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SRI JAYEWARDENEPURA GENERAL HOSPITAL

Talapathpitiya
Nugegoda
Sri Lanka

Tel: 56 - 3610-9

November 29, 1988.

MY REF : SJ/C/MNGT/08

Dr D.D. Samarasinghe
Secretary
Ministry of Women's Affairs &
Teaching Hospitals
2 Galle Road
COLOMBO 4.

Ministry of Women's Affairs and Teaching Hospitals
Secretary
01-12-1988

VISIT OF AN EVALUATION TEAM
ON JAPANESE MEDICAL COOPERATION IN SRI LANKA

Reference your letter 03/SJGH/8 dated 5th September 1988 regarding the above, I am enclosing herewith the Questionnaire - B duly completed by us.

Dr Rienzie Peiris
CHAIRMAN
SRI JAYEWARDENEPURA GENERAL HOSPITAL

Encl :

cc : Dr Y. Hirano - First Secretary, Embassy of Japan.

Chairman: DR. RIENZIE PEIRIS,
M.Ch. Orth., F.R.C.S. (Eng.), F.R.C.S. (Edin.)
Tel: 56 - 3621

Director : DR. R. C. RAJAPAKSE
M.B.B.S. (Cey.), D.P.H. (N.Z.)
Tel: 66 - 3622

Q U E S T I O N N A I R E - B

For Evaluation for Japan's Economic and Technical Cooperation (Medical Sector)

1. Relation between the hospital and regional medical care

(1) Please mark on the map the area of patients who use the hospital.
This Hospital is not directly related to the Departmental Health Service on a regional basis. It is a tertiary hospital, and therefore, patients throughout the island make use of this Hospital though the Emergency Treatment Unit & the Clinics have a larger majority of patients from the greater Colombo area.

(2) Population of the area covered by the hospital. Population by age annual movement.
The whole island. Population of the Western Province is 4,247,000

(3) Number of births and deaths, birth rate and death rate in the region.

Births	84244	Birth Rate	19.8
Deaths	29972	Death Rate	6.8

(4) What is the transportation patient most use ?
Motor bus.

(5) Number of patients and its percentage by major disease in the region.
Not available.

(6) Number of deaths and its percentage by major disease in the region.
Not available.

(7) Number of Health complexes situated under the hospital in the medical care system.
None. But referrals from the rest of the Public Health Service and the private medical system both from the region and outside takes place.
Show the number of beds, out-patients, major department, specify the number of medical staff and specialists as well.
Not applicable.

(8) How many patients per day are usually referred from these health complexes to the hospital?
About 80 referrals per day.

(9) Are there patients referred to any other hospitals at a higher level for more sophisticated medical care ?
Yes. In neurosurgery, cardio thoracic surgery and in orthopaedic surgery.

(10) Is the hospital considered a secondary hospital or teritary hospital in the medical organization system in your country ?
Teritary hospital.

2. The present activity of the hospital

(1) Number of staff and organization structure.
(Annex I & II)

(2) Number of out-patients in each department.

Medical	4326
Paediatric	1162
Paediatric Surgical	470
Gynaecology	2604
Surgical	2260

(August 1988)

(3) Number of hospital beds in each department.
(Beds commissioned)

Medical	124
Paediatric	58
Paediatric Surgical	41
Gynaecology	124
Surgical	248
ICU/CCU	12
Paying Wards	29
Day Care	25

(August 1988)

(4) No. of hospital admission in each department.

Medical	500
Paediatric	172
Paediatric Surgical	149
Gynaecology	645

	Surgical	379	
	ICU/CCU	18	
	Paying Wards	95	
	Day Care	-	(August 1988)

(5) Number of emergency cases per day.

Average :	62.4	(August 1988)

(6) Percentage of bed occupancy in each dept.

Paediatric	55.7	
Gynaecology	92.1	
Medical	81.0	
Paediatric Surgical	66.2	
Surgical	69.4	
Paying Wards	86.3	
ICU/CCU	65.5	(August 1988)

(7) Average duration of stay (days) 7.8 (August 1988)

(8) No. of surgeries and related statistics

No. of surgical operations	297	
No. of Gynaecology operations	263	
No. of Paediatric operations	96	
No. of Orthopaedic operations	--	
No. of ENT operations	02	
Total No. of operations	658	(August 1988)

(9) No. of deliveries 285 (August 1988)

(10) No. of deaths & Autopsies.

Deaths	44	
Autopsies		(August 1988)

(11) Hospital morbidity and mortality

Morbidity - Hospital admissions	1958	
Mortality - Death rate	2.2	(August 1988)

3. Is there any significant difference observed in the following subjects before and after the donation of medical equipment under the Japan's aid programme?

(1) Hospital morbidity and mortality
(2) Hospital statistics
(3) Morbidity and mortality of the people in the district covered by the hospital

) Not applicable as there
) was no hospital before grant a
) Again not appliciable since
) referrals are made from all
) over the country, and pts. a
not confined to a particular area.

4. Present difficulties

(1) Patient care

1) Average waiting time for the out-patient.

All patients coming to the out-patients clinic before 10 AM will be seen on that day itself. However, when appointments are given, there is a waiting time of about one week.

2) Is the space for the out-patient clinic sufficient ? NO

The space is just sufficient at present, and is bursting at the seems. Provision is required for a general out-patients department (non-emergency).

3) How many days to be taken to be in hospital as in-patients ?

This is variable but average is 6-8 days.

4) Is it possible to admit emergency cases immediately ?

Yes - at the ETU which functions around a 24-hour 7-day week cycle.

5) Any other difficulties ?

For trauma and cancer, a CT Scanner is very necessary. Also this Hospital as well as other tertiary sectors in Sri Lanka lacks angiographic investigations. Provisions for specialised dialysis and a tissue culture laboratory also included in the development plans in the Hospital.

(2) Hospital staff

1) Are the number of doctors, nurses and other para medical staff sufficient ?

No. There is a severe dearth of Nurses and Para Medical Staff in the country. However, in this Hospital, the major shortage is in the No. of Nurses.

2) Are they capable of utilizing the donated medical equipment ? Yes.

3) Any other difficulties?
At present, a closed ward is being utilised for the training of Nurses, and bench space is not available for the training of MLTs. Until a Para Medical School is built to supply the specialised personnel for this Hospital, shortage of staff will continue, and the donated wards will not be fully utilised.

(3) The medical equipment donated by Japan
1) Please state the No. and names of the equipment which is unusable and/or unrepairable/unsatisfactory

1.1 Code 802. Ultra Short Wave Apparatus - 02 Nos.
(cannot be repaired as spare parts are not available with the manufacturer).

1.2 2 Lanudry wasning machines have stopped functioning. ODD Has been informed to obtain spare parts.

1.3 The paging units are gradually becoming unserviceable and we are unable to obtain spares or replacements.

1.4 The electrical stimulator supplied is a manually controlled one and is unsatisfactory, and therefore is hardly used.

2) What is the main cause of damage to these equipment ?
Vacuum tube occilator U-25D valves defective. Life time of the valves are over.

3) Is there any difficulty in obtaining reagents, films, spare parts & other consumable for the continuous usage of the donated equipment ?
Yes. When ordered for a set of spares, we receive only a part of it and there is delay in supplying spares.

4) Is there any medical equipment which is unsuitable or inappropriate for the present condition of the hospital? If so, please identify the equipment and the reason. No.

5) Is the donated endoscope working satisfactorily? Yes, except the two vacuum pumps, Engineer who came down from Olympus promised to send 2 pumps.

6) Any other difficulties?
We have not been provided with a set of manuals and literature i.e. service manuals, complete set of circuit diagrams for some of the equipment. No list of spare parts and part numbers. Therefore, it is very difficult to order for spares.

The lack of service manuals is the main reason for our inability to do proper & regular servicing.

(4) Other medical equipment

1) List of equipment, locally procured after the hospital opened.

	quantity
Infant Resuscitator	01
EEG Machine	01
EMG Machine	01
Infusion Controller (Perfusor)	02
Apparatus Measuring Blood Glucose (Glucoscot)	04
Apparatus Suction Double Bottle	02
" " Single bottle	03
Blood Warmer	01
Weighing Machine Infant Avery	01
Nerve Stimulator	02
Nebulizer Electric	10
Nebulizer Foot Pedal	01
Glucometer	01
X-Ray Viewer	01
Laparoscopy Console	01
Operating Table	01
Scilotronometer	02
Micro Surgical Tuboplastic Instrument Set	11
Electronic Blood Pressure Apparatus	05
Ventilator	01

(5) Future planning

1) Specify what equipment can

A) be procured in the future.
Depends on capital allcation by the Ministry. A 5-year development plan has been submitted.

B) be newly purchased. Same as above.

C) be moved from existing hospital. Nil.

(6) Design and architecture of the hospital

1) Is the design and architecture appropriate to the climate and temperature of your country ? Yes.

2) Are there any particular points in the design of the hospital inconvenient for patients care? If so please specify.
Lack of storage facilities. Inadequate space for an outpatient clinic (as different from clinics). Inadequate size of Library & Lecture Hall.

3) Are there any particular points in the design of the hospital inconvenient for administration and management? If so, please specify.
There is a lack of storage facilities for the Main Stores of the Hospital. No provision has been made for computerization of medical records and other administrative documents. In the years ahead, a computer centre would be a necessity. Severe shortage of changing rooms for Orderlies.

4) Is the accommodation of the doctors and nurses in satisfactory condition?
Accommodation is satisfactory and more accommodation of 18 married flats are being constructed. Accommodation will have to be found particularly for trainees.

5) Any other problems?
In the development of the hospital, accommodation for all categories of staff will be a necessity. The development of Para Medical School and the provision of buildings for computerised tomography, arteriography / renal dialysis are essential.

(7) Regarding facility condition

1) State electric power consumption per month and specify the peak lead in kw/hour.
Average value in KWH - 225000
Maximum demand in KVA - 40000

2) How is the voltage shall be down and how it influence to equipment.
In the high tension side : voltage : 33 ± 3 k volts
in the low tension side : Voltage : 400 ± 36 volts
But the voltage of this system is very stable.
In normal condition, voltage = 400 ~ 410 volts
It does not affect to equipment.

3) How often power fails? How long it takes to be in normal condition?

MONTH	DURATION OF POWER FAILURE
March 1988	24 hrs & 20 mts.
May	1½ hrs
August	13 hrs & 10 mts.

How the hospital deals with power failure ?

This institution has 2 generators with a capacity of 250 KVA each. They start automatically when the commercial power fails. But this can be supplied only to selected circuits. One of the two 250KVA generators has been malfunctioning from the inception and ODD has not succeeded repairing it.

4) What volume of city water shall be used per month ?

MONTH	NO. OF UNITS IN M'
March 1988	16203
April	16904
May,	17377
June	18005
July	19596

5) How often city water stops ?

Whenever there is a repair to the main lines.
Last month (October 88) 24 hrs.

6) System of drainage and sewerage.

All the drainage and sewerage pipe lines are connected to a central under-ground tank with motor pumps, which is outside the hospital premises. It is under the control of Water Supply & Drainage Baord.

8) Please submit following materials to refer

1) Summary of management;
The hospital although a public sector hospital, has been established by law to be managed by a Board of Management. It is an experiment in management. The management is done on the lines of a Public Corporation. Each Clinical Unit is expected to be managed independently on its own, according to its own specific or particular needs. Management support is given from the higher levels of administration. Higher management is accessible to all.

2) Statistics & record of all factors of the hospital.
(Annex III) - Annual Report

3) Organisation system of the hospital.
Same as in Annex II.

29/11/88

SRI JAYEWARDENEPURA GENERAL HOSPITAL

25th November, 1988

PARA MEDICAL STAFF

Pharmacists	09	
Physiotherapists	04	
Radiographers	07	
Medical Laboratory Technologists	19	
Trainee Medical Laboratory Technologists	21	
E.C.G. Recordists	03	
Public Health Inspectors	02	65

OFFICE STAFF

Stenographers (English)	03	
Book Keepers	01	
Cashiers	03	
Typists (English)	01	
Typists (Sinhala)	01	
Clerks	59	68

TECHNICAL STAFF

Electro Medical Technologists	01	
Trainee Electro-Medical Technologists	02	
Electrical Foreman	01	
Building Foreman	01	
Skilled Workers (Carpentry)	02	
Skilled Workers (Building)	02	
Skilled Workers (Painting)	02	
Skilled Workers (Plumbing)	01	
Skilled Workers (Electrical)	04	
Bollermen	02	
Laundry Supervisors	01	19

OTHER STAFF

Teachers of English	01	
Store-Keepers	03	
House Wardens	06	
Telephone Operators	05	
Chef	01	
Diet Stewardess	04	
Seamstresses	05	
Drivers	06	
Cooks	08	
Kitchen Helpers	01	40

Contd. ..5/.

Annex I

STAFF STRENGTH

SENIOR ADMINISTRATIVE STAFF

Chairman	01	
Director	01	
Deputy Director	01	
Secretary	01	04

EXECUTIVE STAFF

Accountant	01	
Matron	01	
Deputy Matron	01	
Confidential Secretary	01	
Assistant Accountant	01	
Supplies Officer	01	
Medical Records Officer	-	
Welfare Officer	01	
Bio-Chemist	01	08

MEDICAL STAFF

Consultants	17	
Resident Medical Officers	03	
Registrar in Pathology	01	
Assistant Paediatrician	01	
Assistant Obstetrician & Gynaecologist	01	
Senior House Officers	10	
House Officers	14	
Intern Medical Officers	17	64

NURSING STAFF

Nursing Sisters	17
Tutor Sisters	03
Staff Nurses	207
Trainee Nurses	78
Family Health Workers	01

Contd. ..4/.

ORDERLY STAFF

Laboratory Orderlies	01	
Dark Room Orderlies	01	
Orderlies	341	343

SUMMARY

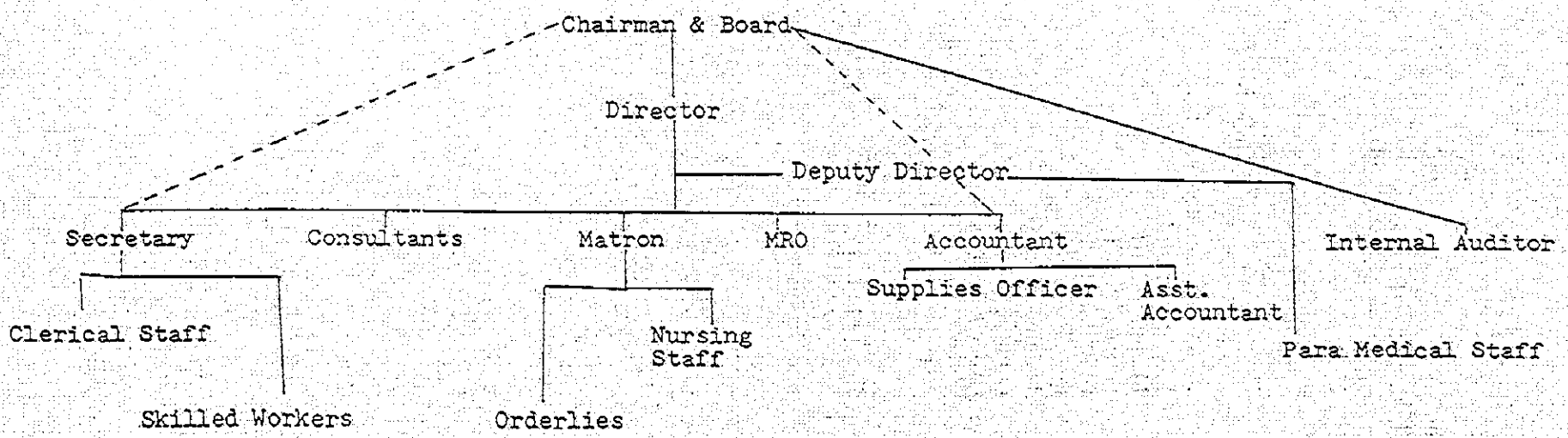
Senior Administrative Staff	04
Executive Staff	08
Medical Staff	64
Nursing Staff	306
Para Medical Staff	65
Office Staff	68
Technical Staff	19
Other Staff	40
Orderly Grade	343
TOTAL	917

Contd. ..6/.

Annex II

ORGANIZATION STRUCTURE

SRI JAYEWARDENEPURA GENERAL HOSPITAL



SRI JAYEWARDENEPURA GENERAL HOSPITAL

ANNUAL REPORT - 1987

INTRODUCTION

The Sri Jayewardenepura General Hospital is an 850 million Rupees Gift from the Government of Japan to the Government of Sri Lanka and is sited on 26 Acres of land in Sri Jayewardenepura - Kotte. The Building Complex covers and area of 260,000 Sq.ft. with a 1001 Bed Capacity and was handed-over to the Ministry of Health on 31st October 1983 after a 23-month Building Process.

The Board of the Sri Jayewardenepura General Hospital was appointed in February 1984 and the Hospital was officially opened by His Excellency the President - J.R. Jayewardena and the Honourable Ishimatsu Kitagawa - Parliamentary Vice Minister for Foreign Affairs of Japan representing the Government of Japan on 17th September 1984 and the Hospital effectively started functioning at the beginning of 1985. The opening of the Clinical Units has been gradual and it was only in 1986 that the Hospital functioned completely as a General Hospital, though some Units have not yet been opened due to lack of Staff.

UTILIZATION & STAFF

There was no significant change in the utilization of Beds during 1987 and by the end of the year, the Number of Beds commissioned was 661 - more than half the Bed Capacity - and the Units now opened were working to full capacity, inspite of the limitations of Specialised Nursing and Laboratory Staff. However, the level of specialization in the Hospital was improved in the course of the year under review due to the opening of the Endoscopy Unit, the Neonatal Intensive Care Unit, the Special Care Baby Unit and the Endo-Urology Unit - all within the existing Medical, Surgical and Paediatric Departments and also with the improvement of the Laboratory capability.

The Clinical Units functioning fully in 1987 are given in Table 01 and the staffing situation at the end of the year is given in Table 02.

It is to be noted that 43.92% of the expenditure was utilized on Staff Emoluments whereas the percentage in the previous year was 42.82%, but in real terms this expenditure increased by 3 million Rupees.

Contd. ..2/.

TABLE 01

CLINICAL UNITS OPENED

02 Units	Department of Medicine (Including a Specialized Endoscopy Unit)
02 Units	Department of Surgery (Including a Specialized Endo-Urology Unit)
02 Units	Department of Obstetrics & Gynaecology
02 Units	Department of Anaesthesia (Managing 06 Operating Theatres and the Intensive Care Unit/ Coronary Care Unit)
01 Unit	Department of Paediatric Medicine (Including a Neonatal Intensive Care Unit and a Special Care Baby Unit)
01 Unit	Department of Paediatric Surgery
01	Day Care Ward
01	Casualty Ward for Injured Servicemen
01	Department of Pathology (consisting of Histopathology, Bacteriology, Haematology and Biochemistry - Including the Blood Bank)
01	Department of Radiology (Including Ultra-sound)
01	Emergency Treatment Unit
01	Class I Paying Ward
01	Class II Paying Ward

Contd. ..3/.

TABLE 02

STAFF STRENGTH

SENIOR ADMINISTRATIVE STAFF		
Chairman	01	
Director	01	
Deputy Director	01	
Secretary	01	04
EXECUTIVE STAFF		
Accountant	01	
Matron	01	
Deputy Matron	01	
Confidential Secretary	01	
Assistant Accountant	01	
Supplies Officer	01	
Medical Records Officer	-	
Welfare Officer	01	
Bio-Chemist	01	08
MEDICAL STAFF		
Consultants	17	
Resident Medical Officers	03	
Registrar In Pathology	01	
Assistant Paediatrician	01	
Assistant Obstetrician & Gynaecologist	01	
Senior House Officers	10	
House Officers	14	
Intern Medical Officers	17	64
NURSING STAFF		
Nursing Sisters	17	
Tutor Sisters	03	
Staff Nurses	207	
Trainee Nurses	78	
Family Health Workers	01	306

Contd. ..4/.

PARA MEDICAL STAFF

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Skilled Workers (Building)	02	
Skilled Workers (Painting)	02	
Skilled Workers (Plumbing)	01	
Skilled Workers (Electrical)	04	
Bollermen	02	
Laundry Supervisors	01	19

OTHER STAFF

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Store-Keepers	03	
House Wardens	06	
Telephone Operators	05	
Chef	01	
Diet Stewardess	04	
Seamstresses	05	
Drivers	06	
Cooks	08	
Kitchen Helpers	01	40

Contd. ..5/.

ORDERLY STAFF

Laboratory Orderlies	01	
Dark Room Orderlies	01	
Orderlies	341	343

SUMMARY

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Executive Staff	08
Medical Staff	64
Nursing Staff	306
Para Medical Staff	65
Office Staff	68
Technical Staff	19
Other Staff	40
Orderly Grade	343
TOTAL	917

Contd. ..6/.

The chief obstacle to the complete utilization of the Hospital is the non-availability of trained Nursing Staff. To overcome this problem, a Nurses Training School was started in 1986 with the assistance of the National Apprenticeship Board which gave a Grant of Rs 144,800/00 and conducted the Recruitment Test. This Nurses Training School is affiliated to the Schools in the Ministry of Health and arrangements were made for our Pupils to sit the common Examination so that it will enable them to register as Nurses with the Ceylon Medical Council at the end of the Three-year Course. Our Pupil Nurses faired comparatively well at the First Year common Examination. Another batch of 100 is to be recuited in 1988 and there will be a continuing intake of 100 Trainees per year.

Another obstacle to progress was the non-availability of Trained Medical Laboratory Technicians. In 1984, out of 42 Medical Laboratory Technologists who applied, only 2 were released from the Department of Health and hence the Hospital was forced to recruit 20 partly trained Technicians from the Private Sector and thus to commence a crash Two year Training Course for them whilst on the job. Another batch of 15 Trainees were recruited in 1987. Meanwhile, 4 more fully-trained Technicians were also recruited. As a result of this recruitment, the capability of the Pathological Laboratory has been considerably improved.

PATIENTS' STATISTICS

Inspite of the fact that the Hospital is situated far from the main residential and business areas of Colombo with poor Road Access, the demands on the Hospital from Patients from afar and wide has been heavy, as indicated by the Statistics given in this Section of this Report.

Although the Sri Jayewardenepura General Hospital commenced its work as a Tertiary Hospital - thus having a Referral System at the Out-patient Specialist Clinics - in 1986, this system was slightly altered due to Public demand, to make all Clinics 'Open House' with appointments being given only for late comers to Specialists' Clinics. There is no OPD as such for simple illnesses, but in keeping with current Government Policy, now there are Daily Specialist Clinics and a 24-Hour Emergency Treatment Unit. The increasing popularity of the Hospital as a Special Care Centre in Sri Lanka is seen from the fact that the attendance at the Specialist Clinics increased to 96413 in 1987 from 75540 in 1986 and 53414 in 1985 without any increase in the number of Specialities or the number of Doctors.

The attendance at these Out-patient Specialist Clinics is given in Table 03. The total attendance at the Emergency Treatment Unit was 22890 as against 17221 and 10549 in the previous two years. There were 3349 visits at the Employees Clinic.

Contd. ..7/.

TABLE 03

MONTHLY ATTENDANCE AT SPECIALIST CLINICS 1985/1986/1987

MONTH		1985	1986	1987
January	..	509	5420	7409
February	..	1090	5187	6542
March	..	2242	6251	8015
April	..	3499	6178	7194
May	..	3615	6175	7522
June	..	4770	5910	8706
July	..	5813	6203	6140
August	..	6981	6778	6673
September	..	6607	6896	10042
October	..	6236	7029	9086
November	..	5920	6311	9150
December	..	6132	7202	9934
		53414	75540	96413

Contd. ..8/.

All admissions to the Hospital are through the Specialist Clinics or the Emergency Treatment Unit which is a 24-Hour facility for Emergencies with capability for resuscitation and Day-stay observation. By the end of the year, 19986 Patients had been admitted for Indoor treatment (as against 17667 in 1986 and 12343 in 1985) with a total In-patient occupancy of 153,244 Patient Days (compared to 128,225 and 89,464 Patient Days in 1985 and 1986 respectively). There were 452 Deaths. The average Daily Occupancy was 418.7 (as against 351.3 in 1986). The Monthly Admissions for each Speciality is given in Table 04. There were 6877 Emergency Admissions and 531 Patients were admitted to the Intensive/Coronary Care Unit (as against 591 and 250 in the previous two years). There were 411 admissions to the Neonatal Intensive Care Unit and Special Care Baby Unit and of this, 53 were Babies delivered elsewhere.

Contd. ..9/.

TABLE 04

NUMBER OF ADMISSIONS IN EACH SPECIALITY - 1987/1986/1985

	MEDICINE			SURGERY			OBS. & GYN			PAEDIATRIC MEDICINE & SURGERY			I.C.U	PAYING WARDS
	1987	1986	1985	1987	1986	1985	1987	1986	1985	1987	1986	1985	1987	1987
January	490	1978	69	300	1229	31	511	1476	26	230	737	08	21	63
February	463	2229	114	291	1066	49	453	1133	88	210	759	19	18	48
March	477	3468	191	351	1071	84	557	930	193	223	782	52	17	57
April	422	2482	313	300	1263	121	501	1507	263	205	926	84	26	66
May	399	2672	338	315	1241	153	583	1468	378	239	794	117	29	92
June	448	2846	407	261	1288	164	525	1182	376	255	594	166	12	86
July	346	2814	399	345	1307	248	447	1227	452	225	855	196	20	88
August	386	3006	422	308	1402	236	492	1498	532	206	872	194	13	89
September	513	3052	443	356	1527	227	580	1421	528	284	896	182	07	116
October	493	3294	524	366	1315	256	636	1512	562	287	908	172	19	124
November	484	2985	461	374	1207	224	606	1364	535	235	755	154	19	96
December	536	3425	468	345	1279	266	622	1579	524	287	919	179	21	71

Contd. ..10/-

TABLE 05

EXPENDITURE FOR THE YEAR ENDED 1987

LABORATORY & BLOOD BANK

Salaries & Overtime	..	1,258,684.25
E.P.F/E.T.F	..	175,359.33
Material consumed	..	3,265,342.47
		4,699,386.05

X-RAY DEPARTMENT

Salaries & Overtime	..	612,839.62
E.P.F/E.T.F	..	82,635.38
Material consumed	..	963,049.94
		1,658,524.94

LAUNDRY

Salaries & Overtime	..	292,593.82
E.P.F/E.T.F	..	39,281.64
Materials consumed	..	57,285.87
		389,161.33

Contd. ..11/.

The output of the work from the Operating Theatres has been a total of 6722 Operations - (5978 in the previous year) which works out to an average of 23 per Working Day. The Post-operative Infection Rate is less than 1% and compares well with that in the better Surgical Centres abroad. The reason for such a high Surgical Work load is that each operating session that begins at 8.00 am continues till about 3.30 pm with Two Operating Tables working simultaneously in each speciality. The number of Surgical Operations increased this year too, inspite of the Senior Surgeon being out of the Island during the first quarter of the year and Surgery on Combat Casualties being lengthy and there being no Military Casualties in the Second half of the year. The Combat Casualties Ward was utilized to the full towards the beginning of the year and another Ward was made available (if necessary) for disaster situations. However, with the appointment of a Third Surgeon in June 1987, this Ward was utilized as a Surgical Unit.

The Disaster Plan of the Hospital was formulated and Cards giving the Duty Lists during Disasters were issued to all Units concerned. In August 1987, the Disaster Plan was put into operation after the Bomb Blast in Parliament (which is situated closeby) and several Ministers and Parliamentarians in a serious condition were treated at the Sri Jayewardenepura General Hospital. On this occasion, the VIP Suite was used for the first time since the opening of the Hospital.

There were 2671 Deliveries (there being 2123 and 1892 Deliveries in 1986 and 1985 respectively). The percentage of Caesarean Sections (in relation to the number of Deliveries) is 23%. 7% of the Deliveries were by Forceps. There were 54 Perinatal Deaths (60 in the previous year). There were 487 Low-Birth-Weights of which 18 died (Neonatal deaths) and 36 Still Births. The percentage of Low-Birth-Weights (below 2.5 kg) in relation to the total births was 18.2% (14.9% in 1987).

There were 53 sick children referred for admission by Paediatricians elsewhere. There was One (01) Maternal Death in 1987, which was completely investigated and found to be unpreventable. In the Investigative services, 246239 Pathological Tests were done in 1987 and 75211 Radiological Examinations - both being a significant increase over the previous year. Forty One (41) New Tests were started this year in the Pathological Laboratory. 9500 E.C.Gs were taken during the year. The E.C.G Technicians were also trained as E.E.G Technicians and the E.E.G and E.M.G were new additions at the latter part of the year to the Hospital's Investigative Laboratory.

Dr Rienzie Peiris
CHAIRMAN
SRI JAYEWARDENEPURA GENERAL HOSPITAL

August 10, 1988.

DRAFT

DEVELOPMENT PLAN

FOR

SRI JAYEWARDENEPURA GENERAL HOSPITAL

1988 - 1992

PREAMBLE

The Sri Jayewardenepura General Hospital has been set up to supplement the curative Health Service and to assist in the training of Health personnel. The operational control is vested in a Board of Management which is in control of the day-to-day running of the Hospital under the overall supervision of the Ministry of Teaching Hospitals. The financing of the Hospital is through a Block Vote from this Ministry and therefore, the long range or strategic Development Plan for the Hospital is related to the General Development Plan for the Health Service as envisaged by the Health Advisory Committee and the Two Ministries.

Contd. ..2/.

INTRODUCTION

The Sri Jayewardenepura General Hospital has the following facilities :

1. O.P.D - Essentially Specialists Clinics

2. Wards

Surgical Wards	03	62 Beds in each Ward
Medical Wards	03	62 Beds in each Ward
Obstetric Wards	02	62 Beds in each Ward
Paediatric Ward	01	62 Beds
Orthopaedic Wards	02	62 Beds in each Ward
Eye Ward	01	62 Beds
E.N.T	01	62 Beds
Dermatology, Paediatric Surgery, Day Care	01	62 Beds
Class I Ward	01	
Class II Wards	02	

3. I.C.U - 06 Medical Beds and 06 Surgical Beds

4. Emergency Treatment Unit

Manned by Doctors is open 24 Hours of the day and is equipped to deal with any Emergency including Resuscitation.

5. Eight Operating Theatres with a Central Sterile Supply Department.

6. Pathology Laboratory

Histopathology
Biochemistry
Haematology
Microbiology
Blood Bank

7. X-ray Department

04 Plants including Image Intensifier
03 Mobile Plants and 02 Ultra sound Machinery

Contd. ..3/.

8. Supporting Services

Kitchen
Laundry
Air-conditioning Units
Generators (Standby - 2x250 KVA)
Workshop

9. Medical Records Department

10. Nurses' Training School

11. Unmarried House Officers' Quarters - 51 Rooms

12. Nurses' Quarters - 131 Rooms

During the last 03 years of it's existence, the following Wards and facilities have become operative :

All Specialists' Out-Patients' Clinics other than E.N.T., Eye, Dermatology and Othopaedics

02 Units in the Department of Medicine

03 Units in the Department of Surgery

02 Units in the Department of Obstetrics & Gynaecology

02 Units in the Department of Anaesthesia (Managing 06 Operating Theatres and the Intensive Care/Coronary Care Unit)

01 Paediatric Medical Unit

01 Paediatric Surgical/Day Care/Dermatology Unit

01 Casualty Ward for Injured Servicemen

Department of Pathology (Including Blood Bank)

Department of Radiology (Including Ultrasound)

Emergency Treatment Unit

Paying Class II - 21 Beds

Paying Class I - 11 Rooms

Nurses' Training School

Hospital Shop for Patients and Visitors

Depending on the availability of Staff - especially Nurses - it is expected that the other Units would be commissioned in due course.

It is however, the firm belief of the Committee of Management that the Sri Jayewardenepura General Hospital should not be allowed to go the way of other General Hospitals in the Country, not only in the form and manner of management but also in the type and quality of Patient Care. For instance, we believe that the excellent facilities available should be harnessed to give better and extensive Patient Care to specially-selected Patients rather than the common illnesses that are treated at present. At present, admissions to Wards are mainly on Patient demand resulting in the Specialists using most of their time to treat Patients that could well be treated in Hospitals with much less facilities and expertise. This dilutes the efficiency with which special cases that need special care could be treated. If we decide to admit mainly selected Cases, the original concept of Sri Jayewardenepura General Hospital being a General Hospital will have to be considered. If this be so, then this Hospital will have to be considered as a Centre of Excellence for the treatment of specific illnesses - namely a Specialist's Referral Centre.

To decide on which fields or sub-specialities this Hospital intends to undertake, we will have to consider the facilities available at present in the other Hospitals in the vicinity and the future plans of the Ministry of Health and the Ministry of Teaching Hospitals. For this reason, there is no intention to deviate from the original plan of not opening Units in the Specialities of Thoracic & Cardiac Surgery, Neuro-Surgery, Psychiatry, Dentistry and Radiotherapy and while it was the intention to have a Dermatology Unit, this has now been dropped as the Ministry plans a Central

SPECIALISATION

It is our intention that each of our Specialised Units will develop into Multi-disciplinary Units with adequate Specialist and Supporting Staff.

In this directions, immediate steps taken have been towards Endoscopy and Renal Dialysis (to be followed by Renal Transplant Surgery) and Neonatal Intensive Care.

We do not intend increasing the number of Specialised Units and will not to embark on the Specialities of Cardiac Surgery, Neuro-Surgery, Psychiatry, Dentistry and Radiotherapy.

However, our Plan of Development envisages the development of Multi-Disciplinary Units - within the existing Units.

Specialised Development is earmarked for the following fields :

1. Gastro-enterology
2. Neurology
3. Genito-Urinary Surgery including Renal Dialysis and Renal Transplant Surgery.
4. Endoscopy
5. Neonatology
6. Radio Isotope Study

7. Vascular Surgery

8. Invitro Fertilization Techniques

9. Development of Accident Emergency Surgery after the commissioning of the Orthopaedic Unit.

It is necessary therefore that the Specialist Staff be gradually strengthened (in comparison with the Original Cadre drawn up in 1984).

The following additional Specialist Staff (fully qualified and Board Certified) would be required :

1. Paediatric Unit to consist of -

   Paediatrician-in-Charge

   Assistant Paediatrician-in-Charge of Neonatology

   Assistant Paediatrician-in-Charge of Research and other Projects undertaken.

2. The Three Surgical Units to have between them, Two Assistant Surgeons. This becomes essential when embarking on Organ Transplant Work and also to ensure that the Consultant Surgeons devote the greater part of their time to a 'higher class' of Surgical Work handling (themselves) only the more difficult and complicated Cases - ensuring therefore (also) that this Hospital becomes a Centre for Referral.

3. The Medical Units to be strengthened immediately by recruitment of a Nephrologist (qualified) to be designated as Assistant Physician and an additional Assistant Physician.

4. Paediatric Surgery too will need an Assistant Surgeon.

5. The Two Obstetric Units will require One Assistant Obstetrician - and abolition of the Post of Resident Obstetrician. The work of the R.O will be taken over by the PGIM Trainee - a continuous recruitment of this category is likely.

6. The Department of Radiology would need -

1. Two more Radiologists
2. One Registrar on a 3-5 year Contract with the option of extension of Service.
3. Three House Officers in Radiology
4. One Physicist
5. Four additional Radiographers

7. The Department of Pathology will require -

One Assistant Microbiologist

All these additional Staff should be sanctioned by the Board now - so that recruitment may commence in 1988 for the Nephrologist and Assistant to the Paediatrician and Paediatric Surgeon and the rest provision to be made in the Budget for 1989.

COMMISSIONING OF THE OTHER WARDS

The main constraint for the fuller use of available facilities is due to the shortage of Nurses. As and when Nurses are recruited, the other Wards will be commissioned to admit Patients. Since the recruitment of Nurses depend on the availability, it is not possible to set dates for the commissioning of the Wards. However, it is felt that the work in the functioning Wards should be consolidated before the other Wards are opened.

The following priority should be used for the opening of the Wards and the following Staff should be recuited for these Wards :

1. THIRD MEDICAL UNIT

Staff Requirement

Consultants	01
Senior House Officers	02
Interns	02
Nurses	18
Orderlies	12

2. ORTHOPAEDIC WARD

Since it is necessary to give Orthopaedic Care if we are to take in Casualties, the Orthopaedic Ward should be opened early. Patients who have been admitted with multiple injuries have been transferred

Contd. ..9/.

to General Hospital Colombo, because it was not possible to treat the Orthopaedic Injuries. An Orthopaedic Consultant is also necessary to take part in the PGIM Training Programme.

Staff Requirement

Consultants	01
Senior House Officers	02
Interns	02
Nurses	18
Orderlies	12

3. E.N.T. WARD

Staff Requirement

Consultants	01
Senior House Officers	02
Interns	02
Nurses	18
Orderlies	12

Contd. ..10/.

5. OPTHALMOLOGY

Staff Requirement

Consultants	01
Senior House Officers	02
Interns	02
Nurses	18
Orderlies	12

PROPOSED EXPANSION TO THE DEPARTMENT OF SURGERY

As suggested in the Introduction, all future Plans should be aimed to make the Department of Surgery, a Centre of Excellence by Improving fields not available in the other Hospitals in Sri Lanka.

1988 :

GASTRO-ENTEROLOGY

A complete Endoscopy Service is already available. These include Gastro-Duodenoscopy, ERCP and Colonoscopy. A Choledochoscope needs to be added to the Equipment already available.

REGIONAL HAEMATEMESIS CENTRE

With a complete Endoscopy Service available, Injection Sclerotherapy for Oesophageal varices could be undertaken and this coupled with facilities for Porta-caval Shunt Surgery and Porta-azygos Disconnection Surgery could make SJGH a Regional Centre for Haematemesis.

During this period, further improvements must be attempted by purchasing a Laser Coagulation Unit which will bring the Haematemesis Centre in line with such advanced Centres in the World. A 60 Watt Co_2 Laser would cost approximately Rs 3.5 million with all accessories.

Instruments required to be purchased would be -

Liver Clamps)	
Anastomotic Stapling gun)	Rs 300,000.00
Ultrasonic Suction Probe)	
Laser Photo Coagulation	Rs 3,500,000.00

1989 & 1990 :

It is proposed that full range of Vascular Surgery be undertaken during this period both elective and traumatic. Treatment of Aortic and Carotid Artery Aneurysons will be undertaken. As a preliminery step, a Vascular Surgical Clinic will be set up in the Hospital. All attempts will be made in 1989 to make this institution a National Transplant Centre. Renal Transplant Surgery would be consolidated with fully equipped Tissue Typing, a Donor Bank and a Biochemistry Back-up Service.

The requirements -

CT Scanner - Expected through Technical Cooperation

US Scanner and Scanner Camera with additional US Probes

Mammography Unit

Nuclear Medicine Department and Gamma Camera

Vascular Radiology Facilities - Angiographic Table - Approximately Rs 7 million - Hopes of getting it through J.I.C.A.

Digital Vascular Imaging

Nephroscope & Dilator Set

2nd Image Intensifier

Portal Vein Manometry System

Billary Stone Removal Set with Dilators

Nephrostomy Sets

Percutaneous Bile Duct Endo-Prosthesis (used for Transhepatic antegrade Billary Drainage)

Urographic Basket Extractors

Lymphenglography Sets

Auto Analyser (Haematology)

Auto Analyser (Biochemistry) - Very important for Dialysis Renal Transplant

Blood Bag Centrifuge with Back-up Storage - on order

Special Coagulation Tests for Disseminated Intravascular Coagulation, full range of Tests

Factor Assays

Platelet Function Assays (Especially important in Renal Transplant)

Tissue Typing and Matching

1990 :

Consolidation of the work undertaken in 1988 and 1989 will be the main tasks undertaken in 1990. In addition, treatment of Breast and Endocrine diseases will be started. A Breast Clinic with Mammography facilities will be started. As a Back-up Service, Endocrine Hormone Assay facilities will be installed.

DEVELOPMENT OF PAEDIATRIC SURGERY

The Paediatric Care provided at this Hospital is part of the Service. Paediatric Surgery is an essential part of Paediatric Care. If it is accepted that a Country should have one Paediatric Surgery Unit for each million people, then this Country should ideally have Fifteen Units. With the establishment of the Paediatric Surgical Unit at this Hospital, there are at present only Four Units with about 200 Beds in the whole Country. The establishment three other Units in the main Three Teaching Hospitals could therefore be considered an essential item in the future development of Paediatric Surgery.

The future development of the Paediatric Surgical Service in this Hospital will have to be considered in the context of the overall developmental plan and the constraints of finance and space for additional Beds.

1. CONSOLIDATION OF THE NEONATAL PAEDIATRIC UNIT - 1988

a) Equipment

Some urgently required items of Equipment like Infant Ventilators and Micro Apparatus for Biochemistry have to be provided.

b) Staff

1) The Surgical Unit requires the appointment of a Qualified Surgeon at Registrar level on a 3-5 year Contract with prospects of become permanent.

2) With the expansion of the Neonatal Sevice, it is essential that an Assistant Physician - (fully qualified) be appointed to this post. The upgrading of the Post held by Dr (Mrs) Ariyawansa from Resident Paediatrician to Assistant Paediatrician is suggested.

3) More Nurses are urgently required in the Paediatric Surgical Ward and the Neonatal Unit.

4) A Medical Officer in the Senior House Officer Grade interested in the Speciality will be necessary for the NNU.

5) A Surgical Trainee who is well on the ladder of higher training in Surgery will have to be recuited to the Paediatric Surgical Unit.

2. ESTABLISHMENT OF A NEONATAL PATIENT TRANSPORT SERVICE (1989)

Development of an area of special interest in the management of cases of Oesophageal Atresia and Billary Atresia.

3. TO CONSIDER THE ACQUISITION OF EQUIPMENT AND EXPERTISE IN PERFORMING FOETAL SURGERY AND THE USE OF LASERS IN PAEDIATRIC SURGERY (1990)

Contd. ..15/.

FIVE YEAR CORPORATE PLAN - RADIOLOGY DEPARTMENT

Suggested Development Plan for the next 05 years.

1988 :

1. Upgrading of Ultra-sound Imaging - Has been done

   Purchase of a new Ultra-sound Scanner incorporating -

   a) Electronic Linear Array

   b) Electronic Sector Probe

   c) Convex Probe

   d) Built in Multi Imager

   e) Video Tape Recorder

   Optional - Doppler Unit

2. Installation of facilities for Vascular Radiology - We expect to receive an Angiographic X-ray Table under Technical Cooperation from J.I.C.A. If this is not forthcoming, purchase from our own Funds is essential.

3. Computerized Tomography (C.T) - Expected end 1988

4. Mammography

1989 :

1. Extension of the above facilities to provide for Interventional Radiological Investigation

   a) Nephrostomy with Calculus Extraction

   b) Percutaneous Extraction of Calculi from the Bile Duct

2. Purchase of 2nd Radiography/Fluoroscopy Table with I.I and T.V.

3. Mammography

1990 :

Establishment of an Isotope Laboratory

1991 :

Nuclear Magnetic Resonance Imaging (Magnetic Resonance Imaging - M.R.I)

1992 :

Consolidation of the above.

STAFF

RADIOGRAPHERS

1988 Four additional.

One to replace the Radiographer who resigned. Two other for Computerized Tomography. One for Ultrasound - to function as an Ultrasound Technician.

1989 Two Radiographers for Vascular Radiography

1990 Two Radiographers for Isotope Laboratory with training in this discipline

1991 Two Radiographers for the Nuclear Magnetic Resource Unit

Cadre has to be increased concomitantly with the establishment of each facility. Radiographers selected should be given preliminary training in each of the above specialities.

In this connection, it must be emphasized that promotional prospects for Radiographers must be established - i.e. the creation of a Cadre for Grade I Radiographer.

NURSES

1988 Two for C.T

1989 Two for Vascular Radiography

1990 None

1991 Two for the M.R.I. Unit

ORDERLIES

1988 Two Male & Two Female

1989 Two Male & Two Female

1990 Two Male for Isotope Laboratory

1991 Two Male & Two Female for MR

RADIOLOGISTS

The Cadre of Consultants should be increased by at least Two. In addition, a Post of Registrar and Three Posts of Medical Officer should be created in order to meet the full Service commitment with the expansion of the Hospital.

REGISTRARS IN RADIOLOGY

A minimum of One Registrar in 1988 and another Two in 1989.

The increase in Staff is necessary to provide the necessary backbone for the successful implementation of the increase in Radiological Diagnostic facilities.

SPACE REQUIREMENTS

It is proposed to undertake an extension to the present Radiology Building - into the Plan where space has been reserved - a Building in conformity with the existing Architecture. This would prove adequate for housing both the CT Scanner and an Angiographic Table and may be the Second Image Intensifier.

FIVE YEAR CORPORATE PLAN - DEPATMENT OF OBSTETRICS & GYNAECOLOGY

SUMMARY

1988 Establish Laparoscopy Service

Establish Screening for Cervical Carcinoma

Tuboplasty has commenced

1989 Establish Colposcopy Service

Establish a Sperm Bank

Establish a Computer Terminal in the Two Obstetrics & Gynaecology Wards

Training for I.V.F. Programme at Kelo University

Establish facilities for Laser Surgery

1990 Inaugurate an I.V.F. Programme

1991 Maintenance of the above Units

1992 Maintenance of the above Units.

At present, the Sri Jayewardenepura General Hospital has no facilities for Laparoscopy, Screening for Cervical Carcinoma, Colposcopy, Storage of Donor Semen and a host of other advanced techniques in Obstetrics & Gynaecology. It is visualized that at the end of the Five Year Plan, all these techniques will be in full operation.

1988 :

1. Laparoscopic Equipment has just arrived in this Hospital. Other Endoscopic Equipment will be made available to this Hospital in 1988.

2. A screening Program for Carcinoma Cervix will be started (1988).

Contd. ..22/.

1989 :

1. As an advancement of the above Screening Program, it is hoped that a Colposcopy Service would be established during this year.

   Equipment Required - Colposcope & Chair

   Provision of Space - In the Gynaecology Clinic

2. Infertility is a problem among our Patients.

   Equipment for Storage of donor Sperms not available.

   Availability of this Equipment will benefit many Couples.

   For AIH, only 0.2 mls of Seminal Fluid is necessary.

   Any one ejaculate of a Husband can be used for many Inseminations.

3. Establishment of a Computer Terminal

   During this year, it is hoped that a Computer Terminal will be established in the Two Wards.

4. Training in IVF

   In order to start an IVF Program at the SJGH in 1990.

   One or Both Consultants should be trained in IVF at Keio University.

   It is also hoped that Equipment for this will also be obtained for this from Japan.

5. Establish facilities for Laser Surgery

1990 :

1. Establishment of an IVF Program

Equipment -

Incubators

O_2 & CO_2 Cylinders (Large)

Dissecting Microscope

Drugs for Induction of Ovulation -

hMg (Pergonal)

HCG

Software for collection of Ova

Material for collection of Ova

Refrigerator

1991 :

Maintenance of the above

1992 :

Maintenance of the above.

DEVELOPMENT PLAN FOR DEPARTMENT OF PATHOLOGY

MICROBIOLOGY :

This Department needs additional space -

1. To deal with the increasing demand for routine work.
2. for Media Preparation and Storages.
3. For Fluorescences Microscopy
4. Separate Room for Culture of Tuberculosis.
5. For Mycology Specimens
6. Isolation for -

   Maintaining Separate Gel-Lines

   Preparation of Primary Tissue Cultures

   Innoculation of T.C's with Specimens for Viral Isolation.

Equipment

1989 Fluorescences Microscope

Deep Freeze - $20^{o}C$

Refrigerated Centrifuge

Liquid Nitrogen Cylinder

Glassware, Media and Chemicals

STAFF

1988/89 One Consultant (Additional)

Four Technologists

ANIMAL HOUSE

Required in 1988 - Can be provided in late 1988 when the proposed new Workshop is completed.

HISTO-PATHOLOGY, HAEMATOLOGY & BIOCHEMISTRY

1988/89

1. Room for a Pathology Museum and Slide Bank.

2. There is one PGIM Trainee in the Histopathology Section.
   Three more are expected shortly for Trainees in all disciplines.

3. Develop Back-up facilities for the Renal Dialysis/Transplant Program.

Equipment

20 Channel Non-computerised Auto Analyser - Approx. Cost Rs 800,000/00

Vortex Mixer - Rs 50,000/00

Automatic Fixed Vot. Pipettes

Disposable Contrainers

One Cell Separator

Equipment for Tissue Typing - HLA Matching and MIC Testing

Miscellaneous Items of Lab Equipment

Staff

Two additional Technologists - trained to collect, transport and perform repeated Cultures - on specimens from receipients at all stages.

1989 It would be desirable to send for Overseas Training (Japan) a Histo-pathologist in Immuno-fluorescence Microscopy and thereafter purchase the necessary Equipment.

RADIO-ISOTOPE STUDIES

It is suggested that we start a Program for studying Patients using Radio-Isotopes - for purpose of -

1. In Vitro Thyroid Functions - T_{131}, T_3, T_4, TSH and Cortisole Prolactin L.H., FSH and Growth Hormone.

2. In Vivo Organ Imaging for Cardiac Function and Organ Scans of Thyroid, Liver and Kidney.

Staff

Recruit in late 1988/early 1989, a Physics Graduate and 2 Technicians to be trained by the I.E.A.

Salary of Graduate - Grade II of Scientific Officer in State Sector

Salary of Technicians - Middle Level Technical Service

If this proposal is accepted, there will be need for areas of space.

1) Room approximately 12x15 for In Vitro Studies

2) Room - (Radiation Protected) for In Vivo Studies.

It must be noted that In Vitro Studies using Isotope Techniques is specifically cheaper than the current testing by the Eliza Techniques.

BUILDING DEVELOPMENT PLAN

1. In 1987 work was started on Building of 18 Flats for Married Doctors. Estimated to be completed in 13 months - but the work is far behind schedule.

2. It is hoped that we can commence work on expansion of the Radiology Block - an extent of approximately 4000 sq.ft. at an approximate cost of Rs 4-5 million.

3. We await confirmation that the World Bank Funded Stores Building of approximately 4000 sq.ft. will become a reality. This will help us to shift Stores from the Main Hospital Complex - utilizing the space so vacated for our other Needs.

4. We propose, this year to put-up a Building of Pre-fabricated Concrete Materials (from the State Engineering Corporation) of approximately 4000 sq.ft. to accomodate Staff and Equipment of the Maintenance Services and our Workshop. To renovate the existing Kajima Office Building adequately for use as Nurses Quarters for the in-coming batch of Student Nurses.

5. The Director's Residence and the Doctors' Restaurant cum Stores facility will be taken over by May 1988.

TRAINING SCHOOL

A Residential Training Facility for training of Nurses at the rate of intake of 100 per year and for training of Para-medical Staff at 30 per year - in the fields of Laboratory Technology and Radiology and Physical Medicine should be considered a priority need.

A preliminary Plan was submitted for such a Proposal - envisaging a Capital outlay of Rs 300 million - seeking total assistance from Japan through JICA.

A modified Plan is to be submitted in the near future and we have very good hopes that Japn will accede to such a request.

We cannot go on with our Nurses Training Program after 1988 without such assistance.

I believe that the Ministry of Women's Affairs and Teaching Hospital is proceeding with the necessary steps to acquire a block of land adjoining the present Hospital Complex - on extent of about 6 acres identified by the U.D.A - whose Plan I have already submited to the Ministry.

Dr Rienzie Peiris
CHAIRMAN
SRI JAYEWARDENEPURA GENERAL HOSPITAL

April 19, 1988.

Public Investment 1988 – 1992
National Planning Div. / Ministry of Finance & Planning

Health

5.33 Governments in Sri Lanka since independence have been committed to provide adequate and accessible health facilities to the people. In 1977, the government committed itself to "restore the high standards of health and disease prevention that existed, and make further improvements in the health services". In 1980, the Charter on Health Development "to provide health for all by the year 2000" was signed in 1978. The Government has already identified 17 key areas for the development of primary health care in accordance with the decisions taken at the International Conference on Primary Health Care held at Alma Ata, USSR.

5.34 Declining mortality since the 1940s due to improved health facilities resulted in an accelerated growth of the population in the 1960s and 1970s. This population growth and the corresponding need for expansion of the structure, organization and service delivery in the health sector, arising out of the government commitment to provide free health facilities, has made increasing demands on the limited resources of the government budget.

5.35 Structural changes in the health administration system included the creation of a project ministry in 1983, under the Ministry of Health. This ministry was soon elevated to Cabinet rank. In 1980, the project Ministry of Indigenous Medicine was created. The National Health Council was set up under the Chairmanship of the Prime Minister in 1980. The National Health Development Committee under the Chairmanship of the Secretary/Health and its six standing committees were established in 1978. An attempt has also been made to link the Government health administration with the appropriate local government authorities.

5.36 Amidst all the difficulties associated with the current wave of destabilization and ethnic unrest in the country, reasonable improvements have been made in the provision of facilities to uplift primary health care. At least 67 percent of the population have adequate sanitary facilities at home or in the vicinity. Between 64–67 percent of infants get immunized against polio and tetanus; 79 percent of pregnant women and 80 percent of infants are attended to by trained mdical staff while 76 percent of deliveries take place in hospitals.

5.37 Between 1980 and 1986 the number of inpatients who sought treatment in hospitals increased by 10 percent. As at 1986, there were 2.6 million inpatients in 832 health institutions with an average duration of stay of 5 days. There was an average daily occupancy of 80 percent of 45,834 beds in these institutions. Those who requested OPD treatment in 1986 were nearly double the total population of that year. In 1986, there were 33 million people requesting OPD treatment which shows a 2 percent increase from 1980

5.38 Even though there are differences in the utilization of medical institutions due to the size and locality, average utilization was high. On average, the 14 provincial and

teaching hospitals had 93 percent utilization, the 21 base hospitals 87 percent, the 112 district hospitals 68 percent, the 121 peripheral units 78 percent and 117 rural hospitals 74 percent utilization.

5.39 The number of Government medical officers in the curative and preventive services increased from 9.6 per 100,000 population in 1980 to 13.2 per 100,000 population in 1986 and the number of nurses from 40 to 51 per 100,000 population. However, the number of midwives declined from 21.2 to 19.2 per 100,000 population during the same period.

5.40 The allocation for health as a percent of total government expenditure fluctuated between 3.3 and 5.1 between 1980 and 1986 and as a percentage of GDP, it varied between 1.3 and 1.9 during the same period. During the years 1984, 1985 and 1986 health sector expenditure was kept at a constant level of 1.4 percent of GDP. The actual expenditure in the health sector at current prices amounted to Rs. 1,200 million in 1982. Expenditure nearly doubled to Rs. 2,064 million in 1985 and is estimated to be Rs. 3,980 million in 1987 and Rs. 4,123 million in 1988. Approximately 66 percent of this expenditure is recurrent ad 34 percent capital. As much as 87 percent of the expenditure on health is provided from domestically mobilised resources in the Budget.

5.41 The current division of health sector responsibilities among three health ministries constrains integrated planning for the sector. It has long been realised that there is an acute need to improve management in the health sector. Problems have arisen in keeping to implemetnation schedules relating to capital expenditure and also in regard to logistics, particularly with regard to procurement, storage and delivery of drugs, drug prescribing procedures and the use of drugs.

5.42 A shortage of trained health manpower including para medical staff, and inadequacies in health manpower planning and management are areas of concern. This is largely due to a brain drain of highly qualified medical personnel which this sector has experienced. The development of sound financing mechanisms acceptable to the government is another issue which needs to be resovled. The strengthening of the currently low salary structure of doctors, particularly in view of their high earning capacity measured in terms of shadow prices associated with the remuneration of private practitioners, is another problem area needing an early solution.

5.43 In view of the above considerations, strengthening of health management has been recognized as a high priority. The World Bank supported Population and Health Project which is to commence its implemetnation in the later part of 1988 is aimed at resolving some of the major management issues in the health sector. The primary objectives of this project are : (a) strengthening of planning and management of the preventive and curative health system at the central and regional levels; (b) increasing the efficinecy and cost effectiveness of the health logistics system; and (c) promoting maternal and child health and reducing fertility through increased use of

modern spacing methods. Implementation of this project is under the direction of a high level National Steering Committee comprising the Secretaries of the Ministries of Health, Teaching Hospitals and Plan Implementation.

Social Security and Social Welfare

5.44 The coverage of social security schemes has declined in 1987. The Employee's Provident Fund (EPF) scheme covered only 82 percent of organized sector employment in 1987, compared to 85 percent in the previous year. Active accounts have fallen from 33 percent to 31 percent between 1986 and 1987. It was estimated that about 80 percent of EPF members receive a lump sum amounting to less than Rs.20,000 at their retirement. Hence a vast majority of members have insufficient funds to sustain themselves throughout a long retirement, as life expectancy at age 55 is 21 years for a man and 23 years for a woman.

5.45 In 1987, about 3,965 cases were pending for compensation payments through the Workmen's Compensation Ordinance as against 3,750 cases in 1986. However, in 1987 only 701 cases were adjudicated as compared to 984 cases in 1986. The decline in compensation payments is due to legal impediments on the one hand and the extent of coverage on the other as the existing law permits payment of compensation only to those workers who receive less than Rs.500 a month. The current facilities under the Act are therefore available only to a limited number of workers.

5.46 In view of these shortcomings, a committee appointed by the government has recommended the establishment of a Tripartite Social Security Board under the purview of the Department of Labour. The proposed Board will administer the EPF and the Workmen's Compensation Ordinance. The existing Medical Care Act and a Maternity Leave Act will also be administered by this Board. The EPF Scheme will be converted into a monthly pension scheme so that workers will be able to maintain their purchasing power from retirement to death. The Workmen's Compensation Ordinance will be broadened in scope and formalities reduced to a minimum.

5.47 The Farmer's Pension and Benefit Scheme was established in 1985 but during the last two years only 6,000 farmers have become members of the scheme, 80 percent of whom are from the Nuwara Eliya and Matara Districts. The total number of famrers who have joined the scheme is lower than the number that were expected to join during the last two years.

5.48 Social welfare programmes of the Government cover nearly 50 percent of the total population. In 1987, 3.3 percent of the total budgetary expenditure was allocated for these programmes.

5.49 Under a programme of assistance to socially, physically and mentally handicapped people, the government supports 125 institutions run by Government and non-governmental organizations. In 1987, vocational training was given to 8,600

公共投資計画（1988－92年）

（単位：百万ルピー）

HEALTH

ITEMS	1988 T	1988 FA	1989 T	1989 FA	1990 T	1990 FA	1991 T	1991 FA	1992 T	1992 FA	1988—1992 T	1988—1992 FC	1988—1992 LC	1988—1992 FA
MINISTRY OF HEALTH														
Ongoing Projects														
1. Rehabilitation and Improvements of Capital Assets	129.4	5.3	145.0	—	150.0	—	155.0	—	170.0	—	749.4	13.1	736.3	5.3
2. Staff Quarters	50.3	—	60.0	—	70.0	—	70.0	—	70.0	—	320.3	—	320.3	—
3. Vehicles	45.7	6.1	60.0	—	70.0	—	75.0	—	80.0	—	330.7	270.7	60.0	6.1
4. Machinery Equipment Tools & Apparatus	210.5	64.7	160.0	—	190.0	—	200.0	—	220.0	—	980.5	926.5	54.0	64.7
5. Water Supply & Sewerage Schemes	20.0	—	25.0	—	32.0	—	38.0	—	40.0	—	155.5	—	155.0	—
6. National Drug Quality Control Lab.	8.0	8.0	4.2	4.2	4.6	4.6	—	—	—	—	16.8	10.8	6.0	16.8
7. M.R.I. Project	100.0	70.0.	500.0	465.0	150.0	95.0	—	—	—	—	750.0	600.0	150.0	630.0
8. C.S. for Medical Supplies	275.0	245.0	—	—	—	—	—	—	—	—	275.0	185.0	90.0	245.0
9. Environmental Sanitation	20.0	—	25.0	—	32.0	—	35.0	—	40.0	—	152.0	—	152.0	—
10. S.P.C. Tablet & Capsule Plant	30.0	—	—	—	—	—	—	—	—	—	30.0	—	30.0	—
11. Sterile Product Plant	—	—	1.0	—	1.0	—	1.0	—	1.0	—	4.0	—	4.0	—
12. Health & Population Project (ADB)	69.0	52.0*	49.0	41.0	—	—	—	—	—	—	118.0	28.0	90.0	103.0
13. NIHS Health Service Research	1.0	1.0	6.8	6.8	—	—	—	—	—	—	7.8	4.8	3.0	7.8
14. Family Health Bureau	0.8	0.8	16.1	16.1	13.9	13.9	17.0	17.0	—	—	47.8	40.0	7.8	47.8
15. Communication Outlay	7.8	—	8.0	—	10.0	—	11.0	—	12.0	—	48.8	42.6	6.2	—
16. Construction Mental Hospitals	2.5	—	2.5	—	—	—	—	—	—	—	5.0	—	5.0	—
17. Annual Furnitures Fixtures	28.2	0.7	30.0	—	35.0	—	38.0	—	40.0	—	171.2	51.2	120.0	0.7
18. Permanent Improvements	53.1	0.1	60.0	—	160.0	—	150.0	—	135.0	—	558.1	—	558.1	0.1
TOTAL	1061.3	463.7	1152.6	533.1	918.5	113.5	790.0	17.0	808.0	—	4720.4	2172.7	2647.7	1127.3

T: Total Amount

FA: Foreign Assistance

MINISTRY OF WOMEN'S AFFAIRS & TEACHING HOSPITALS

ITEMS	1988		1989		1990		1991		1992		1988 - 1992			
	T	FA	T	FA	T	FA	T	FA	T	FA	T	FC	LC	FA
Ministry of Women's Affairs & Teaching Hospital														
Ongoing Projects														
1. Rehabilitation & Improvement of Capital Assets	100.0	—	125.0	—	135.0	—	150.0	—	150.0	—	660.0	—	660.0	—
2. Staff Quarters														
a Jayewardenepura Hospital	8.0	—	4.0	—	15.0	—	10.0	—	15.0	—	52.0	—	52.0	—
b Others	37.2	—	45.0	—	75.0	—	80.0	—	80.0	—	317.2	—	317.2	—
3. Development of G.H.C.	161.4	139.1	152.2	130.3	126.0	112.5	395.9	338.5	306.8	260.7	1142.0	979.1	162.9	979.1
4. Operation Theatres	1.8	—	3.0	—	3.0	—	3.0	—	3.0	—	13.8	—	13.8	—
5. CSS Department	3.5	—	7.0	—	4.0	—	4.0	—	4.0	—	22.5	—	22.5	—
6. Stores Facilities	6.0	—	—	—	—	—	—	—	—	—	6.0	—	6.0	—
7. Sewerage Schemes	10.6	—	15.0	—	6.0	—	3.0	—	3.0	—	37.6	—	37.6	—
8. Water Supply & Drainage	2.0	—	4.0	—	4.0	—	2.0	—	2.0	—	14.0	—	14.0	—
9. Security Walls	3.0	—	4.0	—	2.0	—	2.0	—	—	—	11.0	—	11.0	—
10. Electrical Installation	6.0	—	8.0	—	10.0	—	12.0	—	12.0	—	48.0	—	48.0	—
11. Annuals	16.5	—	20.0	—	22.0	—	25.0	—	25.0	—	108.5	—	108.5	—
12. Vehicles	6.6	—	9.0	—	10.0	—	10.0	—	10.0	—	45.6	—	45.6	—
13. Machinery Equipment	90.0	—	130.0	23.0	150.0	—	160.0	—	160.0	—	690.00	23.0	667.0	23.0
14. Implements Tools & Apparatus	15.0	—	30.0	—	25.0	—	30.0	—	30.0	—	130.0	—	130.0	—
15. Custom Duty & BTT	26.6	—	50.0	—	55.0	—	55.0	—	55.0	—	241.6	—	241.6	—
16. Communication Outlay	15.0	—	20.0	23.0	15.0	—	15.0	—	15.0	—	80.0	23.0	57.0	23.0
17. Permanent Improvements	—	—	2.0	—	5.0	—	5.0	—	5.0	—	17.0	—	17.0	—
18. Womens Bureau	15.4	11.8	15.7	15.7	7.2	7.2	5.9	5.9	15.0	15.0	59.2	55.6	3.6	55.6
TOTAL	524.6	150.9	643.9	192.0	668.2	119.7	967.8	342.4	890.8	275.7	3696.0	1080.7	2615.3	1080.7

ITEMS	1988 T	1988 FA	1989 T	1989 FA	1990 T	1990 FA	1991 T	1991 FA	1992 T	1992 FA	1988–1992 T	1988–1992 FC	1988–1992 LC	1988–1992 FA
Ministry of Indegenous Medicine														
Ongoing Projects														
1 Rehabilitation & Improvements of Capital Assets	3.6	—	4.0	—	4.0	—	4.0	—	4.0	—	19.6	—	19.6	—
2 Equipment for Existing Hospital and Dispensaries	7.0	—	8.5	—	9.0	—	9.5	—	10.0	—	44.0	—	44.0	—
3 Equipment for New Hospitals and Dispensaries	2.0	—	2.4	—	3.0	—	3.5	—	4.0	—	14.9	—	14.9	—
4 Assistant to Private Run Hospitals Gampaha Wickramarachchi College	4.0	—	5.0	—	5.0	—	5.0	—	5.0	—	24.0	—	24.0	—
5 Strengthening of Ayurveda in Sri Lanka four components	6.9	5.4	8.0	6.0	8.0	6.0	8.0	6.0	—	—	30.9	23.4	7.5	23.4
6 Herbarium Gardens	2.0	—	4.0	—	4.0	—	4.0	—	4.0	—	18.0	—	18.0	—
7 Improvements of Residential Facilities for Medical Staff and elect. Installation	2.7	—	4.5	—	4.5	—	4.5	—	4.5	—	20.7	—	20.7	—
TOTAL	28.2	5.4	36.4	6.0	37.5	6.0	38.5	6.0	31.5	—	172.1	23.4	148.7	23.4
Grand Total (Ongoing Project)	1604	620	1833	731	1625	239	1796	365	1730	276	8588	3277	5311	2231

SPECIAL REHABILITATTON PROGRAMME

ITEMS	1989 T	1990 T	1991 T	1992 T	T	1989 FC	1992 LC	FA
Special Rehabilitation Programme								
1. Ministry of Health*								
Buildings	11.8	19.8	15.8	—	47	—	47	—
Furniture	3.0	3.0	3.1	—	9	—	9	—
Equipment	1.9	1.9	2.0	—	6	—	6	—
Vehicles	6.5	6.5	6.5	—	20	—	20	—
TOTAL	23	31	28	—	82	—	82	—
2. Ministry Women's Affairs & Teaching Hospitals**								
Buildings — Jaffna	6.57	—	—	—	7	—	7	—
Buildings — Colombo	10.2	23.6	7.00	—	41	—	41	—
TOTAL	16.77	23.6	7.00	—	48	—	48	—
GRAND TOTAL	40	55	35	—	130		130	—

* According to S/H there is an offer of Rs. 90 Mn. for Tellippalai Hospital from Italian Government through Ministry of Rehabilitation, but not included.

** Includes Furniture, equipment and vehicles as well.

ITEMS	1988 T	1988 FA	1989 T	1989 FA	1990 T	1990 FA	1991 T	1991 FA	1992 T	1992 FA	1988–1992 T	1988–1992 FC	1988–1992 LC	1988–1992 FA
New Projects														
Ministry of Health														
1. Strengthening Service Facilities														
Cancer Institute Maharagama	—	—	80.0	80.0	20.0	—	—	—	—	—	100.0	80.0	20.0	80.0
2. Health & Population Project (IDA)	—	—	72.8	72.8	83.6	83.6	32.1	32.1	18.1	18.1	207.0	207.0	—	207.0
Ministry of Women's Affairs & Teaching Hospitals														
1. Health & Population Project (IDA)	–	–	30.0	30.0	30.0	30.0	10.0	10.0	5.0	5.0	75.0	75.0	—	75.0
Total	—	—	183	183	134	114	42	42	23	23	382	362	20	362

5. Social Infrastructure

Projects	Objectives	T.E.C. (Rs. Mn.) T	FA	LC	Commencement	Completion
5.1 Education						
First Technical Education	Upgrading of facilities at technical institutes, construction of new technical institutes and establishment of a Technical Teacher Training College	634	404	230	1982	1988
5.2 Health						
Medical Research Institute	Improve the efficiency of the MRI	750	630	120	1988	1990
Central Stores for Medical Supplies	Provide proper storage of medical supplies and equipment	290	200	90	1986	1989
Health and Population (Primary Health Care)	Provision of comprehensive essential health care to the entire rural population	213	188	24.90	1983	1989
Development of Colombo General Hospital	Improve the Health Service and management in the Colombo General Hospital and construction of new building	401.89	341.61	60.28	1986	1989
Tabletting and Capsulating Plant	Make available to Government and Private Sector, drugs of uniformity and high quality	782.7	476.9	305.8	1985	1987

TABLE 5.11

DISTRIBUTION OF GOVERNMENT MEDICAL INSTITUTIONS AND BEDS BY DISTRICTS - DECEMBER 1987

DISTRICT	Teaching Hospitals ①		Provincial Hospitals ①		Base Hospitals ②		District Hospitals ③		Peripheral Units ④		Rural Hospitals ⑤		Maternity Homes and Central Dispensaries $		Other Hospitals *		TOTAL		Beds per 1000 Population	Central Dispensaries	MOOH/DHOO
	NO. OF		NO. OF		NO. OF		NO. OF		NO. OF		NO. OF		NO. OF		NO. OF		NO. OF				
	Inst	Beds	Inst	Beds	Inst	Beds	Inst	Beds	Inst	Beds	Inst	Beds	Inst	Beds	Inst	Beds	Inst	Beds			
1. Colombo	6	4814	1	606	1	369	4	351	5	266	2	43	-	-	7	2603	26	9052	4.9	18	9
2. Gampaha	1	1032	-	-	3	1052	4	469	4	166	3	56	11	124	6	1684	32	4583	3.1	31	10
3. Kalutara	-	-	1	578	1	379	5	727	3	140	7	198	3	29	-	-	20	2051	2.2	7	5
4. Kandy	2	1947	-	-	1	300	11	970	9	373	22	537	3	28	1	44	49	4199	3.5	13	10
5. Matale	-	-	-	-	1	504	1	118	7	369	4	62	4	46	-	-	17	1099	2.8	14	4
6. Nuwara Eliya	-	-	-	-	1	178	12	922	3	107	1	14	3	39	-	-	20	1260	2.4	17	2
7. Galle	1	1014	-	-	-	-	6	646	7	320	6	122	4	33	1	10	25	2145	2.4	16	7
8. Matara	-	-	-	-	1	605	2	255	6	319	6	192	7	82	1	6	23	1459	2.0	12	6
9. Hambantota	-	-	-	-	1	139	6	561	4	128	3	96	5	57	-	-	19	981	2.0	4	5
10. Jaffna	1	1021	-	-	1	216	5	625	7	329	4	99	9	83	1	144	28	2517	3.0	15	7
11. Kilinochchi	-	-	-	-	-	-	1	123	3	99	-	-	3	36	-	-	7	258		6	1
12. Mannar	-	-	-	-	1	184	3	94	1	24	2	35	-	-	-	-	7	337	2.8	9	1
13. Vavuniya	-	-	-	-	1	142	-	-	1	24	1	41	2	14	-	-	5	221	2.0	3	1
14. Mullaitivu	-	-	-	-	-	-	1	88	1	42	1	24	2	24	-	-	5	178	2.0	4	1
15. Batticaloa	-	-	1	618	-	-	1	100	4	136	3	43	1	10	2	158	12	1065	2.8	15	3
16. Amparai	-	-	-	-	2	380	2	94	6	188	-	-	5	67	-	-	15	729	1.6	22	4
17. Trincomalee	-	-	-	-	1	290	1	52	1	36	**	**	1	13	-	-	4	391	1.3	5	1
18. Kurunegala	-	-	1	1001	2	431	10	985	17	717	4	85	3	39	-	-	37	3258	2.4	38	13
19. Puttalam	-	-	-	-	1	409	4	436	4	178	5	88	2	21	-	-	16	1132	2.0	20	4
20. Anuradhapura	-	-	1	764	-	-	4	329	7	367	19	431	6	85	1	15	38	1991	3.0	15	5
21. Polonnaruwa	-	-	-	-	1	271	2	218	1	35	3	72	3	28	-	-	10	624	2.1	5	2
22. Badulla	-	-	1	690	-	-	10	776	6	186	6	108	2	22	-	-	25	1782	2.2	15	6
23. Moneragala	-	-	-	-	-	-	8	563	2	106	5	80	-	-	-	-	15	749	2.3	9	3
24. Ratnapura	-	-	1	722	-	-	9	1193	11	340	1	12	1	12	-	-	23	2279	2.6	13	4
25. Kegalle	-	-	-	-	11	560	8	870	-	-	5	141	5	42	-	-	19	1613	2.2	19	8
Total	11	9828	7	4979	21	6409	120	11565	130	4995	113	2579	85	934	20	4664	457	45953	2.8	345	122

$ Includes maternity homes in-charge of midwives.

* Includes Mental, Chest, Leprosy, Police, Prison, Fever, TSJD, Cancer and Rehabilitation Hospitals

** 3 Rural Hospitals - Gomarankadawala, Pampalakamam, Kantalai - bedstrength not available.

Source : Medical Statistics Unit

注) ①：第3次医療機関　②：第2次医療機関　③：第1次医療機関

RANK ORDER CAUSES OF HOSPITALIZATION BY DISTRICTS - 1987

DISEASE \ DISTRICT AND RANK ORDER	SRI LANKA	Colombo	Gampaha	Kalutara	Kandy	Matale & Polonnaruwa	N. Eliya	Galle	Matara	Hambantota	Jaffna & Kilinochchi	Mannar, Vavuniya and Mullaitivu	Batticaloa	Ampara	Trincomalee	Kurunegala	Puttalam	Anuradhapura	Badulla	Monaragala	Ratnapura	Kegalle
Malaria (084)	1		5		4	1			8	3		1	2	1	1	1	1	1	7	1	5	2
Symptoms, signs and ill-defined conditions (780 - 799)	2	1	3	3	1	2	4	2	4	1	4	5	6	4	7	2	3	3	1	2	4	1
Diseases of the respiratory system excluding diseases of the upper respiratory tract pneumonia, broucho-pneumonia and influenza. (466,490 - 519)	3	3	2	1	2	3	1	1	3	2	2	2	4	3	2	3	5	2	3	3	1	3
Traumatic injuries (800 - 904,930 - 939,950 - 957)	4	2	1	2	3	4	2	4	1	4	1	3	1	5	5	5	2	5	2	4	3	4
Intestinal infectious diseases (001 - 009)	5	4	4	4	6	5	3	3	2	5	3	4	3	2	4	4	4	4	4	5	2	5
Diseases of the gastro intestinal tract (530 - 579)	6	5	6	7	5	7	7		10	9	6	9	7	8	10	8	8		10	8	9	9
Diseases of the skin and subcutaneous tissue (780 - 799)	7	7	7	5	7	10	5			10	5	6		6	3		7	6	5		8	10
Diseases of the musculoskeletal system and connective tissue. (710 - 739)	8	10	8	10	8	8	6	7	5	7	7	8	8	9	9	10	9	7	6	7	7	8
Viral diseases (045 - 079)	9		10			9	8	5	6	6					6	7	6	9	9	9	6	6
Diseases of the urinary system (589 - 599)	10		9	9	10			8			9	10						10		10		
Obstetric causes (640 - 648,651 - 676)		6											10				10					
Malignant neoplasm and carcinoma in situ (140 - 208,230 - 234)		8																				
Diseases of the eye and adnexa (360 - 379)		9																				
Other injuries, early complications of trauma (910 - 929,958 - 959,990 - 995)				6	9									7	8	6						
Influenza (487)				8									5									
Diseases of the upper respiratory tract (460 - 465,470 - 478)						6	9	9	7	8						9			8		10	7
Pneumonia and bronchopneumonia (480 - 486)							10															
Late effects of injury and poisoning (905 - 909)								6														
Anaemia (200)								10			8	7	9	10				8		6		
Other infectious and parasitic diseases (100 - 118,120 , 122,130 - 139)									9													
Mental disorders (290 - 319)											10											

Source : Medical Statistics Unit

*Excludes normal delivery and those admitted and discharged before delivery.

TABLE 4.7

LEADING CAUSES OF HOSPITAL DEATHS BY DISTRICTS 1987

DISEASES AND ICD NO. / DISTRICT AND RANK ORDER	SRI LANKA	Colombo	Gampaha	Kalutara	Kandy	Matale & Polonnaruwa	N'Eliya	Galle	Matara	Hambantota	Jaffna & Kilinochchi	Mannar, Vavuniya, Mullaitivu	Batticaloa	Amparai	Trincomalee	Kurunegala	Puttalam	Anuradhapura	Badulla	Monaragala	Ratnapura	Kegalle
Ischaemic heart diseases (410 - 414)	1	5	1	1	3	2	2	1	2	2	4	5	1	3	7	5	2	2	2	3	3	3
Symptoms, signs and ill-defined conditions (780 - 799)	2	2	6	10	1		8		3	4					1	7		6	1	10	7	1
Cerebrovascular diseases (430 - 438)	3	5	2	3	7	7	7	10		3				5	3	3	6	5	5	9	2	2
Slow fetal growth, fetal malnutriton and immaturity (764 - 765)	4		4	2	2		4	6	1		5	4	2	9	6	1	4				1	5
Diseases of the gastro-intestinal tract (530 - 579)	5		3	9	4						6		4			4	1		9			8
Pesticide poisoning (989.2 - 989.4)	6		8		8	1	3	2	6	1		6	8	2		2	5	1	6	1	8	
Diseases of the pulmonary circulation and other forms of heart diseases (415 - 429)	7	6	10		5	3	5	8	7	9			3		8	8	3	4		2	5	
Traumatic injuries (800 - 904,930 - 939,950 - 957)	8	4	9			10					1		7									7
Malignant neoplasms (140 - 208,230 - 234)	9	1			6						9											
Pneumonia and bronchopneumonia (480 - 486)	10	7		4	9	4	1		10	8	10	3		6	10		7	3	7	8		
Diseases of the urinary system (580 - 599)		8											9									
Intestinal infectious diseases (001 - 009)		9				5			8	10	2	2	5	7	5	10	10		3	4	4	9
Other bacterial diseases (020 - 041)		10		6	10	9	10				3			4	4					5		
Hypertensive diseases (401 - 405)			5	7				3		5								9	10	7	9	10
Diseases of the nervous system (320 - 359)			7								8	7		10	9	6	8		8		10	
Poisonings and toxic effects excluding pesticide poisoning (960 - 979,980 - 989.1,989.5 - 989.9)				5		6			5		7		6	1							6	4
Diseases of the circulatory system (440 - 455)				8																		
Tuberculosis (010 - 018)						8		4														
Diseases of the respiratory system excluding diseases of the upper respiratory tract, pneumonia, bronchopneumonia and influenza (466,490 - 519)							6	9		6		10		8	2	9		7	4	6		
Anaemia (200)							9	5				9						8				
Late effects of injuries, poisonings of toxic effects and of other external causes (905 - 909)								7														
Conditions originating in the perinatal period excluding slow fetal growth, fetal malnutrition and immaturity (760 - 763,766 - 779)									4								9					6
Nutritional deficiencies (260 - 269)									9													
Snake bites (E. 905. 0)										7								10				
Malaria (084)												1										
Viral diseases (045 - 079)												8										
Diseases of the upper respiratory tract (460 - 465,470 - 478)													10									

1－3　分析

回答書の比較できるもの、及び主なものを整理すると下記のとおりである。

	ナラヤンガンジ病　院	ダッカ ナショナル メディカル 病　　院	スリジャワルダナプラ 病院
本病院がカバーする地域の人口	3,000,000 人	1,000,000 人	4,247,000 人（全土を対象）
本病院の位置付け	二次医療施設	一次医療施設 * 公立病院でなく明確な位置付けがなされていない。	三次医療施設
職　員　数	304 名	226 名	917 名
病　床　数	200 床	213 床	661 床
外来患者数	500 人(1日)	230 人(1日)	10,822人（1988年 8月）
救急患者数	40 人(1日)	30 人(1日)	1,958人(8月分)
病床占有率	88.1%	80.0%	67.0%
平均入院日数	10.65 日	10.00 日	7.80 日
外来患者待ち時間	1時間	20分	－
入院患者の待ち時間	7日	なし	6～8日
不足している職員	救急医、麻酔医と看護婦等のパラメディカル	ほぼ満足	看護婦
供与された機材を十分活用できる職員か？	ほぼ出来るが、トレーニング必要	出来る	看護婦のトレーニングが必要
使用できない機材とその理由	内視鏡 部品の不足等の為	患者監視装置 人工呼吸器 内視鏡 除細動装置 部品の不足等の為	超音波治療器 ランドリー洗濯機 部品の不足等の為
故障の原因	－	電圧変動が大きい為	部品の消耗
消耗品等の入手について	General Medical Store でも入手不可能	入手は非常に難しい	入手困難である
実情に合わない機材	なし	なし	なし

	ナラヤンガンジ病院	ダッカ ナショナル メディカル 病院	スリジャトワルタナプラ 病院
その他機材に対する問題点	なし	なし	サービスマニュアル、パーツリストが無いため、スペアパーツ購入等、維持管理にあたり困難を生じている
開院後、他より購入した機材	なし	鋼製金物を購入した	小児用人工呼吸器等、20項目にわたる機材を購入した
設計は気候、風土に合っているか	合っている	−	合っている
診療に対しての設計は良いか	I.C.U.がない メディカル ガス システム がなされていない	−	外来診療スペースが不足 倉庫、図書室、レクチャールームが狭い
運営、管理に対して設計は良いか	薬品庫がない 外来と病棟の間にドアが必要	−	倉庫が少ない 診療記録等を保存するコンピューター の事を考えていない
その他	職員宿舎の問題がある		パラメディカル訓練医師の為の宿舎がない

主なものは以上であった。

使用状況はほぼ満足できる答えであるが、機材については取り扱い説明書の不足、部品の不足が大きいが、消耗品、部品の現地調達の難しさが、大きな問題であろう。

なお、現地調査時にナラヤンガンジ病院、及びダッカ医科研究所病院より、次頁にある機材問題点リストを入手した。（資料Ⅱ－1、2参照）

II－1　ナラヤンガンジ総合病院機材トラブルレポート

FROM THE DEPARTMENT OF PATHOLOGY
200 BEDED HOSPITAL ,NARAYANGONJ.

SL NO	NAME OF THE INSTRUMENT	MODEL NO	PROBLEMS	SOLUTION	REMARK
1.	Flame photo -meter	Corning 480 ME-48091001 (USA model)	i) Butan gas cylinder is not available in Bangladesh ii) Lack of training of the personnels to operate this instrument.	i)To replace another model no 410 Corning Clinical Flame Photometr. which can be operated by the natural gas available in Bangladesh. ii)Or to convert this instrument into natural gas. iii)Training facilities.	Many of the experts from BIRDEM & ICDDRB passed their openion that this USA model is not suitable for Bangladesh.
2.	Electrophoresis buffer buth	Item no HI-33	i)One of the electrode wire has been broken and shortened. ii)Lack of training of the personnels to operate this instruments	i)Either to supply another buffer bath of smaller size o ii)Or to repai it. iii)Training facilities.	x

List of the equipment which are not working properly.

Sl.No	Name of the equipment	Manufacture	Quantity	Remarks
1.	Emergency ventilator	ACOMA	01(One)	Not workies properly
2.	Bed side patient monitor, 2E 31A	SHNEI	02(two)	-do-
3.	Portabale Defebrilator 3 MO 1	SHNZI	03(Three)	Due to Re-chagable bathery, batter, loum. down
4.	Kymographic insufflation apparatus, N-10	ATOM	01(one)	Due to standred accessories
5.	Autoclove	-	01 (One)	Not commissioned
6.	Ventilator/ Rerpirater KE-101	KIMURA	-	Due of ppration manual

60 Tk/pat

Endoscope

II－2　ダッカ医科研究所病院マニュアル要求レター

ফোন ঃ ২৬ ৬৪ ৬১
২৬ ৭৩ ০০

ঢাকা ন্যাশনাল মেডিক্যাল ইন্‌স্টিটিউট হাসপাতাল
DHAKA NATIONAL MEDICAL INSTITUTE HOSPITAL

৫৩/১, জনসন রোড,
ঢাকা-১, বাংলাদেশ।

53/1, Johnson Road,
Dhaka-1, Bangladesh.

Ref/ 1　　GA-165/83/NMH/759

Date 4.12.1988

To
NASA Trade International
87 Motijheel Commercial Area,
Dhaka.

Enclosed please find a list of Instruments, Apparatus and appliances supplied by Marubeni Corporation of Japan.

We would request you now to supply us the following which is essential for Operation and Maintenance of the equipments. You are further, requested to do whatever is necessary to make the autoclave operational as early as possible.

Yours faithfully,

4/12/88
(Dr. M. R. MALLICK)
Director
Dhaka National Medical Institute
Hospital, Dhaka.

List of Instruments Manual etc.

1. Operational Manual with details instruction in english version.
2. Servicing Manual with details instruction in english version.
3. Technical Manual with details instruction in english version.
4. Circuit diagram with details instruction in english version.
5. Block diagram with details instruction in english version.
6. Installation instruction manual with details instruction in english version.

1. PATHOLOGY DEPARTMENT

Sl.No.	Item No.	Name of the Instruments with Model No.
1.	1/1,	Drying Oven,inner dimension: 600 X 500 X 500 m. AC 220V, BL-16(s)(ISUzU).
2.	1/2,	Blood Cell Counter, 7 -10075 (ERMA).
3.	1/3,	Hematocrit Contifuge HC)12A (TONY).
4.	1/4,	Haemoglobin Meter (ERMA).
5.	1/5,	Water Bath,BT- 15 (YAMATO).
6.	1/8,	Burker-turk's Counting Chamber, 03-303-1 (ERMA).
7.	1/6,	Barker Electric Incubator, FR-14BS (ISUzU).
8.	1/9,	Photo-electric colorimeter AE-22 (ERMA).
9.	1/12	Pipette Shaker, 05-240-0 (ERMA).
10.	1/13,	PH-Meter HM-20E (TOHA).
11.	1/14,	Hand protein refractometer (Albuminometer),Model)D (04-650-0) (ERMA).
12.	1/15,	Magnetic Stirrer, M-41 (YAMATO).
13.	1/16,	Direct reading Blance,C-3-200(CHO).
14.	1/17,	Clinical rotater with concavity, 7-10105(Cat No.2210) (ERMA).
15.	1/19.	Thermomiker,7-17781 (KAYAGAKI).
16.	1/20,	Blood Cell Calculator, 12 Keys 7-10092 (ERMA).
17.	1/21,	Ultra low temperature cabinet, 7-17728 (YN-80-1) (KATOMAN).
18.	1/23,	Automatic Pure Water apparatus 5 litre,W1-21- AS-31A (YAMATO).
19.	1/27,	Electrophoresis equipment with deneritometer S et A. No. 238 + MICON 20 (JOKO).
20.	1/30,	Blance 16g,PT4-160D (CHO).
21.	1/32,	Low temperature Microbiological Incubator 7-17707(2-2300)(ISUzU).

2. MEDICAL (MALE & FEMALE).

SL.No.	Item No.	Name of the Instruments with Model No.
1.	2/5,	1-Channel Electrocerdiograph, IE-22 (SANEI).
2.	2/10,	Refrigerator Capacity 28 3L-SR-324 NF (SANYO).
3.	2/11,	Suction Unit,Low Presure Continuous Suction, 7-16688(MSP-210)(MIZUHO).
4.	2/20,	Portable Suction Unit,7-16687(AIKA).
5.	2/24,	Auto Spirometer,7-10173,(HI-498) (CHESY).

3. FEMALE PATIENT GYNAECOLOGY DEPRATMENT.

1.	3/31,	Gynaecological Examination Unit, GU-100(NAKAMURA).
2.	3/2,	Kymographic Insuflation apparatus CM-5835 (ATOM).
3.	3/4,	Doppler Fetus Dector, UD-30(TOITU).
4.	3/5.	Sperm &Mucus Test Set (ATOM).
5.	3/28,	Babu Incubator (Neo-natal) H-800 PS (NAKAMURA).

4.SURGICAL (MALE& FEMALE)DEPARTMENT.

1.	4/8,	Tourniquet,7-11701, (MURANAKA).

5)OBSERVATION DEPARTMENT.

1,	5/2,	Electric Suction Unit, 7-16677 (No-103)(ASAHI).

6.FAMILY PLAN & SKIN(MALE & FEMALE.

1.	6/11,	Medical Ultraviolet Ray Irradiation Unit, 7-12766(No.372-SS).(SANAE.)
2.	6/14,	Electric Surgical Knife, TRC-500 SS (TOKYO).
3.	6/15,	Super Speed dremal grinding Unit, G-383 (KEISET).

contd.....

Sl.No.	Item No.	Name of the Instruments with Model No.
4.	6/16,	Ultraviolet Alpin Sun Lamp, 7-12765(No.374) (SANAE.)
5.	6/17,	Infraved Therapy Lamp, 7-12770 (No.1781) (SANAE).

7. E? N. T. (MALE & FEMALE) DEPARTMENT.

1.	7/1,	E. N. T.Treatment Unit,one side type,Model Noble(FIRST).
2.	7/2,	One-Jackson's Endoscope set A-Type (FIRST).
3.	7/3,	Headmirror with fiber,headbend Mirror size dia 8.2 o.m. 7-13500, (WAKO).
4.	7/42,	Electric Cautery, Small size, MIC-4727,MIC-4722-4.(FIRST).
5.	7/46,	Audiometer,7-13627 (NAGASHIMA).

8. PHYSIOTHERAPY(MALE,FEMALE)DEPRATMENT.

1.	8/1,	Traction for one patient,7-12746 Reference only,(FUUNDO).
2.	8/2,	Ultra Short Wave Therapy apparatus,
3.	8/3,	Low Frequency Therapy apparatus, 7-12759(Yet-201) (YAESU).
4.	8/4,	Hydrocollator Heating Unit, 7-12734 (PE-26A) (YAESU).
5.	8/8,	Pinch Meter,FP-3D (YAESU).

9. EYE (MALE? FEMALE)DEPARTMENT

1.	9/5,	Projection Perimeter hand Operated Instrument ¥ Table,SBP-20(TOPCON).
2.	9/7,	Binocular Indirect Opthalmoscope with condensing lens, 20D,30D,ID -5 (TOPCON).
3.	9/28,	Rectifier (For Colia Electrolysis) with cilia Electroysis needle, Complete with Electrode,6-13203+ 6-13204.

opntd.....P/4

10. CHILD AND INOCULATION.

Sl.No.	Item No.	Name of the Instruments with Model No.
1.	10/16,	Oxygen Hood, 7-16446 (MURANAKA).
2		

11. OPERATION THEATRE

1.	11/1,	Fully Hydraulic Operation Table Model M-700 (SANKO).
2.	11/2,	Anesthetic
3.	11/3,	Electric Surgical Unit E-11R (SENKO).
4.	11/4,	Operation Binocular Microscope (OMU)(NETZ).
5.	11/5,	Oil Hydralic operatio
6.	11/6,	Artery Tourniquet 7-11519 (ACOMA).
7.	11/16,	Operating light No 7020 KS (DIAKO).
8.	11/21,	Emergency Ventilator, 7-11519 (ACOMA).
9.	11/27,	Portable Defebrilator 3 mo 1,(SANEI).
10.	11/28,	Portable E.C.G. Logos 8821,(MURANAKA).
11,	11/29,	Ventilator/Respirator, KE-101(KIMURA)
12,	11/30,	Blood Gas Analyzer, AVL-939(ACOMA).

15. AUTOCLAVE & LINEN ROOM.

1.	15/1,	Series Large Steam Sterilizer (Horizontel)SRSPII 556+80-200 (UDONO + SAMSON).
2.	15/2,	Serise Smell Steam Sterilizer, S-9PN. (TOMY).
3.	15/3,	Hot air Sterilbzer,CM-15(s).

16. RECOVERY ROOM.

1.	16/2,	Respirator,KE-101 (KIMIRA).

17. INTENSIVE CARE.

1.	17/3,	Respirator,KE-101 (KIMURA).

contd.....P/5

Sl.No.	Name of item	Name of the Instruments with model No.
2.	17/4	Oxygen analyzer,7-15181, (EO-150) (MAKAMURA)
3.	17/15	Tourniquet, 7-11701(MURANAKA)
4.	17/18	Besides patients monitor 2E31A(SANEI)
5.	17/19	Defibrilator,3MO1(SANEI)
6.	17/21	ECG, Mechine Battery operated 7-10204 2E22(SANEI)
7.	17/23	Portable Defibrillator 30MO1(SANEI)
8.	17/9	Ultrasonic Nebulizer apparatus 7-16514(ATOM)
	18. CABIN PATIENT	
1.	18/7	Untrasonic nebulizer apparatus, 7-16516(SANEI)
2.	18/9	Refrigerator capacity 283-litre, SR 324NF
3.	18/10	1-Channel Direct writting Electro-cardiograph, 7-10200(1E21(SANEI)
4.	18/16	Tourniquet,7-11701(MURANAKA)
	20. PLASTIC SURGERY	
1.	20/19	Electric Dermatome 7-12691(MURANAKA)
	19. X-RAY ROOM	
1.	19/1	X-Ray Generator and Controller set ED 125L *Short time ratings:300 MA at 125KV. 500MA at 100KV. *Continuous ratings 4MA at 120 KV.(SHIMADZU)
2.	19/2,	Radiographic/Fluoroscopic Table,YS-1B *Tilting Range: 90:/ -15 *Travel Range : Max. 500 mm from head end. *with bucky device,foot rest, hand grips,compression belt, spot film device & colliator, (SHIMADZU).

contd.....p/6

Sl.No.	Name of item	Name of the Instruments with model No.
3.	19/3,	X-Ray tube for Table,Cirolex 0.5/1, 5U1 3BN-25 with HT cable 6m and cooling fan (SHIMADZU).
4.	19/4,	7"image intensifier,1A7-3-2X and Television, XT 900 AC with monitor chart (MITSUBISHI).
5.	19/5,	X-Ray tube stand,FH-21 with collimator R-20.(SHIMADZU).
6.	19/6,	X-Ray tube for tube stand,Cirolex 1/2 U & 13BN-25 with HT Cable 8m (SHIMADZU).
7.	19/7,	Photoptimer,SCT-C10 with Chamber, SPT-DF-01,for Spot film device, (SHIMADZU).
8.	19/8,	Lieder'e cassette Radiographic Stand,JMC 7-16123 (Atype) (SHIMA DZU).
9.	19/10.	Tomo attechment,PF-11, (SHIMADZU).
10.	19/OBX1	Protable X-Ray Unit,MC1251-30 Capacbtor discharge type max .tube potential; 125KV capacitor capecitance-1MF MAS: 2to 60MAS (15 step) Cart;e=te Motor driver power requirements: Radiographic 250V 50HZ, AC single phase 2KVA,Battery Charging: 230V 50HZ. AC Single phase 0.7KVA.
	21.ORTHOPEDIC DEPARTMENT.	
1.	21/12,	Hip mating accessorise,(YAESU).
	22. DENTAL DEPARTMENT.	
1.	22/15,	Dental Unit/Chair,Unity-2000 (SANWA?HORIGUCHI,YOSHIDA).
	23. ENDOSCOPY DEPARTMENT.	
1.	23/1,	Upper G.I.Endoscopy FGI. SD-50(MACHIDA)
2.	23/2	Signoidefiberscope FSC-S50(MACHINDA)
3.	23/3	Bronchoscope FBS-6T2(MACHIDA)
4.	23/5	Light source(coldlight supply) RM-300J(MACHIDA)

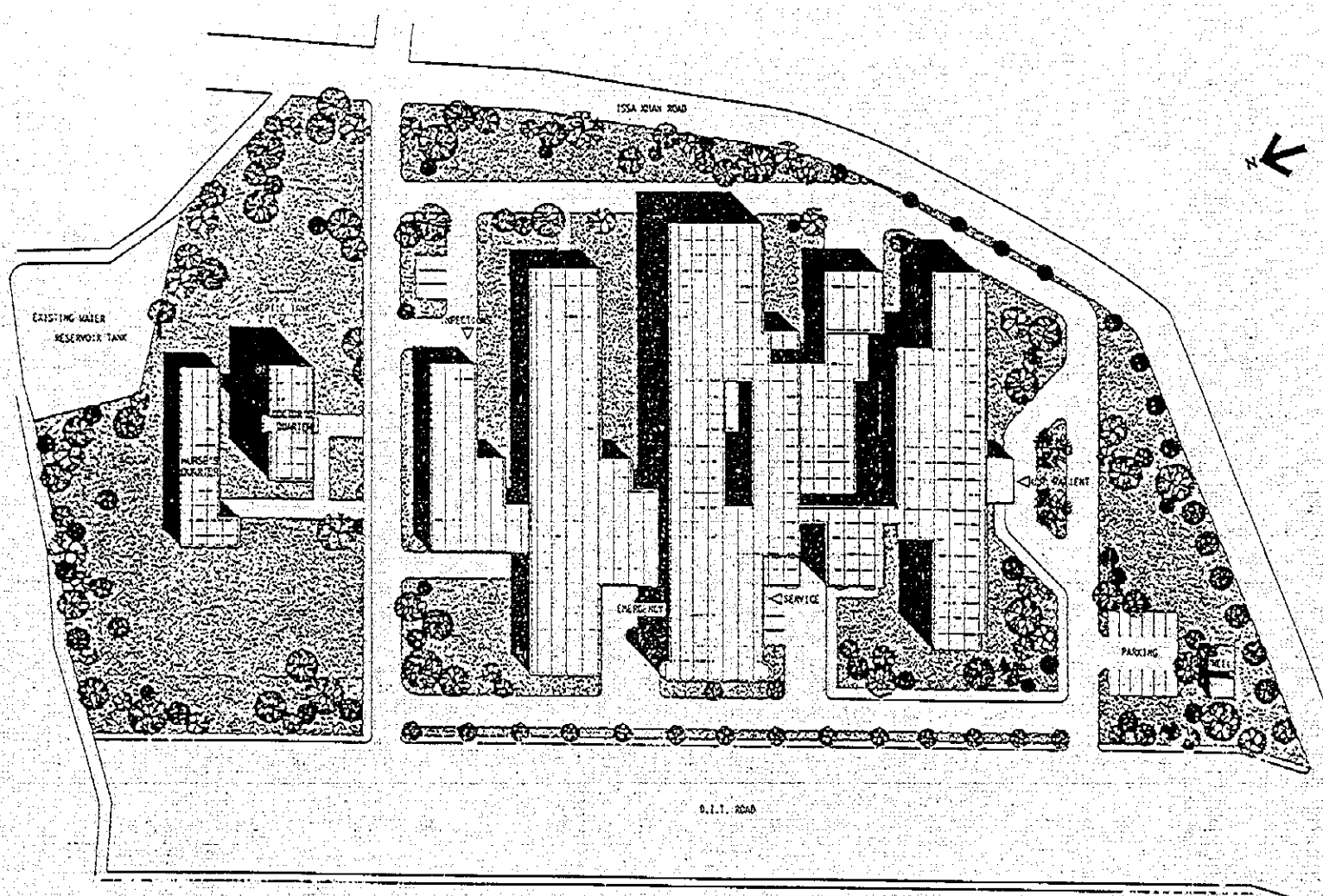
III　その他の資料

III－1　ナラヤンガンジ総合病院基本設計抜粋

5－8　基本設計図

5－8－1.　部門別面積表（ナラヤンガンジ総合病院）

部門別	各部、各室	面積	部門別面積	部門別比率
病棟	一般病棟(190床)	2,732.49㎡		
	伝染病棟(10床)	299.00	3,031.49㎡	37.6%
外来診療部	外来診療	1,017.00	1,017.00	12.6%
中央診療部	救急診療	152.56		
	生理検査	42.75		
	内視鏡検査	62.75		
	放射線診療	174.00		
	臨床検査	144.00		
	中央手術部	375.50		
	分娩部	216.00		
	採血、血液保存	67.50		
	薬剤部	75.00		
	中央材料部	54.00	1,364.06	16.9%
管理部	一般事務室	144.00		
	医事管理諸室	270.00		
	ナースロッカー室	72.00		
	職員食堂	78.00		
	剖検霊安	90.63	654.63	8.1%
サービス部	厨房	221.30		
	洗濯部	118.75		
	中央倉庫	76.60		
	機械室	300.50	717.15	8.9%
共用	廊下、ホール	1,273.04	1,273.04	15.9%
小計		8,057.37	8,057.37	100.0%
医師・インターン仮泊所		471.00		
看護婦仮泊所		295.44		
小計		766.44	766.44	
合計		8,823.81	8,823.81	



THE GENERAL HOSPITAL IN NARAYANGANJ

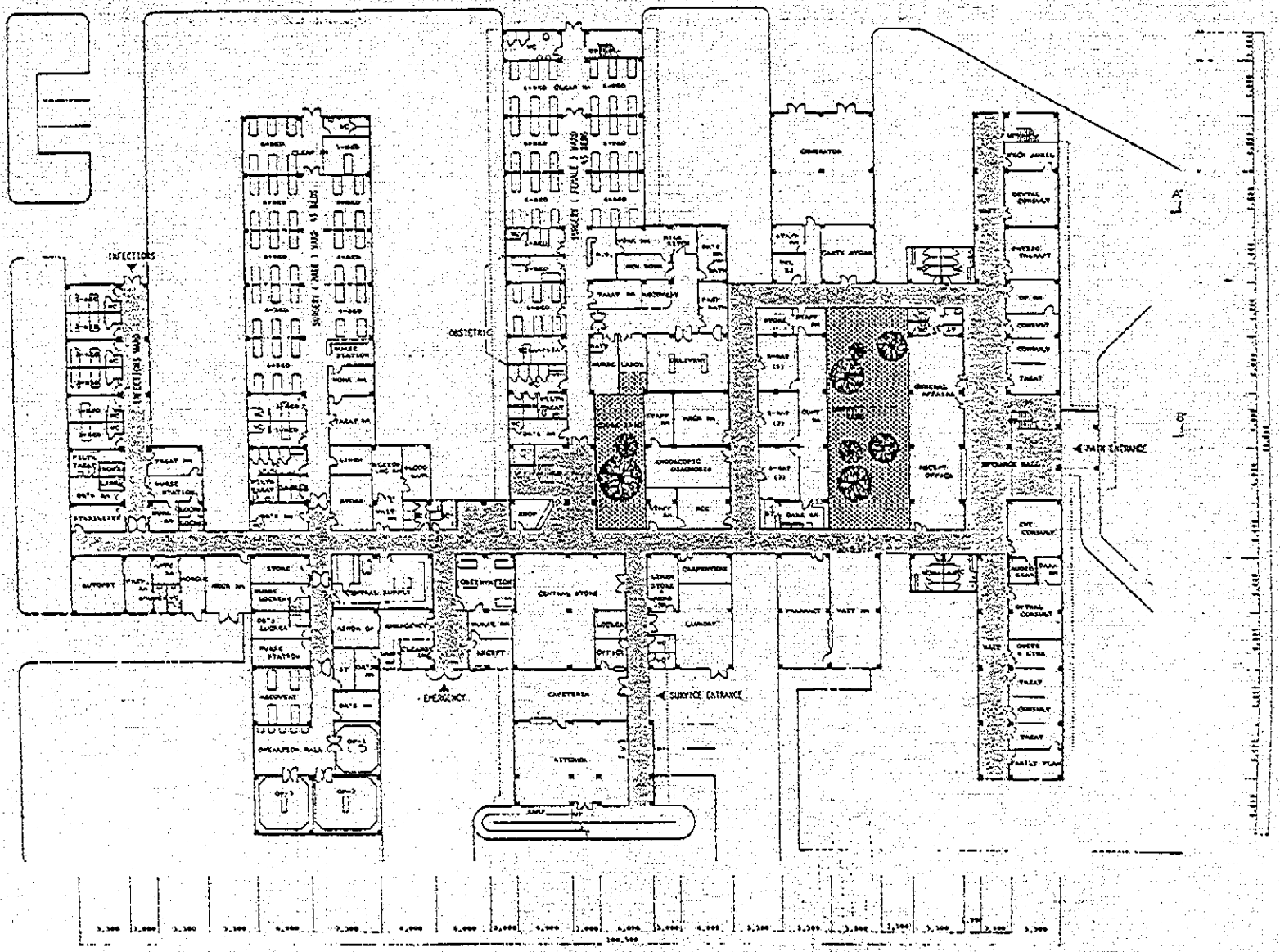
SITE PLAN

S=1:800

1 10 20 40M

01

A-143



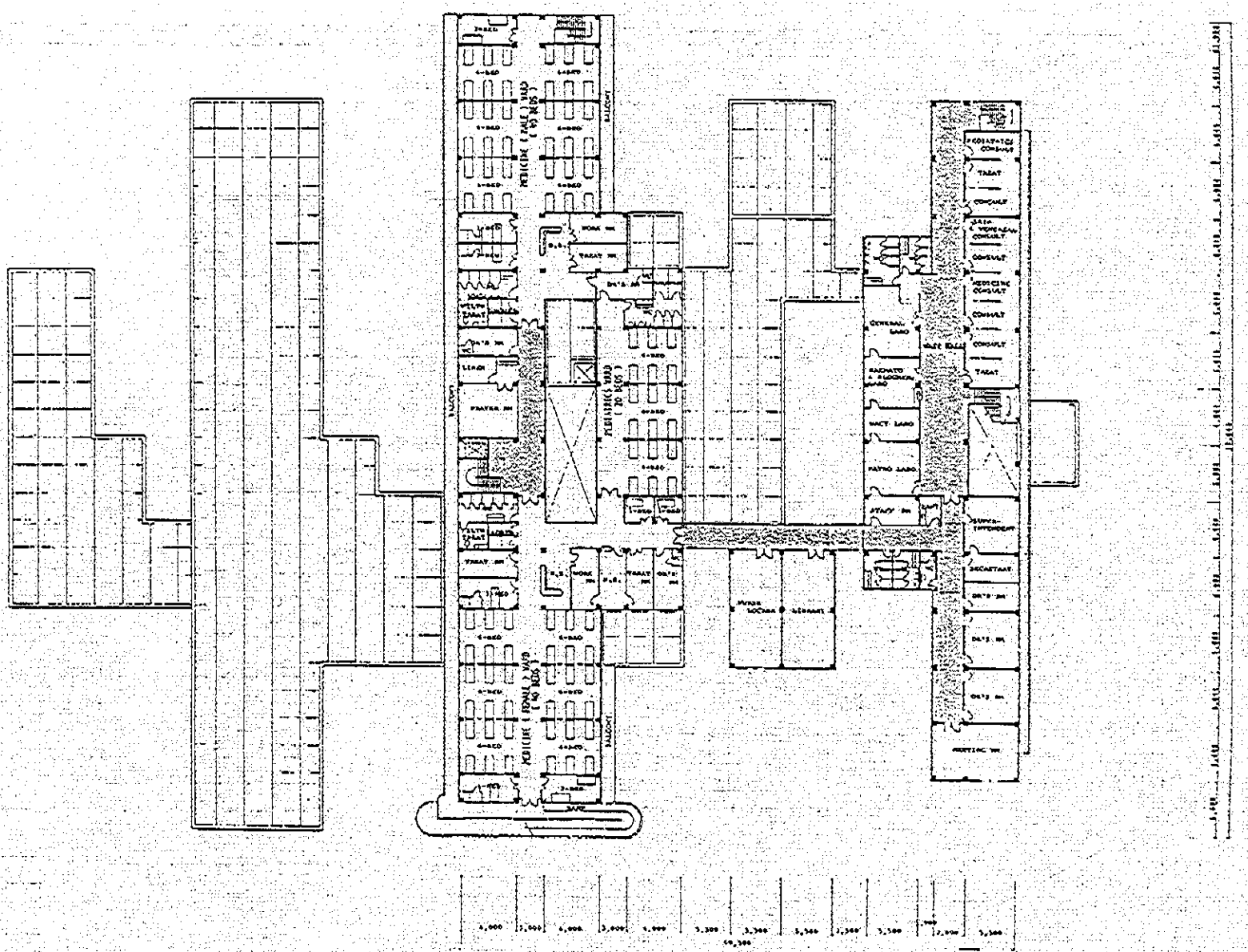
THE GENERAL HOSPITAL IN NARAYANGANJ

GROUND FLOOR PLAN

S-1:400

A-144

02



THE GENERAL HOSPITAL IN NARAYANGANJ — FIRST FLOOR PLAN

S=1:400 A-145

1 5 10 20M

03

III－2　ナラヤンガンジ総合病院納入機材リスト

MEDICAL EQUIPMENT LIST FOR

THE GENERAL HOSPITAL IN

NARAYANGANJ

SECTION 2 EQUIPMENT LIST

(A) OUTPATIENT DEPARTMENT

(A1) INTERNAL MEDICINE

Item No.	Item	Manufacturer	Model	Quantity	Room Area
A1-1	Doctor's Consulting Desk	N.Mohammad & Sons		4	(207-1/2/3/4)
A1-2	Doctor's Consulting Chair	N.Mohammad & Sons		4	(207-1/2/3/4)
A1-3	Examining Table	N.Mohammad & Sons		4	(207-1/2/3/4
A1-4	Treatment Table	N.Mohammad & Sons		1	(206)
A1-5	Film Illuminator	Tosiba Medical	(P-52)	4	(207-1/2/3/4
A1-6	Diagnostic Instrument Set	NIchii		4	(207-1/2/3/4
A1-7	Diagnostic Set	Neitu	(BX-12345)	4	(207-1/2/3/4
A1-8	Clothes Basket	N.Mohammad & Sons		5	(207-1/2/3/4 (206)
A1-9	Sphygmomanometer	Yanase	(No.4305)	4	(207-1/2/3/4
A1-10	Instrument Table	Sanko	(SR-33B)	1	(206)
A1-11	Arm Rest	N.Mohammad & Sons		1	(206)
A1-12	Single Basin Stand	Sanko	(SQ-11C & 10)	3	(207-2/208)
A1-13	Irrigator Stand	Sanko	(SM-3B)	1	(206)
A1-14	Waste Receptacle	Sanko	(SQ-13B)	2	(206/208)
A1-15	Instrument Cabinet	Sanko	(ST-313)	1	(206)
A1-16	Instrument Sterilizer	EMI	(TE-1000M)	1	(206)
A1-17	Automatic Weighing Scale	Tsutsumi	(AH)	1	(206)
A1-18	Urological Examining and Treatment Table	Takei	(UT-1110)	1	(208)
A1-19	Instrument Cabinet	Taiho	(ST-312)	1	(208)
A1-20	Urological Examining and Treatment Set	Takei		1	(208)
A1-21	Human Wall Chart	Kyoto Scientific		1	(208)

(A2)SURGERY

Item No	Item	Manufacturer	Model	Quantity	Room Area
A2-1	Doctor's Consulting Desk	N.Mohammad & Sons		2	(010-1/2)
A2-2	Doctor's Consulting Chair	N.Mohammad & Sons		2	(010-1/2)
A2-3	Examining Table	N.Mohammad & Sons		3	(009/010-1 (018-2)
A2-4	Film Illuminator	Toshiba Medical	(P-52)	2	(010-1/2)
A2-5	Diagnostic Instrument Set	Nichii		2	(010-1/2)
A2-6	Rectal Speculum Set	Yanase		2	(011)
A2-7	Minor Surgical Set	Nakamura		3	(011)
A2-8	Shygmomanometer	Yanase	(No.4305)	2	(010-1?2)
A2-9	Arm Rest	N.Mohammad & Sons		1	(009)
A2-10	Single Basin Stand	Sanko	(SQ-11C & 10)	2	(010-2/011)
A2-11	Waste Receptacle	Sanko	(SQ-13B)	1	(011)
A2-12	Instrument Cabinet	SAnko	(ST-313)	1	(009)
A2-13	Instrument Sterilizer	Emi	(TE-1000M)	1	(009)
A2-14	Instrument Tray Table	Sanko	(SR-43B)	1	(011)
A2-15	Operating Table	Kakinuma	(K-70B)	1	(011)
A2-16	Auxiliary Operating Light	Yamada	(331-C)	1	(011)
A2-17	Kick Bucket	Sanko	(SR-50)	1	(011)
A2-18	Sphygmomanometer	Yanase	(No.4306)	1	(011)
A2-19	Instrument Table	Sanko	(SR-33B)	1	(009)
A2-20	Dressing Drum Stand	Sanko	(SS-22B)	1	(011)
A2-21	Foot Stool	Sanko	(SR-18C)	1	(011)
A2-22	Gypsum Dressing Table	N.Mohammad & Sons		1	(011)
A2-23	Gypsum Cutter Set	Yanase	(M-1)	3	(011)
A2-24	Clothes Basket	N.Mohammad & Sons		4	(010-1/009 110-2/011)

(A3) GYNECOLOGY & OBSTETRIC

Item No	Item	Manufacturer	Model	Quantity	Room Area
A3-1	Doctor's Consulting Desk	N.Mohammad & Sons		2	(004-1/2)
A3-2	Doctor's Consulting Chair	N.Mohammad & Sons		2	(004-1/2)
A3-3	Gynecological Examining Table	Nakamura	(GE-3100)	2	(003-1/2)
A3-4	Gynecological Examining Unit	Nakamura	(GU-050)	2	(003-1/2)
A3-5	Foot Stool	Sanko	(SR-19C)	2	(003-1/2)
A3-6	Examining Table	N.Mohammad & Sons		2	(004-1/2)
A3-7	Film Illuminator	Toshiba Medical	(P-52)	2	(004-1/2)
A3-8	Irrigator Stand	Sanko	(SM-3B)	1	(002)
A3-9	Clothes Basket	N.Mohammad & Sons		4	(003-1/2 002-1/004-2
A3-10	Single Basin Stand	Sanko	(SQ-11C & 10)	2	(002-1/004-2
A3-11	Waste Receptacle	Sanko	(SQ-13B)	2	(003-1/2)
A3-12	Instrument Sterilizer	Emi	TE-1000M)	2	(003-1/2)
A3-13	Instrument Cabinet	Sanko	(ST-313)	2	(003-1/2)
A3-14	Doppler Sound Detector	Nakamura	(EF-50)	1	(002)
A3-15	Sphygmomanometer	Yanase	(No.4305)	2	(004-1/2)
A3-16	Automatic Weighing Scale	Tsutsumi	(AT)	1	(002-1)
A3-17	Diagnostic and Treatment Instrument Set	Nakamura		2	(004-1/2)
A3-18	Hysterosalpingography Set	Nakamura	(N-Ideal)	3	(002 003-1/2)
A3-19	Stereo Colposcope	Toitu	(CP-82)	1	(003-2)
A3-20	Amnioscope	Toitu		2	(003-1/2)
A3-21	Examining Light	Yamada	(Kr395-M)	2	(003-1/2)
A3-22	Human & Obstetrical Models	Kyoto Scientific		1	(002)
A3-23	Cabinet	N.Mohammad & Sons		1	(002)
A3-24	Long Table	N.Mohammad & Sons		1	(002)

(A4) PEDIATRIC

Item No	Item	Manufacture	Model	Quantity	Room Ar
A4-1	Doctor's Consulting Desk	N.Mohammad & Sons		2	(209-1/2)
A4-2	Doctor's Consulting Chair	N.Mohammad & Sons		2	(209-1/2)
A4-3	Examining Table	N.Mohammad & Sons		2	(209-1/2)
A4-4	Treatment Table	N.Mohammad & Sons		1	(210)
A4-5	Film Illuminator	Toshiba Medical	(P-52)	2	(209-1/2)
A4-6	Diagnostic Instrument Set	Nichi		2	(209-1/2)
A4-7	Diagnostic Set	Neitz	(BX-12345)	2	(209-1/2)
A4-8	Sphygmomanometer	Yanase	(No.4305)	2	(209-1/2)
A4-9	Miller's Laryngoscope Set	Nakamura	(142)	2	(209-1/2)
A4-10	Baby Stethoscope	3 M	(3M-2114)	2	(209-1/2)
A4-11	Automatic Weighing Scale	Tsutsumi	(AH)	1	(210)
A4-12	Automatic Infant Scale	Nakamura Medical	(W-20)	1	(210)
A4-13	Pediatric Height Scale	Tsutsumi	(HW)	1	(210)
A4-14	Instrument Table	Sanko	(SR-33B)	1	(210)
A4-15	Arm Rest	N.Mohammad & Sons		1	(210)
A4-16	Single Basin Stand	Sanko Medical	(SQ-11C & 10)	1	(209-1)
A4-17	Waste Receptacle	Sanko	(SQ-13B)	1	(210)
A4-18	Instrument Cabinet	Sanko	(ST-313)	1	(210)
A4-19	Instrument Sterilizer	Emi	(TE-1000M)	1	(210)
A4-20	Napkin Table	N.mohammad & Sons		1	(210)
A4-21	Irrigator Stand	N.Mohammad & Sons		1	(210)
A4-22	Clothes Basket	N.Mohammad & Sons		3	(209-1/2 210)

(A5) E.N.T.

Item No	Item	Manufacturer	Model	Quantity	Room Area
A5-1	Doctor's Consulting Desk	N.Mohammad & Sons		1	(008)
A5-2	Doctor's Consulting Chair	N.Mohammad & Sons		1	(008)
A5-3	E.N.T. Treatment Unit ("New Preerless" Single Sided type)	Nagashima		1	(008)
A5-4	E.N.T. Treatment Chair ("New Columbia" Oil Pump system)	Nagashima		1	(008)
A5-5	Otoscope	Heitz	(345)	1	(008)
A5-6	Film Illuminator	Toshiba Medical	(P-52)	1	(008)
A5-7	Suction Unit	Mizuho Medical	(MSP-205)	1	(008)
A5-8	Nebulizer	Kazama	(MAX-2E)	1	(008)
A5-9	Treatment Table	N.Mohammad & Sons		1	(008)
A5-10	Single Basin Stand	Sanko	(SQ-11C & 10)	1	(008)
A5-11	Waste Receptacle	Sanko	(SQ-13B)	1	(008)
A5-12	Instrument Cabinet	Sanko	(ST-313)	1	(008)
A5-13	Instrument Sterilizer	Emi	(TE-1000M)	1	(008)
A5-14	Audiometer	Nagashima	(MT-3)	1	(007)
A5-15	Iniant Audiometer	Nagashima	(S-II)	1	(007)
A5-16	Long Table	N.Mohammad & Sons		1	(007)
5-17	Diagnostic Instrument Set for E.N.T.	Nagashima	( )	1	(007)

(A6) OPHTHALMIC

Item No	Item	Manufacturer	Model	Quantity	Room Area
A6-1	Doctor's Consulting Desk	N.Mohammad & Sons		1	(005)
A6-2	Doctor's Consulting Chair	N.Mohammad & Sons		1	(005)
A6-3	Examining & Operating Table	N.Mohammad & Sons		1	(005)
A6-4	Eye Treatment Unit	Handaya	(HD-901,1011,1016)	1	(005)
A6-5	Test Chart	Handaya	(HP-1226,HE-941)	1	(005)
A6-6	Trial Lens Set	Inami	(KA-6235)	1	(005)
A6-7	Operating Stool	Marusen	(1104 - 2300)	1	(006)
A6-8	Slit Lamp	Inami	(L-0160)	1	(006)
A6-9	Instrument Table	Inami	(K-1411)	1	(006)
A6-10	Diagnostic & Treatment Set	Inami		1	(005)
A6-11	Instrument Table	Sanko	(SR-33B)	1	(005)
A6-12	Single Basin Stand	Sanko	(SQ-11C & SQ-10)	1	(005)
A6-13	Waste Receptacle	Sanko	(SQ-13B)	1	(005)
A6-14	Instrument Cabinet	Sanko	(ST-313)	1	(005)
A6-15	Instrument Sterilizer	Emi	(TE-1000M)	1	(005)
A6-16	Examining Light	Yamada	(331-C)	1	(005)
A6-17	Screen	N.Mohammad & Sons		1	(005)

(A7) DENTAL

Item No	Item	Manufacturer	Model	Quantity	Room Area
A7-1	Dental Unit	Yosida Dental	(TE-25-1)	2	(013)
A7-2	Dental Compressor	Yosida Dental	(A-10A)	1	(014)
A7-3	Operator Stool	Yosida Dental	(C-19)	2	(013)
A7-4	Dental X-ray Unit	Yosida Dental	(PANPAS-E)	1	(013)
A7-5	Laboratory Equipment	Yosida Dental		1	(014)
A7-6	Autoclave	Yosida Dental	(S-220)	1	(013)
A7-7	Single Basin Stand	Sanko	(SQ-11C & 10)	1	(013)
A7-8	Instrument Cabinet	Taiho	(ST-423)	1	(013)
A7-9	Dental Instrument Set	Japadent		2	(013)

(A8) PHYSIOTHERAPY

Item No	Item	Manufacturer	Model	Quantity	Room Area
A8-1	Special Mat	Yaesu Rehabili	(DY-213A)	2	(012)
A8-2	Portable Walking Parallel Bars	Yaesu	(DY-79A)	1	(012)
A8-3	Wall Stall Bar	Yaesu Rehabili	(DY-203)	1	(012)
A8-4	Electric Traction Equipment	Yaesu	(YET-922)	1	(012)
A8-5	Micro-Wave Therapy Unit	Yaesu Rehabili	(YET-101)	1	(012)
A8-6	Stimulator with Cart	Yaesu Rehabili	(YET-201)	1	(012)
A8-7	Treatment Table	Yaesu Rehabili	(MD-578)	2	(012)

(B) CENTRAL DIAGNOSIS DEPARTMENT

(81) X-RAY ROOM

Item No.	Item	Manufacturer	Model	Quantity	Room Area
81-1	500mA General Radiography X-ray Unit	Toshiba	(KXO-15/DT-BTF)	1	(025-2)
81-2	850mA Radiography/Fluoroscopy X-ray Unit	Toshiba	(KVO-850/DT-KEL)	1	(025-1)
81-3	500mA Tomography X-ray Unit	Toshiba	(KXO-15/LGI)	1	(025-3)
81-4	Mobile X-ray Unit	Toshiba	(KCD-10M-7)	1	(025-3)
81-5	Preventive Control Unit	Toshiba		1	(025-1)
81-6	Tools for Installation and After-maintanance	Toshiba		1	(026)
81-7	X-Ray Film	Dupont		2	(022)
81-8	Developing Tank	Yokoyama	(TX-752)	1	(022)
81-9	X-ray Film Keeping Shelf	N.Mohammad & Sons		5	(025-1/2/3)
81-10	Film Illuminator	Toshiba Medical	(P-52)	1	(022)
81-11	Film Illuminator	Toshiba Medical	(P-53)	1	(026)
81-12	Cassette Pass Box	Toshiba Medical	(P-21S)	1	(025-1)
81-13	Unexposed X-ray Film Storage Box	Toshiba "	(N-3)	1	(022)
81-14	X-ray Accessories	Toshiba Medical		1	(022)
-15	Clothes Basket	N.Mohammad & Sons		3	(025-1/2/3)

(B2) E.C.G. ROOM

Item No	Item	Manufacturer	Model	Quantity	Room Area
B2-1	Doctor's Consulting Desk	N.Mohammad & Sons		2	(045)
B2-2	Doctor's Consulting Chair	N.Mohammad & Sons		2	(045)
B2-3	Examining Table	N.Mohammad & Sons		2	(045)
B2-4	1-Channel Electrocardiograph	NEC San-ei	(1E21)	1	(045)
B2-5	3-Channel Automatic Electrocardiograph	San-ei	(1E-31)	1	(045)
B2-6	Liner Electronic Scan Ultrasonic Tomograph	"	(2H62A)	1	(045)
B2-7	Screen	N.Mohammad & Sons		1	(045)
B2-8	Clothes Basket	N.Mohammad & Sons		2	(045)
B2-9	Instrument Cabinet	Taiho	(ST-312)	1	(045)

(B3) ENDOSCOPIC

Item No	Item	Manufacturer	Model	Quantity	Room Area
B3-1	Gastrointestinal Fiberscope	Machida	(FGI-D50)	1	(046)
B3-2	Gastrointestinal Fiberscope	Machida	(FGI-SD-50)	1	(046)
B3-3	Cold Light Supply	Machida	(PH-150P)	1	(046)
B3-4	Photographic Apparatus for Fiberscope	Machida		1	(046)
B3-5	Endoscope Film Projector	Machida		1	(046)
B3-6	Suction Unit	Mizuho	(MSP-103)	1	(046)
B3-7	Cart for Endoscopes	Machida	(EMI-W)	1	(046)
B3-8	Endoscope Closet	Sanko	(SHK-104)	1	(046)
B3-9	Endoscopic Table	Sanko	(SHK-72B)	2	(046)
B3-10	Oxygen Inhalar Apparatus	Shin-ei	(B3-10)	1	(046)
B3-11	Film Illuminator	Toshiba Medical	(P-52)	1	(046)
B3-12	Rest Table	N.Mohammad & Sons		1	(046)
B3-13	Sphygmomanometer	Yanase	(No.4306)	1	(046)
B3-14	Single Basin Stand	Sanko	(SQ-11C & 10)	1	(046)
B3-15	Foot Stool	Sanko	(SR-18C)	1	(046)
B3-16	Waste Receptacle	Sanko	(SQ-13B)	1	(046)
B3-17	Instrument Cabinet	Taiho	(ST-312)	1	(046)
B3-18	Soap Container	Tonokura		1	(046)
B3-19	Brush Sterilizer	Shin-ei	(SL-15)	1	(046)
B3-20	Clothes Basket	N.Mohammad & Sons		1	(046)

(C) PHARMACY DEPARTMENT

(C1) PHARMACY

Item No	Item	Manufacturer	Model	Quantity	Room Area
C1-1	Prescription Counter	Sakase Kagaku	(H208L)	3	(020)
C1-2	Prescription Counter	Sakase Kagaku	(H-206L)	3	(020)
C1-3	Prescription Counter	Sakase Kagaku	(HS-L)	1	(020)
C1-4	Water Sterilizer	Toyoda	(801AC)	1	(020)
C1-5	Safe for Narcotic Medicine	Kingu	(507)	1	(020)
C1-6	Medicinal Refrigerator	Ebara	(ER-3N)	2	(020)
C1-7	Ice Maker	Hoshizaki	(IM-80J)	1	(020)
C1-8	Working Table	N.Mohammad & Sons		1	(020)
C1-9	Pharmacy Instruments Set	Kayagaki Irika		1	(020)
C1-10	Medicine Balance	Ishida		1	(020)

(C2) BLOOD BANK

C2-1	Blood Bank Refrigerator	Ebara	(BS-3N)	3	(089)
C2-2	Refrigerator	Sanyo	(SR-324NFN)	1	(089)
C2-3	Sphygmomanometer	Yanase	(No.4306)	1	(088)
C2-4	Blood Collecting Table	Kimura Bed	(KC-270 & 23_	1	(088)
C2-5	Blood Donor Instrument Table	Kayagaki		1	(088)
C2-6	Instrument Cabinet	Sanko	(ST-313)	1	(088)
C2-7	Waste Receptacle	Sanko	(SQ-13B)	1	(088)
C2-8	Pipette Shaker	Kayagaki	(KB-3)	1	(089)
C2-9	Centrifuge	Kubota	(KC-25A)	1	(089)
C2-10	Research Microscope	Nippon Kogaku	(MBA314AA)	1	(089)
C2-11	Water Bath	Hirayama	(TR-900L)	1	(089)
C2-12	Blood Examining Instruments Set	Kayagaki		1	(088)
C2-13	Blood Collecting Instruments Set	Kayagaki		1	(088)

(D) WARD DEPARTMENT

(D1) PRIVATE ROOM

Item No	Item	Manufacturer	Model	Quantity
D1-1	2-Crank Catch Bed and Mattress	Marqis	(M-723)	9
D1-2	Bedside Cabinet	N.Mohammad & Sons		9
D1-3	Overbed Table	Marquis	(MC-53)	7

(D2) WARD

D2-1	Patient Bed & Mattress with Safety Sides	N.Mohammad & Sons		156
D2-2	I.V. Hanger Rod	N.Mohammad & Sons		20
D2-3	Ice Bag Hanger	N.Mohammad & Sons		20
D2-4	Bedside Cabinet	N.Mohammad & Sons		162
D2-5	Double Basin Stand	Sanko Medical	(SQ-12C & 10)	5
D2-6	Stretcher	Marquis	(MD-550)	5
D2-7	Orthopedic & Fracture Bed	Maequis	(M-145)	6

(D3) PEDIATRICS

Item No	Item	Manufacturer	Model	Quantity
D3-1	Pediatrics Bed	N.Mohammad & Sons		10
D3-2	Patient Bed & Mattress with Safety Sides	N.Mohammad & Sons		10
D3-3	Bedside Cabinet	N.Mohammad & Sons		20

(D4) FILTH

D4-1	Urine Bag Rack	Sanko Medical	(SQS-308)	5
D4-2	Urinal & Bedpan Rack	Sanko Medical	(SS-95)	5
D4-3	Urinal & Bedpan Sterilizer	Sanko	(SS-9)	2
D4-4	Bedpan	Unicom	(01-100)	40
D4-5	Bedpan	Unicom	(01-101)	10
D4-6	Urinal	Unicom	(01-103)	25
4-7	Urinal	Unicom	(SH-550F)	25

(D5) NURSE STATION

Item No	Item	Manufacturer	Model	Quantity
D5-1	Utility Work Table	Kimura Bed	(KC-381)	5
D5-2	Medicine Cabinet	Nippon Filing	(LBS-406)	5
D5-3	Instrument Cabinet	Sanko Medical	(ST-313)	5
D5-4	Oxygen Tent	Nakamura Medical	(T-3C)	5
D5-5	Dressing Trolley	Sanko Medical	(NO. SQ-50)	5
D5-6	Film Illuminator	Toshiba Medical	(P-52)	10
D5-7	Instrument Sterilizer	Emi Shokai	(TE-1000M)	5
D5-8	Folding Litter	N.Mohammad & Sons		10
D5-9	Automatic Weigning Scale	Tsutsumi	(AT)	5
D5-10	Invalid Walker	Sanko	(SF-34)	10
D5-11	Wheel Chair	Sanko	(SKY-201)	5
D5-12	Wooden Crutches	N.Mohammad & Sons		9
D5-13	Over Bed Cradle	N.Mohammad & Sons		10
D5-14	Over Bed Cradle	N.Mohammad & Sons		5
D5-15	Treatment Table	N.mohammad & Sons		5
D5-16	Instrument Table	Sanko	(SR-33B)	5
D5-17	Linen Hamper	Sanko	(SQ-16)	5
D5-18	Single Basin Stand	Sanko	(SQ11C & SQ-10)	5
D5-19	Waste Receptacle	Sanko	(SQ-13B)	5
D5-20	Sphygmomanometer	Yanase	(No.4305)	10
D5-21	Refrigerator	Sanyo	(SR-324NFN)	5
D5-22	Diagnostic Instrument Set	Nakamura Medical		10
D5-23	Treatment Instruments Set	Emi Shokai		10
D5-24	Oxygen Innalar Apparatus	Shin-ei	(B3-10)	10
D5-25	Electric Suction Unit	Mizuho	(MSP-207M)	5
D5-26	Low Pressure Continuous Suction Unit	Mizuho	(MSP-210)	2
D5-27	Ultrasonic Nebulizer with Cart	Nakamura	(U-3B)	5

(E) INFECTION DEPARTMENT

(E1) WARD

Item No	Item	Manufacturer	Model	Quantity
E1-1	Patient Bed & Mattress with Safety Sides	N.Mohammad & Sons		10
E1-2	Bedside Cabinet	N.Mohammad & Sons		10

(E2) FILTH

E2-1	Urinal & Bedpan Rack	Sanko Medical	(SS-95)	1
E2-2	Urinal & Bedpan Sterilizer	Sanko Medical	(SS-9)	1
E2-3	Bedpan	Unicom	(01-100)	4
E2-4	Urinal	Unicom	(01-103)	3
E2-5	Urinal	Unicom	(SH-550F)	3
E2-6	Urine Bag Rack	Sanko Medical	(SQS-306)	1

(E3) NURSE STATION

Item No	Item	Manufacturer	Model	Quantity	Room Area
E3-1	Utility Work Table	Kimura Bed	(KC-381)	1	
E3-2	Medicine Cabinet	Nippon Filing	(LBS-406)	1	
E3-3	Instrument Cabinet	Sanko Medical	(ST-313)	1	
E3-4	Oxygen Tent	Nakamura Medical	(T-3C)	1	
E3-5	Dressing Trolley	Sanko Medical	(SQ-50)	1	
E3-6	Film Illuminator	Toshiba Medical	(P-52)	2	
E3-7	Instrument Sterilizer	Emi Shokai	(TE-1000M)	1	
E3-8	Folding Litter	N.Mohammad & Sons		1	
E3-9	Automatic Weighing Scale	Tsutsumi	(AT)	1	
E3-10	Treatment Table	N.Mohammad & Sons		1	
E3-11	Instrument Table	Sanko Medical	(SR-33B)	1	
E3-12	Linen Hamper	Sanko Medical	(SQ-16)	1	
E3-13	Single Basin Stand	Sanko Medical	(SQ-11C & SQ-10)	1	
E3-14	Waste Receptacle	Sanko Medical	(SQ-13B)	1	
E3-15	Sphygmomanometer	Yanase	(No.4305)	2	
E3-16	Refrigerator	Sanyo	(SR-324NFN)	1	
E3-17	Diagnostic Instrument Set	Nakamura Medical		1	
E3-18	Oxygen Inhalar Apparatus	Shin-ei	9B3-10)	2	
E3-19	Electric Suction Unit	Mizuho	(MSP-207M)	1	
E3-20	Ultrasonic Nebulizer with Cart	Nakamura	(U-3B)	1	

(E4) STERILIZING

E4-1	Steam Sterilizer	Sakura	(FA-360DE)	1	(108)
E4-2	Bowl Sterilizer	Sakura	(ES-60E)	1	(108)
E4-3	Working Table	Sanko	(SQ-150-2)	1	(108)

(F) DELIVERY DEPARTMENT

(F1) DELIVERY ROOM

Item No	Item	Manufacturer	Model	Quantity	Room Area
F1-1	Operating Light	Yamada	(Kr22-EL)	2	(047)
F1-2	Delivery Table	Nakamura Medical	(GD-A)	2	(047)
F1-3	Vacuum Extractor	Nakamura Medical	(GT-6)	1	(047)
F1-4	Automatic Resuscitator	Nakamura Medical	(S-500)	1	(047)
F1-5	Suction Unit	Shin-ei	(CD-1500)	1	(047)
F1-6	Film Illuminator	Toshiba Medical	(P-52)	1	(047)
F1-7	Sphygmomanometer	Yanase	(No.4306)	2	(047)
F1-8	Infant Dressing Table	N.Mohammad & Sons		1	(047)
F1-9	Automatic Infant Scale	Nakamura Medical	(W-20)	1	(047)
F1-10	Infant Height Scale	Tsutsumi	(HW)	1	(047)
F1-11	Instrument Table	Sanko Medical	(SR-33B)	2	(047)
F1-12	Kick Bucket	Sanko Medical	(SR-50)	2	(047)
F1-13	Instrument Tray Table	Sanko Medical	(SR-43B)	2	(047)
F1-14	Single Basin Stand	Sanko Medical	(SQ-11C & SQ-10)	1	(047)
F1-15	Instrument Cabinet	Sanko Medical	(ST-313)	1	(047)
F1-16	Water Sterilizer	Toyoda	(TSS-802STO	1	(047)
F1-17	Soap Container	Tonokura		1	(047)
F1-18	Brush Sterilizer	Shin-ei		1	(047)

(F2) RECOVERY ROOM

F2-1	Recovery Bed	Marquis Bed	(M-520)	2	(049-1)
F2-2	Bedside Cabinet	N.Mohammad & Sons		2	(049-1)

(F3) LABOR ROOM

Item No	Item	Manufacturer	Model	Quantity	Room Area
F3-1	Labor Bed	Sanritu	(202-0102)	2	(048-1/2)
F3-2	Bedside Cabinet	N.Mohammad & Sons		2	(048-1/2)
F3-3	Sphygmomanometer	Yanase	(No.4306)	2	(048-1/2)

(F4) NEW BORN BABY ROOM

F4-1	Bassinet Cart	N.Mohammad & Sons		18	(056)
F4-2	Infant Incubator	Nakamura Medical	(H800Ps)	2	(056)
F4-3	Suction Unit	Shin-ei	(CD-1500)	1	(056)
F4-4	Automatic Infusion Pump	Nakamura	(IVC-650)	2	(056)
F4-5	Irrigator Stand	Sanko	(SM-3B)	1	(056)
F4-6	Infant Warmer	Nakamura	(NIW-200R)	1	(056)
F4-7	Phototherapy Unit	Nakamura	(PT-1600)	1	(056)
F4-8	Instrument Table	Sanko	(SR-37)	1	(056)
F4-9	Sphygmomanometer	Yanase	(No.4306)	1	(056)
F4-10	Baby Stethoscope	3M	(3M-2114)	1	(056)

(F5) MILK KITCHEN

F5-1	Nursing Bottle Warmer	Nakamura Medical	(N-100)	1	(056)
F5-2	Nursing Bottle Sterilizer	Nakamura Medical	(NS-200)	1	(056)
F5-3	Nursery Goods	Yanase		1	(056)

(F6) BATHING ROOM

F6-1	Infant Dressing Table	N.Mohammad & Sons		1	(049-1)
F6-2	Automatic Infant Scale	Nakamura Medical	(W-20)	1	(049-1)
F6-3	Infant Height Scale	Tsutsumi	(HW)	1	(049-1)
F6-4	Instrument Table	Sanko	(SR-33B)	1	(049-1)

(G) OPERATING DEPARTMENT

(G1) OPERATING THEATER

Item No	Item	Manufacturer	Model	Quantity	Room Area
G1-1	Universal Operating Table	Mizuho	(SPL-330)	1	(070-3)
G1-2	Orthopaedic Operating Table	Mizuho	(MOC-142)	1	(070-2)
G1-3	Gynecological Operating Table	Kakinuma	(K80A)	1	(070-1)
G1-4	Operating Light	Yamada	(Kr66-8-51EL)	3	(070-1/2/3)
G1-5	Electro Surgical Unit	Mizuho	(TRC-1000)	3	(070-1/2/3)
G1-6	Suction Unit	Mizuho	(MSP-205)	5	(070-1/2/3)
G1-7	Heartmemory with Mobile Cart	NEC San-ei	(2E26)	2	(070-1/2)
G1-8	Cardiac Monitoring & Resuscitating Apparatus	NEC San-ei	(SMIT)	2	(070-2/3)
G1-9	Film Illuminator	Toshiba Medical	(P-53R)	1	(070-1)
G1-10	Film Illuminator	Toshiba Medical	(P76R)	2	(070-2/3)
G1-11	Instrument Cabinet	Taiho	(ST-C)	3	(070-1/2/3)
G1-12	Water Sterilizer	Toyoda	(TSS-802SU)	4	(070)
G1-13	Soap Container	Tonokura		2	(071)
G1-14	Brush Sterilizer	Shin-ei	(WL-30)	2	(071)
G1-15	Anesthesia Apparatus with Ventilator	Acoma	(PH-3F)	3	(070-1/2/3)
G1-16	Oxygen Gas Cylinder	Sanko		9	(070-1/2/3)
G1-17	Nitrous-oxide Gas Cylinder	Sanko		12	(070-1/2/3)
G1-18	Cylinder Trolley	N.mohammad & Sons		3	(070-1/2/3)
G1-19	Cylinder Stand	N.Mohammad & Sons		2	(071)
G1-20	Accessories & Parts for Anesthesia Apparatus			1	(071)
G1-21	Sphygmomanometer	Acoma		3	(070-1/2/3)
G1-22	Anesthesia Set	Yanase Acoma	(No.4306) (JMC6-11600)	6	(070-1/2/3)
G1-23	Instrument Table	Sanko	(SR-33B)	3	(070-1/2/3)
G1-24	Mayo Instrument Table	Sanko	(SR-42C)	3	(070-1/2/3)
G1-25	Anaesthetist Table	Sanko	(SR-35A)	3	(070-1/2/3)
G1-26	Linen Hamper	Sanko	(SQ-18)	5	(071)
G1-27	Kick Bucket	Sanko	(SR-50)	3	(070-1/2/3)
G1-28	Dressing Drum Stand	Sanko	(SS-22B)	5	(071)
G1-29	Instrument Cabinet	Taiho	(CT-413)	3	(074)
G1-30	Blood Bank Refrigerator	Sanyo	(MBR105D)	1	(071)
G1-31	Stretcher	Marquis	(MD-550)	1	(071)

(G2) RECOVERY ROOM

Item No	Item	Manufacturer	Model	Quantity	Room Area
G2-1	Recovery Bed	Marquis Bed	(M-520)	3	(072)
G2-2	ECG Monitor	NEC San-ei	(2E31A)	2	(072)
G2-3	Transmitter	NEC San-ei	(1422)	1	(072)
G2-4	Automatic Oxygen Resuscitator	Nakamura	(S-300)	1	(072)
G2-5	Automatic Respirator	Acoma	(AR-2000D)	1	(072)
G2-6	Sphygmomanometer	Yanase	(No.506)	3	(072)
G2-7	Suction Unit	Mizuho	(MSP-103A)	1	(072)
G2-8	Low Pressure Continuous Suction Unit	Mizuho	(MSP-210)	1	(072)
G2-9	Ultrasonic Nebulizer with Cart	Nakamura	(U-3B)	1	(072)
G2-10	Instrument Table	Sanko	(SR-33B)	1	(072)
G2-11	Oxygen Tent	Nakamura	(T-3C)	2	(072)
G2-12	Cylinder Troller	N.Mohammad & Sons		1	(072)
G2-13	Waste Receptacle	Sanko	(SQ-13B)	1	(072)

(G3) NURSE STATION

Item No	Item	Manufacturer	Model	Quantity	Room Area
G3-1	Film Illuminator	Toshiba Medical	(P-52)	1	(080)
-2	Instrument Cabinet	Sanko	(ST-313)	1	(080)
G3-3	Observation Table	N.Mohammad & Sons		1	(080)
G3-4	Refrigerator	Sanyo	(SR-324NFN)	1	(080)
G3-5	Diagnostic Instrument Set	Nichi		1	(080)
G3-6	Treatment Instrument Set	Emi		1	(080)
G3-7	Over Bed Cradle	N.Mohammad & Sons		3	(080)
G3-8	Over Bed Cradle	N.Mohammad & Sons		1	(080)
G3-9	Single Basin Stand	Sanko	(SQ-11C & 10)	1	(080)
G3-10	Chair	N.Mohammad & Sons		1	(080)

(G4) C.S.S.D.

Item No	Item	Manufacturer	Model	Quantity	Room Area
G4-1	Large Steam Sterilizer	Sakura	(FOA-24S2PC)	1	(079)
G4-2	Generator for Large Steam Sterilizer	Sakura		1	(079)
G4-3	Water Conditioner	Culligan	(MARK 57)	1	(079)
G4-4	Autoclave	Hirayama	(HC-36Ae)	1	(078)
G4-5	Ultrasonic Cleaner	Sakura	(US-200S)	1	(078)
G4-6	Dryer Tank	Sakura	(US-200D)	1	(078)
G4-7	Tools for Installation and After Maintanance	Various		1	(079)
G4-8	Truck Cart	Sanko	(SQ-11D)	2	(078)
G4-9	Working Table	Sanko	(SQ-150-2)	2	(078)
G4-10	Instrument Cabinet	Taiho	(ST-321A)	3	(079)
G4-11	Operating Instrument Set	Nakamura		5	(079)
G4-12	Obstetrical Instruments Set	Nakamura	(JMC 7-15191)	3	(079)
G4-13	Pediatric Surgical Instrument Set	Nakamura		2	(079)
G4-14	Nasal Sinoplasty Instruments Set	Nagashima		3	(079)
G4-15	Eye Basic Instruments Set	Inami		2	(079)
G4-16	Casarean Incision Set	Nakamura		3	(079)
G4-17	Gynaecological Instrumants Set	Nakamura		3	(079)
G4-18	Orthopedic Operating Set	Mizuho		1	(079)
G4-19	Urological Surgical Basic Set	Emi		3	(079)
G4-20	Common Surgery Instruments	Emi		2	(079)
G4-21	Stainless Instrument	Unicom		2	(079)
-22	Catheter	Yanase		1	(079)
G4-23	Suture & Suture Needle	Nesco Suture		1	(079)
G4-24	Syringe & Needle	Yanase		2	(079)
G4-25	Medical & Health Care Goods	Yanase		2	(079)
G4-26	Rubber Goods	Yanase		2	(079)
G4-27	Staff Wears	Nagai		2	(083-2)
G4-28	Disposable	Yanase		1	(078)
G4-29	Other Sundries	Yanase		1	(078)
G4-30	Sewing Machine	Brother	(701)	1	(083-2)
G4-31	Dressing Drum Cabinet	Taiho	(TE-110A)	1	(078)
G4-32	Dressing Case Cabinet	Taiho	(TE-110B)	1	(078)

(G5) EMERGENCY

Item No	Item	Manufacturer	Model	Quantity	Room Area
G5-1	Doctor's Consulting Desk	N.Mohammad & Sons		1	(076-2)
G5-2	Doctor's Consulting Chair	N.Mohammad & Sons		1	(076-2)
G5-3	Examining Table	N.Mohammad & Sons		1	(076-2)
G5-4	Examining Light	Yamada	(331-C)	1	(076-2)
G5-5	Film Illuminator	Toshiba Medical	(P-52)	1	(076-2)
G5-6	Diagnostic Instruments Set	Nakamura Medical		1	(076-2)
G5-7	Emergency Instruments Set	Shin-ei	(P-103A)	2	(076-2)
G5-8	Minor Surgical Set	Nakamura		2	(076-2)
G5-9	Oxygen Inhalar Apparatus	Shin-ei	(B3-10)	1	(076-2)
G5-10	Sphygmomanometer	Yanase	(No.4306)	1	(076-2)
G5-11	Instrument Table	Sanko	(SR-33B)	1	(076-2)
G5-12	Arm Rest	N.Mohammad & Sons		1	(076-2)
G5-13	Single Basin Stand	Sanko	(SQ-11C & 10)	1	(076-2)
G5-14	Irrigator Stand	Sanko	(SM-3B)	1	(076-2)
G5-15	Waste Receptacle	Sanko	(SQ-13B)	1	(076-2)
G5-16	Instrument Cabinet	Sanko	(ST-313)	1	(076-2)
G5-17	Medicine Cabinet	Nippon Filing	(LBS-406)	1	(076-2)
G5-18	Instrument Sterilizer	Emi	(TE-1000M)	1	(076-1)
G5-19	Stretcher	Marquis	(MD-550)	1	(076-1)
G5-20	Emergency Labo. Instruments	Kayagaki		1	(076-1)

(G6) MINOR OPERATING THEATER

Item No	Item & Description		Model	Quantity	Room Area
G6-1	Operating Table	Kakinuma	(K70B)	1	(077)
G6-2	Operating Light	Yamada	(Kr66-8)	1	(077)
G6-3	Film Illuminator	Toshiba Medical	(P-53R)	1	(077)
G6-4	Suction Unit	Mizuho	(MSP-103A)	1	(077)
G6-5	Electro Surgical Unit	Mizuho	(TRC-1000)	1	(077)
G6-6	Anesthesia Set	Acoma	(JMC 6-11600)	3	(077)
G6-7	Automatic Oxygen Resuscitator	Nakamura	(S-300)	1	(077)
G6-8	Instrument Cabinet	Taiho	(ST-321)	1	(077)
G6-9	Instrument Cabinet	Taiho	(ST-312)	1	(077)
G6-10	Linen Hamper	Sanko	(SQ-18)	1	(077)
G6-11	Kick Bucket	Sanko	(SR-50)	1	(077)
G6-12	Instrument Tray Table	Sanko	(SR-43B)	1	(077)
G6-13	Single Basin Stand	Sanko	(SQ-11C & 10)	1	(077)

(G7) OBSERVATION ROOM

G7-1	Patient Bed & Mattress with Safety Sides	N.Mohammad & Sons		5	
G7-2	I.V. Hanger Rod	N.Mohammad & Sons		5	
G7-3	Ice Bag Hanger	N.Mohammad & Sons		5	
G7-4	Instrument Table	Sanko	(SR-33B)	1	
G7-5	Bedside Cabinet	N.Mohammad & Sons		5	
G7-6	Single Basin Stand	Sanko	(SQ-11C & 10)	1	
G7-7	Waste Receptacle	Sanko	(SQ-13B)	1	
G7-8	Oxygen Innalar Apparatus	Shin-ei	(Oxygen 9)	1	

(H) LABORATORY DEPARTMENT

(H1) GENERAL/HAEXATOLOGY/BIOCHEXICAL

Item No	Item	Manufacturer	Model	Quantity	Room Area
H1-1	Unit Sink	Sanwa	(SMU-555-S)	1	(214-5)
H1-2	Unit Experiment Table	Sanwa	(SMU 527-S)	1	(214-5)
H1-3	Chemical Cabinet	N.Mohammad & Sons		1	(214-5)
H1-4	Unit Experiment Table	Sanwa	(SMU 510 T-S)	2	(214-5)
H1-5	Xulti Flash Xixer	Kayagaki	(MM-2)	2	(214-5)
H1-6	Clinical Refractometer	Atago	(JMC 7-10107	2	(214-5)
H1-7	Laboratory Balance	Isida Scales	(1)	1	(214-5)
H1-8	Centrifuge	Kubota	(KC-25A)	1	(214-5)
H1-9	Binocular Xicroscope	Nippon Kogaku	(MCA210BH)	2	(214-5)
H1-10	Refrigerator	Sanyo	(SR-324NFN)	1	(214-5)
H1-11	Urine Analyzer	Kyoto Daiichi	(MA-4210)	1	(214-5)
H1-12	Central Experiment Table	Sanwa	(SMC 55-S)	1	(214-4)
H1-13	Chemical Cabinet	N.Mohammad & Sons		1	(214-4)
H1-14	Bilirubin Xeter	Eruma	(04-610-0)	1	(214-4)
H1-15	Clinical Rotator	Sakura	(UP-10B)	1	(214-4)
H1-16	Hematocrit Centrifuge	Kubota	(KH-120M)	1	(214-4)
H1-17	Centrifuge	Kubota	(KS-5000P)	1	(214-4)
-18	Pipette Shaker	Kayagaki	(KB-3)	1	(214-4)
H1-19	Research Xicroscope	Nippon Kogaku	(MBA314AA)	2	(214-4)
H1-20	Laboratory Balance	Ishida	(3)	1	(214-4)
H1-21	Deep Freezer	Ebara	(ESU-13)	1	(214-4)
H1-22	Incubator	Hirayama	(FS-60)	1	(214-4)
H1-23	Xulti Flash Xixer	Kayagaki	(MM-2)	1	(214-4)
H1-24	Differential Leucocyte Counter	Eruma	(01-955-0)	1	(214-4)

HI-25	Unit Experiment Table	Sanwa	(SMU-529)	1	(214-4)
HI-26	Unit Sink	Sanwa	(SMU-555-S)	1	(214-4)
HI-27	Central Experiment Table	Sanwa	(SMC 55-S)	1	(214-4)
HI-28	Chemical Cabinet	N.Mohammad & Sons		1	(214-4)
HI-29	Draft Chamber	Sanwa	(FW 120)	1	(214-4)
HI-30	Spectrophotometer	Jasco	(UVIDEC-50)	1	(214-4)
HI-31	Centrifuge	Kubota	(KN-70)	1	(214-4)
HI-32	Multi Flash Mixer	Kayagaki	(MM-2)	1	(214-4)
HI-33	Electrophoresis Apparatus	Jookoo	(CEP-3)	1	(214-4)
HI-34	Densitometer	Jookoo	(20M)	1	(214-4)
HI-35	Refrigerator	Sanyo	(SR-324NFN)	1	(214-4)
HI-36	Water Bath	Hirayama	(TR-900L)	1	(214-4)
HI-37	Electronic Analytical Balance	Simazu Rika	(EB-280-12)	1	(214-4)
HI-38	Flame Photometer	Cornig	(480)	1	(214-4)
HI-39	PH Meter	Horib	(F-8)	1	(214-4)
HI-40	Laboratory Instrupents	Kayagaki		1	(214-4)

(H2) BACTERIOLOGICAL

Item No	Item	Manufacturer	Model	Quantity	Room Area
H2-1	Unit Sink	Sanwa	(SMU 555-S)	1	(214-2)
H2-2	Chemical Cabinet	N.Mohammad & Sons		1	(214-2)
H2-3	Multi Flash Mixer	Kayagaki	(MM-2)	1	(214-2)
H2-4	Refrigerator	Sanyo	(SR-324NFN)	1	(214-2)
H2-5	Water Bath	Hirayama	(TR-900L)	1	(214-2)
H2-6	Electronic Analytical Balance	Shimazu Rika	(EB-280-12)	1	(214-2)
H2-7	Unit Experiment Table	Sanwa	(SMU 527 T-S)	1	(214-2)
H2-8	Unit Experiment Table	Sanwa	(SMU 528 T-S)	1	(214-2)
H2-9	Colony Counter	Eruma	(05-100-0)	1	(214-2)
H2-10	Research Microscope	Nippon Kogaku	(MBA-114BK)	1	(214-2)
H2-11	Incubator	Hirayama	(FS-60)	1	(214-2)
H2-12	Deep Freezer	Sanyo	(MDF0130)	1	(214-2)
H2-13	Laboratory Instruments	Kayagaki		1	(214-2)

(H3) PATHOLOGY

Item No	Item	Manufacturer	Model	Quantity	Room Area
H3-1	Chemical Cabinet	N.Mohammad & Sons		1	(214-1)
H3-2	Central Experiment Table	Sanwa	(SMC 55-S)	1	(214-1)
H3-3	Unit Experiment Table	Sanwa	(SMU 529)	1	(214-1)
H3-4	Refrigerator	Sanyo	(SR-324NFN)	1	(214-1)
H3-5	Laboratory Balance	Ishida	(3)	1	(214-1)
H3-6	Incubator	Hirayama	(FS-60)	1	(214-1)
H3-7	Large Sledge Microtome	Eruma	(08-100-0)	1	(214-1)
H3-8	Specimen Making Instrument Set	Emi	(JMC 7-17470)	1	(214-1)
H3-9	Trinocular Microscope with Photomicrograph	Nippon Kogaku	(MBA314BB/MPC220AA)	1	(214-1)
H3-10	Slide Warmer	Sakura	(PS-2)	1	(214-1)
H3-11	Shaker for Tissue Fixation	Sakura	(VS-21)	1	(214-1)
H3-12	Paraffin Melting Apparatus	Sakura	(PM-400)	1	(214-1)
H3-13	Automatic Tissue Processor	Sakura	(RH-12EPII)	1	(214-1)
H3-14	Laboratory Instruments	Kayagaki		1	(214-1)
H3-15	Unit Sink	Sanwa	(SMU-564)	1	(214-1)
H3-16	Reagent	Kanto Chemical)		1	(214-1)

(H4) STERILIZING

Item No	Item	Manufacturer	Model	Quantity	Room Area
H4-1	Unit Sink	Sanwa	(SMU 573)	1	(214-3)
H4-2	Working Table	Sanko	(SQ-150-2)	1	(214-3)
H4-3	Automatic Distillation Apparatus	Toyo Kagaku	(GS-20)	1	(214-3)
H4-4	Hot Air Sterilizer	Hirayama	(SW-45E)	1	(214-3)
H4-5	Autoclave	Hirayama	(HL-36Ae)	1	(214-3)
H4-6	Wire shelf	Erecta	(MS1220)	1	(214-3)

(H5) AUTOPSY

Item No	Item	Manufacturer	Model	Quantity	Room Area
H5-1	Mortuary Light	Yamada	(290-C)	1	(107)
H5-2	Film Illuminator	Toshiba Medical	(P-53)	1	(107)
H5-3	Autopsy Table	Sanko	(SU-15KS)	1	(107)
H5-4	Mortuary Trolley	Sanko	(SV-50)	1	(107)
H5-5	Suspension Scale	Takashima	(T-130)	1	(107)
H5-6	Suspension Scale Stand	Takashima	(T-130-2)	1	(107)
H5-7	Instrument Table	Sanko	(SR-33B)	1	(107)
H5-8	Instrument Cabinet	Taiho	(ST-411B)	1	(107)
H5-9	Post-Mortem Dissecting Instrument Set	Emi	(JMC 7-17202)	1	(107)
H5-10	Dissecting Board	Takashima	(T-120)	1	(107)

Ⅳ　参考資料一覧

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