

KENYA MEDICAL RESEARCH INSTITUTE (KEMRI)

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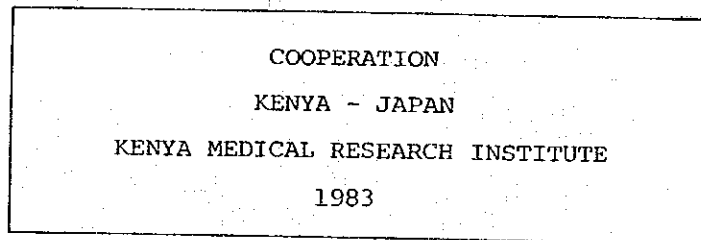
3. SPECIFICATIONS, LISTS OF MEDICAL & RESEARCH EQUIPMENTS

KENYA MEDICAL RESEARCH INSTITUTE (PHASE I)
CONDITIONS OF WORK OF RESEARCH & MEDICAL EQUIPMENT

1. Meaning of Terms
 - Unless otherwise specified, terms used in this CONDITIONS OF WORK OF RESEARCH & MEDICAL EQUIPMENT mean the same as are shown in TENDER DOCUMENTS, STANDARD AND SPECIAL SPECIFICATIONS.
2. General
 - The Medical Equipment shall be procured and installed at designated place shown on the Drawings. The Contractor shall submit specifications and instruction manuals of designated equipment for approval of the consultant before its delivery. Equipment shall be inspected in the presence of the consultant, and only those passed shall be used. On completion, general tests on equipment and trial operation shall be conducted in the presence of the consultant and the Owner's Representative.
3. Warranty
 - The Equipment provided by the Contractor to the Owner shall be genuine, new and properly manufactured according to the strictest standards of the manufacturer and conforming to the Specifications, so as to serve the ultimate needs and purposes of the Owner.
The Contractor shall be held responsible for improper manufacture of the Equipment or damage to the Equipment in transit, including that resulting from careless handling. In such cases, the Contractor shall undertake procedures necessary for settlement and assume all related costs.
 - The warranty of the Equipment shall be considered at free of charge within one (1) calendar year from the hand-over date of the Equipment to the Owner.
 - The Contractor shall guarantee the availability of spare parts and consumables of the supplied equipment for five (5) calendar years after the hand-over of the Equipment.
4. Dispatch of Specialists
 - In order to supervise the installation of and to ensure the perfect operation of the Equipment, the Contractor shall dispatch the necessary specialists to the Project Site.

- In order to conduct the training for those Equipment, marked * in the Equipment Lists, the necessary specialists shall remain at the Project Site for necessary period.
5. Documents
- The Contractor shall submit three (3) sets of the following documents to the consultant before the Equipment shall be delivered to the site.
 - (a) Shop Drawing: Preliminary shop drawings and Final drawings.
 - (b) Manufacturers list for all Equipment
 - (c) Catalogue for all Equipment.
 - (d) Operation Manual (English and Japanese) including Maintenance & Repairing manuals.
 - (e) Invoice & Packing List for the Equipment.
 - (f) Warranty certificate of all Equipment (English)
6. Installation
- Prior to installation of each piece of the Equipment, installation drawings shall be submitted for approval of the consultant on connection and arrangement with respective service pipes (supply water, drainage, exhaust, air, gas, electricity and etc.). Adjustments shall be made before or after service connection as recommended by the manufacturer. Connection of supply water, drainage, electricity and gas etc., shall be provided at positions close to equipment as indicated on the drawings. Three (3) copies of installation drawings shall be submitted. One is to be returned to the Contractor.
 - The Contractor shall furnish all personnel, facilities, water, electricity, fuel, gas and anything else necessary for the test operation and test. The cost for these shall be borne by the Contractor.
7. Packing
- All items shall be securely packed for standard container shipment.

- The Contractor and/or its agent is held responsible for any defects of fabrication and/or damage resulting from improper packing.
The Equipment which is listed as export inspection items and for which its necessary to have an inspection for export shall have the necessary certificate for export.
- 8. Insurance ◦ The Contractor shall insure the Equipment with a first class Japanese insurance company.
- 9. Delivery Date ◦ The delivery date of the Equipment shall be coordinated with the construction of the Buildings. The Contractor shall arrange the shipping and installation of the Equipment in accordance with the progress of the Work.
- 10. Label ◦ All pieces of equipment shall be provided with a label size 25mm × 90mm of self-adhesive aluminum foil such as below.



- This label shall be placed on the Equipment at the site by the consultant's instruction.
- 11. Standard Accessories ◦ All standard operation accessories shall be provided.
- 12. Optional Equipment ◦ The Contractor shall provide all options marked OP in Equipment Lists.
- 13. Spare Parts and Consumables ◦ The Contractor shall provide all spare parts marked SP in Equipment Lists, and all consumables marked CO in Equipment Lists for all items of the Equipment for one (1) year normal operation.

- All such spare parts/consumables shall be suitably packed to prevent them from losses or damages and clearly labelled with instructions where necessary for their correct installation.
- The Contractor may be requested by the consultant minor additional supply of spare parts and consumables.

14. Others

(a) Name plate

All Equipment shall be provided with name plates on a suitable place on the Equipment.

Description: a) Equipment Name
 b) Date of Production
 c) Production Series Number
 d) Manufacturer's Name

All descriptions and notes shall be in English.

(b) All dimension of Equipment shall be in Metric.

(c) Power Supply & Water Quality Conditions

All Equipment shall meet the conditions of power supply and water quality shown in attachment.

(d) The Equipment shall be provided with levelling block and/or anchor bolt, which shall be necessary for the installation of the Equipment.

(e) The Equipment shall be inspected in Japan in the presence of the consultants/or inspector authorized by them if required, and only those passed shall be delivered.

(f) All Equipment specified shall be suitable for the tropical conditions under which shall be used.

(g) The Contractor will consult with the consultant and make necessary procedure in accordance with instructions of the consultant, whenever the production of the designated Equipment is suspended by the manufacturer.

15. Sub-Contractor for Medical Equipment Work
- Sub-Contractor shall be a single Japanese company, which shall execute to supply all the Equipment listed in the Tender Document and shall have agent in the Republic of Kenya during the period of five years following the hand-over date of the Equipment to the Owner.
16. Equivalent Equipment
- Model and Manufacturer shown in Equipment Lists are as reference.
 - The Contractor may procure and install "Equivalent" Equipment.
"Equivalent" shall mean a product which is, in the opinion of the consultant, equivalent or superior to the specified product in the size, quality and performance.

ATTACHMENT

1. Power Source

Equipments shall meet the following conditions of power source.

- 1 phase 240 Voltage ($\pm 10\%$) Frequency 50 Hz ($\pm 5\%$)
- 3 phase 415 Voltage ($\pm 10\%$) Frequency 50 Hz ($\pm 5\%$)

Voltage and Frequency fluctuation shall be compensated as shown limit, the case that more strict limit of Voltage and Frequency shall be needed for Equipments shall be considered by its own side.

2. Water Quality

Equipments shall meet the following conditions of water quality.

Substances	
Nitrates (NO_3)	TRACE
Nitrites (NO_2)	NIL
Chloride (Cl)	4
Free res. (Cl_2)	0.5
Total res. (Cl_2)	0.55
Combined res(Cl_2)	0.05
Fluoride (F-)	0.5
Sulphate (SO_4)	15.0
Lead (Pb)	-
Copper (Cu)	-
Zinc (Zn)	-
Iron (Fe)	0.01
Manganese (Mn)	0.5
Calcium (Ca)	6.8
Magnesium (Mg)	6.8
Sodium (Na)	-
Potassium (K)	-
Aluminium (Al)	NIL
Silica (SiO_2)	10

Appearance

Temperature (at time of collection $^{\circ}\text{C}$)	8.3
pH - Value	8.3
Colour. H.U.	< 5 Hazen Unit
Turbidity F.T.U.	VTU JTU 0.3
Deposit	NIL
Electrical conductivity (Micro mhos/ cm^3)	265

	mg/l		mg/l
Total Hardness as CaCO_3	45	Free Carbon dioxide	-
Calcium Hardness as CaCO_3	17	Aggressive Carbondioxide	-
Alkalinity to phenolphalein	5	Dissolved Oxygen	-
Alkalinity to methylorange	63	N/80 P.V. 4hrs. at 27°C	0.30
Carbonate alkalinity as CaCO_3	10	Free & Saline ammonia as(N)	TRACE
Bicarbonate alkalinity as CaCO_3	53	Albinoid Ammonia as (N)	0.048
Carbonate Hardness as CaCO_3	45	C.O.D. 2 hrs.	4
Non-Carbonate Hardness as CaCO_3	NIL	5 days B.O.D. at 20°C	-
Excess alkalinity as Na_2CO_3	23		
Total dissolved Solids, Residue dried at 180°C	150.0		

Date of Report 31/3/80

RESEARCH AND MEDICAL EQUIPMENT LIST

(PHASE I)

VIROLOGY UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
1-1	<u>TABLE TOP CENTRIFUGE</u> HITACHI SCT-4B 4,000 rpm SP.: 1. Carbon brush 2 pcs/set 1 set 2. Fuse 2 pcs 3. Test tube 15 ml 50 pcs/pk 4 pks 4. Rubber packing for 15 ml tube (50 pcs/set) 1 set	2		
1-2	<u>HIGH SPEED REFRIGERATED CENTRIFUGE</u> HITACHI SCR-20B 20,000 rpm OP.: 1. RPR20-2 Angle rotor 1 pc 2. RPR18-3 Angle rotor 1 pc SP.: 1. 2kg Balancer 1 pc 2. 50PA Tube (10 pcs/pk) 1 pk 3. 50PC Tube (10 pcs/pk) 1 pk 4. M-PP Lid (20 pcs/pk) 1 pk 5. C2-PP Lid (20 pcs/pk) 1 pk 6. 11PA Tube (50 pcs/pk) 1 pk 7. 11PC Tube (50 pcs/pk) 1 pk 8. Stop cock grease 1 pc 9. Cleaning rod (C) 1 pc 10. Cleaning rod (D) 1 pc 11. Aluminum lubricant grease 1 pc 12. Log book 1 pc 13. O-Ring for cover 1 pc 14. O-Ring for cover 1 pc 15. Carbon brush (2 pcs/pk) 1 pk 16. Fuse 30A 2 pcs 17. Fuse 3A 1 pc 18. Fuse 0.1A 1 pc	1	*	
1-3	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	3		
1-4	<u>PH METER</u> HORIVA H-7AD SP.: 1. Combination electrode 1 pc 2. Standard solution (pH 4, 7, 9 & AgCl) 1 set	1		
1-5	<u>REFRACTOMETER</u> ELMA 11-100-0 SP.: 1. Electric bulb 7	1		

VIROLOGY UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
1-6	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	1		
1-7	<u>FREEZER</u> SANYO MDF-330 SP.: 1. Starting relay 1 2. Overload relay 1 3. Starting condenser 1 4. Running condenser 1 5. Indication lamp 1 6. Fuse 3	1		
1-8	<u>ULTRA LOW TEMP. FREEZER</u> SAKURA UL-60A SP.: 1. Leak tester 1 2. Set of fuse, lamp switch 1 3. Tool set 1	1		
1-9	<u>FLUORESCENCE MICROSCOPE WITH CAMERA SET</u> OLYMPUS BHS-312 W/BH-RFL-W-1 SP.: 1. Non-fluorencence oil 50cc 2 2. High-pressure mercury burner USH102D 2 3. Fuses (DF0020, 0009, 0010) 2(ea)	1		
1-10	<u>SPECTROPHOTOMETER (VIS)</u> HITACHI 100-1001 OP.: 1. 10mm glass cell set 5 sets SP.: 1. Tungsten lamp 10V, 3A 3 pcs 2. Fuse set 1 set 3. Silica gel 1 pc	1	*	
1-11	<u>SPECTROPHOTOMETER FOR MICRO-PLATE</u> COLONA MTP-12 OP.: 1. Printer 1 2. Micro-plate 2 SP.: 1. Paper 20 2. Fuse 3 3. Lamp 12	1	*	

VIROLOGY UNIT (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
1-12	<u>CLEAN BENCH</u> HITACHI CCV-811 Piping materials 10 sets SP.: 1. Glow lamp 12 pcs. 2. Fluorescent bulb 6 pcs. 3. Sterilizing lamp 6 pcs. 4. Main filter 3 pcs.	2		
1-13	<u>INCUBATOR</u> YAMATO IC-62R OP.: 1. Stand 1 SP.: 1. Fuse, 5A 3 2. Relay 1 3. Heater, 300W 1 4. Lamp 3 5. Switch 3	2		
1-14	<u>CO2 INCUBATOR</u> YAMATO IP-31R OP.: 1. CO2 Gas cylinder with regulator 1 2. Bomb rack 1 SP.: 1. Fuse 3 2. Filter 1 3. Heater, 3 kinds (A, B, C type) 1 4. Pilot lamp 3 CO.: 1. CO2 Gas cylinder with regulator 1	2		
1-15	<u>WATER BATH</u> SAKURA KE-2 SP.: 1. Power bracket 2 2. Neon bracket 2 3. Thermometer 1 4. Snap switch 1 5. Pipe heater 1 6. Bell timer 1	2		
1-16	<u>RESEARCH BINOCULAR MICROSCOPE</u> OLYMPUS BUTU-112 SP.: 1. Immersion oil 50cc 2 2. Halogen bulb 6V20WHAL-L 10	2		

VIROLOGY UNIT (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
1-17	<p><u>HAND STAND TYPE MICROSCOPE</u></p> <p>OLYMPUS CKC-BI-2</p> <p>SP.: 1. Bulb 6V2AGB-4 4</p>	2		
1-18	<p><u>CHROMATOGRAPHY COLUMN</u></p> <p>SEIKAGAKU Column Chromatography System Sepacol Column Set SK14/50 SK14/100 SK22/50 SK22/100</p> <p>OP.: 1. Reservoir for SK 14/50 1 " for SK 14/100 1 " for SK 22/50 1 " for SK 22/100 1 2. Flow adaptor, SA14 2 " " , SA22 2 3. Practi column, set 1 Consists of: 100 ... 1 pc 150 ... 1 pc 200 ... 1 pc 250 ... 1 pc 300 ... 1 pc 4. Filter for SK14, 5 pcs/pk 1 " for SK22, 5 pcs/pk 1 " for SA14, 5 pcs/pk 1 " for SA22, 5 pcs/pk 1 SP.: 1. Practi column, 100, 6 pcs/pk 2 " " , 150, 6 pcs/pk 2 " " , 200, 6 pcs/pk 2 " " , 250, 6 pcs/pk 2 " " , 300, 6 pcs/pk 2 2. Filter for SK14, 5 pcs/pk 5 " for SK22, 5 pcs/pk 5 " for SK14, 5 pcs/pk 5 " for SA22, 5 pcs/pk 5</p>	1	*	
1-19	<p><u>FRACTION COLLECTOR</u></p> <p>TOYO SF-160K</p> <p>SP.: 1. Test tube, 100 pcs/box 1 2. Dispensing valve 2 3. Fuse 3 4. Micro switch, V3L 5 5. Micro switch, V414J 3</p>	1	*	

VIROLOGY UNIT (5)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
1-20	<u>UV MONITOR</u> TOYO UV-750L OP.: 1. Reference cell 1 SP.: 1. Recording paper 11 2. Interference filter, 280mm 2 3. Flow-cell, quartz 1 4. Fuse 4	1	*	
1-21	<u>PERISTALTIC PUMP</u> TOYO KAGAKU TMP-15E SP.: 1. Silicone tube, 3 kinds 3 each 2. Fuse 3 3. Tube joint 4	1	*	
1-22	<u>DISTILLATION AND ION EXCHANGED WATER APPARATUS</u> YAMATO WG-32R OP.: 1. Filtering apparatus 1 SP.: 1. Raw water filter 5 2. Heater 1 3. Electromagnetic valve, 2 kinds 1 4. Heater jacket packing 1 5. Relay 1 6. Packing for drain 2 CO.: 1. Scale remover 12 kg 2. Ion exchange resin and cartridge 4	1		
1-23	<u>PUMP (PRESSURE AND VACUUM)</u> IKEMOTO 1326	2		
1-24	<u>MEMBRANE FILTRATION APPARATUS</u> TOYO KS-90	1		
1-25	<u>MEMBRANE FILTRATION TANK (10ℓ)</u> TOYO DV-10 OP.: 1. Pressure meter 1 2. Connector B type 1	1		
1-26	<u>FILTER (90ϕm/m)</u> TOYO NA-16 25 pcs/pk	8		

BACTERIOLOGY UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK	
2-1	<u>INCUBATOR</u>	2			
	YAMATO IC-62R				
	OP.: 1. Stand				1
	SP.: 1. Fuse, 5A				3
	2. Relay				1
	3. Heater, 300W				1
4. Lamp	3				
5. Switch	3				
2-2	<u>INCUBATOR</u>	1			
	IKEDA N-3614				
	SP.: 1. Heater				1
2. Fuse	3				
2-3	<u>WATER BATH (WITH STIRRER)</u>	1			
	YAMATO BT-31R				
	SP.: 1. Pipe heater, 2 kinds (A,B)				1
2. Lamp	3				
2-4	<u>WATER BATH</u>	1			
	YAMATO BT-15R				
	OP.: 1. Test tube rack				1
	SP.: 1. Control heater				1
	2. Base heater				1
3. Lamp	2				
2-5	<u>CLEAN REFRIGERATOR</u>	2			
	SANYO MPR-110				
	SP.: 1. Starting relay				1
	2. Overload relay				1
	3. Starting condenser				1
4. Fuse	3				
2-6	<u>SWING CENTRIFUGE (SMALL)</u>	1			
	HITACHI 05P-21 300-5,000 rpm				
	OP.: 1. A Assembly (15 ml x 32 pcs)				1
	2. C Assembly (10 ml x 40 pcs)				1
	3. D Assembly (50 ml x 8 pcs)				1
	4. 05 Rotor				1
	SP.: 1. 15 ml Glass tube (50 pcs/pk)				2
	2. 10 ml Glass tube (50 pcs/pk)				2
	3. 50 ml Glass tube (10 pcs/pk)				2
	4. Carbon brush (2 pcs/set)				1
	5. Fuse 5A				2
6. Assembly balancer	1				

BACTERIOLOGY UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
2-6 (cont'd)	7. Rubber packing for 15 ml tube (50 pcs/set) 1 8. Rubber packing for 10 ml tube (50 pcs/set) 1 9. Rubber packing for 50 ml tube (10 pcs/set) 1			
2-7	<u>TOUCH MIXER</u> YAMATO MT-11 SP.: 1. Sponge 5 2. Switch 1	1		
2-8	<u>RESEARCH BINOCULAR MICROSCOPE</u> OLYMPUS BHTU-112 SP.: 1. Immersion oil 50cc 2 2. Halogen bulb 6V20WHAL-L 10	2		
2-9	<u>ANAEROBIC BOX</u> LAB-LINE Anaerobic Chamber OP.: 1. N ₂ gas bomb, with regulator 1 2. Mixed gas bomb, with regulator 1 (N ₂ ... 90%, H ₂ ... 5% & CO ₂ ... 5%) 3. Gas connecting pipe, with adaptor 2 4. Bomb rack 1 5. Indicator (BBL), 100 pcs/set 1 SP.: 1. Status lamp (all) 1 2. Power lamp 1 CO.: 1. N ₂ gas bomb with regulator 2 2. Mixed gas bomb with regulator 1 3. Indicator (BBL), 100 pcs/pk. 2	1	*	
2-10	<u>LOOP STERILIZER</u> FORMA OP.: 1. 4MM Electroloop loop 1 2. 3MM " " 1 3. Electroloop needle 1	1		
2-11	<u>HIGH SPEED REFRIGERATED CENTRIFUGE</u> HITACHI SCR-20B OP.: 1. RPR20-2 Angle rotor 1 pc 2. RPR18-3 Angle rotor 1 pc 3. RPR9-2 Angle rotor 1 pc SP.: 1. 2kg Balancer 1 pc 2. 50PA Tube (10 pcs/pk) 1 pk	1	*	

BACTERIOLOGY UNIT (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
2-11 (cont'd)	3. 50PC Tube (10 pcs/pk) 1 pk 4. M-PP Lid (20 pcs/pk) 1 pk 5. C2-PP Lid (20 pcs/pk) 1 pk 6. 500PA Tube (4 pcs/pk) 2 pks 7. 11PA Tube (50 pcs/pk) 1 pk 8. 11PC Tube (50 pcs/pk) 1 pk 9. Stop cock grease 1 pc 10. Cleaning rod (C) 1 pc 11. Cleaning rod (D) 1 pc 12. Aluminum lubricant grease 1 pc 13. Log book 1 pc 14. O-Ring for cover 1 pc 15. O-Ring for cover 1 pc 16. Carbon brush (2 pcs/pk) 1 pk 17. Fuse 30A 2 pcs 18. Fuse 3A 1 pc 19. Fuse 0.1A 1 pc			
2-12	<u>MICRO TITER SET (FULL SET)</u> TOMY TITER SET SP.: 1. Seal tape, 35m 2 2. Test paper, 0.025 ml/100 pcs/set 1 3. Test paper, 0.05 ml/100pcs/set 1	1		
2-13	<u>FREEZER (TABLE TYPE)</u> SANYO MDF-230 SP.: 1. Starting relay 1 2. Overload relay 1 3. Starting condenser 1 4. Fuse 3	1		
2-14	<u>FREEZING DRYER</u> LABCONCO 75035 OP.: 1. Pump 1 2. Flask, 300 ml 6 3. Flask, 600 ml 6 4. Adaptor, 3/4" straight 12 5. Adaptor, 3/4", 45° 12 SP.: 1. Vacuum valve, 3/4" 1 2. Vacuum valve, 1/2" 1 CO.: 1. Vacuum oil 2 2. Filter 100	1	*	
2-15	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	3		

BACTERIOLOGY UNIT (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
2-16	<p><u>PHOTO CAMERA FOR MICROSCOPE</u></p> <p>OLYMPUS PM-10-35AD-1</p> <p>OP.: 1. 35-WHK10X</p>	1		

VIROLOGY & BACTERIOLOGY UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
1-2-1	<u>KOCH'S STEAM STERILIZER</u> HIRASAWA KD-2E	1		
1-2-2	<u>HIGH PRESSURE STERILIZER</u> SAKURA ASV-3001 OP.: 1. 2 Shelf type cage 1 2. Media cage 1 SP.: 1. Gasket 2 2. Timer lamp 2 3. Thermoregulator lamp 2 4. Power switch 1 5. Relay, A3-10-1180 1 6. Relay, (for heater) A3-10-5060 1 7. Pipe heater 1	2		
1-2-3	<u>DIRECT READING BALANCE</u> SHIMADZU L-160D	1		
1-2-4	<u>SELF-INDICATING BALANCE</u> SHIMADZU TB-1K	1		
1-2-5	<u>SELF-INDICATING BALANCE</u> SHIMADZU TB-1K	1		
1-2-6	<u>ELECTRONIC READING BALANCE</u> SHIMADZU EB-280-11	1		
1-2-7	<u>PIPETTE WASHER TANK</u> KAYAGAKI 6520	3		
1-2-8	<u>PIPETTE WASHER</u> YAMATO AW-22 SP.: 1. Lamp 3 2. Relay 1 3. Deverheat preventing appa. 1 4. Heater 1 5. Mechanical seal, 2 kinds 1 CO.: 1. Cleanser, 18kg/can 1 2. Ion exchange cartridge B-5Y 2	2		
1-2-9	<u>DRY HEAT STERILIZER</u> YAMATO SH-61 OP.: 1. Stand 1 SP.: 1. Fuse 3	2		

VIROLOGY & BACTERIOLOGY UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
1-2-9 (cont'd)	2. Relay 1 3. Heater 1			
1-2-10	<u>ETO GAS STERILIZER</u> SAKURA EOA-50 Ethylene Oxide Gas Sterilizer SP.: 1. Air filter, B2-00-0030 1 2. Gas filter, B2-00-0160 1 3. Solenoid valve (sterilization) 1 4. Door gasket 2 5. Pilot lights (humidify) 1 6. " (sterilization) 1 7. " (washing) 1 8. " (completion) 1 9. " (Start) 1 10. Solenoid valve (air) 1 11. " (exhaust) 1 12. Power switch 1 13. Vacuum select switch 1 14. Relay (A3-10-1180) 4 15. Stopping relay 1 16. Vacuum pump relay 1 17. Pressure switch (starilization) 1 18. " (vacuum) 1 19. Thermometer 1 CO.: 1. Gas cylinder with regulator 1	1	*	
1-2-11	<u>DRYING OVEN</u> SAKURA TK-21 SP.: 1. Gasket 1 2. Heater 2 3. Thermometer 1 4. Pilot light 2 5. Relay, A3-10-5110 1 6. Relay, A3-10-5060 1 7. Excess temp. preventive device 1	1		
1-2-12	<u>LAB. CART</u> UCHIDA MODEL 1	1		

PARASITOLOGY UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
3-8	<p><u>SWING CENTRIFUGE (SMALL)</u></p> <p>HITACHI 05P-21 300-5,000 rpm</p> <p>OP.: 1. A Assembly (15 ml x 32 pcs) 1 2. C Assembly (10 ml x 40 pcs) 1 3. D Assembly (50 ml x 8 pcs) 1 4. 05 Rotor 1</p> <p>SP.: 1. 15 ml Glass tube (50 pcs/pk) 2 2. 10 ml Glass tube (50 pcs/pk) 2 3. 50 ml Glass tube (10 pcs/pk) 2 4. Carbon brush (2 pcs/set) 1 5. Fuse 5A 2 6. Assembly balancer 1 7. Rubber packing for 15 ml tube (50 pcs/set) 1 8. Rubber packing for 10 ml tube (50 pcs/set) 1 9. Rubber packing for 50 ml tube (10 pcs/set) 1</p>	1		
3-9	<p><u>FREEZER</u></p> <p>SANYO MDF-330</p> <p>SP.: 1. Starting relay 1 2. Overload relay 1 3. Starting condenser 1 4. Running condenser 1 5. Indication lamp 1 6. Fuse 3</p>	1		
3-10	<p><u>REFRIGERATOR</u></p> <p>SANYO SH-123RH</p> <p>SP.: 1. Lamp 2</p>	1		
3-11	<p><u>HIGH SPEED REFRIGERATED CENTRIFUGE</u></p> <p>HITACHI SCR-20B 20,000 rpm</p> <p>OP.: 1. RPR20-2 Angle rotor 1 pc 2. RPR18-3 Angle rotor 1 pc</p> <p>SP.: 1. 2kg Balancer 1 pc 2. 50PA Tube (10 pcs/pk) 1 pc 3. 50PC Tube (10 pcs/pk) 1 pc 4. M-PP Lid (20 pcs/pk) 1 pc 5. C2-PP Lid (20 pcs/pk) 1 pc 6. 11PA Tube (50 pcs/pk) 1 pc 7. 11PC Tube (50 pcs/pk) 1 pc 8. Stop cock grease 1 pc 9. Cleaning rod (C) 1 pc 10. Cleaning rod (D) 1 pc</p>	1	*	

PARASITOLOGY UNIT (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
3-11 (cont'd)	11. Aluminum lubricant grease 1 pc 12. Log book 1 pc 13. O-Ring for cover 1 pc 14. O-Ring for cover 1 pc 15. Carbon brush (2 pcs/pk) 1 pk 16. Fuse 30A 2 pcs 17. Fuse 3A 1 pc 18. Fuse 0.1A 1 pc			
3-12	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	1		
3-13	<u>INCUBATOR</u> YAMATO 1C-62R OP.: 1. Stand 1 SP.: 1. Fuse, 5A 3 2. Relay 1 3. Heater, 300W 1 4. Lamp 3 5. Switch 3	1		
3-14	<u>REFRIGERATED CENTRIFUGE</u> HITACHI 05PR-22 300-5,000 rpm OP.: 1. 05 Rotor 1 pc 2. Balancer for 05 rotor 1 pc 3. C Assembly (10 ml x 40 pcs) 1 set 4. D Assembly (50 ml x 8 pcs) 1 set 5. F Assembly (15 ml x 40 pcs) 1 set SP.: 1. Carbon brush (2 pcs/set) 1 set 2. Fuse 15A 2 pcs 3. 15 ml Glass tube (50 pcs/pk) 2 pks 4. 10 ml Glass tube (50 pcs/pk) 2 pks 5. 50 ml Glass tube (10 pcs/pk) 2 pks 6. Rubber packing for 15 ml tube (50 pcs/pk) 1 pk 7. Rubber packing for 10 ml tube (50 pcs/pk) 1 pk 8. Rubber packing for 50 ml tube (10 pcs/pk) 1 pk	1		
3-15	<u>REFLECTED LIGHT FLUORESCENCE MICROSCOPE</u> OLYMPUS BHS-312 W/BH-RFL-W-1 (Without D-PLAN objectives) 1. Non-fluorescence oil 50cc 2 2. High-pressure mercury burner USH102D 2 3. Fuses (DF0020, 0099, 0010) 2 ea.	1		

PARASITOLOGY UNIT (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
3-16	<p><u>INVERTED MICROSCOPE W/INCUBATOR</u></p> <p>OLYMPUS 1MT-313 W/1MT-IB</p> <p>1. Bulb LS30 4</p> <p>2. Fuse DF0024 4</p>	1		

VECTOR BIOLOGY UNIT

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
4-1	<u>DEEP FREEZER</u> SAKURA UL-60A SP.: 1. Leak tester 1 2. Set of fuse, lamp, switch 1 3. Tool set 1	1		
4-2	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	1		
4-3	<u>BIOLOGICAL RESEARCH MICROSCOPE</u> OLYMPUS CHB-213-W SP.: 1. Fuse DF0043 2 2. Bulb CH220V20WSB (3 pcs/pk) 1 3. Immersion oil 50cc 2	4		
4-4	<u>STEREOMICROSCOPE (ZOOM)</u> OLYMPUS SZ-TR	10		
4-5	<u>MACRO-PHOTO CAMERA</u> OLYMPUS OM-2 (chrome body) Auto bellows Macro objective F3.5 Double cable release Magnifier Focus screen 1, 12	1		
4-6	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	1		

PARASITOLOGY & VECTOR BIOLOGY UNIT

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
3-4-1	<u>DRYING OVEN</u> SAKURA TK-21 SP.: 1. Gasket 1 2. Heater 2 3. Thermometer 1 4. Pilot light 2 5. Relay, A3-10-5110 1 6. Relay, A3-10-5060 1 7. Excess temp. preventive device 1	1		
3-4-2	<u>ULTRASONIC WASHER (TABLE TOP)</u> YAMATO-BRANSON 92H OP.: 1. Rack 1 SP.: 1. Transistor 1 2. Fuse 9A 3	1		
3-4-3	<u>HIGH SPEED STERILIZER</u> SAKURA ASV-3001 OP.: 1. 2 Shelf type cage 1 2. Media cage 1 SP.: 1. Gasket 2 2. Timer lamp 2 3. Thermoregulator lamp 2 4. Power switch 1 5. Relay, A3-10-1180 1 6. Relay, (for heater) A3-10-5060 1 7. Pipe heater 1	1		
3-4-4	<u>DRY HEAT STERILIZER</u> YAMATO SH-61 OP.: 1. Stand 1 SP.: 1. Fuse 3 2. Relay 1 3. Heater 1	1		
3-4-5	<u>DIRECT READING BALANCE</u> SHIMADZU L-200SM	1		
3-4-6	<u>LAB. CART</u> UCHIDA MODEL 1	1		

ELECTRON MICROSCOPE (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
9-1	<u>PH METER</u> HORIBA H-7AD SP.: 1. Combination electrode 1 2. Standard solution 1 (PH4, 7, 9 & AGCL)	1		
9-2	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	1		
9-3	<u>EM POLYMERIZER</u> SAKURA EM-200T SP.: 1. Power switch 2 2. Timer indicating lamp 4 3. Power lamp 2 4. Thermoregulator 1 5. Indicating lamp 4 for thermoregurator 6. Keep temp. switch 1 7. Indicating lamp 2 for keep temp. switch 8. Heater 1 9. Thermometer 1	1	*	
9-4	<u>VACUUM PUMP</u> HITACHI SVR-16F Direct Drive SP.: 1. VP oil MR-100, 4/can 1 2. Oil trap element 2	1		
9-5	<u>SWING CENTRIFUGE (SMALL)</u> HITACHI 05P-21 300-5,000 rpm OP.: 1. A Assembly (15 ml x 32 pcs) 1 2. C Assembly (10 ml x 40 pcs) 1 3. D Assembly (50 ml x 8 pcs) 1 4. 05 Rotor 1 SP.: 1. 15 ml glass tube (50 pcs/pk) 2 2. 10 ml glass tube (50 pcs/pk) 2 3. 50 ml glass tube (10 pcs/pk) 2 4. Carbon brush (2 pcs/set) 1 5. Fuse 5A 2 6. Assembly balancer 1 7. Rubber packing for 15 ml tube (50 pcs/set) 1 8. Rubber packing for 10 ml tube (50 pcs/set) 1 9. Rubber packing for 50 ml tube (10 pcs/set) 1	1		

ELECTRON MICROSCOPE (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
9-6	<u>ELECTRON MICROSCOPE PROCESSOR</u>	1	*	
	SAKURA REM-20B			
	SP.: 1. Space heater, 50W 1 2. Fan heater REM-589 1 3. Micro switch Z-15GW-22K 1 4. Floatless switch 61F-11 1 5. Reed switch GLS-S1 1 6. Relay LY-1D-10S 1 7. Relay LY-4Z 1 8. Relay LY-2Z 1 9. Relay LY-1 1 10. Relay LY-2 1 11. Relay G2A-4L32A 1 12. Rectifier 5B-4 1 13. Bracket BNG-51 (R) 2 14. Neon bulb NE-2H 2 15. Bracket BN-5710 (R) 2 16. Lamp, small #0408 2 17. Lamp, small #5588 2 18. Strainer CT-1 1 19. V belt M-19 1 20. Air filter AF-200 2 21. Glass beaker REM-208 100 22. Polyethylene beaker 1000 23. Bell jar seal REM-334 5 24. Drip shield, 100/pkg. 10 25. Charcoal packs, 20g 100 REM-1136 26. Basket REM-323 5 27. Center stem REM-322 1 28. Bell jar gasket REM-332 5 29. Timer tape 3 30. Basket lock ring REM-1158 20 31. Vacuum filter 10			
9-7	<u>STEREO MICROSCOPE (ZOOM)</u>	1		
	OLYMPUS SZ-TR			
9-8	<u>DECICATOR</u>	1		
	IUCHI (SANKO) C-3BR			
	OP.: 1. Pump horse 1 2. Adoptor 1			

ELECTRON MICROSCOPE (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
9-9	<u>PHOTO DEVELOPING APPARATUS</u>	1	set	
	Consisting from following items.			
	1. Enlarger, Fuji SS690, w/Lens 50mm & 105mm	1		
	2. Lamp	4		
	3. Film holder, DG-120	1		
	4. Easel mask, 10 x 12"	1		
	5. " , cabinet size	1		
	6. Focus scope	2		
	7. Blower brush	1		
	8. Paper drier, AD-320II	1		
	9. Paper washer	1		
	10. Film drier	1		
	11. Cutter, 1/4 size	1		
	12. Dark room clock	1		
	13. Safe light, 1/4 size	1		
	14. Glass for safe light	10		
	15. Bulb for safe light	4		
	16. Trough, w/heater	1		
	17. " , 1/4 size	8		
	18. Bamboo forcep	10		
	19. Sponge	2		
	20. Developer tank	1		
	21. Fixation tank	1		
	22. Stopper tank	1		
	23. Water tank	1		
	24. Hanger rack	1		
	25. Lupe, w/scale	2		
	26. Balance	1		
	27. Spotting colour	1		
	28. Spotting brush	5		
	29. Storage bottle, 10 litre	1		
	30. " , 5 "	1		
	31. " , 1 "	1		
	32. Measuring cup, 1.3 "	1		
	33. Microfine, 0.6 litre	30		
	34. Printing paper, 13 x 18 cm, F2	5		
	35. " , " , F3	5		
	36. " , " , F4	5		
	37. " , 1/6 size, F2	5		
	38. " , " , F3	5		
	39. " , " , F4	5		
	40. Copinal, 4 litre	5		
	41. Papitol, 8 "	10		
	42. Superfix, 4 "	10		
	43. Stopper, 10 "	2		

ELECTRON MICROSCOPE (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
9-9 (cont'd)	44. Drywel, 2 litre 10 45. Timer 1 46. Water filter 1 47. Film clip 10 48. Contact printer 1 49. Rinse tank 1 50. Exposure tank 1 51. Film hanger 50 52. Light box 1 53. Auto-desicator 1 54. Funnel, 21 cm ø 1 55. Rinse, 2 litre x 25 1			
9-10	<u>ULTRA MICROTOME</u> JEOL JUM-7 SP.: For one year CO.: For one year	1	*	
9-11	<u>ULTRA THIN DIAMOND CUTTER</u> JEOL (for 45°)	1		
9-12	<u>GLASS KNIFE MAKER</u> JEOL SP.: For one year CO.: For one year	1		
9-13	<u>DIAMOND GLASS CUTTER</u> JEOL No.1	1		
9-14	<u>TRIMMING TABLE</u> JEOL	1		
9-15	<u>MAGNETIC STIRRER</u> YAMATO MD-81 SP.: 1. Fuse 5 2. Resistor 1	1		
9-16	<u>VACUUM EVAPORATOR</u> JEOL EE-RTS2 SP.: For one year CO.: For one year	1	*	

ELECTRON MICROSCOPE (5)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
9-17	<p><u>ELECTROMICROSCOPE MAIN</u></p> <p>JEOL JEM-100S w/Automatic Voltage Regulator and Closed Circuit Water Chiller</p> <p>OP.: 1. Eucentric side entry gonio- 1 set meter</p> <p>2. Common specimen holder 1 set</p> <p>3. Photographing spare cassette 50 pcs.</p> <p>4. Standard accessory 1 set</p> <p>5. Circuit chart (English) 1 set</p> <p>SP.: 1. Filament K Type 20</p> <p>2. Heater for D.P. 200V 600W 3</p> <p>3. Read wire for D.P. heater 2 2 pcs/set</p> <p>4. Tantalum boat for aperture 1</p> <p>5. Aperture foil for OL 10 MB103221-4</p> <p>6. Aperture foil for CL, 5 IL MB140431A4</p> <p>7. Fixed aperture for CL 1 UB121127</p> <p>8. Fixed aperture for CL 1 UB121186</p> <p>9. Aperture holder assembly CL, 1 IL, UA161105A3</p> <p>10. Aperture holder assembly OL, 1 UA161104A3</p> <p>11. Vacuum grease APIEZON-L 25g 1</p> <p>12. Oil for D.P. LION-S 1 l 1</p> <p>13. Oil for C.P. 1 l 1</p> <p>14. Oil for R.P. MR-200 1 l 5</p> <p>15. Metal polish PIKAL 250g 1</p> <p>16. Fluorescent screen small 1 UB151101-4</p> <p>17. Fluorescent powder P22-G4 1</p> <p>18. Vacuum hose 42øx18øx1000 2</p> <p>19. 24øx 9øx1000 1</p> <p>20. V-belt 2 pcs/set 1 REC-MF-6319</p> <p>21. O-ring JISB2401 P10A 1</p> <p>22. P8 1</p> <p>23. P30 1</p> <p>24. P6 2</p> <p>25. G165 1</p> <p>26. P.B. Memory of MAG MP001500 1</p> <p>27. Vacuum unit MP0001356A 1</p>	1	*	

ELECTRON MICROSCOPE (6)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
9-17 (cont'd)	28. Pirani tube assembly MA174021-4	1		
	29. Fuse MF61-0.1A	10		
	30. 0.5A	10		
	31. 1A	10		
	32. 2A	10		
	33. 5A	10		
	34. 10A	10		
	35. I.C. μ PC-151A	5		
	36. μ PC-154A	5		
	37. 40K	1		
	38. RC4558 (NJM4558)	5		
	39. Transistor 2SD234	3		
	40. 2SB434	3		
	41. 2SA733Q	3		
	42. 2SA495	3		
	43. 2SC782	3		
	44. 2SC944(S)-K	3		
	45. 2SC945Q	3		
	46. 2SC980A-G-0	3		
	47. 2SC983-0	3		
	48. 2SD118-Y	3		
	49. Lamp BFB-14 Red	5		
	50. BFB-14 Green	5		
	51. No.1012 MK-4	5		
	52. M-0926	5		
	53. Indicator lamp FDK-5V15	8		
	54. V.R. GF-201-15SB 500 Ohm	1		
	55. GF281-40R 5k Ohm	1		
	56. 25HP-10 2k Ohm	1		
	57. Rotary switch OLF MP001512	1		
	58. OLM MP001513	1		
	59. Relay FBV154B 71/101	1		
	60. FBV154A 71/1	1		
	61. SRF-3	1		
	62. Micro S.W. S5HL2-1A9	1		
	63. Solenoid valve AG3X0072 DC24V P	1		
	64. Fuse, 30A	5		
	65. Tungsten basket filament, 10/pack	10 packs		
	66. Variable resistor, RV16YP10SB, 5k ohm	1		
	67. " SMR16PA, 1 k ohm	1		
	68. " SMR16PA, 10k ohm	1		
	69. Relay, HD-2, AC100V	1		
	70. Thermo-relay, E-Z-204	1		

ELECTRON MICROSCOPE (7)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
9-17 (cont'd)	71. Switch, JEC-1 1 72. " , SF-120-2 1 73. " , SW-3532 1 74. Pirani tube, PTA-3 1 75. O-ring packing, JISW2401, P-10A 1 76. " " , P-85 1 77. O-ring gasket, JISB2401 G-230 1 78. Carbon rod, 4/box 50boxes 79. Oil for rotary pump, 1 litre/can 1 80. Oil for diffusion pump, 1 litre/can 1 81. Carbon sharpener, C-2, 100V 1 82. Spare knife for carbon sharpener 1 83. Step-down transformer, 240V-100V 1			
9-18	<u>STANDARD HOLDER</u>	5		

CENTRAL COLD ROOM & CHILLED ROOM (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
10-1	<u>WATER DISTILLATION APPARATUS</u> BARNSTEAD 40-4 OP.: 1. Pre-process apparatus for soft water 1 SP.: 1. Filter 5 μ m, 6pcs/set 5 2. Filter, 0.2 μ m 5 3. Ion-exchange cartridge, 2pcs/set 5 4. Organic removal cartridge 5 CO.: 1. Ion-exchange resin for pre-process appa. MB-2, 10 ℓ /pk. 11	1	*	
10-2	<u>ICE MAKER</u> HOSHIZAKI IM-50 H SP.: 1. Fuse 3	1		
10-3	<u>FREEZER</u> SANYO MDF-440 SP.: 1. Starting relay 1 2. Starting condenser, L & H 1 3. Running condenser, L & H 1 4. Overload relay, L & H 1 5. Fuse 3	2		
10-4	<u>DEEP FREEZER</u> SANYO MDF-390 OP.: 1. Storage case, MDF-39SC 20 2. Liquid nitrogen gas bomb with rack and regulator 1 SP.: 1. Starting relay 1 2. Starting condenser 1 3. Running condenser 1 4. Overload relay 1 5. Indication lamp 3 6. Fuse 3 CO.: 1. Liquid nitrogen gas bomb 1	1		
10-5	<u>CYLINDER CART</u> UCHIDA Model 2	1		

CENTRAL COLD ROOM & CHILLED ROOM (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
10-6	<p><u>PREPARATIVE ULTRACENTRIFUGE</u></p> <p>HITACHI SCP-55H 55,000 rpm</p> <p>OP.: 1. Angle rotor, RP30-2 1 pc 2. Swinging bucket rotor, RPS50 1 pc 3. RPS27-3 1 pc RPS27-2 1 pc 4. Tube slicer 1 set</p> <p>SP.: 1. 30PC Bottle assembly 10 pcs 2. 30PA Bottle assembly (10 pcs/pk) 1 pk 3. 33PC Tube set (10 pcs/pk) 1 pk 4. 33PA Tube set (10 pcs/pk) 1 pk 5. 5CN Tube set (50 pcs/pk) 2 pks 6. 5PA Tube set (50 pcs/pk) 2 pks 7. 40PA Tube (50 pcs/pk) 1 pk 8. 40CN Tube (50 pcs/pk) 1 pk 9. 16PA Tube set (50 pcs/pk) 2 pks 10. 16PC Tube set (50 pcs/pk) 2 pks</p>	1	*	
10-7	<p><u>FRACTION COLLECTOR</u></p> <p>TOYO SF-160K</p> <p>SP.: 1. Test tube, 100 pcs/box 1 2. Dispensing valve 2 3. Fuse 3 4. Micro switch, V3L 5 5. Micro switch, V414J 3</p>	1	*	
10-8	<p><u>VACUUM PUMP</u></p> <p>HITACHI SVR16F Direct Drive</p> <p>SP.1 VP Oil MR-100, 4/can 1 SP.2 Oil trap element 2</p>	2		

P3 LABORATORY (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
11-1	<u>BIOHAZARD SAFETY CABINET</u> HITACHI SCV-1300EC II Piping materials for installation SP.: 1. Fluorescent bulb 1 set 2. Glow lamp 2 pcs. 3. Sterilizing lamp 2 pcs. 4. Main filter 2 pcs. (Hepa filter for exhaust) 1 pc.	1		
11-2	<u>CLEAN BENCH</u> HITACHI CCV-811 Piping materials 1 sets SP.: 1. Glow lamp 12 pcs. 2. Fluorescent bulb 6 pcs. 3. Sterilizing lamp 6 pcs. 4. Main filter 3 pcs.	1		
11-3	<u>CO₂ INCUBATOR</u> YAMATO IP-31R OP.: 1. CO ₂ Gas cylinder with 1 regulator 2. Bomb rack 1 SP.: 1. Fuse 3 2. Filter 1 3. Heater, 3 kinds (A,B,C type) 1 4. Pilot lamp 3 CO.: 1. CO ₂ Gas cylinder with 1 regulator	1		
11-4	<u>INCUBATOR</u> YAMATO IC-62R OP.: 1. Stand 1 SP.: 1. Fuse, 5A 3 2. Relay 1 3. Heater, 300W 1 4. Lamp 3 5. Switch 3	1		
11-5	<u>HAND STAND TYPE MICROSCOPE</u> OLYMPUS CKC-Bi-2 Bulb 6V2AGB-4 4	1		

ANIMAL HOUSES UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
12-1	<u>MOUSE BREEDING CAGE + SHELF</u> NIHON CLEA CL-2910 (6 lines x 6 steps) Shelf CL-2910 1 Cage CL-0104 36 Cage cover CL-0104 36 Water bottle CL-0904 36 SP.: 1. Spare cage CL-0104 7 2. Water bottle 36	5 sets		
12-2	<u>RAT BREEDING CAGE + SHELF</u> NIHON CLEA CL-0516 (4 lines x 5 steps) Shelf CL-0516 1 FRP Cage w/feeding box 20 CL-0408 Water bottle + basin 20 CL-0905 SP.: 1. Spare water bottle 20 CL-0905	2 sets		
12-3	<u>GUNIEA PIG BREEDING CAGE + SHELF</u> NIHON CLEA CL-0520 (4 lines x 5 steps) Shelf 1 Cage w/feeding box 20 CL-0420-2 Water bottle + basin 20 CL-0938 SP.: 1. Spare water bottle 20 CL-0938	3 sets		
12-4	<u>HUMSTER BREEDING CAGE + SHELF</u> NIHON CLEA CL-0516 (4 lines x 5 steps) Shelf 1 FRP Cage w/feeding box 20 CL-0408 Water bottle + basin 20 CL-0905 SP.: 1. Spare water bottle 20	2 sets		

ANIMAL HOUSES UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
12-5	<u>RABBIT BREEDING CAGE + SHELF</u> NIHON CLEA CL-0570 (4 lines x 3 steps) Shelf 1 FRP Cage w/feeding box 12 CL-0435 Water bottle + basin 12 CL-0910 Bottle holder CL-3223 12 SP.: 1. Spare water bottle 12 CL-0910	3 sets		
12-6	<u>CAT BREEDING CAGE + SHELF</u> NIHON CLEA CL-0541 (5 lines x 3 steps) Shelf 1 FRP Cage w/breeding box Water basin and restraining devised grill 15 CL-0465 Box for cat 15	2 sets		
12-7	<u>CHICKEN BREEDING CAGE + SHELF</u> NIHON CLEA CL-0570S (4 lines x 2 steps) Shelf 1 Cage with feeding box & water basin CL-2121 8	2 sets		
12-8	<u>VERBET MONKEY BREEDING CAGE + SHELF</u> NIHON CLEA CL-0683 (6 lines x 2 steps) Shelf (wall hang type) 1 Cage w/feeding box and restraining device CL-0480 12 Water bottle CL-0910 12 SP.: 1. Spare water bottle 12	2 sets		
12-9	<u>WORKING CART</u> NIHON CLEA CL-4601	1		

ANIMAL HOUSES UNIT (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
12-10	<u>HIGH PRESSURE STERILIZER (HEATER TYPE)</u> KRECA Inner size min. 600W x 600H x 900D Built-in electric steam generator, dryer, 30 KW, with water softner Piping materials for installation 1 set Tool set for installation 1 set SP.: 1. Door gasket 1 2. Heater 3 3. Recording paper 6 roles 4. Pressure gauge 1 5. Thermometer 1 6. Water level indicator 2 7. Heat element 2 8. Main filter 1 9. Pre-filter 10 pcs 10. Strainer for steam 1 pc 11. Strainer for water supply 1 pc	1	*	
12-11	<u>CART</u> NIHON CLEA CL-4543-2	1		
12-12	<u>STERILIZER BOX (FOR HEY BED)</u> NIHON CLEA CL-4547-1	2		
12-13	<u>STERILIZER BOX (FOR FEEDING STAFF)</u> NIHON CLEA CL-4547-2	2		
12-14	<u>SHOULDER HANG VAPORIZER</u> NIHON CLEA CL-4115	1		
12-15	<u>CATCH GLOVES</u> NIHON CLEA CL-4536	2		
12-16	<u>SAFETY MASK</u> NIHON CLEA CL-4538	2		
12-17	<u>CAPTURING NET</u> NIHON CLEA CL-4537-2	2		

ANIMAL HOUSES UNIT (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
12-18	<u>MOUSE AUTO BALANCE</u> NIHON CLEA CL-4503	1		
12-19	<u>RAT AUTO BALANCE (RAT, HUMSTER)</u> NIHON CLEA CL-4504	2		
12-20	<u>RABBIT AUTO BALANCE (RABBIT, CAT, GUINEA PIG)</u> NIHON CLEA CL-4505	3		
12-21	<u>MEDIUM SIZE ANIMAL AUTO BALANCE</u> NIHON CLEA CL-4506	1		
12-22	<u>ANIMAL OPERATING TABLE</u> NIHON CLEA CL-4513	1		
12-23	<u>CAT, RABBIT OPERATING TABLE</u> NIHON CLEA CL-4518	1		
12-24	<u>RABBIT BLOOD COLLECTOR</u> NIHON CLEA CL-4522	1		
12-25	<u>RAT FIXER (KOYAMA TYPE)</u> NIHON CLEA CL-4524	1		
12-26	<u>MOUSE FIXER (KITAZATO TYPE)</u> NIHON CLEA CL-4526	1		
12-27	<u>MOUSE, RAT, OPERATING FIXER</u> NIHON CLEA CL-4530	1		
12-28	<u>VIRESECTION SET (37 SETS)</u> NIHON CLEA CL-4550	1		
12-29	<u>SIMMER BUSH</u> NIHON CLEA CL-4560-2	1		
12-30	<u>ELECTRIC SHAVER</u> NIHON CLEA CL-4556 SP.: 1. Spare blade #40, 30, 15, 10 6 sheets/ea.	1		

WORK SHOP (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
13-1	<u>WORK SHOP TABLE (STEEL)</u> UCHIDA 328-0901 Dimensions (mm): 1800 x 750 x 740	3		
13-2	<u>CARPENTRY TABLE</u> ERON NK-560T Dimensions (mm): 1800 x 900 x 700 Top board : Plywood with melamine plastic board Loading cap : Approx. 1.5t Leg : Steel	1		
13-3	<u>STEEL RACK (WITH DRAWER)</u> UCHIDA 300-0000 & 300-9020 Dimensions (mm): 880 x 380 x 1790	3		
13-4	<u>ELECTRICAL WELDER</u> HITACHI AT-SS5 Output electric current: 300A Welding rod size : 6 - 2.6mm dia. OP.: 1. Protection glasses 2 2. Face protector, hand-lift type 2	1		
13-5	<u>GAS WELDER</u> ANDOH 1. Gas welder 1 2. Gas bomb, C ₂ H ₂ 1 3. Gas bomb, O ₂ 1 4. Bomb rack 1 5. Regulator 2 6. Pressure meter 1 7. Cutting and welding torch 2 8. Face protector 1 9. Protection glasses..... 1 10. Lighter 2 11. Connecting pipe 1 SP.: 1. Protection glasses 2 2. Face protector 2 3. Cutting and welding torch 1	1		
13-6	<u>BATTERY CHARGER</u> NIHON DENCHI SPI-35-20B	1		

WORK SHOP (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
13-7	<u>GRINDER (WITH BUFFER)</u> SHIMONURA SGB-400 Output : 0.4kW, 3 phase No. of revolution: 3000 r.p.m. Max. buffwheel : 240 dia.x30 face x 16 hole Grind wheel : 205 dia. x 19 face	1		
13-8	<u>DRILL PRESS</u> KIRA KRTOT-480 Swing : 480mm Cap : 4 - 45 dia. mm (S45C) Working space : 420 dia. mm Revolution change: 8-stage Motor : 1.5kW - 3 phase Base installation: 440 x 700mm Height : 1860mm	1		
13-9	<u>ELECTRIC HAND DRILL (WOOD WORK)</u> HITACHI BUW-SH3 Cap. : Wood 30mm No. of revolution: 1100 r.p.m. Power consumption: 700W SP.: 1. Drill bit	1		
13-10	<u>ELECTRIC HAND DRILL (STONE WORK)</u> HITACHI V-10B Cap. : Concrete 10mm No. of revolution: 1600 r.p.m. Power consumption: 335W SP.: 1. Drill bit	1		
13-11	<u>WISE</u> ERON	2		
13-12	<u>CARPENTRY TOOL SET</u> HITACHI DR-10RA	2		
13-13	<u>ELECTRICIAN TOOL SET</u> HCOZAN & SANWA S-56 with Universal tester	2		
13-14	<u>PLUMBING TOOL SET</u> HIT	2		

WORK SHOP (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
13-15	<u>PIPE CUTTER</u> EA203B	1		
13-16	<u>PORTABLE COMPRESSOR</u> HITACHI SC-52	1		
13-17	<u>ALUMINIUM LADDER (8 FEET)</u> UCHIDA P-24 356-5024 Length: 2400 width: 400	2		
13-18	<u>CART (500KG CAP.)</u> UCHIDA Big type	1		
13-19	<u>CART (300KG CAP.)</u> UCHIDA Model S Type 356-1020 220H x 600W x 900D	1		
13-20	<u>WORK STEP (ALUM.)</u> UCHIDA M-1 type 356-5001	2		
13-21	<u>WORK STEP (ALUM.)</u> UCHIDA A-5 type 356-5015	2		
13-22	<u>TOOL CABINET</u> UCHIDA 700-B 355-0071 (6 Drawers Type) with standard dividing panels 700H x 624W x 600D	35		
13-23	<u>TOOL PANEL</u> UCHIDA 354-999 Single Panel with Stands	29 pcs		

WORK SHOP (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK																								
13-24	<p><u>METAL HOOKS FOR TOOL PANEL</u></p> <p>UCHIDA with Following sets.</p> <table border="0"> <tr> <td>A-75</td> <td>354-0300, 6 pcs/set</td> <td>10</td> </tr> <tr> <td>A-150</td> <td>354-0301, "</td> <td>10</td> </tr> <tr> <td>B-75</td> <td>354-0302, "</td> <td>10</td> </tr> <tr> <td>A-150</td> <td>354-0303, "</td> <td>10</td> </tr> <tr> <td>C-75</td> <td>354-0304, "</td> <td>10</td> </tr> <tr> <td>C-150</td> <td>354-0305, "</td> <td>10</td> </tr> <tr> <td>D-150</td> <td>354-0306, "</td> <td>10</td> </tr> <tr> <td>D-300</td> <td>354-0307, "</td> <td>10</td> </tr> </table>	A-75	354-0300, 6 pcs/set	10	A-150	354-0301, "	10	B-75	354-0302, "	10	A-150	354-0303, "	10	C-75	354-0304, "	10	C-150	354-0305, "	10	D-150	354-0306, "	10	D-300	354-0307, "	10	1 set		
A-75	354-0300, 6 pcs/set	10																										
A-150	354-0301, "	10																										
B-75	354-0302, "	10																										
A-150	354-0303, "	10																										
C-75	354-0304, "	10																										
C-150	354-0305, "	10																										
D-150	354-0306, "	10																										
D-300	354-0307, "	10																										
13-25	<p><u>LATHE</u></p> <p>TUDA Pros</p> <p>OP.: 1. Driving center 1 2. 4 jaw chuck 1 3. 4-stage type rotary stopper 1 4. Steady set (10 - 150) 1 5. Follow set (10 - 70) 1</p>	1	*																									
13-26	<p><u>STEP-DOWN TRANSFORMER</u></p> <p>1 KVA Input: 1 phase 240 V (B.S. standard) Output: 100 V (JIS standard,w/ 2 x two pole consent holes)</p>	20																										

KENYA MEDICAL RESEARCH INSTITUTE (KEMRI)

PHASE 2 1983

**SPECIFICATIONS, LISTS OF MEDICAL &
RESEARCH EQUIPMENTS**

KENYA MEDICAL RESEARCH INSTITUTE (PHASE II)
CONDITIONS OF WORK OF RESEARCH & MEDICAL EQUIPMENT

1. Meaning of Terms
 - Unless otherwise specified, terms used in this CONDITIONS OF WORK OF RESEARCH & MEDICAL EQUIPMENT mean the same as are shown in TENDER DOCUMENTS, STANDARD AND SPECIAL SPECIFICATIONS.

2. General
 - The Medical Equipment shall be procured and installed at designated place shown on the Drawings. The Contractor shall submit specifications and instruction manuals of designated equipment for approval of the consultant before its delivery. Equipment shall be inspected in the presence of the consultant, and only those passed shall be used. On completion, general tests on equipment and trial operation shall be conducted in the presence of the consultant and the Owner's Representative.

3. Warranty
 - The Equipment provided by the Contractor to the Owner shall be genuine, new and properly manufactured according to the strictest standards of the manufacturer and conforming to the Specifications, so as to serve the ultimate needs and purposes of the Owner.
The Contractor shall be held responsible for improper manufacture of the Equipment or damage to the Equipment in transit, including that resulting from careless handling. In such cases, the Contractor shall undertake procedures necessary for settlement and assume all related costs.
 - The warranty of the Equipment shall be considered at free of charge within one half (1/2) calendar year from the hand-over date of the Equipment to the Owner.
 - The Contractor shall guarantee the availability of spare parts and consumables of the supplied equipment for five (5) calendar years after the hand-over of the Equipment.

4. Dispatch of Specialists
 - In order to supervise the installation of and to ensure the perfect operation of the Equipment, the Contractor shall dispatch the necessary specialists to the Project Site.

- In order to conduct the training for those Equipment, marked * in the Equipment Lists, the necessary specialists shall remain at the Project Site for necessary period.
5. Documents
- The Contractor shall submit three (3) sets of the following documents to the consultant before the Equipment shall be delivered to the site.
 - (a) Shop Drawing: Preliminary shop drawings and Final drawings.
 - (b) Manufacturers list for all Equipment
 - (c) Catalogue for all Equipment.
 - (d) Operation Manual (English and Japanese) including Maintenance & Repairing manuals.
 - (e) Invoice & Packing List for the Equipment.
 - (f) Warranty certificate of all Equipment (English)
6. Installation
- Prior to installation of each piece of the Equipment, installation drawings shall be submitted for approval of the consultant on connection and arrangement with respective service pipes (supply water, drainage, exhaust, air, gas, electricity and etc.). Adjustments shall be made before or after service connection as recommended by the manufacturer. Connection of supply water, drainage, electricity and gas etc., shall be provided at positions close to equipment as indicated on the drawings.
Three (3) copies of installation drawings shall be submitted. One is to be returned to the Contractor.
 - The Contractor shall furnish all personnel, facilities, water, electricity, fuel, gas and anything else necessary for the test operation and test. The cost for these shall be borne by the Contractor.
7. Packing
- All items shall be securely packed for standard container shipment.

- The Contractor and/or its agent is held responsible for any defects of fabrication and/or damage resulting from improper packing.
The Equipment which is listed as export inspection items and for which its necessary to have an inspection for export shall have the necessary certificate for export.

8. Insurance

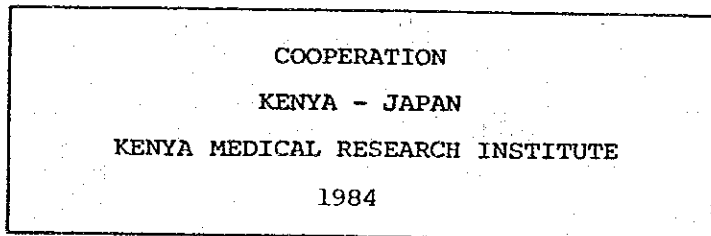
- The Contractor shall insure the Equipment with a first class Japanese insurance company.

9. Delivery Date

- The delivery date of the Equipment shall be coordinated with the construction of the Buildings. The Contractor shall arrange the shipping and installation of the Equipment in accordance with the progress of the Work.

10. Label

- All pieces of equipment shall be provided with a label size 25mm x 90mm of self-adhesive aluminum foil such as below.



- This label shall be placed on the Equipment at the site by the consultant's instruction.

11. Standard Accessories

- All standard operation accessories shall be provided.

12. Optional Equipment

- The Contractor shall provide all options marked OP in Equipment Lists.

13. Spare Parts and Consumables

- The Contractor shall provide all spare parts marked SP in Equipment Lists, and all consumables marked CO in Equipment Lists for all items of the Equipment for one (1) year normal operation.

- All such spare parts/consumables shall be suitably packed to prevent them from losses or damages and clearly labelled with instructions where necessary for their correct installation.
- The Contractor may be requested by the consultant minor additional supply of spare parts and consumables.

14. Others

(a) Name plate

All Equipment shall be provided with name plates on a suitable place on the Equipment.

Description: a) Equipment Name
 b) Date of Production
 c) Production Series Number
 d) Manufacturer's Name

All descriptions and notes shall be in English.

(b) All dimension of Equipment shall be in Metric.

(c) Power Supply & Water Quality Conditions

All Equipment shall meet the conditions of power supply and water quality shown in attachment.

(d) The Equipment shall be provided with levelling block and/or anchor bolt, which shall be necessary for the installation of the Equipment.

(e) The Equipment shall be inspected in Japan in the presence of the consultants/or inspector authorized by them if required, and only those passed shall be delivered.

(f) All Equipment specified shall be suitable for the tropical conditions under which shall be used.

(g) The Contractor will consult with the consultant and make necessary procedure in accordance with instructions of the consultant, whenever the production of the designated Equipment is suspended by the manufacturer.

15. Sub-Contractor for Medical Equipment Work
- Sub-Contractor shall be a single Japanese company, which shall execute to supply all the Equipment listed in the Tender Document and shall have agent in the Republic of Kenya during the period of five years following the hand-over date of the Equipment to the Owner.
16. Equivalent Equipment
- Model and Manufacturer shown in Equipment Lists are as reference.
 - The Contractor may procure and install "Equivalent" Equipment.
"Equivalent" shall mean a product which is, in the opinion of the consultant, equivalent or superior to the specified product in the size, quality and performance.

ATTACHMENT

1. Power Source

Equipments shall meet the following conditions of power source.

- 1 phase 240 Voltage ($\pm 10\%$) Frequency 50 Hz ($\pm 5\%$)
- 3 phase 415 Voltage ($\pm 10\%$) Frequency 50 Hz ($\pm 5\%$)

Voltage and Frequency fluctuation shall be compensated as shown limit, the case that more strict limit of Voltage and Frequency shall be needed for Equipments shall be considered by its own side.

2. Water Quality

Equipments shall meet the following conditions of water quality.

(source) City Council of Nairobi

Kabete Central Water Testing Laboratory.

Substances	
Nitrates (NO ₃)	TRACE
Nitrites (NO ₂)	NIL
Chloride (Cl)	4
Free res. (Cl ₂)	0.5
Total res. (Cl ₂)	0.55
Combined res (Cl ₂)	0.05
Fluoride (F-)	0.5
Sulphate (SO ₄)	15.0
Lead (Pb)	-
Copper (Cu)	-
Zinc (Zn)	-
Iron (Fe)	0.01
Manganese (Mn)	0.5
Calcium (Ca)	6.8
Magnesium (Mg)	6.8
Sodium (Na)	-
Potassium (K)	-
Aluminium (Al)	NIL
Silica (SiO ₂)	10

Appearance

Temperature (at time of collection °C) _____
 pH - Value 8.3
 Colour. B.U. < 5 Hazen Unit
 Turbidity F.T.U. VTU JTU 0.3
 Deposit NIL
 Electrical conductivity (Micro mhos/cm³) 265

	mg/l		mg/l
Total Hardness as CaCO ₃	45	Free Carbon dioxide	-
Calcium Hardness as CaCO ₃	17	Aggressive Carbondioxide	-
Alkalinity to phenolphalein	5	Dissolved Oxygen	-
Alkalinity to methylorange	63	N/80 P.V. 4hrs. at 27°C	0.30
Carbonate alkalinity as CaCO ₃	10	Free & Saline ammonia as(M)	TRACE
Bicarbonate alkalinity as CaCO ₃	53	Albuninoid Ammonia as (N)	0.048
Carbonate Hardness as CaC ₃	45	C.O.D. <u>2</u> hrs.	4
Non-Carbonate Hardness as CaCO ₃	NIL	5 days B.O.D. at 20°C	-
Excess alkalinity as Na ₂ CO ₃	23		
Total dissolved Solids, Residue dried at 180°C	150.0		

Date of Report 31/3/80

RESEARCH AND MEDICAL EQUIPMENT LIST

(PHASE II)

CLINICAL RESEARCH UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
5- 1	<u>REFRIGERATOR</u> SANYO SR-1001 SP.: 1. Lamp 2	1		
5- 2	<u>INCUBATOR</u> SAKURA 1F-3B with Stand SP.: 1. Fuse 5A, F-7161 3 pcs 2. Relay, E-1 1 pce 3. Heater, 320W (160W × 2) 1 pc 4. Pilot lamp 3 pcs 5. Power switch 3 pcs	1		
5- 3	<u>SAFETY BOX</u> HIRASAWA SB-C with Transformer SP.: 1. UV-lamp 2 pcs 2. Fluorescent lamp 1 pc	1		
5- 4	<u>FUME HOOD</u> TOYO KAGAKU LFB-120 SP.: 1. Glow Lamp 1 pc 2. Fluorescent lamp 1 pc	1		
5- 5	<u>TABLE TOP CENTRIFUGE</u> HITACHI SCT-4B 4,000 rpm SP.: 1. Carbon brush 2 pcs/set 1 set 2. Fuse 2 pcs 3. Test tube 15 ml 50 pcs/pk 4 pks 4. Rubber packing for 15 ml tube (50 pcs/set) 1 set	2		
5- 6	<u>WATER BATH WITH STIRRER</u> SAKURA KR-2 W/KS-2 SP.: 1. Pipe heater 1 pc 2. Lamp 3 pcs	1		
5- 7	<u>DESICATOR(Plastic)</u> SANKO PLASTIC C-6 OP.: 1. Pump hose 1 2. Adaptor 1	1		
5- 8	<u>DESICATOR (Glass)</u> YAZAWA 201-390	1		

CLINICAL RESEARCH UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
5-9	<u>UNIVERSAL BIOLOGICAL RESEARCH MICROSCOPE</u> <u>(WITH CAMERA SET)</u> OLYMPUS AHB-LB-2 W/AH-SW-LB, W/PM10-35AD-1, 35-SWK 10X SP.: 1. Immersion oil 50cc 2 2. Halogen bulb JC12V100W-HAL 1	1		
5-10	<u>MULTI DISCUSSION MICROSCOPE</u> OLYPUS BHS-313 W/BH2-MDO-1 SP.: 1. Halogen bulb JC12V100W-HAL-L 1 2. Bulb 6V10WGE for BH2-MDO-1 2 3. Immersion oil 50cc 2	1		
5-11	<u>RESEARCH BINOCULAR MICROSCOPE</u> OLYMPUS BHTU-112 SP.: 1. Immersion oil 50cc 2 2. Halogen bulb 6V20W-HAL-L 10	1		
5-12	<u>WATER BATH</u> SAKURA KR-2 SP.: 1. Power bracket 2 pcs 2. Neon bracket 2 pcs 3. Thermometer 1 pc 4. Snap switch 1 pc 5. Pipe heater 1 pc 6. Bell time 1 pc	1		
5-13	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	3		
5-14	<u>ULTRA LOW TEMP. FREEZER</u> SAKURA UL-60A SP.: 1. Leak tester 1 2. Set of fuse, lamp switch 1 3. Tool set 1	1		

PATHOLOGY UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
6- 1	<u>TRINOCULAR RESEARCH MICROSCOPE</u> <u>WITH PHOTO ATTACHMENT</u> OLYMPUS BHS-312 W/PM10-35AD-1 SP.: 1. Halogen bulb JC12V100WHAL-L 2 pcs 2. Immersion oil 50cc 2 pcs	1		
6- 2	<u>MULTI DISCUSSION MICROSCOPE</u> OLYMPUS BHS-313 W/BH2-MDO-1 SP.: 1. Halogen bulb JC12V100W-HAL-L 1 2. Bulb 6V10WGE for BH-2-MDO-1 2 3. Immersion oil 50 cc 2	1		
6- 3	<u>RESEARCH BINOCULAR MICROSCOPE</u> OLYMPUS BHTU-112 SP.: 1. Immersion oil 50cc 2 2. Halogen bulb 6V20WHAL-L 10	3		
6- 4	<u>FLUORESCENCE MICROSCOPE WITH CAMERA SET</u> OLYMPUS BHS-312 W/BH-RFL-W-1 SP.: 1. Non-fluorescence oil 50cc 2 2. High-pressure mercury burner USH102D 2 3. Fuses (DF0020, 0009, 0010) 2(ea)	1		
6- 5	<u>STORAGE BOX FOR SLIDE GLASS</u> TAKASHIMA T-87 OP.: 1. Alum. mappé T-85K 50	1		
6- 6	<u>VACUUM TISSUE PROCESSOR</u> SAKURA VRX-23A SP.: 1. Thermal Fuse 3 pcs 2. Microswitch, V-10-1A 3 pcs 3. Diaphragm 3 pcs 4. Silicone tube 3 pcs 5. Glass Vat 3 pcs 6. Bimetal Timer 1 pc 7. Buzzer 2 pcs 8. Timer Motor 1 pc 9. Vacuum Head 2 pcs 10. Paraffin Bath 1 pc 11. Charcoal 1 pc	1	*	
6- 7	<u>AUTOMATIC TISSUE PROCESSOR</u> SAKURA RH-12DM-II SP.: 1. Motor, Basket drive 1 pc	1	*	

PATHOLOGY UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
6- 7	2. Lid for glass beaker, 135 3. Lid for glass beaker, 134 4. Lid for glass beaker, 137 5. Microswitch, S-5G 6. Bracket, BN-4R (C) 7. Microswitch, S-5GL2 8. Relay, LY-2F 9. Microswitch, UV-15-1A 10. Microswitch, ST-115A 11. Rotary switch 12. Multi-Timer control TTC-11A 13. Timer 14. Neon Bracket, BN-4R (C) 15. Neon Bracket, BN-4SR (C) 16. Timing disc 17. Power switch, ST-206N 18. Glass Vat 19. Paraffin bath	1 pc 1 pc 1 pc 2 pcs 2 pcs 2 pcs 2 pcs 2 pcs 2 pcs 1 pc 1 pc 1 pc 2 pcs 2 pcs 1 pc 1 pc 2 pcs 2 pcs 1 pc		
6- 8	<u>PARAFFIN OVEN</u> SAKURA PM-400II SP.: 1. Thermometer 2. Pilot lamp, B-1 (C) 3. Signal lamp, B-1 (K) 4. Heater, 500W x 2 5. Door packing	2 pcs 2 pcs 2 pcs 1 set 2 sets	1	
6- 9	<u>INCUBATOR</u> SAKURA 1F-3B with Stand SP.: 1. Fuse 5A, F-7161 2. Relay, E-1 3. Heater, 320W (160W x 2) 4. Pilot lamp 5. Power switch	3 pcs 1 pce 1 pc 3 pcs 3 pcs	2	
6-10	<u>TABLE TOP CENTRIFUGE</u> HITACHI SCT-4B 4,000 rpm SP.: 1. Carbon brush 2 pcs/set 2. Fuse 3. Test tube 15 ml 50 pcs/pk 4. Rubber packing for 15 ml tube (50 pcs/set)	1 set 2 pcs 4 pks 1 set	1	
6-11	<u>SLEDGE MICROTOME</u> ERMA 08-100-1 SP.: 1. Microtome Knife, 17cm	3 pcs	2	

PATHOLOGY UNIT (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
6-12	<p><u>FREEZING MICROTOME</u></p> <p>SAKURA CM-41</p> <p>SP.:</p> <ol style="list-style-type: none"> 1. Fluorescent lamp 2 pcs 2. Spouit 2 pcs 3. Anti-roll plate 2 pcs 4. Specimen block 7mmϕ 1 pc 5. " 22mmϕ 1 pc " 35mmϕ 1 pc " 50 x 50mm 1 pc 5. Microtome Knife 1 pc 6. Squarrel oil, 20cc 2 pcs 7. Crion, 400g, 2 bottle/set 1 set 8. Fuse 20A 2 pcs 9. Fuse 3A 2 pcs 10. Fuse 1A 2 pcs 	1	*	
6-13	<p><u>SLIDE WARMER</u></p> <p>SAKURA PS-51</p> <p>SP.:</p> <ol style="list-style-type: none"> 1. Heater 1 pc 2. Switch 2 pcs 3. Bracket 2 pcs 	2		
6-14	<p><u>REFRIGERATOR</u></p> <p>SANYO SR-1001</p> <p>SP.:</p> <ol style="list-style-type: none"> 1. Lamp 2 	2		
6-15	<p><u>AUTOMATIC MICROTOME KNIFE SHARPENER</u></p> <p>SAKURA MN-72</p> <p>SP.:</p> <ol style="list-style-type: none"> 1. Microswitch, Z-15GW3 1 pc 2. Power switch, ST-215K 1 pc 3. Bracket, No.5701' (0) 1 pc 4. Dial gauge 1 pc 5. Cover, Acrylic C-2 1 pc 6. Dressing Btone 1 pc 7. Grinding Stone, No.8000 2 pcs 8. Belt, SN-2 1 pc 9. Box wrench 1 pc 10. Teflon gear for vertical axial 1 pc 11. Teflon gear for horizontal axial 1 pc 12. Fuse 2 pcs 	1		

PATHOLOGY UNIT (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
6-16	<u>SHAKER FOR TISSUE FIXATION</u> SAKURA VSJ-10B SP.: 1. Timer 1 pc 2. Switch 1 pc 3. Bracket 1 pc 4. V Belt 1 pc	1		
6-17	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	3		

CLINICAL RESEARCH & PATHOLOGY UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
5-6-1	<u>LABORATORY GLASS WASHER</u> YAMATO AW-47R OP.: 1. Jet cage 1 pc 2. Tube cage 1 pc SP.: 1. Lamp 3 pcs 2. Relay 1 pc 3. Overheat preventing appa. 1 pc 4. Heater 1 pc 5. Mechanical Seal 1 pc CO.: 1. Cleanser 15kg/can 1 pc	1		
5-6-2	<u>VERTICAL HIGH PRESSURE STERILIZER</u> SAKURA AC-3701 SP.: 1. Fuse in glass tube 2 pcs 2. Bracket for indicator 1 pc 3. Bracket for sterilizing lamp 1 pc 4. Bracket for low water burning lamp 1 pc 5. Door gasket 1 pc 6. Pipe heater 1 pc 7. Power switch 1 pc 8. Relay, LY-27ZF 1 pc 9. Over-heat protect regulator 1 pc 10. Pressure gauge 1 pc	1		
5-6-3	<u>DRY HEAT STERILIZER</u> SAKURA HE-21 with Stand SP.: 1. Fuse 3 2. Relay 1 3. Heater 1	1		
5-6-4	<u>ULTRASONIC GLASS WASHER</u> SAKURA US-20 with Basket SP.: 1. Transistor 1 2. Fuse 3	1		
5-6-5	<u>AUTOMATIC PIPET WASHER</u> KAYAGAKI TKW-2	1		
5-6-6	<u>ULTRASONIC PIPETTE CLEANER</u> TOYO KAGAKU TNS-150 SP.: 1. Transistor 1 pc 2. Fuse 3 pcs	1		

CLINICAL RESEARCH & PATHOLOGY UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
5-6-7	<u>LAB. CART</u> UCHIDA MODEL 1	1		

NUTRITION UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
7-1	<u>HOT PLATE</u> TOYO KAGAKU TP-35 SP.: 1. Thermoregulator 1 pc 2. Lamp 5 pcs	1		
7-2	<u>THIN LAYER CHROMATOGRAPH APPARATUS</u> TOYO KAGAKU OP.: 1. TLC Pre-coated Plate No. 1011 25 Plate/box 1 No. 2011 25 Plate/box 1 No. 1511 25 Plate/box 1 No. 1521 25 Plate/box 1 No. 2511 25 Plate/box 1 No. 2521 25 Plate/box 1 2. Sample Streaker, ST-16 1 3. Hanging TLC Developing Chamber, HPS-204 1 4. Spray Chamber, SP-600 1 5. Sample Scratch & Extraction Apparatus, TLC-RE 1 SP.: 1. Lid, Glass, with Hole 2 2. Lid 2 3. UV-Lamp, 254nm 2 4. UV-Lamp, 352nm 2 5. Fluorescent Lamp 2 6. Extracted Solvent Tank 3 7. Receiver, 5 ml 5 8. Syringe 5 9. Membrane Filter, TM-2P 5	1		
7-3	<u>GAS CHROMATOGRAPH</u> HITACHI 164-F W/Transformer OP.: 1. Chromato Data Processor 833 (1ch) 1 2. Soap Bubble Flow Meter 1 3. H ₂ Gas Piping 1 4. Air Piping 1 5. Carrier Gas Piping 1 6. Silent Air Compressor HITACHI SC-62 W/Transformer 1 7. H ₂ Bombe W/Regulator (with gas) 2 8. N ₂ Bombe W/Regulator (with gas) 2 9. Micro Syringe 2	1	*	

NUTRITION UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
	SP.: 1. T-shaped Packing, Small, 25 pcs/set 5 2. T-shaped Packing, Large, 25 pcs/set 1 3. Silicone Rubber Packing 25 pcs/set 5 4. Silica Glass, Wool, /g 1 5. O-ring 003-1783 25 pcs/set 10 6. Glass Insert 4 7. Ignition Coil 2 8. Nozzle 2 9. Fuse, 1A & 0.5A each 10 pcs/set 1 10. Chart Paper, for Recorder 10 pcs/set 3 11. Pen, Red 20 12. Chart Paper, for Data Processor 10 pcs/set 3 13. Thermal Pen Head 1			
7-4	<u>TABLE TOP CENTRIFUGE</u> HITACHI SCT-4B 4,000 rpm SP.: 1. Carbon Brush 2 pcs/set 1 set 2. Fuse 2 pcs 3. Test Tube 15 ml 50 pcs/pk 4 pks 4. Rubber Packing for 15 ml Tube (50 pcs/set) 1 set	1		
7-5	<u>WATER BATH WITH STIRER</u> SAKURA KR-2 W/KS-2 SP.: 1. Pipe Heater 1 pc 2. Lamp 3 pcs	1		
7-6	<u>MAGNETIC STIRRER</u> TOYO KAGAKU C-2S SP.: 1. Resistor 1 2. Lamp 2	1		
7-7	<u>MUFFLE FURANCE</u> TOYO KAGAKU ESF-1PID SP.: 1. Heater 1 2. Thermocouple 1 3. Thermal Fuse 1	1		

NUTRITION UNIT (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
7-8	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	1		
7-9	<u>RESEARCH BINOCULAR MICROSCOPE</u> OLYMPUS BHTU-112 SP.: 1. Immersion Oil 50 cc 2 2. Halogen Bulb 6V20WHAL-L 10	1		
7-10	<u>HYDROMETER (Short, 19 Hydrometer Set)</u> TOKYO GARASU 53-40	1		
7-11	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	3		

PUBLIC HEALTH & EPIDEMIOLOGY UNIT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
8- 1	<u>CENTRIFUGE FOR BUTYROMETER</u> NAKAMURA IKARIKA N-104B	1		
8- 2	<u>BUTYRO METER</u> NAKAMURA IKARIKA N-105 W/Rubber lid	24		
8- 3	<u>BUTYROMETER WARMER WITH H SO DISPENSER</u> NAKAMURA IKARIKA N-113, N-151	1		
8- 4	<u>PERSONAL COMPUTER</u> IBM 5150 Unit with Monitor OP.: 1. Disk Drive 1 2. Printer Cable 1 3. I/F Monochrome Printer 1 4. Dos Ver 1.1 1 5. Printer 1	1		
8- 5	<u>RESEARCH BINOCULAR MICROSCOPE</u> OLYMPUS BHTU-112 SP.: 1. Immersion oil 50cc 2 2. Halogen bulb 6V20WHAL-L 10	1		
8- 6	<u>HEMATOCRIT CENTRIFUGE</u> HITACHI MODEL MC-201 SP.: 1. Capillary Tube (100 pcs/pk) 10 pks 2. Carbon Brush (2 pcs/set) 20 sets 3. Fuse 10A 10 pcs 4. Putty 5 pcs 5. Cushion for Capillary Tube 10 pcs 6. Revolution Counter 1 pc	1		
8- 7	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	1		
8- 8	<u>HEALTH METER (For Adults)</u> T.T.M. AT.	1		
8- 9	<u>MEASURING ROD</u> T.T.M. HD.	1		
8-10	<u>1CH. ELECTRO CARDIOGRAPH</u> NIHON KOHDEN ECG-6151	1	*	

PUBLIC HEALTH & EPIDEMIOLOGY UNIT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK	
(Contd.)	OP.: 1. Adaptor/Charger SB-613D	1		set	
	2. Patient Cable BJ-601D	1		set	
	SP.: 1. Diode 1S-953-3	5			
	2. ZD 02Z-6.8A	1			
		02Z-4.7	1		
		HZ-5C2	1		
		HZ-5C1	1		
		RD 5.6J	1		
		HZ3B3	1		
		05Z24Y	1		
		05Z6.8Y	1		
		05Z3.9Y	1		
		3. LED GL-9PR2 RED	1		
		TLR-102	1		
		4. LCD Custom LCD for			
		ECG-6151	1		
		5. PHC TL521-2	1		
		NJL5142EL-B	1		
		6. IC AN6561	1		
		uPC-801C	1		
		uPC-803C	1		
		uPC-78L08	1		
		MC-14001UBCP	1		
		MC-14011BCP	1		
		MC-14070B CP	1		
		MC-14069UBCP	1		
		MC-14028BCP	1		
		MC-14419P	1		
		MC-14556BCP	1		
		MC-14174BCP	1		
		MC014020BCP	1		
		MC-14042BCP	1		
		MC-14046BCP	1		
		MC-14503BCP	1		
		MC-14584BCP	1		
		TC-4052	1		
		HD14053BP	1		
		KT-1(Buffer Amp. 1)	1		
		KT-2(Buffer Amp. 2)	1		
		KT-5(Amp.)	1		
	KT-4(Auto position)	1			
	EHD-AF6330				
	(Main Amp. 1)	1			
	EHD-AF6331				
	(Main Amp. 2)	1			
	EHD-HA6332				
	(Heater circuit)	1			
	M51848L	1			
	7. ROM HN462716	1			
	8. CPU MSM 5840RS	1			
	9. Tr. 2SA-836-D	1			
	2SA-1243-Y	1			

PUBLIC HEALTH & EPIDEMIOLOGY UNIT (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
(Contd.)	<p>2SA-1120-0 1</p> <p>2SC-1173-Y 1</p> <p>2SC-1222-(2)-E 1</p> <p>2SC-1345-D 1</p> <p>2SC-2270-C 1</p> <p>2SC-2516-L 1</p> <p>10. FET 2SK-30A-Y 1</p> <p>11. Diode 1S1885 1</p> <p>M4C-6 1</p> <p>12. ZD 02Z-6.8A 1</p> <p>13. LED GL-9PG2 1</p> <p>GL-9PR2 1</p> <p>14. TH SDT-100 1</p> <p>15. IC uPC-14312H 1</p> <p>16. Tr. 2SC-1345-D 1</p> <p>2SD-526-0 or Y 1</p> <p>CO.: 1. Recording Paper FPS50-3-75 100 rolls</p> <p>2. Patient Cable BJ-601D 3 pcs</p> <p>3. ECG Clip-on Electrode "FAST CLIP" 4pcs./set 3 sets</p> <p>4. CardioCream, two 100gm tubes/set 20 sets</p> <p>5. Heat Stylus TLS-100 5 pcs</p> <p>6. Limb Electrode for adult 12 pcs</p> <p>7. Limb Electrode for child 12 pcs</p> <p>8. Limb Electrode Strap for adult 12 pcs</p> <p>9. Limb Electrode Strap for child 12 pcs</p> <p>10. ECG Chest Electrode for adult 18 pcs</p> <p>11. ECG Chest Electrode for child 18 pcs</p>			
8-11	<p><u>WATER ANALYTICAL SET</u></p> <p>HACK CHEMICAL DR-EL-1a</p>	1		
8-12	<p><u>HEMOGLOBIN METER</u></p> <p>ERMA Hb-240</p> <p>SP.: 1. Spare Bulb 2</p>	1		
8-13	<p><u>GAS BURNER</u></p> <p>HAYASHI SEISAKU MODEL GS.</p>	3		

NUTRITION & PUBLIC HEALTH-EPIDEMIOLOGY (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
7-8- 1	<p><u>DISTILLATION AND ION EXCHANGED WATER APPARATUS</u></p> <p>TOYO KAGAKU GS-20N</p> <p>OP.: 1. Filtering apparatus 1 2. Ion exchange resin reviving appar. 1</p> <p>SP.: 1. Raw water filter 5 2. Heater 1 3. Electromagnetic valve, 2 kinds 1 4. Heater jacket packing 1 5. Relay 1 6. Packing for drain 2</p> <p>CO.: 1. Scale remover 12 kg 2. Ion exchange resin 2</p>	1		
7-8- 2	<p><u>DRYING OVEN</u></p> <p>SAKURA TK-21 with Stand</p> <p>SP.: 1. Gasket 1 2. Heater 2 3. Thermometer 1 4. Pilot light 2 5. Relay, A3-10-5110 1 6. Relay, A3-10-5060 1 7. Excess temp. preventive device 1 device 1</p>	1		
7-8- 3	<p><u>DRY HEAT STERILIZER</u></p> <p>SAKURA HE-21</p> <p>OP.: 1. Stand 1</p> <p>SP.: 1. Fuse 3 2. Relay 1 3. Heater 1</p>	1		
7-8- 4	<p><u>KOCH'S STEAM STERILIZER</u></p> <p>SAKURA C-30E</p>	1		
7-8- 5	<p><u>HIGH PRESSURE STERILIZER</u></p> <p>SAKURA ASV-3001</p> <p>OP.: 1. 1 Shelf type cage 1 2. Media Basket 1</p> <p>SP.: 1. Gasket 2 2. Timer lamp 2 3. Thermoregulator lamp 2 4. Power switch 1 5. Relay, A3-10-1180 1 6. Relay, (for heater) A3-10-5060 1</p>	1		

NUTRITION & PUBLIC HEALTH-EPIDEMIOLOGY (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
	7. Pipe heater	1		
7-8- 6	<u>DIRECT READING BALANCE</u> SHIMADZU L-160D	1		
7-8- 7	<u>CONTAINER USING LIQUID NITROGEN</u> OSAKA OXYGEN DALIC-17B	2		
7-8- 8	<u>UV-VIS SPECTROPHOTOMETER</u> HITACHI 100-10 OP.: 1. 10mm glass cell set 5 sets SP.: 1. Tungsten lamp 10v, 3A 3 pcs 2. Fuse set 1 set 3. Silica gel 1 pc	1		
7-8- 9	<u>PH METER</u> HORIVA F-8 SP.: 1. Combination electrode 1 pc 2. Standard solution (pH 4,7,9 & AgCl) 1 set	1		
7-8-10	<u>LAB. CART</u> UCHIDA MODEL 1	1		

WARD (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
14-1	<u>2-CRANK GATCH BED</u> UCHIDA UA-471	40		
14-2	<u>MATTRESS</u> UCHIDA "ASEPASU" MATTRESS UE-710	50		
14-3	<u>BEDSIDES RAIL</u> UCHIDA UA-16	80		
14-4	<u>OVER BED TABLE</u> UCHIDA UF-290	40		
14-5	<u>FORMALIN GAS EVAPORATOR</u> KATO KS-2	1		
14-6	<u>AMBULANCE (2WD)</u> NISSAN URVAN 2000cc W/Ambulance modification not diesel type	1		
14-7	<u>AMBULANCE (4WD)</u> NISSAN PATROL 4000cc W/Ambulance modification not diesel type	1		
14-8	<u>BEDSIDE CABINET</u> UCHIDA MODEL 5	40		

NURSE STATION & TREATMENT (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
15-1	<u>BED PAN WASHER</u> SAKURA BS-5 SP.: 1. Air Valve 1 pc 2. Air Valve Handle 1 pc	1		
15-2	<u>BED PAN RACK</u> ATOM SL-81B	1		
15-3	<u>FILM ILLUMINATOR</u> NIKO 1-42	1		
15-4	<u>SPHYGMOMANOMETER</u> S'MES M-102STD	5		
15-5	<u>STETHOSCOPE</u> S'MES S-007	5		
15-6	<u>TREATMENT CARRIAGE</u> UCHIDA 353-0055 MODEL 5	2		
15-7	<u>WHEEL STRETCHER</u> UCHIDA MODEL UK-210	2		
15-8	<u>WHEEL CHAIR</u> UCHIDA MODEL UKF-80	2		
15-9	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	2		
15-10	<u>ICE MAKER</u> HOSHIZAKI IM-50 H SP.: 1. Fuse 3	1		
15-11	<u>EXAMINING BED</u> UCHIDA MODEL UC-260	2		
15-12	<u>DUST CART</u> UCHIDA MODEL N W/Dust Sack	2		
15-13	<u>IV-HANGER STAND</u> UCHIDA MODEL UC-502	2		

NURSE STATION & TREATMENT (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
15-14	<u>HAND WASHING STAND</u> UCHIDA MODEL 2 OP.: 1. Wash bowl (deep type) 2 pcs	4		
15-15	<u>PANEL SCREEN</u> UCHIDA MODEL C-66 (White)	2		
15-16	<u>TREATMENT CARRIAGE</u> UCHIDA 353-0057 MODEL 2	2		
15-17	<u>1CH, ELECTRO CARDIOGRAPH</u> NIHON KOHDEN ECG-6151 OP.: 1. Adaptor/charger SB-613D 1 set 2. Patient Cable BJ-601D 1 set SP.: Same Spare Parts shown in 8~10 CO.: Same Consumables shown in 8~10	1	*	
15-18	<u>TABLE TOP HIGH PRESSURE STERILIZER</u> SAKURA SP-203 OP.: 1. Cubic cast 1 pc SP.: 1. Door gasket 1 pc 2. Thermo regulator lamp 2 pcs 3. Power lamp 2 pcs 4. Power switch 1 pc 5. Relay for heater 2 pcs	1		
15-19	<u>PORTABLE BED PAN</u> COMBI 8040	10		
15-20	<u>URINAL FOR MALE/FEMALE</u> COMBI 8003 (for male) 5 pcs COMBI 8004 (for female) 5 pcs	1 set		
15-21	<u>OPERATING LIGHT (Stand Type)</u> YAMADA No. 331-C SP.: 1. Spare Bulb 1	1		
15-22	<u>MEDICINE RACK</u> UCHIDA UBC-409	1		

NURSE STATION & TREATMENT (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
15-23	<p><u>DEFIBRILLATOR</u></p> <p>NIHON KOHDEN CARDIAC RESUSCITATION SYSTEM</p> <p>consisting from ;</p> <p>1. Defibrillator TEC-3500M 1 set</p> <p>2. Heart Monitor OEC-3500 1 set</p> <p>3. Heat-writing Recorder 1 set WT-311R</p> <p>4. Chart Take-up WH-311P 1 set</p> <p>5. Carrying Cart KD-301D 1 set</p> <p>6. External Paddle, 80mmφ, 1 pair ND-304D</p> <p>CP :: 1. External Paddle, 40mmφ, 1 pair ND-304D</p> <p>2. Internal Paddle, 70mmφ, 1 pair ND-217D</p> <p>3. Internal Paddle, 50mmφ, 1 pair ND-s15D</p> <p>SP.: 1. IC CA3130T 1</p> <p>MCL4049UBCP 1</p> <p>MCL4011UBCP 1</p> <p>HD14012BP 1</p> <p>MCL4023BCP (CD4023BE) 1</p> <p>MCL4049UBCP 1</p> <p>MCL4511BCP 1</p> <p>MCL4513BCP 1</p> <p>HD14538BP 1</p> <p>MC7808CT 1</p> <p>2. Tr. 2SA-473Y 1</p> <p>2SC-1213AK-D 1</p> <p>2SC-1313-S98G 1</p> <p>2SC-1345K-D 1</p> <p>2SC982 (HFE 8000) 1</p> <p>2SD797 1</p> <p>3. Diode RC-2 2KV 200MA 1</p> <p>SR1FM-8 1</p> <p>SR25B-4R 1</p> <p>SR3AM-2A 1</p> <p>Varistor VR-60 1</p> <p>1S-953-3 1</p> <p>4. ZD O2Z6.8A 1</p> <p>5. LED GL-3AR1 1</p> <p>GL-3PG1 1</p> <p>HDSP-3403 1</p> <p>HLMP-1401 1</p>	1	*	

NURSE STATION & TREATMENT (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
	6. IC AN6914	1		
	DG200BA	1		
	LF13741	1		
	LF-13741-EEG7000	1		
	Green			
	MC-78L12ACP	1		
	MC14049UBCP	1		
	uPC151A	1		
	7. Tr. 2SA-495G-Y	1		
	2SA836	1		
	2SC-1345K-D	1		
	2SC-1213AK-D	1		
	8. FET ITS-30083	1		
	AD840	1		
	9. Photo Coupler			
	PC-507	1		
	6N-135	1		
	10. Diode 1S-953-3	1		
	11. ZD 02Z6.8A	1		
	12. Diode 1S-953-3	1		
	13. ZD RD-24A	1		
	14. IC HA-17082PS	1		
	DG200BA	1		
	uPC271C	1		
	AD518J	1		
	uPC801C	1		
	uPC157C	1		
	MC14076BCP (CD4076BE)	1		
	uPD2114LC-0 (P2114L)	1		
	SN74LS107	1		
	SN74LS00N	1		
	MC14013BCP (CD4013BE)	1		
	MC14566BCP	1		
	HD14071BP	1		
	(MC14071BCP)			
	HD14503BP	1		
	(MC14503BCP)			
	MC14598BCP	1		
	MC14174B	1		
	SN74LS670	1		
	MC14008BCP (CD4008BE)	1		
	HD14519BP (MC14519BCP)	1		
	SN74LS161AN	1		
	HD14081BP (MC14081BCP)	1		
	CD4073BE (MC14073BCP)	1		
	MC14049UBCP (CD4049UBE)	1		
	MC14011BCP	1		

NURSE STATION & TREATMENT (5)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
(Contd)	HD14025BP (MC14025BCP) 1 MC14559BCP 1 HD14519BP (MC14519BCP) 1 SN74LS161AN 1 MC14572UBCP 1 AD561J 10BIT D/A 1 CD4050BE (MC14050BCP) 1 MC14027BCP (CD4027BE) 1 HD14023BP (MC14023BCP) 1 CD4050BE (MC14050BCP) 1 MC14001UBCP 1 (CD4001UBE) MC14072BCP (CD4072BE) 1 HD14040BCP (MC14040BCP) 1 MC14011UBCP 1 (CD4011UBE) MC14049UBCP 1 (CD4049UBE)			
	15. Tr. 2SA-726YG 1			
	16. FET ITS-30088 1			
	17. Tr. 2SC-1012A 1 2SC-1313-YG 1 2SC-14460 1 2SC-982 (HFE 8000) 1 2SC-1047 C-D 1 2SA-913 1 2SC-1345K-D (1707H-C) 1			
	18. Diode 1S-953-3 1 HZ12LA2 (orange) 1 HZ6LA1 (orange) 1			
	19. Diode SR1FM-8 1			
	20. IC MB4204 1 uPC801C 1 HA17741GS 1 (741T, C151A) HA17082PS 1 HD14066BP (MC14066BCP) 1 HA17723G (723CJ) 1 MC14001UBCP (CD4001UBC) 1			
	21. Tr. 2SA-685 1 2SA-913 1 2SC-1012A 1			
	22. Diode H.V.T. T-22 15MA 12KV 1			
	23. Tr. 2SA-736YG 1 2SC-1313-YG 1 2SC-1061-B 1			

NURSE STATION & TREATMENT (6)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
(Contd)	24. Diode S4VB10	1		
	SR1FM-8	1		
	WO-6 (0950446)	1		
	25. IC HA17815P	1		
	MC7915CT	1		
	HA17805P	1		
	26. LED HLMP-0301 red	1		
	HLMP-0401 yellow	1		
	HLMP-1301 red	1		
	HLMP-1401	1		
	27. Diode 1S0953-3	1		
	HZ6LC2 (orange)	1		
	28. IC uPC-1458C	1		
	uPC-801C	1		
	MB4204 (uPC339C)	1		
	MC14011UBCP	1		
	(CD4011UBCP)			
	HD14538BP (MC14538CP)	1		
	CA3140AT	1		
	MC14433 (3.1/2 A/D)	1		
	MSM561	1		
	uPA2004C	1		
	MC14069UBCP	1		
	(CD4069UBE)			
	MC14001UBCP	1		
	HD14040BP (MC14140BCP)	1		
	HD14066BP (MC14066BCP)	1		
	29. FET ITS-30088	1		
	30. Tr. 2SA-495-YG	1		
	2SC-982 (HFE 8000)	1		
	2SC-372-GY	1		
	31. ZD HZ7LC3	1		
	32. Diode 1S-953-3	1		
	33. Tr. 2SC-372-GY	1		
	34. IC MC14001UBCP	1		
	MC14011UBCP	1		
	HD14012BP	1		
	MC14020BCP	1		
	HD14024BP	1		
	MC14025BCP	1		
MC14069UBCP	1			
uPC-151A	1			
uPC-1458C	1			
HA17741GS	1			
TCA955	1			
HA17812P	1			

NURSE STATION & TREATMENT (7)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
(Contd)	<p>35. Tr. 2SA-495G-0 1 2SA-550A-P 1 2SB-512A-P 1 2SB-525D 1 2SC-1345K-D 1 2SC982 1 2SD-389AP 1</p> <p>36. Diode 1S-953-3 1 SR1FM-8 1</p> <p>37. LED HLMP-1401 1</p> <p>38. ZD 02Z6.8A 1 HZ6C2 1</p> <p>CO.: 1. Recording Paper MS-50-2, 20 rolls 50 mm x 20 m 2. Heat Stylus TLS-200 2 pcs 3. Cardio Cream, two 5 sets 100 grm tubes/set</p>			
15-24	<p><u>LOW PRESSURE CONTINUOUS SUCTION UNIT</u></p> <p>MIZUHO MSP-210</p> <p>SP.: 1. Bottle (3,000 cc) 1 pc 2. Low pressure regulating cylinder 1 pc 3. Horse 2 pcs 4. Rubber lid 2 pcs</p>	1		
15-25	<p><u>RESUSCITATOR</u></p> <p>ATOM OX-500</p> <p>OP.: 1. O₂ cylinder - 500ℓ 1 pc</p> <p>SP.: 1. Resuscitation mask for adult w/rubber cushion 2 pcs 2. Airway large 1 pc 3. Airway medium 1 pc 4. Suction tube sterilizer bottle 2 pcs 5. Reservoir bottole 2 pcs 6. Humidifier bottle 2 pcs 7. Adaptor for bottle 2 sets</p>	1		

NURSE STATION & TREATMENT (8)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
15-26	<u>RESPIRATOR</u> BIRD MARK 8 OP.: 1. Air Compressor #9000 1 2. Humidifier #3201 1 3. Oxygen Blender #5100 1 4. Patient Unit 2 5. Rack 1 SP.: 1. I.C.U. Nebulizer Tube 1 2. Test Lamp 2 3. 7.5 mm Senser 5 4. Gas Inlet Adaptor 3 5. Senser Adaptor 3 6. Connector 2 7. Wick 10 8. Tracheotomy Set 1 9. Inspection Parts 1 set	1	*	
15-27	<u>OPHTHALMOSCOPE</u> NEITZ BX-123 SP.: 1. Lamp 6	1		
15-28	<u>HAIR WASHING STAND</u> ATOM NS-960	1		
15-29	<u>LEG WASHING TUB</u> SANKO SQ-10	1		
15-30	<u>WALKING ASSISTANCE CART</u> UCHIDA S-55L	1		
15-31	<u>ULTRASONIC NEBULIZER</u> OMRON NE-U10 SP.: 1. Mask 1 pc 2. Power light 1 pc 3. Alarm light 1 pc 4. Relay 1 pc 5. Transistor 1 pc 6. Fuse 3 pcs	2		

NURSE STATION & TREATMENT (9)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
15-32	<u>GLUCOSE METER</u> MILES-SANKYO DEXTROMETER II SP.: 1. Wash bottle 2 pcs 2. Tips #5594 1 pc CO.: 1. Dextrostick 5 pcs	1		
15-33	<u>KARTE & FILM SHELF</u> UCHIDA 353-0002 MODEL 2	2		
15-34	<u>MOBILE TYPE BATH TUB</u> PIGEON K605	2		
15-35	<u>AUTOMATIC WASHER</u> HITACHI PS-92	1		
15-36	<u>BOILING STERILIZER</u> SANKO SS-35 (for LPG Gas)	1		

PHYSIOLOGICAL TEST (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
16-1	<p data-bbox="292 427 639 454"><u>6CH ELECTROCARDIOGRAPH</u></p> <p data-bbox="368 472 703 499">NIHON KOHDEN ECG-6306</p> <p data-bbox="432 517 1139 607"> OP.: 1. Input Box JC-501D 1 set 2. Carrying Cart KD-601D 1 set 3. Cable Hunger KH-601D 1 set </p> <p data-bbox="432 622 1139 1973"> SP.: 1. ZD HZ-5C2 1 2. ZD HZ4B-1 1 3. ZD HZ3A1 1 4. ZD HZ5B1 1 5. ZD HZ6A1 1 6. ZD HZ6A1L 1 7. ZD RD9.1FB 1 8. ZD HZ3BLL 1 9. ZD HZ-7C3 1 10. D RB-152 1 11. D S10VB20 1 12. D 15SB04S 1 13. SCR 5P1M 1 14. Photocoupler ON2152 1 15. TR 2SA-473-Y-AC 1 16. TR 2SA-546-E 1 17. TR 2SA-673A-C 1 18. TR 2SA-779-K 1 19. TR 2SA1010 1 20. TR 2SA1020 1 21. TR 2SB512-0 1 22. TR 2SC696-E 1 23. FET 2SK30ATM R 1 24. FET 2SK30ATM Y 1 25. TR uPA-2004C 1 26. LIC uPC-151C 1 27. LIC LF13741E (Green) 1 28. LIC uPC-1458C (Green) 1 29. LIC CA741CG (Green) 1 30. LIC M51501L 1 31. LIC uPC14312H 1 32. LIC uA7912 1 33. LIC uPC14315H 1 34. LIC UA78M08 1 35. LIC UA79M08 1 36. LIC HA17555 1 37. DIC HD74LS03P 1 38. DIC HD74LS10P 1 39. DIC HD74LS32P 1 40. DIC HD74LS125AP 1 41. DIC HD74LS367AP 1 42. DIC HD74LS368AP 1 43. DIC HD7404P 1 44. DIC SN74LS174N 1 </p>	1	*	

PHYSIOLOGICAL TEST (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK	
(Contd)	45. DIC HD74LS174P	1			
	46. DIC HD74LS175P	1			
	47. DIC HD74LS160P	1			
	48. DIC SN74LS390N	1			
	49. DIC MC14001UBCP	1			
	50. DIC MC14001BCP	1			
	51. DIC MC14011BCP	1			
	52. DIC MC14012BCP	1			
	53. DIC MC14023BCP	1			
	54. DIC MC14075BCP	1			
	55. DIC MC14081BCP	1			
	56. DIC CD4010BE	1			
	57. LSI M58609-04P	1			
	58. DIC MC14013BCP	1			
	59. DIC MC14174BCP	1			
	60. DIC MC14017BCP	1			
	61. DIC MC14520BCP	1			
	62. DIC MC14046BCP	1			
	63. LSI MSL9650AS	1			
	64. RAM TC5501P	1			
	65. CPU LH-0080	1			
	66. IC 7910E	1			
	67. IC uPD-8253C-5	1			
	68. IC MSM-5832RS (CLK)	1			
	69. IC MB4051 (ADC)	1			
	70. LSI AM9519A-1	1			
	CO.: 1. Recording Paper PS280-6A	280 mm x 60 m	50 rolls		
	2. ECG Clip-on Electrode,	"FAST CLIP" 4 pcs/set	3 sets		
	3. Limb Electrode for adult		12 pcs		
	4. Limb Electrode for child		12 pcs		
	5. Limb Electrode Strap for adult		12 pcs		
	6. Limb Electrode Strap for child		12 pcs		
	7. ECG Chest Electrode for adult		18 pcs		
	8. ECG Chest Electrode for child		18 pcs		
	9. Cardio Cream, two 100 gm tubes/set		20 sets		
	10. Heat Stylus TLS-100		20 pcs		
	11. Patient Cable BJ-261D		3 pcs		

PHYSIOLOGICAL TEST (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
16-2	<u>EXAMINING BED</u> UCHIDA UC-260	2		
16-3	<u>RESIPARATORY FUNCTION MONITOR</u> NIHON KOHDEN POLYGRAPH SYSTEM RM-6200 Consisting from ; 1. Cart CR-605H 1 set 2. 4-channel Ink-writing Recorder WI-641G 1 set 3. 4-channel Monitor Oscilloscope VC-640G 1 set 4. 4-channel Polygraph Amplifier Console, RMP-6004M 1 set 5. Carrier Amplifier AP-621P 2 sets 6. Integraltor EI-601G 1 set 7. Pneumotachograph Transducer MFP-1200 (including TV-112V & RY-111S) 1 set SP.: 1. Spare Galvanometer OL-604G 1 set CO.: 1. Recording Paper RS210-4 100 rolls 2. Recording Pen LS-120D 40 pcs 3. Ink, black, 400cc 20 bottles 4. Nose Clip 20 pcs 5. Disposable Mouth Piece with adaptor, 100 pcs/set 100 sets	1	*	
16-4	<u>BLOOD GAS ANALYZER</u> CORNING M-158 CO.: 1. pH6.838 6 2. pH7.382 6 3. Frash Solution 6 4. PO2 Electrolight 2 5. PCO2 Electrolight 2 6. 4M KCl 4 7. 1N KOH 4 8. Electrode Solution 2 9. pH Membran Kit 6 10. KCl Dornats 15 11. PO2 Membran Kit 6 12. PCO2 Membran Kit 6 13. pH Electrode 1 14. pH Reference Electrode 1 15. PO2 Electrode 1 16. PCO2 Electrode 1 17. O Ring Kit 4 18. Cal Gas 1 19. Slope Gas 1	1	*	

X-RAY TEST (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
17-1	<p><u>REMOTE CONTROLLED DIAGNOSTIC X-RAY FLUOROSCOPY AND RADIOGRAPHY SYSTEM</u></p> <p>SHIMADZU</p> <p>Consisting from;</p> <ol style="list-style-type: none"> 1. Cassetteless remote controlled diagnostic table USZ 11A 1 set 2. High potential generator XED 150L 1 set 3. X-ray tube Circlex 0.6/1.2P 18C-80S 1 set 4. Image amplifier IA9-3-2-SX 1 set W/transformer 5. X-ray TV apparatus XT-1000AC 1 set 6. 16" TV Sub-monitor 1 set 7. Sub-monitor cart 1 set 8. Shoulder pad (for USZ11A) 1 set 9. Oppression belt (for USZ11A) 1 set 10. Cable <p>(NOTE) Incoming power source (3φ 415V and 1φ 415V) shall be considered.</p> <p>SP.: 1. X-ray tube Circlex 0.6/1.2P 18C-80S 1 set</p> <ol style="list-style-type: none"> 2. Cable 10 m 3. Other electrical and mechanical spare parts 1 set 	1	*	
17-2	<p><u>GENERAL X-RAY WITH TOMO ATTACHMENT OF SIMULTANEOUS PLANIGRAPHIC SYSTEM</u></p> <p>SHIMADZU</p> <p>Consisting from;</p> <ol style="list-style-type: none"> 1. Radiographic table BK-12 1 set 2. Bucky stand BR-10M 1 set 3. 500mA high potential generator 1 set ED-150L 4. X-ray tube Circlex 1/2P 13C-80S 1 set 5. Ceiling tube support CH-30X 1 set 6. Bracket (for CH-30X) 1 set 7. X-ray beam collimator R-20 1 set 8. Automatic horizontal planigraphic device HL-5 1 set 9. Simultaneous planigraphic attachment 1 set (for HL-5) 10. X-ray tube Circlex 0.6/1.2P 18C-80S 1 set 11. Simultaneous planigraphic cassette 1 set STF-5-5 (35 × 35cm) 12. Cable <p>(NOTE) Incoming power source (1φ 415V) shall be considered.</p>	1	*	

X-RAY TEST (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
17-3	<p>SP.: 1. X-ray tube Circlex 1/2 P13C-80S 1 set 2. Cable 14 m 3. Other electrical and mechanical spare parts 1 set</p> <p><u>PORTABLE DIAGNOSTIC X-RAY</u></p> <p>SHIMADZU MD-100P-11PW</p> <p>OP.: 1. Extension cable (10m) with drum reel 1 set</p> <p>SP.: 1. X-ray tube 1 pc 2. Other electrical and mechanical spare parts 1 set</p>	1	*	
17-4	<p><u>FILM ILLUMINATOR</u></p> <p>NIKO 1-42</p>	1		
17-5	<p><u>METRAS SONDE</u></p> <p>MIZUHO MS-151 (8pcs/set)</p>	3		
17-6	<p><u>FLEXIBLE BRONCH CATHETER</u></p> <p>MACHIDA FBC-6</p> <p>SP.: 1. Head Band 1 2. Style 2 3. Channel Cleaning Brush 2 4. Connector 2 5. Cylinge for Contrast Medium Injection 1 6. Mouth Piece 2 7. Carring Case 1</p>	1		
17-7	<p><u>TREATMENT CHAIR FOR E.N.T.</u></p> <p>FIRST MEDICAL NEW COLOMBIA</p>	1		
17-8	<p><u>OPERATING LIGHT (Stand Type)</u></p> <p>YAMADA No.331-C</p> <p>SP.: 1. Spare Bulb 1</p>	1		

ENDOSCOPY TEST (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
18-1	<u>GASTROINTESTINAL FIBERSCOPE</u> OLYMPUS GIF-K2 Standard set	1	*	
18-2	<u>BRONCHOFIBERSCOPE</u> OLYMPUS BF-B3R Standard set	1	*	
18-3	<u>ENDOSCOPE LOCKER</u> MACHIDA MT-6 OP.: 1. Germicidal Lamp 3	1		
18-4	<u>ENDOSCOPE TABLE</u> KAKINUMA K-1020B	1		
18-5	<u>GASTROINTESTINAL FIBERSCOPE</u> OLYMPUS GIF-QW Standard set	1	*	
18-6	<u>BIOPSY FORCEPS SET</u> OLYMPUS Consisting from; 1. Biopsy forceps. FB-24Q 2 pcs 2. " " FB-25K 2 pcs 3. " " FB-19K 2 pcs 4. " " FB-19N 2 pcs 5. " " FB-19C 2 pcs	1 set		
18-7	<u>FIBERSCOPE CLEANER</u> SHOEI SANGYO MC-11 OP.: 1. Coupler for OLYMPUS GIF-K2 2 pcs 2. " " " GIF-QW 2 pcs 3. " " " BF-B3R 2 pcs 4. " " " CF-IBW 2 pcs SP.: 1. Pilot lamp 9 pcs 2. Universal cramp 1 pc 3. Relay 2 pcs 4. Fuse 2 pcs CO.: 1. Detergent 16kg/Bottle 1 2. Disinfectant 500cc/Bottle 70	1	*	
18-8	<u>ENDOSCOPIC SCREEN VIEWER (16mm/35mm)</u> OLYMPUS EV-100 SP.: 1. Halogen lamp 150W 5 pcs	1		

ENDOSCOPY TEST (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
18-9	<u>COLONOFIBERSCOPE</u> OLYMPUS CF-1BW Standard set	1	*	
18-10	<u>LECTURESCOPE</u> OLYMPUS LS-2	1	*	
18-11	<u>HIGH INTENSITY COLD LIGHT SUPPLY</u> OLYMPUS CLV SP.: 1. Xenon lamp	1	*	1 pc
18-12	<u>CAMERA WITH ADAPTOR</u> OLYMPUS OM-1 W/SM-2S	1		

PHARMACY (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
19-1	<u>SELF-INDICATING BALANCE</u> SHIMADZU TB-1K	1		
19-2	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	2		
19-3	<u>DRUG SAFE</u> UCHIDA T-18	1		
19-4	<u>BOTTLE WASHER</u> NAKAMURA Z TYPE	1		
19-5	<u>PHARMACY CABINET</u> UCHIDA UK-223	1		
19-6	<u>PHARMACY CABINET</u> UCHIDA UK-254	1		
19-7	<u>SIMPLE DESK TYPE DRUG-PACKER</u> YUYAMA AUTOPACK-21SE CO.: 1. Packing Film 6pcs/box 10	1		
19-8	<u>DISTILLATION AND ION EXCHANGED WATER APPARATUS</u> TOYO KAGAKU GS-20N OP.: 1. Filtering apparatus 1 2. Ion exchange resin reviving appar. 1 SP.: 1. Raw water filter 5 2. Heater 1 3. Electromagnetic valve, 2 kinds 1 4. Heater jacket packing 1 5. Relay 1 6. Packing for drain 2 CO.: 1. Scale remover 12 kg 2. Ion exchange resin 2	1		
19-9	<u>LABORATORY STERILIZER</u> SAKURA ASV-2401 SP.: 1. Door Gasket 1 2. Timer Lamp, BN-9C 2 3. Thermoregurator Lamp 2 4. Power Switch 2	1		

PHARMACY (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
	5. Relay, LY-2ZF	2		
	6. Relay for Heater, HG-2	2		
	7. Pipe Heater, 1.3kw	1		
	8. Media Basket	1		

BIOCHEMISTRY TEST (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
20-1	<u>MAG MIXER</u> TOYO KAGAKU C-2S SP.: 1. Resistor 1 2. Lamp 2	3		
20-2	<u>WATER BATH</u> SAKURA KR-2 SP.: 1. Power bracket 2 2. Neon bracket 2 3. Thermometer 1 4. Snap switch 1 5. Pipe heater 1 6. Bell timer 1	2		
20-3	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	1		
20-4	<u>TABLE TOP CENTRIFUGE</u> HITACHI SCT-4B 4,000 rpm SP.: 1. Carbon brush 2 pcs/set 1 set 2. Fuse 2 pcs 3. Test tube 15 ml 50 pcs/pk 4 pks 4. Rubber packing for 15 ml tube 1 set (50 pcs/set)	1		
20-5	<u>RESEARCH BINOCULAR MICROSCOPE</u> OLYMPUS BHTU-112 SP.: 1. Immersion oil 50cc 2 2. Halogen bulb 6V20WHAL-L 10	1		
20-6	<u>SPECTROPHOTOMETER (VIS)</u> HITACHI 100-1001 OP.: 1. 10mm glass cell set 5 sets SP.: 1. Tungsten lamp 10V, 3A 3 pcs 2. Fuse set 1 set 3. Silica gel 1 pc	1		
20-7	<u>PH METER</u> HORIBA F-8 SP.: 1. Combination electrode 1 2. Standard solution 1 (PH4, 7, 9 & AGCL)	1		

BIOCHEMISTRY TEST (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
20-8	<u>VACUUM PUMP</u> HITACHI SVR-16F Direct Drive SP.: 1. VP oil MR-100, 4/can 1 2. Oil trap element 2	1		
20-9	<u>ULTRA LOW TEMP. FREEZER</u> SAKURA UL-60A SP.: 1. Leak tester 1 2. Set of fuse, lamp switch 1 3. Tool set 1	1		
20-10	<u>FLAME PHOTOMETER</u> HITACHI 775-A w/Dilutor and Auto-Sampler OP.: 1. Air compressor Model SC-62 for 240V operation 1 unit 2. Propane gas cylinder (with gas) 2 pcs. 3. Pressure regulator for gas cylinder 1 pc. SP.: 1. Standard Solution -1. For Serum 10 pcs/set 5 sets -2. For Urin 10 pcs/set 5 sets -3. For Lithium 10 pcs/set 5 sets -4. Dilutent standard Lithium solution 5 sets -5. Rinse 5 sets 2. Dilution tube 10 pcs/set 2 sets 3. Sample tube 10 pcs/set 2 sets 4. Pt Atomizer 1 pc 5. Dispneser 1 pc 6. Printing Paper 30 pcs 7. Oxygen hose 10 m/set 1 set 8. Sample cup 1 pc 9. Ribon tape 4 pcs 10. Fuel hose 10 m/set 1 pc 11. Fuse 1 A 20 pcs 12. Clean wire set 1 set 13. Capillary tube set 2 pcs/set 5 sets 14. Drain pot 1 set	1	*	
20-11	<u>DENSITOMETER</u> JOOKOO DENSITRON MICON 20 W/standard accessories CO.: 1. Graphic Recording Paper 10 pck/box 3 2. Tangsten Lamp 5pcs/box 1	1	*	

BIOCHEMISTRY TEST (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
20-12	<p><u>ELECTROPHORESIS APPARATUS</u></p> <p>JOOKOO A SET</p> <p>CO.: 1. Separax (6 x 22 cm), 50 sheet/box 7</p> <p>2. Filter Paper (22 x 7 cm) 200 sheet/box 1</p> <p>3. Filter Paper (30 x 30 cm) 100 sheet/box 3</p> <p>4. Veronal Buffer 50 pck/box 3</p> <p>5. Ponceau 3R 25g/bottle 2</p> <p>6. Trichloroacetic Acid 2</p>	1		
20-13	<p><u>AUTO-ANALYZER</u></p> <p>CHUGAI Raba-Σ</p> <p>SP.: 1. Lamp 2 pcs</p> <p>CO.: 1. Reagent for TP 6 boxes</p> <p>2. " " Alb 6 "</p> <p>3. " " TTT 6 "</p> <p>4. " " GOT 3 "</p> <p>5. " " GPT 3 "</p> <p>6. " " LDH 3 "</p> <p>7. " " ALP 3 "</p> <p>8. " " LAP 3 "</p> <p>9. " " r-GTP 3 "</p> <p>10. " " Glu 3 "</p> <p>11. " " Crea 3 "</p> <p>12. " " BUN 3 "</p> <p>13. " " Amy 3 "</p> <p>(NOTE) Special attention for keeping reagent 2 ~ 10°C</p>	1	*	
20-14	<p><u>SWING CENTRIFUGE (SMALL)</u></p> <p>HITACHI 05P-21 300-5,000 rpm</p> <p>OP.: 1. A Assembly (15 ml x 32 pcs) 1</p> <p>2. C Assembly (10 ml x 40 pcs) 1</p> <p>3. D Assembly (50 ml x 8 pcs) 1</p> <p>4. 05 Rotor 1</p> <p>SP.: 1. 15 ml Glass tube (50 pcs/pk) 2</p> <p>2. 10 ml Glass tube (50 pcs/pk) 2</p> <p>3. 50 ml Glass tube (10 pcs/pk) 2</p> <p>4. Carbon brush (2 pcs/set) 1</p> <p>5. Fuse 10A 2</p> <p>6. Assembly balancer 1</p> <p>7. Rubber packing for 15 ml tube (50 pcs/set) 1</p>	1		

BIOCHEMISTRY TEST (4)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
20-15	<p>8. Rubber packing for 10 ml tube 1 (50 pcs/set)</p> <p>9. Rubber packing for 50 ml tube 1 (10 pcs/set)</p> <p><u>CLEAN REFRIGERATOR</u></p> <p>SANYO MPR-110</p> <p>SP.: 1. Starting relay 1 2. Overload relay 1 3. Starting condenser 1 4. Fuse 3</p>	1		
20-16	<p><u>GAS BURNER</u></p> <p>HAYASHI SEISAKU MODEL GS</p>	2		

BLOOD & SERUM TEST (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
21-1	<u>RESEARCH BINOCULAR MICROSCOPE</u> OLYMPUS BHTU-112 SP.: 1. Immersion oil 50cc 2 2. Halogen bulb 6V20WHAL-L 10	2		
21-2	<u>CLINICAL ROTATOR</u> SAKURA VP-10B SP.: 1. Rubber ring shaft 1 pc 2. Glass reaction plate 5 pcs 3. Colored bottle for anti-body 1 pc 4. Spoit (2cc) 1 pc 5. Pipette (0.3cc) 1 pc	1	*	
21-3	<u>REFRIGERATED CENTRIFUGE</u> HITACHI 05PR-22 300-5,000 rpm OP.: 1. 05 Rotor 1 pc 2. Balancer for 05 rotor 1 pc 3. C Assembly (10 ml x 40 pcs) 1 set 4. D Assembly (50 ml x 8 pcs) 1 set 5. F Assembly (15 ml x 40 pcs) 1 set SP.: 1. Carbon brush (2 pcs/set) 1 set 2. Fuse 15A 2 pcs 3. 15 ml Glass tube (50 pcs/pk) 2 pks 4. 10 ml Glass tube (50 pcs/pk) 2 pks 5. 50 ml Glass tube (10 pcs/pk) 2 pks 6. Rubber packing for 15 ml tube (50 pcs/pk) 1 pk 7. Rubber packing for 10 ml tube (50 pcs/pk) 1 pk 8. Rubber packing for 50 ml tube (10 pcs/pk) 1 pk	1		
21-4	<u>WATER BATH</u> SAKURA KR-2 SP.: 1. Power bracket 2 2. Neon bracket 2 3. Thermometer 1 4. Snap switch 1 5. Pipe heater 1 6. Bell timer 1	1		
21-5	<u>HEMATOCRIT CENTRIFUGE</u> HITACHI MODEL MC-201 SP.: 1. Capillary Tube (100 pcs/pk) 10 pks 2. Carbon Brush (2 pcs/set) 20 sets	1		

BLOOD & SERUM TEST (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
	3. Fuse 10A 10 pcs 4. Putty 5 pcs 5. Cushion for Capillary Tube 10 pcs 6. Revolution Counter 1 pc.			
21-6	<u>AUTOMATIC HEMATO STAINER</u> SAKURA RSG-50 SP.: 1. Relay, LY-2F 1 pc 2. Microswitch, V-15-1A 1 pc 3. Relay timer 1 pc 4. Timer, 10M 1 pc 5. Timer, 60M 1 pc 6. Neon Bracket 1 pc 7. Pipe heater, 160W 1 pc 8. Thermometer 1 pc 9. Air Filter 1 pc	1	*	
21-7	<u>MAG MIXER</u> TOYO KAGAKU C-2S SP.: 1. Resistor 1 2. Lamp 2	2		
21-8	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	1		
21-9	<u>CLEAN REFRIGERATOR</u> SANYO MPR-110 SP.: 1. Starting relay 1 2. Overload relay 1 3. Starting Condensor 1 4. Fuse 3	1		
21-10	<u>BLOOD CELL COUNTER</u> ERMA ACM-403 OP.: 1. Automatic Diluter, AD-70 1 2. Platelet Centrifuge, PLC-220 1 SP.: 1. Beaker 3000 pcs/box 1 2. Hemolyser 15 ml x 3/box 5 3. Diluent Solution 18 liter/box 3 4. Smit Tube 2000 pcs/box 2	1	*	

BLOOD & SERUM TEST (3)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
21-11	<u>MULTI DISPLAY TOTALYZER</u> KAYAGAKI MDT-120 SP.: 1. Switch 1 pc 2. Fuse 2 pcs	1		
21-12	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	1		

BACTERIOLOGY TEST (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
22-1	<p><u>TABLE TOP CENTRIFUGE</u></p> <p>HITACHI SCT-4B 4,000 rpm</p> <p>SP.: 1. Carbon brush 2 pcs/set 1 set 2. Fuse 2 pcs 3. Test tube 15 ml 50 pcs/pk 4 pks 4. Rubber packing for 15 ml tube (50 pcs/set) 1 set</p>	1		
22-2	<p><u>INCUBATOR</u></p> <p>SAKURA 1F-3B with Stand</p> <p>SP.: 1. Fuse 5A, F-7161 3 pcs 2. Relay, E-1 1 pc 3. Heater, 320W (160W × 2) 1 pc 4. Pilot lamp 3 pcs 5. Power switch 3 pcs</p>	1		
22-3	<p><u>SAFETY BOX</u></p> <p>HIRASAWA SB-C with Transformer</p> <p>SP.: 1. UV-lamp 2 pcs 2. Fluorescent lamp 1 pc</p>	1		
22-4	<p><u>ANAEROBIC BOX</u></p> <p>FORMA 1024 with Gas Connecting Pipe and Adaptor</p> <p>OP.: 1. N₂ gas bomb, with regulator 1 2. Mixed gas bomb, with regulator (N₂... 90%, H₂... 50% & CO₂... 5%) 1 3. Bomb rack 1 4. Indicator (BBL), 100 pcs/set 1 5. Stand 1</p> <p>SP.: 1. Status lamp (all) 1 2. Power lamp 1</p> <p>CO.: 1. N₂ gas bomb with regulator 2 2. Mixed gas bomb with regulator 1 3. Indicator (BBL), 100 pcs/pk 2</p>	1		
22-5	<p><u>MULTI DISCUSSION MICROSCOPE</u></p> <p>OLYMPUS BHS-313 W/BH2-MDO-1</p> <p>SP.: 1. Halogen bulb JC12V100W-HAL-L 1 2. Bulb 6V10WGE for BH2-MDO-1 2 3. Immersion oil 50cc 2</p>	1		

BACTERIOLOGY TEST (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
22-6	<u>ULTRA LOW TEMP. FREEZER</u> SAKURA UL-60A SP.: 1. Leak tester 1 2. Set of fuse, lamp switch 1 3. Tool set 1	1		
22-7	<u>WATER BATH WITH STIRER</u> SAKURA KR-2 W/KS-2 SP.: 1. Pipe heater 1 pc 2. Lamp 3 pcs	1		
22-8	<u>DECICATOR</u> IUCHI (SANKO) C-3BR OP.: 1. Pump horse 1 2. Adoptor 1	1		
22-9	<u>REFRIGERATOR</u> SANYO SR-123RH SP.: 1. Lamp 2	1		
22-10	<u>AUTOMATIC PIPETTE WASHER</u> KAYAGAKI TKW-2	1		
22-11	<u>GAS BURNER</u> HAYASHI SEISAKU MODEL GS	2		

WASH & STERILIZING FOR CLINICAL LAB. (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
23-1	<u>DISTILLATION AND ION EXCHANGED WATER APPARATUS</u> TOYO KAGAKU GS-50E OP.: 1. Filtering apparatus 1 2. Ion exchange resin reviving appar 1 3. Water softner W/pressure pump 1 SP.: 1. Raw water filter 5 2. Heater 1 3. Electromagnetic valve, 2 kinds 1 4. Heater jacket packing 1 5. Relay 1 6. Packing for drain 2 CO.: 1. Scale remover 12 kg 2. Ion exchange resin 2	1	*	
23-2	<u>DIRECT READING BALANCE</u> SHIMADZU L-160D	1		
23-3	<u>CHEMICAL BALANCE</u> SHIMADZU 5-200	1		
23-4	<u>DRYING OVEN</u> SAKURA TK-21 with Stand SP.: 1. Gasket 1 2. Heater 2 3. Thermometer 1 4. Pilot light 2 5. Relay, A3-10-5110 1 6. Relay, A3-10-5060 1 7. Excess temp. preventive device 1	1		
23-5	<u>VERTICAL HIGH PRESSURE STERILIZER</u> SAKURA AC-3701 SP.: 1. Fuse in glass tube 2 pcs 2. Bracket for indicator 1 pc 3. Bracket for sterilizing lamp 1 pc 4. Bracket for low water burning lamp 1 pc 5. Door gasket 1 pc 6. Pipe heater 1 pc 7. Power switch 1 pc 8. Relay, LY-2ZF 1 pc 9. Over-feat protect regulator 1 pc 10. Pressure gauge 1 pc	1		

WASH & STERILIZING FOR CLINICAL LAB. (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
23-6	<u>DRY HEAT STERILIZER</u> SAKURA HE-21 with Stand SP.: 1. Fuse 3 2. Relay 1 3. Heater 1	1		
23-7	<u>LAB. CART</u> UCHIDA MODEL 1	1		
23-8	<u>CYLINDER CART</u> UCHIDA MODEL 2	1		
23-9	<u>BOILING STERILIZER</u> SANKO SS-35 (for LPG Gas)	1		

CENTRAL SUPPLY (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
24-1	<p><u>HIGH PRESSURE STERILIZER</u> (Steam source type)</p> <p>SAKURA FBA-6S1PCE</p> <p>Control: Automatic</p> <p>Chamber dim: 500 × 500 × 900 mm</p> <p>With water softner, two shelves, and temperature recorder</p> <p>Cabinet type</p> <p>Piping materials for installation 1 set</p> <p>Tool set for installation 1 set</p> <p>SP.: 1. Door gasket 1</p> <p>2. Recording paper 6 roles</p> <p>3. Pressure gauge 1</p> <p>4. Thermometer 1</p> <p>5. Electrode 2</p> <p>6. Heat element 2</p> <p>7. Main filter 1</p> <p>8. Pre-filter 10 pcs</p> <p>9. Strainer for steam 1 pc</p> <p>10. Strainer for water supply 1 pc</p>	1	*	
24-2	<p><u>ETO GAS STERILIZER</u></p> <p>SAKURA EOA-50 Ethylene Oxide Gas Sterilizer</p> <p>SP.: 1. Air filter, B2-00-0030 1</p> <p>2. Gas filter, B2-00-0160 1</p> <p>3. Solenoid valve (sterilization) 1</p> <p>4. Door gasket 2</p> <p>5. Pilot lights (humidify) 1</p> <p>6. " (sterilization) 1</p> <p>7. " (washing) 1</p> <p>8. " (completion) 1</p> <p>9. " (Start) 1</p> <p>10. Solenoid valve (air) 1</p> <p>11. " (exhaust) 1</p> <p>12. Power switch 1</p> <p>13. Vacuum select switch 1</p> <p>14. Relay (A3-10-1180) 4</p> <p>15. Stopping relay 1</p> <p>16. Vacuum pump relay 1</p> <p>17. Pressure switch (starilization) 1</p> <p>18. " (vacuum) 1</p> <p>19. Thermometer 1</p> <p>CO.: 1. Gas cylinder with regulator 1</p>	1		

CENTRAL SUPPLY (2)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
24-3	<p><u>ULTRASONIC WASHER</u></p> <p>SAKURA US-101S</p> <p>SP.: 1. Power Lamp 2 pcs 2. Fuse 15A 3 pcs 3. Gasket for swing shaft 3 pcs 4. Washing detergent 1 set 5. Washing timer 1 pc 6. Solenoid valve for water supply 1 pc 7. Solenoid valve for hot water supply 1 pc 8. Over flow timer 1 pc 9. Relay for pump 1 pc 10. Relay for generator 1 pc</p>	1	*	
24-4	<p><u>AUTOMATIC WASHER</u></p> <p>HITACHI PS-92</p>	1		
24-5	<p><u>DRYING OVEN</u></p> <p>SAKURA CLINI-OVEN TF-31 with Stand</p> <p>SP.: 1. Filter 3 pcs 2. Door gasket 2 pcs 3. Heater, 500W 1 pc 4. Over-heating prevention device 1 pc 5. Relay 2 pcs 6. Pilot lamp, BN-9-C 2 pcs 7. Timer 1 pc 8. Breaker, BL-2B 20A 1 pc</p>	1		
24-6	<p><u>BOILING STERILIZER</u></p> <p>SANKO SS-35 (for LPG Gas)</p>	1		

AUTOPSY & MORTUARY (1)

NO.	ITEMS (SPECIFICATION/MANUFACTURE MODEL)	Q'TY	S/T	REMARK
25-1	<p><u>AUTOPSY TABLE WITH SCALE AND SUCTION UNIT</u></p> <p>SAKURA</p> <p>Consisting from;</p> <p>1. Autopsy table KA-DBZ 1 set W/scale, 4 kg</p> <p>2. Suction unit SB-3 1 set</p> <p>3. Cutting board 2 sets</p> <p>SP.: 1. Switch 1AF4-J 1 pc 2. Switch, ST-210P 1 pc 3. Bracket, No.5666 1 pc 4. V Belt 1 pc 5. Pressure Regulator 1 pc</p>	1		
25-2	<p><u>INTESTINE PHOTOGRAPHIC UNIT</u></p> <p>SAKURA UP-R (Without camera)</p> <p>SP.: 1. Incandescent lamp, 500W 4 pcs 2. Fluorescent lamp, 20W 4 pcs</p>	1	*	
25-3	<p><u>FILM ILLUMINATOR</u></p> <p>NIKO LF-8-4 (Wall built-in type)</p> <p>SP.: 1. Fluorescent lamp 2 pcs</p>	1		
25-4	<p><u>WEIGHT SCALE</u></p> <p>T.T.M. AT</p>	1		
25-5	<p><u>MORTUARY REFRIGERATOR (COOLING TYPE)</u></p> <p>SAKURA MRE-2H</p> <p>Piping Materials for installation 1 set Tool set for installation 1 set</p> <p>SP.: 1. Door gasket 4 pcs 2. Pilot lamp 4 pcs</p>	1	*	

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