
104.	112	Teat Syphon	Stainless steel, self retreating, adjustable, 2mm outer diam.	
105.	113	Test Tube	Borosilicate glass, medium wall(extra strong), size (O.D. X length) in mm = 12 X 75, 12 X 100, 15 X 150, 18 X 150	
106.	114	Test tube holder	Brass/ Stainless steel with wooden handle	
107.	115	Test tube Stand (Steel)	Aluminium, three tier, 12holes of dia 18-20 mm in two rows Stainless steel, three tier, 24 holes of 13 mm in 3 rows and 12 or 18 holes of 18 - 20 mm in two rows	
108.	116	Thermo Regulatory Water Bath	Consisting of water bath or outer jacket made up of perspex, inner organ bath, heating rod, stirrer, condenser, oxygen delivery tube, miniature aerator for organ bath, electrically operated( 230 volt, 50Hz)	
109.	117	Thermoflask SS , 2 lit capacity wide mouth	Thermo Flask. Wide Mouth 2 litre cap. With strap for easy carrying.	
110.	118	Tissue Paper General purpose	General Purpose Tissue Paper	
111.	119	Tissue Paper Lens Cleaning	Lens cleaning Tissue Paper for Cleaning of Microscope Lens.	
112.	120	Towel Clip	Towel Clip. S.S. 8 cm.	
113.	121	U.V Light	Ultra Violet Light. 3 feet. 35 Watt. Complete set of dual tubes for germicidal effect.	
114.	122	Universal A.I Gun with container	Stainless steel, for French mini, midi & German straws	
115.	123	Vaccine Carrier	Moulded polythene construction with lid & strong carrying handle, double walled with PUF insulation, unbreakable, lightweight, sponge piece to fit internally with 8-10 rectangular plastic ice packs, dimension( LX W X H) in feet= 2.0 X 1.0 X 15	
116.	124	Vacutainer with needle a) Tube with anticoagulant	Sterile, Borosilicate glass/ PP, evacuated (vacuum) tube with rubber stoppers, EDTA / Heparin as anticoagulant, capacity- 10 ml	

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		b) Tube without anticoagulant c) Blood collection needle	Same as above except the anticoagulant Disposable, sterile, double ended stainless steel 20 gauge, 1.5 inch long with threaded hub that fit into the holder	
117.	125	Volumetric Flask 50 ml., 100 ml. & 250 ml.	Borosilicate glass, one mark stoppered flask with interchangeable glass stopper.	
118.	126	Wash Bottle	Low density polyethylene (LDPE), leak proof, outlet tube moulded into the bottle, polypropylene screw cap	
119.	127	Washing Brush (for bottle/flask) a) for test tube  b) for bottle / flask	White nylon bristles on galvanized wire for use with 12-16 ml tube and 18-25 ml tube, approx. length of wire 24- 25 cm with size of head (Bristle portion )75-100mm long X 25-30 mm diam. nylon bristles, loop form on galvanized wire, size of head 125mm X 60mm diam., overall length 300 - 400mm	
120.	128	Water Bath for semen thawing	Stainless steel chamber (LxBxH in inches=24x18x18), shaking speed range 40 -140 cycle/ min, shaking tray can either hold tubes or flasks, temp. range 20 <sup>o</sup> -120 <sup>o</sup> C	
121.	129	Wire Saw	Gigli wire saw 316 LMV Steel	

**Equipments for FSB**

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122.	130	AI gun containers	The AI gun container should be made rigid PVC with the following dimensions 480 mm long 25 mm O.D. and 1 mm thick. It should be of white colour. It should have lids at both ends, which can be removed easily.	
123.	131	AI Guns (Flexia) for French mini straws (0.25 ML)	Made of Stainless steel body and piston, with one ring on body for locking of sheath and suitable for 0.25 ml/0.5 ml straws and split / unsplit sheaths. (ISO Certified).	
124.	132	AI sheaths – split single pack	Sterile AI sheaths suitable for 0.25 ml AI Guns made of transparent plastic and packed in sterile packets. The sheath should have a split, match with standard imported AI gun, and fit with the straw. The sheath should have plastic bead to hold the straw, which should move smoothly in the sheath. (ISO Certified)	
125.	133	AI Straws – (0.25ml)	The straws should be made PVC of suitable grade which can withstand long time storage in liquid nitrogen i.e. temperature of – 1960c (Minus 196 Degree Celsius. Each straw should have volume of about 0.23 ml and 133 mm long. The factory plug of straws should absorb less semen than regular straws and straw production should be higher by 6% over regular straws. The straws should be available in pastel colors like pastel red, pastel green, pastel blue, pastel yellow, grey & pastel orange. The straws should not lose shape in normal storage condition. (ISO Certified)	
126.	134	Artificial Vagina cones - 9"	The cone should be made of virgin latex rubber, 9 inches long with one end tapering to fit on semen collection tube of 15 mm diameter. It should withstand steam sterilization. It should be of thick rubber.	
127.	135	Artificial Vagina cones siliconized - 9"	The cone should be made of siliconized rubber, 9 inches long with one end tapering to fit on semen collection tube of 15 mm diameter. The inner surface should be very smooth and shining to permit free flow of semen. It should be withstand steam sterilization.	
128.	136	Artificial Vagina Hose pipe - 10"	Artificial vaginas made of rubber, suitable for buffalo bulls, 10 inches long, 2.5" Dia approx fitted with good quality brass valve for pouring hot water. The brass valve should be leak proof for air and water. The body should be slightly pliable. Both the edges should be rounded, smooth and elevated to hold the rubber liner.	

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129.	137	Artificial Vagina Hose pipe - 12 "	Artificial vaginas made of rubber, suitable for cattle and buffalo bulls, 12 inches long, 2.5" Dia approx., fitted with good quality brass valve for pouring hot water. The brass valve should be leak proof for air and water. The body should be slightly pliable. Both the edges should be rounded, smooth and elevated to hold the rubber liner.	
130.	138	Artificial Vagina Liners-12"	The rubber liner should be made of virgin latex rubber and 12 inches long with sides smooth. The liner should be of uniform thickness, smooth and soft. It should withstand repeated sterilization.	
131.	139	Artificial Vagina Liners-22"	The rubber liner should be made of virgin latex rubber and 20 inches long with both sides smooth. The liner should be of uniform thickness, smooth and soft.	
132.	140	Controller for Bio Freezer (Stand By for existing)		
133.	141	Spare for bio-freezer		
134.	142	Dipstick for LN2 container		
135.	143	Disposable plastic goblets 13 mm dia 118 mm long capacity 25 French mini straws.	The goblets should be made from virgin plastic compound with size of 13 mm dia and 118 mm long. The goblets should withstand repeated cooling to -196 degree centigrade and thawing to ambient temperature. The goblets should be compatible with the imprinted make straw counting and filling machine. It should accommodate 25 French mini straws.	
136.	144	Disposable plastic goblets Hexagonal capacity 80 Frenchmini straws	The goblets should be made from virgin plastic compound and hexagonal shape 118 mm long. The goblets should withstand repeated cooling to -1960 centigrade and thawing to ambient temperature. The goblets should be compatible with the imprinted make straw counting and filling machine. It should accommodate 80 French mini straws.	

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137.	145	Goblets for straws(Aluminum)	The goblets should be made from anodized aluminum with size of 65 mm diameter and 118 mm long. The edges should be smooth. The sheet should be of 30 gauge.	
138.	146	Goblets for straws(Aluminum)	The goblets should be made from anodized aluminum with size of 35 mm diameter and 118 mm long. The edges should be smooth. The sheet should be of 30 gauge.	
139.	147	Gum boots Full size (in pair)	Gumboots should be of lightweight, made of rubber / synthetic rubber with cloth lining inner side. Sizes-8,9, 10 Full size Height – 14” Gumboots should be of lightweight, made of rubber / synthetic rubber with cloth lining inner side. Sizes-9, 10 & 12 Full size Height – 14” with steel toe.	
140.	148	Forceps for frozen semen goblets	Made of stainless steel, 16” long suitable for lifting goblets with frozen semen straws. The tip should have grooves to grip the goblet tightly	
141.	149	Forceps for frozen semen goblets 12”	Made of stainless steel, 12” long suitable for lifting goblets with frozen semen straws. The tip should have grooves to grip the goblet tightly.	
142.	150	Gynaecology aprons	Aprons for gynaecological work, of full length made of synthetic material and provided with braided cotton ends for tying with pockets. Should be made up of glass with silver lining. Should not have scratches.	
143.	151	Insemination Gloves	Full arm length (34”) LDPE disposable gloves with five fingers. The thickness should be 25 microns and above the joints should be strong and non-leaky. The gloves should be smooth, soft and harmless to the mucus membrane of cow / buffalo and also to the inseminator’s hand.	
144.	152	Semen Straw Cutter	Sharp Cutter to Cut the PVC semen Straw	
145.	153	AI Sheath container	It should be made of rigid PVC of 460 mm long, 50 mm OD and 2 mm thickness. It should be of white colour have good quality lids at both ends which can be removed easily and maintain dust proof condition inside the container.	

Sl. No	No. as per Approved TC List	Instruments / Equipments	Specification	Unit
146.	154	Spare lids for LN container	Spare lids for LN storage & transport of 51.5 lit, IN 55 Spare lids for LN storage of 3-4 lit capacity Neck. Spare lids for LN storage of 35 lit capacity 7 BA-35 Neck Plug	
147.	155	Cryocan Frozen semen storage container 30-35 liters	Capacity 30-35 liters of Liquid Nitrogen with static evaporation loss rate of 0.118 liters per day at STP, six canisters with OD 38mm, height 120 mm. The level of liquid nitrogen from bottom should be about 33 cms. The neck diameter should be 50mm. The container is required for storage of FS doses at Veterinary Institutions.	
148.	156	Cryocan Frozen semen storage container 11-12 Litres	Capacity 11-12 liters of Liquid Nitrogen with static evaporation loss rate of 0.14 liters per day at STP, six canisters with OD 38mm, height 120 mm. The neck diameter should be 50mm. The container is required for supply of goblets containing FS doses to Institutions in the district. It should be sturdy	
149.	157	Cryocan Liquid Nitrogen Storage & Transport Container	Capacity 50-55 liters of Liquid Nitrogen with static evaporation loss rate of 0.43 liters per day at STP. The neck diameter should be 50mm. The container should be sturdy, fitted with rubber rings and rubber bottom pads to prevent friction. It should have two well placed handles. This container is required for transportation of LN from district HQ to institutions.	
150.	158	Cryocan Portable Frozen Semen Container	Capacity 3-4 liters of Liquid Nitrogen with static evaporation loss rate of 0.135 liters per day at STP, six canisters with OD 38mm, height 120mm. The level of liquid nitrogen from bottom should be about 20cms. The neck diameter should be 50mm. This container is meant for doorstep AI by private AI practitioners and should be sturdy.	
151.	159	Liquid Nitrogen container Jumbo-12	Capacity 45-50 liters of Liquid Nitrogen with static evaporation loss rate of 0.38 liters per day at STP, 11 canisters with OD 72mm, height 280mm. The level of liquid nitrogen from bottom should be about 42 cms. The neck diameter should be 120 mm. This container is required for storage and transport of FS doses from production centre to district quarters. More than 99% pure. Each bottle will have 2.5 lit AR/Excellar	
152.	160	Bacteriological Incubator	350mmx350mmx350mm with SS Inner cabinet with temperature range 5c to 70c with sensitivity of +or-1 c	

Sl. No	No. as per Approved TC List	Instruments / Equipments	Specification	Unit
153.	161	Incubator	Made up of stainless steel inner cabinet with temp range from 5 oC to 70 oC with +/- of 1o C variation with digital display and temp recorder	
154.	162	Ink cartridge	Domino printing unit is a part of straw printing assembly supplied by M/s IMV France. The ink is required for replenishment. The ink should be compatable with IMV machine and give clear and permanent marking on the straw 1.2 lt. 13 Domino	
155.	163	Ink reservoir	Domino printing unit is a part of straw printing assembly supplied by M/s IMV France. The ink is required for replennishment. The ink should be compatable with IMV machine and give clear and permanent marking on the straw 1.2 lt.	
156.	164	Liquid detergent for cleaning of Glassware and Rubber ware	Neutral liquid detergent equally effective in hard and soft water. Required for washing and cleaning of Laboratory glass ware, rubber ware etc. It should be mild and effective without causing chemical reaction.	
157.	165	Laboratory Fumigation Concentrate	Required for room fumigation through aerosol disinfection, powerful to kill bacteria, fungi, spores and virus. It should have Glutaraldehyde and Benzal Konium Chloride, 1- Propanol and 2- Propanol. It should be non-toxic and nonirritant to personnel	
158.	166	Make up cartridge	Domino printing unit is a part of straw printing assembly supplied by M/s IMV France. The make up solution is required for dilution of ink. It should be compatable with IMV machine	
159.	167	Spares for Photometer	Disposable Cuvate Lamp 6 Volt, Key Pad, Hamiliton Syringe ml	
160.	168	Spares for Domino Printing Unit	Air Filter, Keypad, Wash	
161.	169	Spares for Integrated Filling seaing Machine	Flexible Filling Tubes, Flexible sauction Tubes, Disoposable Cones, Suction nozle, Filling nozle, Rubber beads, Rubber Belt	
162.	170	Spares for Biofrezer	All consumables	

<b>Sl. No</b>	<b>No. as per Approved TC List</b>	<b>Instruments / Equipments</b>	<b>Specification</b>	<b>Unit</b>
163.	171	Spares for Nikon Phase Contrast & DIC MICROSCOPE with Monitor	All consumables	
164.	172	Spars for CASA	Ident & viadent Stain, Leja -4 Slides	
165.	173	Morphology Soft Ware For CASA	IVOS-HAMILTON THRONE	

**Equipments for Poultry & Duck Breeding Farms**

<b>Sl. No</b>	<b>No. as per Approved TC List</b>	<b>Instruments / Equipments</b>	<b>Specification</b>	<b>Unit</b>
166.	174	Feed Grinder, Hammer Mill of 3/5 HP, single phase	Feed Grinder (Hammer Mill of 3 HP/ single phase)	Single
167.	175	Premixer (Single Phase) 500 Kg.	Premixer (Single Phase) 500 Kg./ hr	Single
168.	176	3 Wheeler trolley- Rickshaw for egg transportation	3 Wheeler trolley- rickshaw for egg transportation	Single
169.	177	Box Type double wheel Barrow, 3 Cft. Capacity.	Box Type double wheel Barrow, 3 Cft. Capacity.	Single
170.	178	Egg Candiling System (Table with Elect bulb fitted)	Egg Candiling System (Table with Elect bulb fitted)	Single
171.	179	Plastic Regular Drinker Automatic with all fittings for chicks	(No. of Birds 125 Chicks / 100 Broilers/Layers) Bell Diameter 340 mm Trough Height 35 mm Water Level in Trough 10-25 mm	Single
172.	180	Plastic Regular Drinker Automatic with all fittings for Grower	(No. of Birds 50 Breeder Grower Bell Diameter 340 mm Trough Height 50 mm Water Level in Trough 20-25 mm	Single
173.	181	Plastic Regular Drinker Automatic with all fittings for layer	(No. of Birds 50 Breeder Layers) Bell Diameter 340 mm Trough Height 50 mm Water Level in Trough 20-25 mm	Single
174.	182	Plastic Chick Feeder (One Feeder for 50 chicks)	Feed Capacity 2 kg approx. Feeder Pan Diameter 255 mm Mini Chick Grill 30 mm Spare List a). Chick Feeder Cone, b). Chick Feeder Pan, c). Chick Mini Grill, d). Chick Feeder Two Way Stand, e). Chick Feeder Pipe, f). Chick Feeder Nut (Black), g). Chick Feeder Extension	Single
175.	183	Plastic Grower Feeder (One Feeder for 40 -50	Plastic Grower Feeder (One Feeder for 40 -50 Birds) Feed Capacity 7.5 kg approx.	Single

Sl. No	No. as per Approved TC List	Instruments / Equipments	Specification	Unit
		Birds)	Feeder Pan Diameter 336 mm Mini Chick Grill 25 mm & 35 mm Spare List a). Feeder Hook, b). Feeder Height Adjuster, c). Feeder Cord, d). Feeder Extension, e). Feeder Cover , f). Feeder Cone g). Feeder Pan, h).Grill 25mm/35 mm, i).Feeder Pipe, j).Feeder Pipe Nut (Black).	
176.	184	Egg Tray Plastic (30 eggs capacity)	Egg Tray Plastic (30 eggs capacity)	Single
177.	185	Fogger Brass Cap	Fogger Brass Cap with all fittings	Single
178.	186	Flame Gun LPG 4 burner	Flame Gun LPG 4 burner with all fittings	Single
179.	187	Debeaker (Electrical)	Debeaker (Electrical)	Single
180.	188	Sprayer 10 Ltr. Capacity (Brass)	Sprayer 10 Ltr. Capacity (Brass)	Single
181.	189	Laying Nest of G.P. Sheet Size 12" X 14" X 16" (1.5)	Laying Nest of G.P. Sheet Size 12" X 14" X 16" (1.5)	Single
182.	190	Sprinkler	Sprinkler with all fittings	Single
183.	191	Feed Storage Bin 100-150 kg capacity	Feed Storage Bin 100-150 kg capacity	Single
184.	192	Spade	Spade	Single
185.	193	Hand Balance (With Weight)	Hand Balance (With Weight)	Single

**SCHEDULE – A ( Require Drug License)**

<b>Sl. No</b>	<b>No. as per Approved TC List</b>	<b>Instruments / Equipments</b>	<b>Specification</b>	<b>Unit</b>
186	4.	Absorbent Cotton I.P	500 gm.	
187	24.	Catgut Chromic No.2	Catgut, Sterilized Chromic Non-boilable in Foil No. 2.	
188	26.	Clinical Thermometer I.P	With lens front, dual case(35 to 40 C and 94 to 108 F) in plastic case.	
189	37.	Digital Thermometer I.P	Portable, battery, operated, digital LCD readout temperature. Thermometer covers range 20 degree to 43 degree C , accuracy $\pm$ 0.1 degree C.	
190	46.	ELISA Kits	Kits for Haemorrhagic Septicemia, Black Quarter, Anthrax, Brucellosis, Ranikhet Disease , Infectious Bursal Disesase and Aflatoxin	
191	52.	Gauge (bandage)	Bandage than	
192	77.	Needles disposable -	Disposable Sterile Needle 18 G & 20 G	
193	110.	Syringe, Tuberculine disposable	Borosilicate glass, central nozzle, heat and corrosion resistant, graduated, graduations at 0.01ml intervals	

Recommended by Technical Committee

Approved

**D I R E C T O R**

**Dr. G.C.Sar,  
DD, FSB, Cuttack**

**Dr. P.K.Bisoi,  
DD (PD), DAH & VS,  
Orissa**

**Dr. M.R.Das,  
Assoc. Prof., Deptt. of  
Clinical Medicine, OVC**

**Dr. S. Nayak,  
Prof. & HOD, Deptt. of  
Surgery, OVC**

**Dr. Sanat Mishra,  
CEO, OLRDS**

**Dr. T.Nayak,  
CDVO, Malkangiri**

**Dr. P.N.Rout,  
CDVO, Jagatsinghpur**

**Dr. S.Mohanty,  
CDVO, Sonapur**

**Dr. L.Behera,  
DD, OBPI, BBSR**

**Dr. C.R.Swain,  
PC, ADRI,  
Phulnakhara, Cuttack**

**Dr. U.S.Patro,  
JOINT DIRECTOR,  
AH & VS, Orissa, Cuttack**