





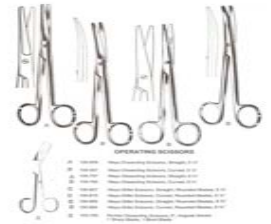






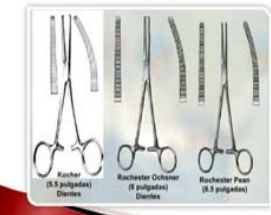

Ministry of Education and Sports
Department of Vocational Education
Dongkhamxang Agriculture Technical School






No.:...../DATS
Vientiane Capital, date:.....






The List of Equipment and Tools for Veterinarian, DATS






ລ/ດ	ຊື່ອຸປະກອນ	ລັກສະນະເຕັກນິກ, ຈຸດພິເສດ, ມາດຕະຖານອຸປະກອນ	ຮູບພາບ	ຍີ່ຫໍ້ອຸປະກອນ	ຫນ່ວຍ	ຈານວນລວມ
No.	ITEM	SPECIFICATION	Picture	Prefer brand	Unit	Total
1	ARI V-320 Veterinary Anaesthesia machine Anesthesia Machine	<p>- Application: small and large animals.</p> <p>- Gas sources: O2: 0.27--0.55MPa.</p> <p>- Flow meter: O2: 0.1--2L/min 2.5--10L/min.</p> <p>- Flow rate of rapid oxygen supply: 25--75L/min. Low oxygen pressure alarm: There will be sound alarm when the oxygen pressure < 0.2MPa.</p> <p>- Vaporizer: The regulation range of evaporator concentration is 0--5 vol%. The range of flow is 0.25-15L/min. Among Halothane, Enflurane, Isoflurane and Sevoflurane, one can be chosen for application as required by the customer.</p> <p>- Respiratory circuit: working mode: all-close, semi-close, semi-open releasing pressure: 0.5--7 kPa.</p> <p>- Respiratory bellows: bellows for adults, bellows for children tidal volume range:0--1500 ml.</p>			Machine	1
2	Portable Fully-Auto Biochemistry Analyzer (Veterinary)	<p>-Type: Biochemical Analysis System;</p> <p>- Diagnosis: Whole blood;</p> <p>- Warranty: 12 months;</p> <p>- Test time: 12 mins/sample;</p> <p>- Application: Diagnosis;</p> <p>- Sample Volume: 0.1 cc.</p>		Seamaty	set	1
3	Autoclave, Model: SA-252F	<p>- Model No.: SA-252F</p> <p>- Overall Dimensions/Mm: 630 (Dep.) × 540 (W) × 450 (H)</p> <p>- Construction: Chamber & Door: Stainless Steel #304</p> <p>- Chamber Size/Mm: 260 (Dia.) × 450 (Dep)</p> <p>- Chamber Capacity: 24 Liters</p> <p>- Capacity Of Water Tank: 4200 cc</p> <p>- Water Consumption Per Cycle: 300cc</p> <p>- Power Supply: 230V 50/60Hz</p> <p>- Power Consumption: 2063 W/9 Amp, Heater 1800W, Dry Heater 263W</p> <p>- Standard Accessories: ST. ST. 304 Sterilization Box × 1, Heater Cover × 1</p> <p>Size of Box: 368 (L) × 206 (W) × 121 (H) /mm</p> <p>- Optional Accessories: Tray Set (Tray x 3, Frame x 1, Holder x 1)</p> <p>Spring Holder(Pouch Rack) x 2</p>			set	1

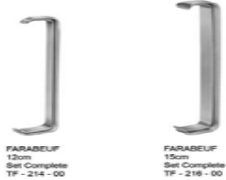






4	Ultrasound Model: SonoAce R7	<ul style="list-style-type: none"> - Full Spectrum Imaging™ (FSI™) - 3D eXtended Imaging™ (3D XI™) - Spatial Compounding Image™ (SCI™) - Quick Scan™ - Automated Intima-Media Thickness Measurement™ (Auto IMT) - Enhanced Post-analysis Tool - Full User-Customisation - Slim and Compact Design - Warranty: 12 months 		SAMSUNG		1																																	
5	Pharmaceutical Refrigerator, MPR-S163/S313	<p>Annex 1</p> <table border="1" data-bbox="817 347 1317 622"> <thead> <tr> <th></th> <th>MPR-S163</th> <th>MPR-S313</th> </tr> </thead> <tbody> <tr> <td>Exterior dimensions (W x D x H)</td> <td>800 x 465 x 1090 (mm)</td> <td>800 x 465 x 1800 (mm)</td> </tr> <tr> <td>Interior dimensions (W x D x H)</td> <td>720 x 300 x 725 (mm)</td> <td>720 x 350 x 1435 (mm)</td> </tr> <tr> <td>Capacity</td> <td>158 liters (5.6 cu.ft.)</td> <td>340 liters (12.0 cu.ft.)</td> </tr> <tr> <td>Doors</td> <td colspan="2">Sliding glass doors, double-glazing glass with heat-reflective film</td> </tr> <tr> <td>Control range</td> <td colspan="2">2°C to 14°C</td> </tr> <tr> <td>Lighting / Casters</td> <td colspan="2">LED/2 casters</td> </tr> <tr> <td>Temperature display</td> <td colspan="2">Digital (1°C increments)</td> </tr> <tr> <td>High/Low temperature alarm system</td> <td colspan="2">±2°C to ±14°C from temperature setting value</td> </tr> <tr> <td>Door ajar alarm</td> <td colspan="2">Buzzer / door ajar lamp</td> </tr> <tr> <td>Options</td> <td colspan="2"> Temperature recorder: MTR-0621LH-PE/PA (recorder fixing: MPR-S30-PW) MTR-G04C-PE/G04A-PA (recorder fixing: MPR-S7-PW) Battery mounting box: MPR-48B1-PW Interface board: MTR-480-PW, MTR-L03-PW DAQ system: MTR-5000-PW </td> </tr> </tbody> </table>		MPR-S163	MPR-S313	Exterior dimensions (W x D x H)	800 x 465 x 1090 (mm)	800 x 465 x 1800 (mm)	Interior dimensions (W x D x H)	720 x 300 x 725 (mm)	720 x 350 x 1435 (mm)	Capacity	158 liters (5.6 cu.ft.)	340 liters (12.0 cu.ft.)	Doors	Sliding glass doors, double-glazing glass with heat-reflective film		Control range	2°C to 14°C		Lighting / Casters	LED/2 casters		Temperature display	Digital (1°C increments)		High/Low temperature alarm system	±2°C to ±14°C from temperature setting value		Door ajar alarm	Buzzer / door ajar lamp		Options	Temperature recorder: MTR-0621LH-PE/PA (recorder fixing: MPR-S30-PW) MTR-G04C-PE/G04A-PA (recorder fixing: MPR-S7-PW) Battery mounting box: MPR-48B1-PW Interface board: MTR-480-PW, MTR-L03-PW DAQ system: MTR-5000-PW			Panasonic	Unit	2
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6	Set Instruments Surgery Major				Set	10																																	
6.1	<i>Sterilizing box, stainless steel, 50 x 20 x12cm</i>				box	20																																	
6.2	<i>MAYO-STILLS, dissecting scissors, bunt, straight, 17 cm</i>					10																																	
6.3	<i>MAYO-STILLS, dissecting scissors, bunt, curved, 17 cm</i>					10																																	








6.4	<i>METZENBAUM, dissecting scissors, blunt, curved, 18 cm</i>					10
6.5	<i>Scissors, Dissecting Nelson Meetzenbaum curved blunt 23 cm</i>					10
6.6	<i>D'ALLAINES, dissecting scissors, sharp/sharp, 20 cm</i>					10
6.7	<i>D'ALLAINES, dissecting scissors, sharp/sharp, 23 cm</i>					10
6.8	<i>BACKHAUS, Towel forceps, 11 cm</i>					120








6.9	<i>Forceps, Sponge holding Foerster straight serrated jaws 24 cm</i>					10
6.10	<i>Forceps, Sponge holding Foerster curved serrated jaws 24 cm</i>					10
6.11	<i>COLLIN, Sponge forces, 25 cm</i>					20
6.12	<i>Dissecting forceps, 20 cm, del W.25 cm, diam. 2.8 mm</i>					20
6.13	<i>Dissecting forceps, 16 cm, diam. 2.8 mm with teeth</i>					10








6.14	<i>Dissecting forceps, 16 cm, diam. 2.8 mm without teeth</i>					10
6.15	<i>Dissecting forceps, 20 cm, diam. 2.8 mm with teeth</i>					10
6.16	<i>Dissecting forceps, 20 cm, diam. 2.8 mm without teeth</i>					10
6.17	<i>HALSTEAD, Mosquito forceps, curved, 11 cm</i>					40
6.18	<i>KELLEY, Hemostatic forceps, straight, 14 cm</i>					40








6.19	KELLEY, Hemostatic forceps, curved, 14 cm					40
6.20	BENGOLEA, dissecting forceps, straight, 24 cm					20
6.21	BENGOLEA, dissecting forceps, curved, 24 cm					20
6.22	ROCHESTER-PEAN, hemostatic forceps, curved, 16cm					80
6.23	ROCHESTER-OCHSNER, Forceps, curved, 15cm, 1X2 teeth					80








6.24	FARABEUF D/E, retractor, 12cm, set, of 2.		 <p>FARABEUF 12cm Set Complete TF - 214 - 00</p> <p>FARABEUF 15cm Set Complete TF - 218 - 00</p>			10
6.25	FARABEUF D/E, retractor, 15cm, set, of 2.					10
6.26	REVERDRIN, Spatula, 28cm, Bay. Shape					
6.27	LERICHE, Abdominal spatula, 31cm, 45mm Wide					
6.28	DEAVER, retractor 30cm x 3.8cm					
6.29	DEAVER, retractor 30cm x 5cm					
6.30	BALFOUR, abdominal retractor, with ratchet.					

6.31	Groove director, 16cm					
6.32	Groove director, 20cm					
6.33	Probe D/E, 20cm 1.5mm Diam.					
6.34	Probe D/E, 20cm 2mm Diam.					
6.35	YANKAUER, suction tube, stainless steel, 28cm					
6.36	Holder, Needle Hegarmayo 20 cm with tungsten carbide insert jaws					
6.37	Holder, Needle Hegarmayo 23 cm with tungsten carbide insert jaws					




6.38	Holder, Needle Hegarmayo 30 cm with tungsten carbide insert jaws					
6.39	REVERDIN, needle 19cm, NO 1					
6.40	REVERDIN, needle 19cm, NO 4					
6.41	CHAPUT, tissue forceps, 12cm, 2x3 teeth					
6.42	ALLIS, tissue forceps, 19cm, 5x6 teeth					
6.43	WILLIAMS, Tissue forceps, 20cm					
6.44	BABCOCK, tissue forceps, 20cm					

6.45	DE BAKEY, dissecting and ligature forceps, 21cm					
6.46	DE BAKEY, dissecting and ligature forceps, 24cm					
6.47	COLLIN, retractors, central 50x75, set					
6.48	DEBAKEY, suction tube, olive diam. 9mm					
6.49	HABERER, spatula, 300x37/45mm					
6.50	BABCOCK, grasping forceps, 16cm					
6.51	BABCOCK, grasping forceps, 22cm					

6.52	COLLIN, grasping forceps, 19.5cm					
6.53	COLLIN, grasping forceps, 23cm					
6.54	Scalpel handle, number 4					
6.55	Scalpel handle, number 3					
6.56	Sterile scalpel blades, number 10, box of 100 pieces					
6.57	Sterile scalpel blades, number 11, box of 100 pieces					
6.58	Sterile scalpel blades, number 18, box of 100 pieces					




6.59	Sterile scalpel blades, number 21, box of 100 pieces					
6.60	Lotion bowl, diam. 12cm					
6.61	DE BAKEY, Aorta-aneurysm-clamps, 26.5cm					
6.62	KOCHER, intestinal clamps, soft elastic, 22cm					
6.63	KOCHER, intestinal clamps, soft elastic, 25cm					
6.64	KOCHER, intestinal clamps, soft elastic, 28cm					
6.65	MAYO-GUYON, kidney clamps, 23cm					





6.66	GUYON, kidney clamps, 23cm					
6.67	Dish, Kidney stainless steel 25 cm					
6.68	Dish, Kidney stainless steel 30 cm					
6.69	Gallipot, stainless steel 180 ml					
6.70	Gallipot, stainless steel 420 ml					


7	X-ray machine Model: VET 1010	<p>- Properties: Medical X-ray Equipments & Acc Number: VET1010 acquisition and processing system: DICOM 3.0 interface supports concise image processing and work list output. - A-Si Flat Panel Detector: (1) Mature flat-panel detector ensures excellent image quality and reliable clinical diagnosis; (2) Fast imaging time, high efficiency, directly imaging in computer without film processing. - Flexibility: (1) Movable in any field, convenient to fix vet animals on the table; (2) High quality X-ray monoblock can rotate $\pm 90^\circ$; (3) Rocker can move up and down with advanced counter balance technology; (4) Foldable detector bracket. - Clinical Experience: (1) High quality x-ray monoblock assures more details, less dose; (2) Wireless remote control exposure, penetrate obstacles.</p>		Perlong	Machine	1
8	ENT Diagnostic set (ear, eye, nose)	<p>- Type: Visual Acuity Examination Apparatus. Function: Ear Nose Throat Eyes Examination set. Model Number: ENT-107.</p>		NJ ENT Diagnostic sets	set	10
9	Electronic balance for laboratory	<p>Balance may be used for seed weighth determination (seed laboratory, thousand-seed weight), or for specific laboratory projects (eg A3, weighing of fish, or feed ingredients, etc)</p> <p>Digital balance, max weight 5000 g, resolution: at least 0,01 g, tolerance <0,1% Tara-function, easy to clean, with battery</p>		5 Unit		5

10	Set Crude Protein Analysis	Annex 1		set	1
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11	Set Instruments Fat Analysis	Annex 1		set	1
12	Set Instruments DF Analysis (Fibertherm)	Annex 1	 <p>See Annex (1)</p>	set	1

13	Hammer mill	<p>Instrument specifications: Type: Benchtop; Type of instrument/consumable/software: Cutting mill and Hammer mill; Final fineness: Minimum : 0.04 mm, Maximum : 1.2 mm; Sample volume: Maximum : 300.0 ml; Rotation speed: Minimum : 50.0 rpm, Maximum : 6000.0 rpm; Material: Containing fat, Dry, Hard, Medium-hard; Matrix: Number of position: Minimum : 1.0, Maximum : 1.0; Norm of instrument / software: IP20; Noise rating: 70.0 dB.</p> <p>Dimensions and weight: External width: 25.1 cm; External height: 48.0 cm; External depth: 32.5 cm; Weight (kg): 12 kg.</p> <p>Power supply and communication: Voltage: Minimum : 100.0 V & Maximum : 230.0 V; Power: 1000.0 W; Interface language(s): English; Operating temperature: Minimum : 0.0 °C & Maximum : 40.0°C; Relative humidity: Maximum : 80.0.</p>		Polymix	Machine	1
14	Micro-organism disinfection Oven	<p>Dry heat sterilization (killing or removal of all microorganisms, including bacterial spores) technique requires longer exposure time (1.5 to 3 hours) and higher temperatures than moist heat sterilization. Various available methods of dry heat sterilization are: hot air oven, incineration, flaming (wire loop) etc.</p>			Unit	1
15	Olympus Reseach Microscope, CH20i (Binocular Version)	<p>30 degrees inclined binocular, seiden top style head, rotatable, 360 degrees, pair 10x wide field eyepieces, 4 DIN objectives: 4x (N.A. 0.10) 25x (N.A. 0.25) 40x (NA. 0.65), 100x (0.1 immersion, NA 1.25),</p> <p>Magnifications: 40x to 1000x, 4 ½ x 5 (120 x 125 mm) mechanical stage with coaxial drive/rack and pinion adjustment, left hand controls, Abbe condenser NA 1.25</p> <p>Iris diaphragm with fitter holder, built – in blue filter over ariable intensity halogen illuminator, 6V 20W, coaxial coarse and fine focusing and low knob position, UL approved 3 wire cord,</p> <p>Size: 8”L x 6”W x 14½” H</p> <p>With spare parts and accessories: 1 set of objective eye pieces, 1 box glass slides 1 box cover slips oil for oil immersion 1 object preparation kit (scissors, razor blades, tissue holder)</p>		Olympus	set	12

16	Automatic Double Water Still	<table border="1"> <thead> <tr> <th>Model</th> <th>LWD-3005D</th> <th>LWD-3010D</th> </tr> </thead> <tbody> <tr> <td>Capacity</td> <td>4.0 ℓ / Hour</td> <td>8.0 ℓ / Hour</td> </tr> <tr> <td>Dimension (WxDxHmm)</td> <td>570 x 600 x 600</td> <td>680 x 720 x 650</td> </tr> <tr> <td>Heater</td> <td>9.0 KW</td> <td>12.0 KW</td> </tr> <tr> <td>Cooling Water</td> <td>Approx. 35 - 60 ℓ</td> <td>Approx. 60 - 90 ℓ</td> </tr> <tr> <td rowspan="3">Material</td> <td>Inner</td> <td>Stainless Steel Boiler</td> </tr> <tr> <td></td> <td>Stainless Steel Storage Tank</td> </tr> <tr> <td>Outer</td> <td>Powder Coating Steel Case</td> </tr> <tr> <td>Reservoir</td> <td>11 ℓ SUS Storage Tank</td> <td>16-20 ℓ SUS Storage Tank</td> </tr> <tr> <td rowspan="3">Safety Device</td> <td></td> <td>Over Temp Protector</td> </tr> <tr> <td></td> <td>Water Float Level Sensor</td> </tr> <tr> <td></td> <td>Water Supply Cut Off</td> </tr> <tr> <td>Operation</td> <td colspan="2">Fully Automatic Operation</td> </tr> <tr> <td>Signal lamp</td> <td colspan="2">Distill, Full, Water</td> </tr> <tr> <td>Electric supply</td> <td colspan="2">380V, 50/60 Hz, 3 Phase</td> </tr> </tbody> </table>	Model	LWD-3005D	LWD-3010D	Capacity	4.0 ℓ / Hour	8.0 ℓ / Hour	Dimension (WxDxHmm)	570 x 600 x 600	680 x 720 x 650	Heater	9.0 KW	12.0 KW	Cooling Water	Approx. 35 - 60 ℓ	Approx. 60 - 90 ℓ	Material	Inner	Stainless Steel Boiler		Stainless Steel Storage Tank	Outer	Powder Coating Steel Case	Reservoir	11 ℓ SUS Storage Tank	16-20 ℓ SUS Storage Tank	Safety Device		Over Temp Protector		Water Float Level Sensor		Water Supply Cut Off	Operation	Fully Automatic Operation		Signal lamp	Distill, Full, Water		Electric supply	380V, 50/60 Hz, 3 Phase			LabTech, LWD-series	set	1
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17	3M LITTMANN CLASSIC II SE STETHOSCOPE	3M Littmann Classic II SE Stethoscope with Latex free tubing, stainless steel chest piece, non-chill rims and soft-sealing ear tips. 28" overall length. Model : LITT-CII			Unit	25																																									
18	Beurer Ear Thermometer FT55	3 in 1 ear thermometer (measurement in the ear, ambient and surface temperature); 9 memory spaces for simple monitoring; incl. date and time; Display of normal or elevated temperature with color LEDs (LED Fever Alarm); With protective cap for sensitive sensor tip; With storage case; With automatic switch-off function; With change battery indicator Incl. batteries.			set	25																																									
19	Set of oxygen tank	Medical oxygen tanks are made of aluminum and are commonly available in different sizes. They store oxygen that is highly important for human medical use. The optimal one is M2. It is 5.3 inches tall and features a diameter of 2.5 inches.			set	1																																									

20	Ashing Furnace GSM	<p>Standard features: (1) 1100°C maximum operating temperature; (2) Fused quartz furnace chamber, ideal for analyses where Al₂O₃ or SiO₂ could contaminate test results; (3) Chamber lining offers superior containment of corrosive & aggressive vapours such as H₂SO₄, HNO₃, HCl; (4) Moulded ceramic fibre door plug; (5) 4 sided heating (2 sides, roof, hearth).</p> <p>(Annex 1)</p>		Carbolite	Unit	1
Grand Total						