



Table of Organization and Equipment for 10-, 20-,  
50-, 250-and 500-Bed Hospitals in Bangladesh:

# Standardization of Medical Equipment

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The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. Toward this end, the SIAPS result areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening financing strategies and mechanisms to improve access to medicines, and increasing quality pharmaceutical services.

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#### Key Words

Bangladesh, medical equipment, maintenance, specifications, organization and equipment, medical devices

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# Contents

<b>Acronyms</b> .....	4
<b>Foreword</b> .....	5
<b>Acknowledgments</b> .....	6
<b>Executive Summary</b> .....	7
<b>Background</b> .....	9
Distribution of Health Facilities .....	9
Primary Level .....	9
Secondary Level.....	10
Tertiary Level.....	10
Definition of the Table of Organization and Equipment .....	10
Definition of Medical Equipment .....	11
Purpose and Objectives.....	11
<b>Methodology</b> .....	12
Limitations .....	13
<b>Key Findings</b> .....	14
Medical Devices Management, Procurement, and Planning .....	14
Installation and Use of Medical Devices .....	14
Medical Devices Management Information System and Inventory Management .....	14
Financing.....	15
Human Resources .....	15
Medical Devices Operation/Handling.....	15
<b>Recommendations</b> .....	16
<b>Way Forward</b> .....	17
<b>References</b> .....	18
Annex A. Standardization of Equipment for 10-Bed Rural Health Center .....	20
Annex B. Standardization of Equipment for 10- and 20-Bed Maternal and Child Welfare Centres .....	22
Annex C. Standardization of Equipment for 50-Bed Primary-Level Hospitals.....	24
Annex D. Standardization of Equipment for 250-Bed Secondary-Level Hospitals.....	27
Annex E. Standardization of Equipment for 500-Bed Tertiary-Level Hospitals.....	37
Annex F. Guide for Users .....	76
Annex G. List of Contributors.....	85
Annex H. Government Order of TOEs .....	91

# Acronyms

<b>BME</b>	biomedical engineer
<b>BMET</b>	biomedical equipment technician
<b>CCU</b>	coronary care unit
<b>CE</b>	civil engineer
<b>CMSD</b>	Central Medical Stores Depot
<b>CSSD</b>	Central Sterile Services Department
<b>DFID</b>	Department for International Development
<b>DGHS</b>	Directorate General of Health Services
<b>DH</b>	district hospital
<b>EMT</b>	electro-medical technician
<b>ENT</b>	ears, nose, and throat
<b>GOB</b>	Government of Bangladesh
<b>HPSP</b>	Health and Population Sector Program
<b>ICU</b>	intensive care unit
<b>IDA</b>	International Development Association
<b>IPD</b>	inpatient department
<b>JICA</b>	Japan International Cooperation Agency
<b>MCH</b>	Medical College Hospital
<b>MCWC</b>	maternal and child welfare centre
<b>MOHFW</b>	Ministry of Health and Family Welfare
<b>MSH</b>	Management Sciences for Health
<b>MSR</b>	medical and surgical requisites
<b>NEMEMW&amp;TC</b>	National Electro-Medical Equipment Maintenance Workshop and Training Centre
<b>NICR&amp;H</b>	National Institute of Cancer Research and Hospital
<b>NINS</b>	National Institute of Neuro-Sciences and Hospital
<b>OPD</b>	outpatient department
<b>OT</b>	operating theatre
<b>PLMC</b>	Procurement and Logistics Management Cell
<b>SIAPS</b>	Systems for Improved Access to Pharmaceuticals and Services
<b>SOP</b>	standard operating procedure
<b>TOE</b>	table of equipment
<b>UHC</b>	upazila health complex
<b>UPS</b>	uninterruptible power source
<b>USAID</b>	US Agency for International Development
<b>WHO</b>	World Health Organization

# Foreword

Items of medical equipment are the most expensive material goods in a health care facility. They have a specific life cycle and require special handling and management. It is therefore very important to ensure a cost effective health management system. It is also essential that medical equipment used by health facilities functions well to ensure high quality service delivery to patients and, ultimately, to promote patient safety.

A standard table of organization and equipment (TOE) is a vital tool for effective health care technology management. However, to date in Bangladesh, tables of equipment have only been developed for 10-, 20-, 50-, 250- and 500-bed health facilities. (Please note that the previous version of this document [September 2015] has been updated to include 500-bed facilities).

This document was developed to ensure that the required manpower, equipment, and infrastructure are available at service delivery points so that a proper plan and budget can be prepared at the start of the fiscal year for the procurement and maintenance of medical equipment. Cost effective health services will also be ensured through use of this standard TOE.

We hope this standard TOE will be helpful to the different components of the procurement and supply management cycles, especially those related to medical equipment, in the Ministry of Health and Family Welfare (MOHFW). This document provides the necessary information for needs-based procurement of medical equipment at each level of health facility and will help to ensure that funds are used effectively and efficiently. At the same time, it will also ensure that patients are given standard health care services in our health facilities.

# Acknowledgments

First, we would like to express our sincere gratitude to the dedicated policy makers in the MOHFW. Also to the following stakeholders: professors, associate professors, and assistant professors at the medical college hospitals; line directors and program managers in the Directorate General of Health Services (DGHS); dedicated managers of the National Electro-Medical Equipment Maintenance Workshop and Training Centre (NEMEMW&TC); civil surgeons, superintendents, and consultants at district hospitals; the director, principals, departmental experts, and clinicians from medical colleges and hospitals; director and dedicated staff of the Central Medical Stores Depot (CMSD), which is the key procurement entity for medical equipment; and the upazila health and family planning officers. We would also like to thank several donor representatives, including Ms. Iffat Mahmud, Operations Officer of Health, the World Bank; Department for International Development (DFID); and the Japan International Cooperation Agency (JICA), who provided their support and contributed to this document through their participation in consensus building workshops for the completion of this assignment.

Finally, the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program would like to express its sincere thanks and appreciation to its short-term international and local consultants for providing international and local perspectives on the standardization of medical equipment.

# Executive Summary

The System for Improved Access to Pharmaceuticals and Services (SIAPS) Program, funded by the US Agency for International Development (USAID) and implemented by Management Sciences for Health (MSH), in collaboration with the Ministry of Health and Family Welfare (MOHFW) developed this Standard Table of Organization and Equipment (TOE) for public health care facilities in Bangladesh under the MOHFW. The goal of this activity is to ensure access to high quality and safe public health services through the standardization and optimal use of medical equipment at all service delivery points as well as their needs-based procurement.

The TOE is intended to be used by the health care system as a national guideline for the planning and standardization of medical equipment at health-facility levels. This document provides tables/standard lists of equipment for 10-, 20-, and 50-bed health facilities at the primary level (Annexes A, B, and C); 250-bed health facilities at the secondary level (Annex D); and 500-bed health facilities at the tertiary level (Annex E).

This work is based on a review and analysis of a wide number of documents published by the World Health Organization (WHO), the Directorate General of Health Services (DGHS) in Bangladesh, and other organizations. It is also based on findings from visits to different levels of hospitals in the Dhaka division (Upazila Health Complex of Kaligonj; Gazipur District Hospital; Dhaka Medical College Hospital; selected specialized hospitals, such as the National Institute of Cancer Research and Hospital [NICR&H], National Institute of Neuro-Sciences and Hospital [NINS], and National Institute of Cardio-Vascular Disease [NICVD]). A series of technical

consultations with clinicians, public health managers, hospital managers, and users were also organized to develop the TOE.

Key findings from site visits were considered during the development of this document, especially regarding the status of equipment at health facilities. For example, it was found that some equipment was not installed and still kept in its original boxes. Approximately 25% of equipment requires repair, while nearly 10% of equipment cannot be used or serviced and should be disposed of. Although a TOE was developed in 2008 under the direction of the DGHS, procurement planning for the upazila and district levels is not done using this document. Other key findings include the lack of skilled biomedical engineers and biomedical technicians, who are urgently needed for the proper management and maintenance of expensive medical equipment, both preventive and curative. As a result of this gap in human resources, management of medical equipment is being conducted largely by medical professionals, and occasionally with the involvement of non-credentialed engineers, ultimately putting the whole process at risk.

It is recommended that the MOHFW make a strategic decision on the acquisition of medical equipment to ensure needs-based procurement planning and use of this approved TOE as a reference document in the planning process. The MOHFW should also make a provision for keeping more Government of Bangladesh (GOB) (revenue) budget or hospital-generated funds for the maintenance of equipment. Recommendations are also made to develop and appoint skilled personnel, such as biomedical engineers and biomedical technicians, for the proper management and maintenance of

biomedical equipment as well as the establishment of a Biomedical/Clinical Engineering Department under the MOHFW. Ensuring the availability of key utilities (e.g., water, gas, ventilation, electricity), the availability of an uninterruptible power supply/uninterruptible power source(UPS) with not less than 30 minutes of back-up, and the availability of an external or stand-by generator should be expanded to critical health facility areas, such as the operating theatre (OT), intensive care unit (ICU), and coronary care unit (CCU), or in all cases where the life of the patient is in danger. Other recommendations include the development of information systems (inventory database, patient database, Radiology Information System [RIS]/Picture Archiving and

Communication System [PACS], etc.) covering both equipment and patients at all health facilities.

To make this TOE more comprehensive, support service departments, such as the central sterile supply department (CSSD), waste management, kitchen, laundry, etc., were also taken into consideration and included in 500-bed health facilities. The human resource component, linking human resource requirements with the standardization of equipment for each level of hospital, will be addressed by the MOHFW with technical assistance from SIAPS. Other key elements of this standard TOE (e.g., specifications database and coding of medical equipment) have been updated by SIAPS as part of this process.



# Background

As in many countries, procurement of medical equipment is a major part of public sector health investment in Bangladesh. It therefore requires close monitoring. Well-functioning medical equipment is essential for the provision of effective and efficient health services. To strengthen the different components of the procurement and supply management cycles in the MOHFW, especially for medical equipment, an assessment of the current status of medical equipment and its management was conducted by studying a representative sample of equipment supplied under the Health and Population Sector Program (HPSP) during the period 2000 to 2005. The assessment (Bangladesh Medical Equipment Survey 2008) was funded by the International Development Association (IDA) and the Multi-Donor Trust Fund (MDTF) managed by the World Bank, and was conducted by Simed International. One of the key findings of the assessment was that only 50% of equipment supplied during the period 2000 to 2005 under the HPSP was effectively used at its final destination. The main reasons for ineffectiveness noted included: the lack of a comprehensive equipment planning; failures in the delivery system; the absence of adequate maintenance; and a combination of these factors. The assessment included recommendations, one of which was to develop and apply a standard TOE for all levels of health service delivery. Based on this recommendation, the Directorate General of Health Services (DGHS) took the initiative and drafted TOEs in 2008 for 20-, 100-, 150-, 200-, 250- and 500-bed hospitals.

In 2012, Simed International conducted another study that covered equipment supplied during the period of 2006 to 2011 under the Health, Nutrition and Population Sector Program. According to this study's findings, a Medical Technology Department at the MOHFW was proposed to be established along with updating the existing TOEs (which had been drafted by the DGHS) for hospitals with 10, 20,

31, 50, 100, 250, and 500 beds. Following this, in a meeting on September 22, 2013, with the Honorable Minister for Health and Family Welfare, SIAPS was asked to update the standard TOE for the MOHFW. This matter was subsequently discussed at the development partners meeting held in January 2014, and was included in the follow up Action Plan of the "Bangladesh Medical Equipment Survey 2012" facilitated by the World Bank. As the MOHFW proceeded strategically to upgrade and standardize primary- and secondary-level health facilities, there would be only 50-bed hospitals for the primary level and 250-bed hospitals for the secondary level. Finally, it was decided that SIAPS would develop a TOE for 50-bed health facilities at the upazila (sub-district) level, 250-bed facilities at the district level, and also 500-bed and above for Medical College Hospitals (teaching). Later, the MOHFW requested SIAPS to include 10- and 20-bed facilities to cover rural health centers under the DGHS and maternal and child welfare centres (MCWCs) under the Directorate General of Family Planning.

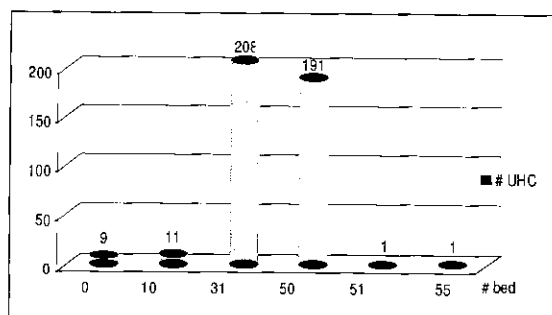
## Distribution of Health Facilities

There are three tiers of health care facilities in Bangladesh:

- Primary level or upazila health complex
- Secondary level or district hospital
- Tertiary level or Medical College Hospital

## Primary Level

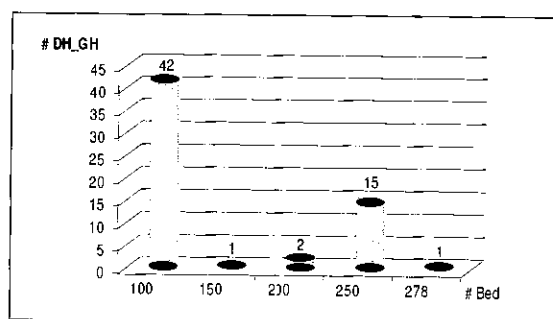
The primary-level hospitals are managed by a director of primary health care under the administrative control of the DGHS. The total number of primary-level hospitals is 421. The number of beds ranges from 0 to 55. The distribution of primary-level healthcare facilities and their number of beds are shown in figure 1.



**Figure 1: Distribution of primary-level hospitals and their number of beds**

## Secondary Level

The number of healthcare facilities at the secondary level is 61. The number of beds at this level varies, ranging from a low of 100 to a high of 278. The distribution of secondary-level healthcare facilities and their number of beds are shown in figure 2.

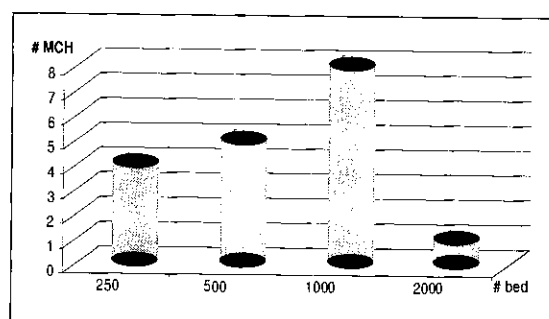


**Figure 2. Distribution of secondary-level facilities and their number of beds**

## Tertiary Level

Tertiary-level healthcare facilities provide various medical treatments, the types of which are dependent on the number of beds available.

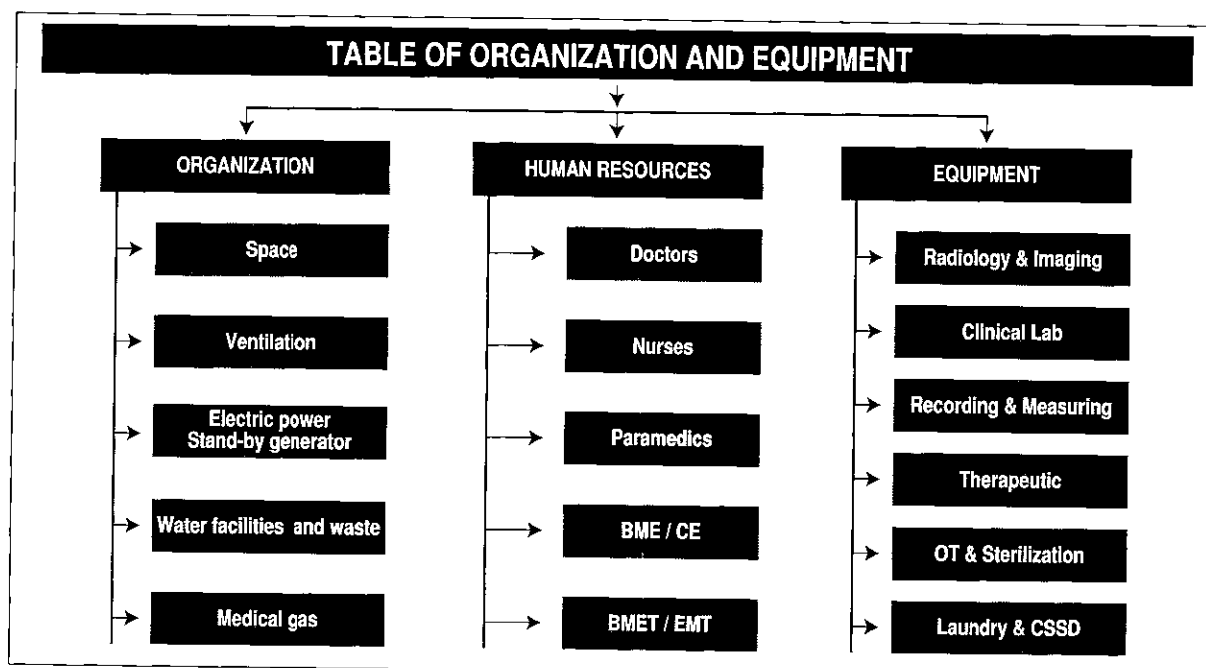
There are 18 tertiary-level health facilities. The number of beds ranges from 250 to 2,000. Figure 3 shows the distribution of tertiary-level healthcare facilities and their number of beds.



**Figure 3. Distribution of tertiary-level facilities and their number of beds**

## Definition of the Table of Organization and Equipment

In general terms, the table of organization and equipment is defined as the integration of infrastructure, utilities, human resources, and essential medical equipment for the standard functioning of healthcare facilities, as shown in figure 4.



**Figure 4. Table of organization and equipment**

## Definition of Medical Equipment

According to the WHO, medical equipment is a medical device that requires calibration, maintenance, repair, user training, and decommissioning, activities which are usually managed by clinical engineers. Medical equipment is used for the specific purposes of diagnosis and treatment of disease or rehabilitation following disease or injury. It can be used either alone or in combination with any accessory, consumable, or other piece of medical equipment. Medical equipment excludes implantable, disposable, or single-use medical devices. There are several basic types of medical equipment, such as diagnostic equipment, therapeutic equipment, life support equipment, medical monitors, medical laboratory equipment, etc.

## Purpose and Objectives

With funding from the US Agency for International Development (USAID), SIAPS facilitated the updating of the MOHFW's TOE and the development of specifications for core medical equipment.

This standard TOE will ensure access to quality and safe public health services through the standardization and optimal use of medical equipment at all service delivery points as well as their needs-based procurement.

The TOE will help to institutionalize needs-based planning and procurement of medical equipment, which will ultimately reduce capital investment in the procurement of new equipment and, hence, introduce a standard medical equipment management system. This document will also help to build the skills and performance of personnel by enabling staff to become more knowledgeable about the range of medical products and, as a result of standardization, thereby reduce variety in the types of equipment procured.

The objective is that this TOE will be used by the national health care system as a guideline for the planning and organization of standard tables of medical equipment according to health facility levels.

# Methodology

To develop a TOE for each level of health facility, it was important to gain an understanding of the current situation regarding medical equipment in the country. SIAPS engaged an international consultant and a local consultant to develop the TOE. First, the consultants reviewed relevant documents of the DGHS, MOHFW, and WHO, as well as the Bangladesh Medical Equipment Surveys of 2008 and 2012 conducted by Simed International. The consultants analyzed data in the 2012 survey, which was available in the DGHS management information system (source: [http://app.dghs.gov.bd/lhb\\_report/](http://app.dghs.gov.bd/lhb_report/)) to develop an inventory of medical equipment at public health facilities at the primary, secondary, and tertiary levels.

The SIAPS team collected detailed information on departments, sections, and human resources at 50-, 100-, 250- and 500-bed health facilities. Documents were reviewed to obtain an understanding of the existing departments, infrastructure, facilities, and sanctioned human resources. The list of departments at 50-, 250- and 500-bed facilities was considered when developing the standardized list of equipment.

The consultants also visited health facilities in each category in the Dhaka division: i.e., Upazila Health Complex of Kaligonj; Gazipur District Hospital; Dhaka Medical College Hospital; and several specialized hospitals (National Institute of Cancer Research and Hospital [NICR&H], National Institute of Neuro-Sciences and Hospital [NINS], and National Institute of Cardio-Vascular Disease [NICVD]). The objective was to gather information on available services and the current set-up. In-depth interviews were conducted with end-users at the selected hospitals to obtain their perspectives on equipment availability, the quality of maintenance, and the

degree of user satisfaction with the equipment. The Central Medical Stores Depot (CMSD) and the National Electro-Medical Equipment Maintenance Workshop & Training Centre (NEMEMW&TC) were included in the review process to learn about their roles in procurement, warehousing, distribution, maintenance, and capacity building related to medical devices.

In addition, a total of 54 procurement contracts containing core medical equipment of the CMSD were analyzed to develop specifications for the medical equipment. A draft TOE was developed based on the study findings, site visits, and inventory report.

The draft document was shared, reviewed, and finalized during different workshops involving a wide range of participants, including directors of hospitals; hospital superintendents/civil surgeons; clinicians/experts from UHCs, DHs, and MCHs; representatives from key DGHS line directorates (e.g., Hospital Service Management, Essential Service Delivery, and CMSD); NEMEMW&TC representatives; members of the Procurement and Logistics Management Cell [PLMC]; staff from the hospital section of the MOHFW; and donors.

For primary/secondary-level health facilities, common disciplines like surgery, anesthesiology, radiology and imaging, cardiology, clinical pathology, gynecology and obstetrics, orthopedics, ophthalmology, dentistry, ENT, and medicine were considered. For tertiary-level health facilities, additional specialized departments, such as gastroenterology, blood bank and transfusion, community medicine, emergency, ICU, nephrology, neuromedicine, pediatrics, physical medicine, plastic surgery, psychiatry, radiotherapy, skin VD, urology,

respiratory medicine, CSSD, waste management, kitchen, laundry, physiology, anatomy, etc., were included based on level of services.

During the workshops, participants worked in break-out sessions according to their respective level of health facility. The draft TOE prepared by the SIAPS consultants was used as the working document. Participants in each group considered the following factors: physical infrastructure available in the existing plan of the facilities at their level; manpower; and cost-effectiveness in the country context. All groups made changes required to the working document, adding some important features to make the information clearer. The SIAPS/Bangladesh team facilitated these break-out sessions.

## **Limitations**

The development of the TOE with specifications of medical equipment requires extensive input from clinicians, who are the ultimate users of medical equipment at health facilities. Getting dedicated time and attention from clinicians was a significant challenge in the completion of this assignment. This document covers only the standard TOE. It does not include the associated information on human resources linked with equipment at any level of health facility. Moreover, the document covers medical equipment only; instruments or other medical requisites are not addressed.

# Key Findings

Three consultative workshops were conducted with relevant stakeholders to discuss findings, review the draft TOE, and incorporate feedback into different parts of the TOE document.

Although the review and assessment covered all health facilities, ranging from 31-bed facilities at the primary level to 2,000-bed tertiary-level health facilities, initially the consultative workshops focused on the finalization of the list of equipment for 50- and 250-bed hospitals, as requested by the MOHFW. The remaining types of health facilities, especially 500-bed, have been addressed to complete all levels of health facilities.

The TOEs for 50-, 250- and 500-bed health facilities (Annexes C, D, and E, respectively) are organized by department or unit, list of equipment, and the quantity of equipment that should be available at the respective level of health facility/hospital. The lists cover only equipment, including core and major equipment items. They do not include minor items, such as forceps, scissors, which are considered instruments.

The development of the TOE for 50- and 250-bed health facilities/hospitals has been the basis for a process to develop TOEs for health facilities with 500 beds and above.

Based on the detailed desk review of documents, site visits, stakeholder interviews, and the consultative workshops with key MOHFW officials and medical professionals, the following key findings, priority recommendations, and next steps are offered.

## Medical Devices Management, Procurement, and Planning

- Lack of and/or no biomedical equipment management policy, standard list of equipment

by level, and comprehensive specifications for equipment.

- Lack of guidelines or standard operating procedures (SOPs) for the management of medical devices, including standardization, selection, pre-qualification of suppliers, procurement, warehousing, distribution, installation, use, maintenance, decommissioning, etc.
- The TOE developed by the DGHS in 2008 has not been followed for procurement planning at upazila and district-level health facilities.

## Installation and Use of Medical Devices

- During the visits to the hospitals, some equipment items were found to be not installed and still kept in boxes. The 2008 Bangladesh Medical Equipment Survey data show that 50% of the equipment that was supplied is effectively used at its final destination; 16% of the remainder are not in use or are not installed.
- Inventory data on medical devices were available for only 62 pieces of medical equipment at all public hospitals.

## Medical Devices Management Information System and Inventory Management

- There are no standard inventory control systems and tools for inventory management. Therefore, data on medical equipment are not complete.
- There are big differences in the quantity and quality of medical devices among the different levels of health facilities.

- Data in the DGHS management information system show that approximately 3% of devices are not installed (at all three levels), approximately 25% of equipment requires repair (at all three levels), while nearly 10% of equipment cannot be used or serviced and should be disposed. However, these data were not verified by engineering professionals. (Source: [http://app.dghs.gov.bd/lhb\\_report/](http://app.dghs.gov.bd/lhb_report/))
- The Equipment Tracker Module was highly appreciated at the workshop as an important tool for tracking distribution, installation, and maintenance of equipment, as well as information on the performance of concerned departments and vendors.

## Financing

- There is inadequate Government of Bangladesh (GOB) revenue and development budget for equipment maintenance.
- There is no provision for using hospital-generated funds for equipment maintenance.

## Human Resources

- There is a lack of skilled personnel (biomedical engineers and biomedical technicians) who are essential for the management and maintenance of expensive medical equipment, both preventive and curative.
- There is currently a circular on human resource requirements and the allocation of personnel for each level of hospital (i.e., primary, secondary, and tertiary) from the Ministry of Establishment (Government notification issued on December 23, 2008), however, the allocated human

resources are not aligned with or do not match the needs of the hospital departments.

- The management of medical equipment is being conducted largely by medical professionals and occasionally with the involvement of non-credentialed engineers available locally, ultimately putting the whole process at risk. Vendors (i.e., suppliers) are responsible for the maintenance and management of equipment up to the end of the warranty period, as stipulated in their contracts. The NEMEMW&TC is responsible for the maintenance and management of medical equipment when the warranty period has ended. In each case, hospitals report to either the CMSD or the NEMEMW&TC for proper action.

## Medical Devices Operation/Handling

- An absence of proper ventilation or air conditioning system (other than opening windows) was identified in most of the operating theatres at the health facilities visited, which poses a high risk of infection during surgical procedures.<sup>1</sup>
- In some cases, X-ray protection from radiation does not exist in the radiology department.
- Most upazila health facilities/hospitals do not have back-up generators, and suffer from voltage fluctuations and poor electrical wiring.
- There is no installation, service/maintenance, trouble shooting/validation training provided as part of the procurement process.

<sup>1</sup> An international standard may require operating theatres to have a ventilation system that produces negative pressure air-flow over the operating table (to promote a sterile environment).

# Recommendations

- The MOHFW should make a strategic decision on the acquisition of medical equipment to ensure needs-based procurement planning of medical equipment and use the approved TOE as a reference document in the planning process.
- Skilled personnel, such as biomedical engineers and biomedical technicians, should be developed and appointed for the proper management and maintenance of biomedical equipment. Also critical is the establishment of a biomedical/clinical engineering department under the MOHFW. In addition, there is need to place a biomedical engineer in the relevant procurement entities, i.e., the CMSD.
- Develop guidelines and SOPs for good medical device management practices (selection, quantification, procurement, warehousing, distribution, use, inventory control, decommissioning, safety, and protection).
- The MOHFW should have a provision to keep more GOB (revenue) budget or a provision for using hospital-generated funds for the maintenance of equipment.
- The synchronization of human resources and equipment should be made in the TOE so that there are enough trained staff to operate equipment.
- Standardize basic prerequisites such as trained human resources and ensure infrastructure (adequate space and technically sound structure) and support services, such as utilities (e.g., water, gas, ventilation, stable and uninterrupted electricity), hazard prevention/protection, fire-fighting staffing, and training for all health facilities.
- The provision of an external generator or stand-by generator with adequate resources for fuel should be expanded to critical areas, such as the OT, ICU, or CCU or in all cases where the lives of patients are in danger.
- Equipment should be provided with an adequate uninterruptible power source (UPS) system with not less than 30 minutes of back-up.
- Development of comprehensive information systems (inventory database, patient database, RIS/PACS, etc.) covering both equipment and patients.
- Office equipment, vehicles, furniture, stores items, instruments, medical and surgical requisites (MSR) items may be added in the next version of the TOE.
- The Asset management Module under the Supply Chain Management Portal should be made functional, and the NEMEMW&TC should be incorporated in to the electronic equipment tracking system due to its role in routine maintenance and audit of equipment.
- Map-out a medical devices management role and implementation plan for the different key entities, including the CMSD and PLMC.
- Manpower and physical facilities should be aligned with equipment in collaboration with relevant departments/units of the MOHFW.
- Expensive equipment should not be procured until appropriate human resources are deployed at health facilities.
- Update and consolidate the specifications database.
- Develop a medical devices database and coding system (may be addressed by the recommendation above concerning the development of management information systems).
- Develop a pricing guideline.



# Way Forward

Going forward, SIAPS and the MOHFW need to work to implement the activities listed below, which will complement the medical devices appraisal and TOE development undertaken thus far.

- The MOHFW should address the human resources component by linking equipment and physical facilities for each level of health facility/hospital. After addressing this, SIAPS can update the TOEs to incorporate the standards for human resources in order to have a comprehensive TOE.
- Update or develop coding for medical equipment as part of the specifications exercise.
- Finalize the medical devices indicator price list and specifications database.
- Develop minimum requirement guidelines for: human resources (staffing, training, competencies, etc.); infrastructure (space, conditions, accessories, etc.); utilities (water, power supply and wiring, protection/safety, etc.); maintenance and spare parts; installation, decommissioning, write-off, disposal, etc.; and validation/calibration, etc.
- Develop SOPs and medical device management information systems with appropriate forms/tools, such as inventory control, requisition, maintenance, audit, calibration, disposal, etc.

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# Annex

<b>Annex A. Standardization of Equipment for 10-Bed Rural Health Center</b>	<b>20</b>
<b>Annex B. Standardization of Equipment for 10- and 20-Bed Maternal and Child Welfare Centres</b>	<b>22</b>
<b>Annex C. Standardization of Equipment for 50-Bed Primary-Level Hospitals</b>	<b>24</b>
<b>Annex D. Standardization of Equipment for 250-Bed Secondary-Level Hospitals</b>	<b>27</b>
<b>Annex E. Standardization of Equipment for 500-Bed Tertiary-Level Hospitals</b>	<b>37</b>
<b>Annex F: Guide for TOE Users</b>	<b>76</b>
<b>Annex- F1 : Medical Equipment Acquisition Form</b>	<b>77</b>
<b>Annex- F1a : Infrastructure and Electrical Requirements for Health Facility</b>	<b>78</b>
<b>Annex- F1b : Manpower Requirements</b>	<b>79</b>
<b>Annex- F1c : Requirements to be addressed by procuring entity</b>	<b>79</b>
<b>Annex- F1d : drawing of Different Rooms</b>	<b>81</b>
<b>Annex G: List of Contributors</b>	<b>85</b>
<b>Annex H. Government Order of TOEs</b>	<b>91</b>

## Annex A. Standardization of Equipment for 10-Bed Rural Health Center

### Standardization of Equipment: 10-Bed Rural Health Center

Department	Section	Name of Equipment	Qty	Unit
<b>Clinical Laboratory and Pathology</b>	Laboratory/ Pathology	Microscope, Binocular, Laboratory	1	Each
		Colorimeter, Digital	1	Each
		Micropipette, digital, 10-100µl	1	Each
		Centrifuge, digital, 6 hole	1	Each
<b>Emergency and OPD</b>	Emergency & OPD	ECG Machine, 6 channel	1	Each
		Glucometer	1	Each
		Suction machine, Electric & manual, 2 liter	1	Each
		Gas Cylinder, Oxygen	2	Each
		Flow meter, oxygen, with accessories	1	Each
		Resuscitation Unit (Ambu), adult	1	Each
		Nebulizer; Pneumatic; set	1	Each
		Patient Trolley	1	Each
		Sphygmomanometer (BP Machine), aneroid	1	Each Visit room
		Stethoscope	1	Each Visit room
		Thermometer, Clinical	1	Each Visit room
		View box for X-ray, single, electric	1	Each Visit room
		Cabinet, Medicine, non-refrigerant	1	Each
		Scale, Height & Weight, adult	1	Each
	Insertion Room for FP services	Insertion Table	1	Each
		OT Light, portable, single arm (spot light)	1	Each
<b>Store</b>	Store	Fire Extinguisher	1	Each
		Thermometer, Room, with hygrometer	1	Each
		Rack, Shelving	2	Each
		Pallets	2	Each

Department	Section	Name of Equipment	Qty	Unit
IPD (In-Patient Department)	Ward	Gas Cylinder, Oxygen	2	Each
		Flow meter, oxygen, with accessories	2	Each
		Resuscitation Unit (Ambu), adult	1	Each
		Nebulizer, Pneumatic, set	1	Each
		Autoclave, 50 Liter, vertical	1	Each
		Trolley, Patient	1	Each
		Trolley, Medicine	2	Each
		Glucometer	1	Each
		Cabinet, Medicine, non-refrigerant	1	Each
		Sphygmomanometer (BP Machine), aneroid	4	Each
		Stethoscope	4	Each
		View Box for X-ray, single, electric	2	Each
		Trolley, Instrument	1	Each
		Scale, Height & Weight, adult	1	Each
	Labor Room	Table, Labor (obstetric), 3 section	2	Each
		Examination Table	1	Each
		OT Light, portable, single arm (spot light)	1	Each
		Kit, Resuscitation, Infant	1	Each
		Suction machine, Electric & manual, 2 liter	1	Each

## Annex B. Standardization of Equipment for 10- and 20-Bed Maternal and Child Welfare Centres

### Standardization of Equipment: 10 Bed & 20 bed MCWC

Department	Section	Name of Equipment	Qty	Unit
Emergency and OPD	Emergency & OPD	Glucometer	1	Each
		Sphygmomanometer (BP Machine), aneroid	1	Each MO
		Stethoscope	1	Each MO
		Thermometer, Clinical	1	Each MO
		Sphygmomanometer (BP Machine), aneroid	1	Each FWV
		Stethoscope	1	Each FWV
		Thermometer, Clinical	1	Each FWV
		View box for X-ray, single, electric	1	Each MO
		Gas Cylinder, Oxygen	1	Each
		Flow meter, Oxygen, with accessories	1	Each
		Resuscitation Unit (Ambu), Adult	1	Each
		Nebulizer; Pneumatic; set	1	Each
		Patient Trolley	1	Each
		Cabinet, Medicine, non-refrigerant	1	Each
		Scale, Height & Weight, Adult	1	Each
Gynecology and Obstetrics	Operating Theatre	OT Table, Hydraulic	1	Each
		OT Light, LED, Ceiling, Double dome	1	Each
		OT Light, Single Arm, mobile, battery backed	1	Each
		Electro-Surgical Unit (Diathermy), 200w	1	Each
		Anesthesia Machine	1	Each
		Resuscitation Unit (Ambu), Adult	2	Each
		Laryngoscope, curved blade, all sizes, Macintosh	1	Each
		Laryngoscope, straight blade, all sizes, Miller	1	Each
		Pulse Oxymeter	1	Each
		Gas Cylinder, Oxygen	2	Each
		Gas Cylinder, Nitrous Oxide	2	Each
		Flow meter, Oxygen, with accessories	2	Set
		Nebulizer; Pneumatic; set	1	Each
		Scale, Height & Weight, Adult	1	Each
		Suction machine, Electric & manual, 2 liter	2	Each

Department	Section	Name of Equipment	Qty	Unit
		Autoclave, ≥50 Liter, Vertical	1	Each
		View box for X-ray, single, electric	2	Each
		Scale, Weighing, Infant	1	Each
		Sphygmomanometer (BP Machine), aneroid	2	Each
		Stethoscope	2	Each
		Sterilizer, Electric	2	Each
		Monitor, Patient	1	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	2	Each
		Trolley, Patient	2	Each
		Bowl Stand	2	Each
	Labor Room	Labor Table	1	Each
		Examination Table	1	Each
		OT Light, portable, single arm (spot light)	1	Each
		Suction machine, Electric & manual, 2 liter	1	Each
		Radiant Warmer	1	Each
		Resuscitation Kit, Infant	1	Each
	Insertion Room	Insertion Table	1	Each
		OT Light, portable, single arm (spot light)	1	Each
	Ward	Fetal Doppler	1	Each
		Sphygmomanometer (BP Machine), aneroid	2	Each
		Stethoscope	2	Each
		View box for X-ray, single, electric	1	Each
		Trolley, Instrument	1	Each
		Scale, Height & Weight, Adult	1	Each
		Thermometer, Clinical	2	Each
		Trolley, Medicine	1	Each
		Trolley, Patient	1	Each
		Gas Cylinder, Oxygen	1	Each
		Flow meter, Oxygen, with accessories	1	Each
		Trolley for Gas Cylinder		
		Nebulizer; Pneumatic; set	1	Each
		Cabinet, Medicine, non-refrigerant	1	Each

## Annex C. Standardization of Equipment for 50-Bed Primary-Level Hospitals

### Standardization of Equipment: 50-Bed Primary Level Hospitals

Department	Section	Name of Equipment	Qty	Unit
Clinical Laboratory and Pathology	Laboratory/ Pathology	Microscope, Binocular, Laboratory	2	Each
		Analyzer, Chemistry, Semi-automatic	1	Each
		Colorimeter, Digital	1	Each
		Micropipette, 5-50 µl	1	Each
		Micropipette, 10-100 µl	1	Each
		Centrifuge, 12 holes	2	Each
		Water Bath, Digital, 10 Liters	1	Each
		Refrigerator, Blood Bank	1	Each
Dentistry	OPD (Out-patient department)	Dental Unit	1	Each Dentist
		Sphygmomanometer (BP Machine), aneroid	1	Each Visit room
		Stethoscope	1	Each Visit room
		View box for X-ray, single, electric	1	Each Visit room
		Air Compressor	1	Each Dentist
		Ultrasonic Scaler	1	Each
		Micro-motor Machine	1	Each
		Light Cure Machine	1	Each
Emergency and OPD	Emergency & OPD	ECG Machine, 6 channel	1	Each
		Glucometer	1	Each
		Ventilator, Transport	1	Each
		Suction machine, Electric & manual, 2 liter	1	Each
		Gas Cylinder, Oxygen	2	Each
		Flow meter, oxygen, with accessories	1	Each
		Resuscitation Unit (Ambu), adult	1	Each
		Nebulizer, Pneumatic, set	1	Each
		Patient Trolley	1	Each
		Sphygmomanometer (BP Machine), aneroid	1	Each Visit room
		Stethoscope	1	Each Visit room
		Thermometer, Clinical	1	Each Visit room
		View box for X-ray, double, electric	1	Each Visit room
		Cabinet, Medicine, non-refrigerant	1	Each
		Scale, Height & Weight, adult	1	Each
Gynecology and Obstetrics	Operating Theatre	OT Table, Hydraulic	1	Each
		OT Light, LED, Ceiling, Double dome	1	Each
		OT Light, portable, single arm (spot light)	1	Each
		Electro-Surgical Unit	2	Each
		Anesthesia Machine	1	Each
		Resuscitation Unit (Ambu), adult	2	Each



Department	Section	Name of Equipment	Qty	Unit
		Laryngoscope, Curved Blades, All Sizes, McIntosh	1	Each
		Laryngoscope, Straight Blades, All Sizes, Miller	1	Each
		Pulse Oxymeter	1	Each
		Nebulizer, Pneumatic, set	1	Each
		Scale, Height & Weight, adult	1	Each
		Suction machine, Electric & manual, 2 liter	2	Each
		Autoclave, Steam, 100 Liter	1	Each
		View box for X-ray, double, electric	2	Each
		Weighing Scale, Infant	1	Each
		Sphygmomanometer (BP Machine), aneroid	2	Each
		Stethoscope	2	Each
		Glucometer	1	Each
		Sterilizer, Electric	2	Each
		Monitor, Patient	1	Each
		Weighing Scale, Infant	1	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	2	Each
		Trolley, Patient	2	Each
		Bowl Stand	2	Each
	Labor Room	Labor Table	2	Each
		Examination Table	2	Each
		OT Light, Single Arm, mobile, battery backed	2	Each
		Suction machine, Electric & manual, 2 liter	2	Each
		Radiant Warmer	1	Each
		Resuscitation Kit, Infant	1	Each
	Ward	Fetal Doppler	2	Each
		Nebulizer, Pneumatic, set	1	Each
		CTG (Cardiotocography) Machine	1	Each
		Ultrasonogram; Convex, Linear & Transvaginal probe	1	Each
		Cabinet, Medicine, non-refrigerant	1	Each
Radiology and Imaging	Radiology and Imaging	X-Ray 500 mA Analog	1	Each
		Auto-processor for X-Ray	1	Each
		X-Ray 300 mA Analog; Portable	1	Each
		View box for X-ray, double, electric	1	Each
		Ultrasound; Convex & Linear Probe	1	Each
		Lead Apron	1	Each
		Thyroid Protector	2	Each
		Gonad Protector	2	Each
		Dosimetry	1	Each
Store	Store	Fire Extinguisher	2	Each
		Thermometer, Room, with hygrometer	2	Each
		Rack, Shelving	2	Each
		Pallets		For 50% Space

Department	Section	Name of Equipment	Qty	Unit
		Air conditioner	1	Each
		Dehumidifier	1	Each
		Trolley, Hand	1	Each
Surgery	Operating Theatre	OT Table, Hydraulic	1	Each
		OT Light, Ceiling	1	Each
		OT Light, Single Arm, mobile, battery backed	1	Each
		Electro-Surgical Unit	1	Each
		Anesthesia Machine	1	Each
		Resuscitation Unit (Ambu), adult	2	Each
		Laryngoscope, Curved Blades, All Sizes, McIntosh	2	Each
		Laryngoscope, Straight Blades, All Sizes, Miller	1	Each
		Pulse Oxymeter	2	Each
		Nebulizer, Pneumatic, set	1	Each
		Scale, Height & Weight, adult	1	Each
		Monitor, Vital Sign; with defibrillator	1	Each
		Gas Cylinder, Oxygen	3	Each
		Gas Cylinder, Nitrous Oxide	3	Each
		Flow meter, oxygen, with accessories	3	Set
		View box for X-ray, double, electric	2	Each
		Stethoscope	2	Each
		Suction machine, Electric & manual, 2 liter	1	Each
		Trolley, Patient	1	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	2	Each
		Autoclave, Steam, 50 Liter	1	Each
		View Box for X-ray Film	2	Each
		Bowl Stand	2	Each
IPD (In-Patient Department)	Ward	Gas Cylinder, Oxygen	3	Each ward
		Flow meter, oxygen, with accessories	2	Each ward
		Resuscitation Unit (Ambu), adult	1	Each ward
		Nebulizer, Pneumatic, set	1	Each ward
		Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Glucometer	1	Each ward
		Monitor, Ambulatory Blood Pressure	1	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		Sphygmomanometer (BP Machine), aneroid	4	Each ward
		Stethoscope	4	Each ward
		View box for X-ray, double, electric	2	Each ward
		Trolley, Instrument	1	Each ward
		Scale, Height & Weight, adult	1	Each ward

## Annex D. Standardization of Equipment for 250-Bed Secondary-Level Hospitals

### Standardization of Equipment: 250-Bed Secondary Level Hospitals

Department	Section	Name of Equipment	Qty	Unit
Alternative Medicine	Alternative Medicine	Sphygmomanometer (BP Machine), aneroid	1	Each
		Stethoscope	1	Each
		View box for X-ray, double, electric	1	Each
Blood Bank and Transfusion	Blood Bank and Transfusion	Refrigerator, Blood Bank	1	Each
		Freezer, Plasma Storage	1	Each
		Monitor, Blood Collection	2	Each
		Centrifuge, Refrigerated, for blood bank	1	Each
		Centrifuge, 18 holes	1	Each
		Tube Sealer	2	Each
		Microscope, Binocular, Laboratory	2	Each
		Blood Warmer	2	Each
		Bath, Plasma Thawing	1	Each
		Water Bath, Digital	2	Each
		Oven, Hot Air	1	Each
Cardiology	OPD (Out-patient department)	ECG Machine, 3 channel	2	Each
		Echocardiogram, 4D, Color Doppler	1	Each
		Treadmill (ETT)	1	Each
		Trolley, Patient	1	Each
		Sphygmomanometer (BP Machine), aneroid	5	Each
		Stethoscope	1	Each
		View box for X-ray, double, electric	1	Each
	Ward	ECG Machine, 12 Channel	1	Each ward
		Monitor, Patient (ECG, NIBP, SPO2)	1	Each ward
		Defibrillator, External, Automated	2	Each ward
		CPR Machine, Automated	1	Each ward
		Echocardiogram, Portable	1	Each ward
		Echocardiogram, 2D, Color Doppler	1	Each ward
		Syringe Pump	6	Each ward
		Infusion Pump	3	Each ward
		Cabinet, Medicine, refrigerant	1	Each ward
		Gas Cylinder, Oxygen	1	Each 2 beds
		Flow meter, oxygen, with accessories	1	Set Each 2 beds
		Trolley for Gas Cylinder	1	Each 2 beds
		Trolley, Patient	1	Each
		Sphygmomanometer (BP Machine), aneroid	2	Each ward

Department	Section	Name of Equipment	Qty	Unit
		Stethoscope	2	Each ward
		View box for X-ray, double, electric	1	Each ward
		Suction machine, Surgical	2	Each ward
		Temporary Pacing Equipment	1	Each ward
		Monitor, Holter, with 2 recorder	1	Set Each ward
		BP Machine, Ambulatory	2	Each Ward
		Glucometer	1	Each ward
		IVUS (Intra-vascular Ultrasound)	1	Each ward
		Rotablator	1	Each ward
		ETT Machine (Treadmil)	2	Each ward
Clinical Laboratory and Pathology	Laboratory/ Pathology	Microscope, Binocular, Laboratory	5	Each
		Analyzer, Chemistry, Semi-automatic	2	Each
		Analyzer, Hematology	1	Each
		Centrifuge, 18 holes	2	Each
		Water Bath, Digital, 20 Liters	2	Each
		Micropipette, Digital, 5-50 µl	2	Each
		Micropipette, Digital, 10-100 µl	2	Each
		Blood Culture, Automated, ≥50 vials	1	Each
		Biosafety Cabinet Class 2	1	Each
		Analyzer, Immunochemistry	1	Each
		Analyzer, ESR	1	Each
		Coagulometer, Auto	1	Each
		Coagulometer, Semi-automatic	1	Each
		Elisa System, semi-auto	1	Each
		Centrifuge, Refrigerated	1	Each
		Incubator, 50 Liter	1	Each
		Autoclave, ≥20 Liters, Bench-top	1	Each
		Oven, Hot Air, 50 Liter	1	Each
		Balance, Analytical, Digital, (0.1mg to 200g)	1	Each
		Electrolyte Analyzer; Semi-automatic	1	Each
Dentistry	OPD	Dental Unit	1	Each Dentist
		Air Compressor	1	Each Dentist
		Ultrasonic Scaler	1	Each
		Micro-motor Machine	1	Each
		Light Cure Machine	1	Each
		Sphygmomanometer (BP Machine), aneroid	1	Each
		Stethoscope	1	Each
		View box for X-ray, double, electric	1	Each
Dermatology and VD	OPD	Examination Light	1	Each
		Torch, Pencil	1	Each
		Glass, Magnifying	1	Each
		Sphygmomanometer (BP Machine), aneroid	1	Each
		Stethoscope	1	Each

Department	Section	Name of Equipment	Qty	Unit
Ear, Nose, and Throat (ENT)	OPD	Sphygmomanometer (BP Machine), aneroid	1	Each ER
		Stethoscope	1	Each ER
		Audiometer, Clinical	1	Each ER
		Audiometer, Impedance	1	Each ER
		Audiometer, Portable	1	Each ER
		Laryngoscope, Fiber Optic, Video	1	Set Each ER
		Pharyngoscope	1	Each ER
		Tympanometer	1	Each ER
		View box for X-ray, double, electric	1	Each ER
		Examination Light for ENT	2	Each ER
		Head Light with Mirror	2	Each ER
		Otoscope	2	Each ER
		ENT Chair	1	Each ER
	Operating Theatre	OT Table, Electro-hydraulic	1	Each
		OT Light, with satellite, LED, Ceiling	1	Each
		OT Light, Single arm, mobile	1	Each
		Electrosurgical Unit	1	Each
		Suction Machine, Surgical	2	Each
		Suction Pump, Surgical, Potable	1	Each
		Anesthesia Machine	1	Each
		Infusion Pump	2	Each
		Sterilizer, Hot Air, Medical	1	Each
		Autoclave, Steam, 50 Liter, Vertical type	1	Each
		Autoclave, Steam, 100 Liter, Horizontal type	1	Each
		Patient Monitor	1	Each
		Defibrillator, External, Automated	1	Each
		Gas Cylinder, Medical, Oxygen	3	Each
		Gas Cylinder, Medical, Nitrous Oxide	2	Each
		Head Light, Fiber Optic	2	Each
		Microscope, Operating, ENT	1	Each
		Microsurgery Set, ENT	1	Set
		Drill Machine, Micro, with Tungsten Bar	1	Set
		Sinus Surgery Set, Endoscopic , with Telescope	1	Set
		Navigation System, ENT	1	Set
		Micro-debrider	1	Each
		Nerve Stimulator	1	Each
		Sphygmomanometer (BP Machine), aneroid	1	Each
		Stethoscope	1	Each
		View box for X-ray, double, electric	1	Each
		Trolley, Patient	1	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	2	Each

Department	Section	Name of Equipment	Qty	Unit
	Ward	Bowl Stand	1	Each
		Height & Weight Measuring Scale	1	Each ward
		Otoscope	1	Each ward
		Cabinet, Medicine, refrigerant	1	Each ward
		Sphygmomanometer (BP Machine), aneroid	2	Each ward
		Stethoscope	2	Each ward
		Thermometer, Clinical	2	Each ward
		Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Trolley, Instrument	1	Each ward
		View box for X-ray, double, electric	2	Each ward
Emergency	OPD	ECG Machine, 12 channel	1	Each
		Glucometer	1	Each
		Fetal Doppler	1	Each
		Ventilator, Transport	1	Each
		Suction Machine, electric	1	Each
		Gas Cylinder, Oxygen	3	Each
		Flow Meter, oxygen, with accessories	3	Set
		Resuscitation Unit (Ambu)	2	Each
		View box for X-ray, double, electric	3	Each
		Nebulizer, Pneumatic, set	2	Set
		Trolley, Patient	1	Each
		Cabinet, Medicine, refrigerant	1	Each
		Scale, Height & Weight, adult	2	Each
Gynecology and Obstetrics	OPD	Ultrasound, Doppler	1	Each
		Hysteroscope	1	Each
		Urodynamic Machine	1	Each
		Ultrasound, Convex, linear & TVS Probe	1	Set
		Colposcope, video	1	Set
		Scale, Height & Weight, adult	1	Each
		Sphygmomanometer (BP Machine), aneroid	3	Each
		Stethoscope	3	Each
		Thermometer, Clinical	3	Each
		View box for X-ray, double, electric	3	Each
		Fetal Doppler	1	Each
		CTG Machine	1	Each
		Trolley, Patient	1	Each
	Operation Theatre	OT Table, Hydraulic	1	Each
		OT Light, LED, Ceiling, Double Dome	1	Each
		OT Light, Single rm, mobile	1	Each
		Electro-Surgical Unit	1	Each
		Suction machine, Surgical	1	Each
		Gas Cylinder, Oxygen	3	Each

Department	Section	Name of Equipment	Qty	Unit
		Gas Cylinder, Nitrous Oxide	2	Each
		Autoclave, Steam, 50 Liter, Vertical type	1	Each
		Autoclave, Steam, 100 Liter, Horizontal type	1	Each
		Blood Warmer	1	Each
		Resuscitation Kit, Infant	1	Each
		Flow meter, oxygen, with accessories	2	Set
		Anesthesia Machine	1	Each
		Anesthesia Ventilator	1	Each
		Resuscitation Unit (Ambu), adult	2	Each
		Laryngoscope, curved blades, all size, McIntosh	1	Set
		Laryngoscope, straight blades, all size, Miller	1	Set
		Pulse Oxymeter	2	Each
		Scale, Height & Weight, adult	1	Each
		View box for X-ray, double, electric	2	Each
		Sphygmomanometer (BP Machine), aneroid	2	Each
		Stethoscope	2	Each
		Laparoscopic Surgery Set	1	Each
		Trolley, Patient	2	Each
		Trolley, Instrument	1	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	3	Each
		Bowl Stand	2	Each
		Radiant Warmer	1	Each
	Labor Room	Labor Table	4	Each
		Examination Table	4	Each
		OT Light, Single Arm, Mobile, Battery Back-up	2	Each
		Suction Machine, Electric, 2 liter	2	Each
		Trolley, Patient	1	Each
		Radiant Warmer	1	Each
		Sterilizer	1	Each
		Resuscitation Kit, Infant	2	Each
	Ward	Sphygmomanometer (BP Machine), aneroid	2	Each ward
		Stethoscope	2	Each ward
		Thermometer, Clinical	3	Each ward
		Wheel Chair	1	Each ward
		Glucometer	1	Each ward
		Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Trolley for Gas Cylinder	2	Each ward
		Trolley, Instrument	2	Each ward
		Gas Cylinder, Oxygen	2	Each ward
		Flow meter, oxygen, with accessories	2	Set Each ward
		Nebulizer; Pncumatic; set	1	Set Each ward

Department	Section	Name of Equipment	Qty	Unit
Medicine		View box for X-ray, double, electric	2	Each ward
		CTG (Cardiotocography) Machine	1	Each ward
		Cabinet, Medicine, refrigerator	1	Each ward
	OPD	Glucometer	1	Each visit room
		Sphygmomanometer (BP Machine), aneroid	1	Each visit room
		Stethoscope	1	Each visit room
		View box for X-ray, double, electric	1	Each visit room
		Scale, Height & Weight, adult	1	Each visit room
	Ward	Sphygmomanometer (BP Machine), aneroid	2	Each
		Stethoscope	2	Each
		Thermometer, Clinical	3	Each
		Cabinet, Medicine, refrigerator	1	Each
		Trolley, Patient	1	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	2	Each
		Trolley, Instrument	1	Each
		Monitor, Ambulatory Blood Pressure	2	Each
		Gas Cylinder, Oxygen	2	Each
		Flow meter, oxygen, with accessories	2	Each
		Resuscitation Unit (Ambu)	1	Each
		Nebulizer, Pneumatic, set	2	Set
		Wheel Chair	1	Each
		Laryngoscope, curved, all blade size, McIntosh	1	Set
		Infusion Pump	1	Each
		Glucometer	1	Each
		View box for X-ray, double, electric	1	Each
Ophthalmology	OPD	Torch Light, Halogen	1	Each Exam room
		Trail Box with Trail frame	1	Each Exam room
		Retinoscope	1	Each Exam room
		Ophthalmoscope, Direct	1	Each Exam room
		Ophthalmoscope, Indirect	1	Each Exam room
		Slit Lamp, Motorized Stand	1	Each Exam room
		Tonometer, Schidtz	1	Each Exam room
		Auto Refracto-keratometer	1	Each Exam room
		B-Scan, Ocular, Ultrasound	1	Each Exam room
		Auto Refracto-Keratometer	1	Each Exam room
		Tonometer, GAT	1	Each Exam room
		A-Scan, Ophthalmic (biometer)	1	Each Exam room
		Laser, Yag	1	Each
		Ophthalmic Unit (Chair)	1	Each Exam room
		Gonioscope	1	Each Exam room



Department	Section	Name of Equipment	Qty	Unit
	Operating Theatre	OT Table, Electro-hydraulic	1	Each
		OT Light, with satellite, LED, Ceiling	1	Each
		OT Light, Single Arm, Mobile	1	Each
		Electrosurgical Unit	1	Each
		Sterilizer, Hot Air, Medical	1	Each
		Autoclave, Steam, Bench top	1	Each
		Phaco-emulsifier with Reusable Cassette	1	Set
		Anesthesia Machine	1	Each
		Gas Cylinder, Oxygen	1	Each
		Gas Cylinder, Nitrous Oxide	1	Each
		Flow meter, oxygen, with accessories	1	Set
		Laryngoscope with all size blades	1	Set
		Pulse Oxymeter	1	Each
		Microscope, Operating, Ophthalmic	1	Each
		Sphygmomanometer (BP Machine), aneroid	1	Each
		Stethoscope	1	Each
		Trolley, Patient	1	Each
		Trolley, Instrument	2	Each
		Chair, Surgeons	1	Each
		Suction machine, Surgical	1	Each
		Trolley, Patient	1	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	1	Each
		Bowl Stand	2	Each
	Ward	Sphygmomanometer (BP Machine), aneroid	1	Each
		Stethoscope	1	Each
		Cabinet, Medicine	1	Each
		Trolley, Patient	2	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	1	Each
		Trolley, Instrument	1	Each
Orthopedics and Trauma Surgery	OPD	Sphygmomanometer (BP Machine), aneroid	2	Each visit room
		Stethoscope	2	Each visit room
		View box for X-ray, double, electric	1	Each visit room
		Plaster Cutting Saw, electric	2	Each visit room
		Thermometer, Clinical	2	Each visit room
		Trolley, Patient	2	Each
		Trolley, Medicine	1	Each visit room
		Trolley for Gas Cylinder	1	Each visit room
		Trolley, Instrument	1	Each
		Gas Cylinder, Oxygen	1	Each visit room
		Flow meter, oxygen, with accessories	1	Set Each visit room

Department	Section	Name of Equipment	Qty	Unit
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	1	Each visit room
		View box for X-ray, double, electric	1	Each visit room
		Scale, Height & Weight, adult	1	Each visit room
	Operating Theatre	OT Table, Hydraulic, with Orthopedic attachment	1	Set
		OT Light, Ceiling	1	Each
		OT Light, Single arm, mobile	1	Each
		Electro-Surgical Unit	1	Each
		Suction Machine, electric	2	Each
		Gas Cylinder, Oxygen	4	Each
		Gas Cylinder, Nitrous Oxide	3	Each
		Flow meter, oxygen, with accessories	2	Set
		Anesthesia Machine	1	Each
		Anesthesia Ventilator	1	Each
		Resuscitation Unit (Ambu)	1	Set
		Laryngoscope with all blade sizes	2	Set
		Pulse Oxymeter	1	Each
		Scale, Height & Weight, adult	1	Each
		View box for X-ray, double, electric	2	Each
		Sphygmomanometer (BP Machine), aneroid	3	Each
		Stethoscope	3	Each
		Fracture Table	1	Each
		C-Arm Machine	1	Each
		Trolley, Patient	2	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	2	Each
		Bowl Stand	2	Each
	Ward	Sphygmomanometer (BP Machine), aneroid	3	Each
		Stethoscope	3	Each
		Trolley, Patient	1	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	2	Each
		View box for X-ray, double, electric	1	Each
		Wheel Chair	1	Each
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	2	Each
		Scale, Height & Weight, adult	1	Each
		Cabinet, Medicine, refrigerant	1	Each
Pediatrics	OPD	Scale, Weighing, Baby	1	Each
		Stethoscope	3	Each
		View box for X-ray, double, electric	1	Each

Department	Section	Name of Equipment	Qty	Unit
	Ward	View box for X-ray, double, electric	3	Each
		Stethoscope	2	Each
		Trolley, Patient	1	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	1	Each
		Trolley, Instrument	1	Each
		Gas Cylinder, Oxygen	1	Each
		Flow meter, oxygen, with accessories	1	Set
		Resuscitation Kit	2	Each
		Nebulizer; Pneumatic; set	1	Each
		Scale, Height & Weight, adult	1	Each
		Sphygmomanometer (BP Machine), aneroid	1	Each
		Cabinet, Medicine, refrigerant	1	Each
Radiology and Imaging	Radiology and Imaging	X-Ray 500 mA Analog	1	Each
		CR (if no digital x-ray)	1	Each
		X-Ray 500 mA, digital	1	Each (optional)
		MRI (Magnetic Resonance Imaging), Permanent Magnet, 0.3-0.4T	1	Each (Subject to space and HR)
		X-Ray 300 mA Analog; Portable	1	Each
		Fluoroscopy	1	Each
		View box for X-ray, double, electric	2	Each
		Lead Apron	1	Each
		Thyroid Protector	2	Each
		Gonad Protector	2	Each
		Dosimetry	1	Each
		CT Scan; 64 slice	1	Each
		Ultrasound, 4D	1	Each
		View box for X-ray, double, LED	2	Each
		Ultrasonogram; Convex, Linear & Transvaginal	1	Each
Store	Support Service	Fire Extinguisher	2	Each
		Thermometer, Room	1	Each
		Rack, Shelving	3	Each
		Pallets	5	Each
		Air-conditioner, split, 2 tons		As per space
		Dehumidifier	1	Each
		Trolley, Platform	1	Each
Surgery	OPD	Sphygmomanometer (BP Machine), aneroid	3	Each
		Stethoscope	3	Each
		Trolley, Patient	1	Each
		View box for X-ray, double, electric	3	Each
		Scale, Height & Weight, adult	1	Each

Department	Section	Name of Equipment	Qty	Unit
	Operating Theatre	OT Table, Hydraulic	1	Each
		OT Light, LED, Ceiling, Double Dome	1	Each
		OT Light, Single Arm, Mobile	1	Each
		Electro-Surgical Unit	1	Each
		Suction machine, Surgical	2	Each
		Gas Cylinder, Oxygen	3	Each
		Gas Cylinder, Nitrous Oxide	2	Each
		Flow meter, oxygen, with accessories	2	Set
		Anesthesia Machine	1	Each
		Anesthesia Ventilator	1	Each
		Resuscitation Unit (Ambu), adult	1	Each
		Autoclave, Steam, 50 Liter, Vertical type	1	Each
		Autoclave, Steam, 100 Liter, Horizontal type	1	Each
		Autoclave, Steam, ≥350 Liter, Programmable	1	Each
		Laryngoscope, curved, all size blade, McIntosh	1	Set
		Pulse Oxymeter	1	Each
		Trolley, Patient	2	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	3	Each
		Bowl Stand	2	Each
		Scale, Height & Weight, adult	1	Each
		View box for X-ray, double, electric	2	Each
		Sphygmomanometer (BP Machine), aneroid	3	Each
		Cabinet, Medicine, refrigerant	1	Each
		Stethoscope	3	Each
		Laparoscopic Surgery Set	1	Set
	Ward	Sphygmomanometer (BP Machine), aneroid	2	Each
		Stethoscope	2	Each
		Thermometer, Clinical	2	Each
		Trolley, Patient	2	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	2	Each
		Trolley, Instrument	1	Each
		Gas Cylinder, Oxygen	2	Each
		Flow meter, oxygen, with accessories	2	Set
		Cabinet, Medicine, non-refrigerant	1	Each
		View box for X-ray, double, electric	2	Each
		Scale, Height & Weight, adult	2	Each

## Annex E. Standardization of Equipment for 500-Bed Tertiary-Level Hospitals

### Standardization of Equipment: 500-Bed Tertiary Level Hospitals

Department	Section	Name of Equipment	Qty	Unit
Gastro- enterology	IPD & Endoscopy Room	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Suction Apparatus, Portable	2	Each
		Sterilizer, Electric	2	Each
		Pulse Oxy-meter	1	Each
		Nebulizer, ultrasonic	1	Each
		Glucometer	1	Each
		Proctoscope, adult	1	Each
		Endoscope, Upper GI, Video, with accessories	1	Each
		Resuscitation Unit (Ambu), adult, set	2	Each
		Colonoscope, video, set	1	Each
		Ultrasound, endoscopic	1	Each *(Optional)
		Enteroscope, Double balloon	1	Each
		Duodenoscope, side view (ERCP), set	1	Each
		Fluoroscopy Machine	1	Each
		I3C Urea Breath Machine	1	Each
		Hydrogen Breath Test Machine	1	Each
		Dilator, esophageal, Savory Galliard	1	*Each
		Snare, Polypectomy	1	*Each
		Forcep, biopsy, Upper GI, Crocodile	1	*Each
		Forcep, biopsy, Lower GI, Crocodile	1	*Each
		Forcep, foreign body, endoscopic	1	*Each
		Basket, Foreign body, endoscopic	1	*Each
		Needle, sclerotherapy, endoscopic	2	*Each
		Dilator, balloon, achalasia	1	*Each
		Sphygmomanometer (BP Machine), Aneroid	1	Each
		Stethoscope	1	Each
		Trolley, Patient	2	Each
		Trolley, Cylinder	2	Each
		Trolley, Instrument	2	Each
Gastro- enterology	IPD & Endoscopy Room	Cabinet for Colonoscope	1	Each
		Cabinet for Endoscope	1	Each
		Nebulizer	1	Each
		Sucker apparatus	1	Each
		Pulse Oxymeter	1	Each

Department	Section	Name of Equipment	Qty	Unit
		Stethoscope	1	Each
		Sphygmomanometer (BP Machine), Aneroid	1	Each
		Glucometer	1	Each
		Suction Apparatus, Portable	1	Each
		Sterilizer, Electric, ss	1	Each
		Pulse Oxy-meter	1	Each
		Nebulizer, Ultrasonic	1	Each
		Glucometer	1	Each
		Proctoscope, adult	1	Each
		Endoscope, Upper GI, Video, with accessories	1	Each
		C-Arm, 5kw, 9" image intensifier	1	Each
		Electrosurgical Unit (Diathermy), Gastro, 300w	1	Each
		Trolley, Patient	2	Each
		Trolley, Cylinder	2	Each
		Trolley, Instrument	2	Each
		Cabinet, Endoscope	1	Each
	OPD	Stethoscope	1	Each visit room
		Sphygmomanometer (BP Machine), Aneroid	1	Each visit room
		Scale, weight & height, adult	1	Each visit room
Cardiology	OPD	ECG Machine, 3channel	2	Each
		ECG Machine, 12channel	2	Each
		Echocardiogram 2D, with Color Doppler	1	Each
		ETT Machine (Treadmil)	1	Each
		Trolley, Patient	1	Each
		Sphygmomanometer (BP Machine), Aneroid	5	Each
		Stethoscope	1	Each
		ViewBox for X-ray Film, double, electric	1	Each
		Echocardiogram; Trans-esophageal	1	Each
Cardiology		Echocardiogram; 4D, with Color Doppler	1	Each
		Monitor, Holter	10	Each
		Cath Lab, ceiling mounted, flat panel	1	Each
		Pace maker, Temporary	10	Each
		C-Arm, with fluoroscopy	1	Each
		EECP (Enhanced external counter pulsation), set	1	Each
	IPD (25% of allocated cardiac beds)	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		ECG Machine, 12Channel	1	Each ward
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each ward
	IPD (25% of allocated cardiac beds)	Defibrillator, External, Automated	2	Each ward
		CPR Machine, Automated	1	Each ward
		Echocardiogram, Portable, 2D, B&W	1	Each
		Echocardiogram, 2D, Color Doppler	1	Each
		Syringe Pump	6	Each ward

Department	Section	Name of Equipment	Qty	Unit
		Infusion Pump	3	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		GasCylinder,Oxygen	1	Each 2beds
		Flow meter, Oxygen, with accessories	1	Set Each2beds
		Trolley,for GasCylinder	1	Each 2beds
		Trolley, Patient	1	Each
		Sphygmomanometer (BP Machine), Aneroid	2	Each ward
		Stethoscope	2	Each ward
		View box for x-ray film, double, electric	1	Each ward
		SuctionMachine	2	Each ward
		Temporary Pacing Equipment	1	Each ward
		Monitor, Holter, with 2recorder	1	Each ward
		Monitor, Blood Pressure, Ambulatory	2	Each Ward
		Glucometer	1	Each ward
		ETT Machine(Treadmil)	2	Each ward
	Post CCU (50% of allocated cardiac beds)	Bed, ICU	1	Each Bed
		Ventilator, CCU	1	Each 8 Beds
		Monitor, Multiparameter (IBP, NIBP, ETCO2, Temp)	1	Each bed
		Defibrillator, External,Automated	1	Each 8 beds
		CPR Machine,Automated	1	Each 8 beds
		Syringe Pump	1	Each bed
		Infusion Pump	1	Each bed
	Cath Lab 480 + 200 + 200 Sqft (Proper + Console + Machine)	Cath lab Machine, floor mounted (for ceiling mounted 13' ceiling clearance needed)	1	Each
		Anesthesia Machine with ventilator	1	Each
		Sphygmomanometer (BP Machine), Aneroid	1	Each
		Stethoscope	1	Each
	CCU (coronary care unit)25% of allocated cardiac beds	Ventilator, CCU	1	Each 5 beds
		Monitor, Cardiac	1	Each bed
		Monitor, Multiparameter (IBP, NIBP, ETCO2, Temp)	1	Each bed
		Defibrillator, External,Automated	1	Each 3 beds
		CPR Machine,Automated	1	Each 3 beds
	CCU (coronary care unit) 25% of allocated cardiac beds	Syringe Pump	2	Each bed
		Infusion Pump	2	Each bed
		Analyzer, Blood Gas with electrolytes	1	Each
		ICU Bed	1	Per bed strength
		Cabinet, Medicine, refrigerant	1	Each
Cardiology		Monitor, Central, multi-parameter, 16 beds	1	Each
		Pulse Oxymetry with NIBP	1	Each bed
		Flow meter, with accessories	1	Each bed
		Gas Cylinder, Oxygen	4	Each
		Sphygmomanometer (BP Machine), Aneroid	5	Each 4 bed

Department	Section	Name of Equipment	Qty	Unit
		Stethoscope	5	Each 4 bed
		Trolley, Patient	2	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	4	Each
		Trolley for Gas Cylinder	4	Each
		View Box for X-ray Film, LED	1	Each
		Wheel Chair	1	Each 2 beds
		Blanket, patient warming	1	Each 4 beds
		Blood infusion warmer	1	Each 4 beds
CSSD	Soil room	Washer disinfectant, for CSSD, auto	2	Each
		Ultrasonic cleaner, ≥30L	2	Each
		Work table, with wash stations	2	Each
		Scrub Station, automatic	2	Each
		Spray gun, air	1	Each
		Spray gun, water	1	Each
		Water softener	1	Each
	Handling & Packing room	Dry cabinet/Hot Air Oven, ≥100L	2	Each
		Heat sealing machine	2	Each
		Gauge cutting machine	2	Each
		Table, for packing, CSSD	3	Each
		Magnifying lamps	2	Each
		Basket, for handling materials	1	Each
		Instrument tray, for handling materials	1	Each
	Sterilizer room	Autoclave, ≥450L, double wall, post- & pre-vacuum	2	Each
		Autoclave, ≥200L, double wall, post- & pre-vacuum	3	Each
		Sterilizer, Ethylene oxide, ≥100L	1	Each
		Sterilizer, Plasma, ≥100L	1	Each
		Autoclave, Fast, ≥30L, horizontal	2	Each
	Storage room	Storage rack for CSSD	4	Each
		Basket rack for CSSD	4	Each
	Transport equipment	Trolley, for transport of baskets	4	Each
		Table trolley, internal, for CSSD	3	Each
Dentistry	OPD	Dental Unit	1	Each Dentist
		Air Compressor, dental	1	Each Dentist
		Ultrasonic Scaler	1	Each
		Micro-motor Machine	1	Each
		Light Cure Machine	1	Each
		X-Ray, 10mA, analog, dental	1	Each
		X-Ray, Panoramic (OPG), analog	2	Each
		X-Ray, Panoramic (OPG), digital	1	Each
		CBCT (Cone Beam Computed Topography)	1	Each
		Autoclave, 100 liter, horizontal	1	Each
		Sterilizer, Electric, SS	2	Each



Department	Section	Name of Equipment	Qty	Unit
		Sphygmomanometer (BP Machine), Aneroid	2	Each
		Stethoscope	2	Each
		ViewBoxfor X-rayFilm, LED	1	Each
		Amalgamator, mechanical	3	Each
		Sterilizer, glass bead	3	Each
		Casting Machine	3	Each
		Kits, dental implant	2	Each
		Motor, Table Mounted	3	Each
		Motor, Hanging	3	Each
		Arthroscopy Machine, for TM Surgery	2	Each
		Vibrator, Mini	2	Each
	Dental Ward	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer (BP Machine), Aneroid	2	Each
		Stethoscope	2	Each
		Trolley, Patient	2	Each
		Trolley,Instrument	2	Each
		Trolley, Medicine	2	Each
		Trolleyfor GasCylinder	2	Each
		ViewBoxfor X-rayFilm, double	2	Each
		Wheel Chair	3	Each
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	2	Each
		Scale,Measuring, Height&Weight	2	Each
		Refrigerator, lab, 300L capacity	2	Each
Emergency	OPD	ECG Machine, 12channel	1	Each
		Glucometer	1	Each
		Fetal Doppler	1	Each
		Ventilator,Transport	1	Each
		SuctionMachine, electric	1	Each
		GasCylinder,Oxygen	3	Each
		Flow Meter, oxygen, with accessories	3	Each
		Resuscitation Unit(Ambu), adult, set	2	Each
		Resuscitation Unit(Ambu), pediatric, set	1	Each
		ViewBoxfor X-ray, double	3	Each
		Nebulizer,Pneumatic	2	Each
		Trolley, Patient	1	Each
		Examination table	1	Each visit room
		Sphygmomanometer (BP Machine), Aneroid	1	Each visit room
		Stethoscope	1	Each visit room
		Defibrillator, external, automated	1	Each
		CPR Machine, adult, automated	1	Each
		Cabinet, Medicine, non-refrigerant	1	Each

Department	Section	Name of Equipment	Qty	Unit
		Scale, Height&Weight	2	Each
		Ambulance, cardiac	2	Each
		Ambulance, medical	4	Each
		Mortuary	9	unit
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer (BP Machine), Aneroid	3	Each ward
		Stethoscope	3	Each ward
		Thermometer, Clinical	3	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		Trolley, Patient	2	Each ward
		Trolley, Medicine	2	Each ward
		Trolley for Gas Cylinder	2	Each ward
		Trolley, Instrument	1	Each ward
		Monitor, Ambulatory Blood Pressure	2	Each ward
		Gas Cylinder, Oxygen	2	Each ward
		Flow meter, oxygen, with accessories	2	Each ward
		Resuscitation Unit (Ambu), adult, set	1	Each ward
		Nebulizer, Pneumatic	2	Each ward
		Wheel Chair	1	Each ward
		Laryngoscope, curved, Macintosh, all sizes blade	1	Each ward
		Infusion Pump	2	Each ward
		Glucometer	1	Each ward
		View Box for X-ray, double	1	Each ward
		Ultrasound, B&W, 2D, convex & linear probe	1	Each
	Stat lab	Analyzer, Electrolyte, semi-auto	1	Each
		Drug detector equipment	1	Each
Emergency				
Ear, Nose, and Throat (ENT)	OPD	Sphygmomanometer (BP Machine), Aneroid	1	Each visit room
	(male OPD, female OPD, & R/S room)	Stethoscope	1	Each visit room
		Audiometer, Clinical	1	Each visit room
		Audiometer, Impedance	1	Each visit room
		Audiometer, Portable	1	Each visit room
		Laryngoscope, Fiber-optic, all sizes blade	1	Each visit room
		Naso-pharyngoscope	1	Each visit room
		Tympanometer	1	Each visit room
		View Box for X-ray Film, double, electric	1	Each visit room
		Light, examination, for ENT	2	Each visit room
		Head Light, Fiber-optic, with Mirror	2	Each visit room
		Otoscope	2	Each visit room
		Chair, ENT	1	Each visit room
		Set, ENT office	1	Each visit room
		Suction Apparatus	2	Each visit room
	IPD	Hospital bed	1	per bed strength

Department	Section	Name of Equipment	Qty	Unit
		Cabinet, bed side, for patient	1	per bed strength
		Height&Weight Measuring Scale	1	Each ward
		Otoscope	2	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		Sphygmomanometer (BP Machine), Aneroid	2	Each ward
		Stethoscope	2	Each ward
		Thermometer, Clinical	4	Each ward
		Trolley, Patient	2	Each ward
		Trolley, Medicine	2	Each ward
		Trolley, Instrument	1	Each ward
		ViewBox for X-ray Film, double, electric	2	Each ward
		Suction Machine, Surgical	2	Each Ward
		Wheel Chair	2	Each Ward
Ophthalmology	OPD	Torch, Halogen, for eye examination	4	Each
		Magnifying loupe, Binocular	4	Each
		Trail Lens Box (6 cylinder) with Trail frame	1	Each Exam room
		Retinoscope	1	Each Exam room
		Ophthalmoscope, Direct	1	Each Exam room
		Ophthalmoscope, Indirect	1	Each Exam room
		Slit Lamp with Tonometer GAT, Motorized Stand, with extra views access	1	Each Exam room
		Tonometer, Schiotz	1	Each Exam room
		Tonometer, Air-Puff	1	Each Exam room
		Auto Refractometer	1	Each Exam room
		B-Scan, Ocular, Ultrasound	1	Each Exam room
		Auto Refractometer	1	Each Exam room
		Lens for Gonioscope	1	Each Exam room
		Angiogram, eye, with fundal camera	1	Each
		OCT (Optical coherent tomography) machine	1	Each
		Laser, Argon	1	Each
		Laser, YAG	1	Each
		Biometry Machine	1	Each
		Pachymeter	1	Each (Optional)
		Analyzer, visual field	1	Each
		A-Scan, Ocular, ultrasound	1	Each
		OT Light, portable, single arm (spot light)	1	Each Room
		Lens, Condensing, +78D & +90D	1	Each Exam room
		Chart, Near Vision, Snellen's	1	Each Exam room
		Chart, Distant Vision, Snellen's (illuminating)	1	Each Exam room
		Optokinetic drum	1	Each
		Chart, Ishihara	1	Each Exam room
		Light, flickering	1	Each Exam room
		Scale, weighing	1	Each Exam room

Department	Section	Name of Equipment	Qty	Unit
		View box for x-ray, single	1	Each Exam room
		Sphygmomanometer (BP Machine), Aneroid	1	Each Exam room
		Stethoscope	1	Each Exam room
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Slit Lamp, with GAT	1	Each
		Ophthalmic Unit	1	Each
		Trial Lens Set	1	Each
		Lens, condensing, +78D & +90D	1	Each
		Sphygmomanometer (BP Machine), Aneroid	1	Each
		Ophthalmoscope, Direct	1	Each
		Ophthalmoscope, Indirect	1	Each
		Retinoscope	1	Each
		Tonometer, air puff	1	Each
		Stethoscope	1	Each
		Cabinet, Medicine, refrigerant	1	Each
		Set, extra-ocular surgery	1	Each
		Trolley, Patient	2	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	1	Each
		Trolley, Instrument	2	Each
Ophthalmology	IPD	Torch, halogen, for eye	4	Each
		Scale, weighing	2	Each
		Wheel Chair	4	Each
		View box for x-ray, single	1	Each
Gynecology and Obstetrics	OPD	Ultrasound, Doppler	1	Each
		Ultrasound, 2D, Convex, Linear & TVS probe	1	Each
		Scale, Height & Weight	1	Each visit room
		Sphygmomanometer (BP Machine), Aneroid	1	Each visit room
		Stethoscope	1	Each visit room
		Thermometer, Clinical	1	Each visit room
		View Box for X-ray, double	1	Each visit room
		Fetal Doppler	1	Each visit room
		CTG (Cardio-tocography) Machine	1	Each
		Resuscitation unit (Ambu), adult, set	2	Each
		Trolley, Patient	1	Each
		Sterilizer, electric, ss	1	Each
		Table, patient examination	1	Each visit room
		OT Light, portable, single arm (spot light)	1	Each visit room
		Drum, Surgical, medium	2	Each visit room
		Wheel Chair	4	Each
		Cabinet, medicine, refrigerant	1	Each

Department	Section	Name of Equipment	Qty	Unit
	Colposcopy room	Colposcope, video	1	Each
		Electro-surgical unit (Diathermy) for Leep	1	Each
		OT Light, portable, single arm (spot light)	1	Each
		Laser Therapy Set	1	Each
		Table, Gynec examination, hydraulic	1	Each
		Cryo Therapy Set	1	Each
Gynecology and Obstetrics	Labor unit	Table, Labor (obstetric), 3 sections	2	Each Room
		Table, patient examination	2	Each Room
		OT Light, rechargeable, portable, single arm	1	Each Room
		Suction Machine, Electric	1	Each Room
		OT Light, portable, single arm (spot light)	1	Each Room
		Trolley, Patient	2	Each Room
		Trolley, Instrument	2	Each Room
		Cabinet, Medicine, refrigerant	1	Each
		Radiant Warmer	1	Each Room
	Labor Unit	Sterilizer, electric, ss	1	Each Room
		Resuscitation unit (Ambu), Infant, set	2	Each
		Wheel Chair	2	Each
		Sphygmomanometer (BP Machine), Aneroid	2	Each Room
		Stethoscope	2	Each Room
		Cabinet, bedside for patient	1	Each bed
		Scale, weighing, neonatal	1	Each Room
		Fetal Doppler	2	Each
		CTG (Cardio-tocography) Machine	1	Each
		Nebulizer, pneumatic	1	Each
		Ventose Machine	1	Each
		Forceps, Obstetric	1	Each
		Glucometer	1	Each
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer (BP Machine), Aneroid	2	Each ward
		Stethoscope	2	Each ward
		Thermometer, Clinical	3	Each ward
		Wheel Chair	4	Each ward
		Glucometer	1	Each ward
		Trolley, Patient	1	Each ward
		Nebulizer, Pneumatic	1	Each ward
		View Box for X-ray, double	2	Each ward
		CTG (Cardio-tocography) Machine	1	Each ward
		Cabinet, medicine, refrigerant	1	Each
		Ultrasound, 2D, B&W, 2 probe	1	Each
		ECG Machine, 12 channel	1	Each
		Autoclave, 50 Liter, Vertical	1	Each

Department	Section	Name of Equipment	Qty	Unit
		Sterilizer, electric, ss	2	Each ward
		Drum, Surgical, medium	2	Each ward
		Resuscitation unit (Ambu), Adult, set	1	Each ward
		Trolley, Medicine	2	Each ward
		Trolleyfor GasCylinder	2	Each ward
		Trolley,Instrument	2	Each ward
		GasCylinder,Oxygen	2	Each ward
		Flow meter, oxygen, with accessories	2	Each ward
		Trolley, for dressing	2	Each ward
Anesthesiology	ICU	Bed, ICU	1	Per bed strength
		Monitor, Multi-parameter (IBP, NIBP, ETCO2, Temp)	1	Each bed
		Monitor, Central, for 32 beds	1	Each bed
		Pulse oximeter	1	Each bed
		Ventilator, ICU	1	Each bed
		Ventilator, Transport	2	Each
		Defibrillator, External, Automated	2	Each
		X-Ray, Portable, 30kw, 300mA, Analog	1	Each
		Syringe Pump	5	Each 4 bed
		Infusion Pump	5	Each 4 bed
		Suction Machine	3	Each
		Nebulizer, ultrasonic	1	Each 2 beds
		Analyzer, Blood Gas with electrolytes	1	Each
		Refrigerator, Medicine	1	Each
		Circuit, Bain	2	Each bed
		Flow meter, with accessories	1	Each bed
		Gas Cylinder, Oxygen	4	Each
		Sphygmomanometer (BP Machine), Aneroid	5	Each 4 bed
		Stethoscope	5	Each 4 bed
		Trolley, Patient	2	Each
		Trolley,Instrument	2	Each
		Trolley, Medicine	4	Each
		Trolleyfor GasCylinder	4	Each
		ViewBoxfor X-rayFilm, LED	1	Each
		Wheel Chair	1	Each 4 beds
		Blanket, Patient warmer	1	Each 4 beds
		Blood infusion warmer	1	Each 4 beds
MEDICINE	OPD (6-visit room)	Glucometer	1	Each visit room
		ECG Machine, 6 Chanel	1	Each visit Room
		Sphygmomanometer (BP Machine), Aneroid	1	Each visit room
		Stethoscope	1	Each visit room
		ViewBoxfor X-rayFilm, double	1	Each visit room
		Scale, Height&Weight	1	Each visit room
		Nebulizer, Pneumatic	1	Each visit room

Department	Section	Name of Equipment	Qty	Unit
		Flow meter, peak expiratory	1	Each visit room
		Chair, wheel	1	Each visit room
		Trolley, patient	1	Each visit room
		Hammer, medical, for percussion	1	Each visit room
		Tuning fork	1	Each visit room
		Examination Light	1	Each visit room
		Set, venesection	1	Each visit room
		Ophthalmoscope, direct	1	Each visit room
		Table, patient examination	1	Each visit room
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer (BP Machine), Aneroid	5	Each ward
		Stethoscope	5	Each ward
		Thermometer,Clinical	3	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Trolleyfor GasCylinder	2	Each ward
		Trolley,Instrument	1	Each ward
		Monitor,AmbulatoryBlood Pressure	2	Each ward
		Ultrasound, 2D, B&W	1	Each
		ECG Machine, 6 Chanel	1	Each
		Suction Machine	1	Each ward
		Pulse Oxymeter	1	Each ward
		GasCylinder,Oxygen	4	Each ward
		Flow meter, Peak Expiratory, with accessories	4	Each ward
		Resuscitation Unit(Ambu), adult, set	2	Each ward
		Nebulizer,Pneumatic	2	Each ward
		Wheel Chair	2	Each ward
		Laryngoscope, curved, Macintosh, all size blades	1	Each ward
		Infusion Pump	2	Each ward
		Glucometer	2	Each ward
		ViewBoxfor X-rayFilm, double	2	Each ward
		Cabinet, Medicine, refrigerant	1	Each
		Set, Lumber Puncture	1	Each
		Scale, Height and weight	1	Each
		Needle, Liver biopsy, set	1	Each
		Tuning Fork	1	Each
		Hammer, medical, for percussion	1	Each
		Ophthalmoscope, Direct	1	Each
Nephrology	OPD	Stethoscope	1	Each visit room
		Sphygmomanometer, aneroid	1	Each visit room
		View Box, X-Ray, double	1	Each visit room

Department	Section	Name of Equipment	Qty	Unit
Nephrology		Ophthalmoscope, direct	1	Each visit room
		Hammer, Medical, for percussion	1	Each visit room
		Tuning Fork	1	Each visit room
		Scale, Height and weight	1	Each visit room
		Torch, halogen, for eye exam	1	Each visit room
	Dialysis Unit	Hemodialysis Machine	1	Each bed
		Water Treatment Plant	2	Each
		Television, LED, 32"	2	Each
		Hemodialysis Bed	1	Each bed strength
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each bed
		Cabinet, bed-side for patient	1	Each bed
		Resuscitation Unit (Ambu), adult, set	1	Each
		Ultrasound, with Vascular probe	1	Each
		Glucometer	2	Each
		Sphygmomanometer, Aneroid	2	Each
		Suction machine	2	Each
		ECG Machine, 6 Channel	2	Each
		Pulse Oxymeter	2	Each
		Gas Cylinder. oxygen	2	Each
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer, Aneroid	2	Each ward
		Stethoscope	2	Each ward
		Thermometer, Clinical	3	Each ward
		Cabinet, medicine, refrigerant	1	Each
		Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Trolley, for Gas Cylinder	2	Each ward
		Trolley, Instrument	1	Each ward
		Monitor, Ambulatory Blood Pressure	2	Each ward
		Gas Cylinder, Oxygen	2	Each ward
		Flow meter, oxygen, with accessories	2	Each ward
		Wheel Chair	2	Each ward
		Scale, weighing, adult	2	Each ward
		Trolley, for patient	1	Each ward
		Ophthalmoscope, direct	1	Each ward
		Nebulizer, pneumatic	2	Each ward
		Table, for procedure, height adjustable	1	Each
		Trolley, for instrument	1	Each ward
		Ultrasound, B&W, 2D, convex probe	1	Each
		Biopsy needle, true cut (gun biopsy needle)	1	Each ward
Neuro-medicine	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength



Department	Section	Name of Equipment	Qty	Unit
Neuro-medicine	IPD	Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
		Trolley, Patient	1	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley for Gas Cylinder	2	Each
		View Box for X-ray Film	1	Each
		Wheel Chair	1	Each
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	2	Each
		Scale, Height & Weight	1	Each
		Cabinet, medicine, refrigerant	1	Each
		Ophthalmoscope, direct	1	Each ward
		Sucker machine	5	Each
		Pneumatic bed	5	Each
		Set, Speech tools	1	Each
		ECG Machine	1	Each
		Infusion pump	1	Each ward
		Laryngoscope, Macintosh, Curved, all sizes blade	1	Each ward
		Pulse oxymeter	1	Each ward
		Glucometer	1	Each
		Wheel Chair	3	Each
	OPD	Sphygmomanometer, Aneroid	2	Each visit room
		Stethoscope	2	Each visit room
		View Box for X-ray Film	1	Each visit room
		Plaster Cutting Saw, electric	2	Each visit room
		Thermometer, Clinical	2	Each visit room
		Trolley, Patient	2	Each
		Trolley, Medicine	1	Each visit room
		Trolley for Gas Cylinder	1	Each visit room
		Trolley, Instrument	1	Each
		Gas Cylinder, Oxygen	1	Each visit room
		Flow meter, oxygen, with accessories	1	Each
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	1	Each visit room
		View Box for X-ray, double	1	Each visit room
		Scale, Height & Weight	1	Each visit room
		Electro-encephalography (EEG)	1	Each
		Electro-myography (EMG)	1	Each
		NCS (Nerve Conduction Study) machine	1	Each

Department	Section	Name of Equipment	Qty	Unit
Orthopedics and Trauma Surgery	OPD (2-visit room)	Sphygmomanometer, Aneroid	2	Each visit room
		Stethoscope	2	Each visit room
		ViewBox for X-ray Film, double	2	Each visit room
		Plaster Cutting Saw, electric	2	Each visit room
		Thermometer, Clinical	2	Each visit room
		Trolley, Patient	2	Each visit room
		Trolley, for Gas Cylinder	1	Each visit room
		Trolley, Instrument	1	Each
		Gas Cylinder, Oxygen	1	Each visit room
		Flow meter, Oxygen, with accessories	1	Set Each visit room
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	2	Each visit room
		Height & Weight Measuring Scale	1	Each visit room
		Tape, Measuring	2	Each visit room
		Goniometer	2	Each visit room
		Doppler Device	1	Each visit room
		Wheel Chair	2	Each visit room
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
		Trolley, Patient	1	Each
		Trolley, Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolley, for Gas Cylinder	2	Each
		ViewBox, for X-ray Film, double	1	Each
		Wheel Chair	4	Each
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	2	Each
		Scale, Height & Weight	1	Each
		Refrigerator, Medicine, non-refrigerant	1	Each
Pathology and allied	Pathology	Traction Bed (Orthopedic bed)	1	Each
		Set, Bucks Traction	1	Each
		Set, Cervical Traction	1	Each
		Set, Holter Tractioner	1	Each
		Set, Pelvic Traction	1	Each
		Splint, Braun Bowler	10	Each
		Analyzer, Chemistry, Fully Automated	2	Each
		Analyzer, Chemistry, Semi Auto	2	Each
		Analyzer, Coagulation, Auto	1	Each
		Analyzer, Coagulation, Semi Auto	1	Each
		Analyzer, Blood Gas, Auto	1	Each
		Analyzer, Electrolyte, Auto	2	Each

Department	Section	Name of Equipment	Qty	Unit
		Analyzer , ESR, Auto	2	Each
		Analyzer , HbA1c (Glycated Hemoglobin)	1	Each
		Analyzer , Haematology, 5 Part including Reticulocyte count and Fluid Cytology, Auto	1	Each
		Analyzer, Urine, Auto	2	Each
		Analyzer, immunoassay, CLIA	1	Each
		Chamber, counting, improved Neuber	10	Each
		Centrifuge, 30 Hole, Swing Rotor	1	Each
		Centrifuge, 18holes Fixed Rotor	2	Each
		Colorimeter, Digital	1	Each
		pH meter	1	Each
		Microscope, Binocular, Laboratory	5	Each
		Microscope, Binocular with Phase contrast, Polarizing and Dark field	1	Each
		Bio-safety laminar flow	2	Each
		Autoclave, ≥50Liters, Bench-top	1	Each
		Water plant, distilled	2	Each
		Incubator, Lab, 50Liter	1	Each
		Oven, Hot Air, 50Liter	1	
		Water Bath, Digital, 20Liters	2	Each
		Balance, Analytical, Digital, (0.1mg to 200g)	1	Each
		Lab Rotator	2	Each
		Shaker	2	Each
		Vortex Mixer	1	Each
		Timer 0-2 Hr.	2	Each
		Micropipette, Digital, 10µl Fixed	3	Each
		Micropipette, Digital, 50µl Fixed	3	Each
		Micropipette, Digital, 100µl Fixed	3	Each
		Micropipette, Digital, 200µl Fixed	3	Each
		Micropipette, Digital, 0.5-10µl	3	Each
		Micropipette, Digital, 10-100µl	3	Each
		Micropipette, Digital, 100-1000µl	2	Each
		Refrigerator, 2-8 0C for Reagent, 300 liter	2	Each
Pathology and allied	Histo- Pathology	Centrifuge, Cyto	1	Each
		Cryostat with accessories	1	Each
		Microtome, Automatic	1	Each
	Histo- Pathology	Microtome, Rotary with accessories	2	Each
		Microscope, Compound, Photomicrography	1	Each
		Microscope, Compound, Binocular	2	Each
		Microscope, Compound, Trinocular	1	Each
		Microscope, 10-head, with cage, projector & photo-microscope	1	Each
		Paraffin Dispenser	2	Each
		Slide Driver , Hot Air	1	Each

Department	Section	Name of Equipment	Qty	Unit
		Slide Stainer , Automatic	1	Each
		Slide Stainer, Random Access	1	Each
		Slide Staining set, Manual	1	Each
		Tissue Processor, Automatic	1	Each
		Tissue Processor, Microwave	1	Each
		Tissue Paraffin Bath	1	Each
		Tissue Floatation Bath	1	Each
		Tissue Embedding Center	1	Each
		Autoclave, ≥50Liters, Bench-top	1	Each
		Incubator, Lab, 50Liter	1	Each
		Oven, Hot Air, 50Liter	1	Each
		Water Bath, Digital, 20Liters	1	Each
		Micropipette, Digital, 0.5-10μl	2	Each
		Micropipette, Digital, 10-100μl	2	Each
		Micropipette, Digital, 100-1000μl	2	Each
		Refrigerator, 2-8 0C for Reagent	2	Each
	Microbiology/ Immunology	Blood Culture, Automated, ≥50vials	1	Each
		Bio-safety Cabinet Class 2	1	Each
		Bio-safety Laminar Flow	1	Each
		Analyzer, Immunoassay, CLIA	1	Each
		Elisa System, Complete (reader, shaker, incubator), Semi-auto	1	Each
		Autoclave, ≥50Liters, Bench-top	1	Each
		Autoclave, ≥100Liters, Front loading	1	Each
		Incubator, Lab, 50Liter	3	Each
		Oven, Hot Air, 50Liter	1	Each
		Water Bath, Digital, 20Liters	1	Each
		PCR, conventional, set	1	Each
		Microscope, Immuno-fluorescent	1	Each (optional)
		Balance, Analytical, Digital, (0.1mg to 200g)	1	Each
		Centrifuge, refrigerated	1	Each (optional)
		Centrifuge, 28+ hole	2	Each
		Water plant, distilled	1	Each
		Chamber, Macloid, for Semen Analysis	2	Each
		Lab Rotator	2	Each
		Shaker	3	Each
		Timer, 0-2Hr.	2	Each
Pathology and allied	Microbiology/ Immunology	Vortex Mixer	1	Each
		Micropipette, Digital, 10μl Fixed	3	Each
		Micropipette, Digital, 50μl Fixed	3	Each
		Micropipette, Digital, 100μl Fixed	3	Each
		Micropipette, Digital, 0.5-10μl	3	Each
		Micropipette, Digital, 10-100μl	3	Each

Department	Section	Name of Equipment	Qty	Unit
		Micropipette, Digital, 100-1000µl	2	Each
		Freezer, -80 deg Celsius, 300 Liter	1	Each
		Refrigerator, Lab, 300 liter	2	Each
	Biochemistry	Analyzer, Chemistry, auto	1	Each
		Analyzer, Chemistry, semi-auto	1	Each
		Analyzer, Electrolyte; semi-auto	1	Each
		Analyzer, Electrolyte; auto	1	Each
		Colorimeter, digital	2	Each
		Analyzer, HbA1c (Glycated Hemoglobin)	1	Each
	Hematology	Analyzer, Hematology; semi-auto	1	Each
		Analyzer, Hematology; auto	1	Each
		Analyzer, HbA1c (Glycated Hemoglobin)	1	Each
		Analyzer, ESR	1	Each
		Coagulometer, auto	1	Each
		Coagulometer, semi-auto	1	Each
		Electrophoresis, Capillary, auto	1	Each
	Virology	Elisa System, semi-auto, complete	1	Each
		Elisa System, fully automated	1	Each
		PCR (Polymerase Chain Reaction), real time	1	Each
		Micropipette, for PCR, assorted set	1	Each
		DNA Extraction system, automated	1	Each
		RNA Extraction system	1	Each
		Heat block, dry, digital	1	Each
		pH meter	1	Each
		Microscope, Binocular, Laboratory	1	Each
		Water Plant, distilled	2	Each
		Incubator, Lab, 50Liter	2	Each
		Oven, Hot Air, 50Liter	1	Each
		Water Bath, Digital, 20Liters	1	Each
		Balance, Analytical, Digital, (0.1mg to 200g)	1	Each
		Vortex Mixer	1	Each
		Micropipette, Digital, 100µl Fixed	1	Each
	Virology	Micropipette, Digital, 200µl Fixed	1	Each
		Micropipette, Digital, 0.5-10µl	2	Each
		Micropipette, Digital, 10-100µl	2	Each
		Micropipette, Digital, 100-1000µl	2	Each
		Micropipette, Multichannel, 100-1000µl	1	Each
		Micropipette, Multichannel, 10-300µl	1	Each
		Refrigerator, Lab, 300 Liter	2	Each
		Autoclave, ≥50Liters, Bench-top	1	Each
		Autoclave, ≥100Liters, Front loading	1	Each
		Microscope, immuno-fluorescent, with photographic attachment	1	Each (optional)

Department	Section	Name of Equipment	Qty	Unit
Pathology and allied		Freezer, deep, -20 to -30 Celsius , 200L	1	Each
		Freezer, -80 deg Celsius, 300 Liter	1	Each
		Bio-safetyCabinetClass2	1	Each
		Centrifuge, digital, 28+ hole	1	Each
		Centrifuge, Micro-	1	Each
		Ice maker	1	Each
		Cold box	4	Each
Pediatrics	OPD	Scale, Weighing,Baby	1	Each visit room
		Stethoscope	1	Each visit room
		View Box for X-ray, double	1	Each visit room
		Table, Patient Examination	1	Each visit room
		Ophthalmoscope, Pediatric	1	Each
		Torch, halogen, for eye exam	1	Each visit room
		Stadiometer (height scale)	2	Each
		Nebulizer, pneumatic	2	Each
		Flowmeter, oxygen, with accessories	2	Each
		Sucker, electronic, foot operating	2	Each
	ShishuBikash Kendra	WISE-IV		
		WISE-R		
		M-Chart		
		ADCL (Autism Diagnostic Check-list)		
		ADOS (Autism Diagnostic Observation Schedule)		
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		ViewBoxfor X-ray, double	2	Each ward
		Stethoscope	3	Each ward
	IPD	Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Trolleyfor GasCylinder	1	Each ward
		Trolley,Instrument	1	Each ward
		GasCylinder,Oxygen	1	Each ward
		Flow meter, oxygen, with accessories	1	Each ward
Pediatrics		Resuscitation unit (Ambu), pediatrics, set	2	Each ward
		Nebulizer,Pneumatic	1	Each ward
		Scale, baby weighing	3	Each ward
		Sphygmomanometer, aneroid	2	Each ward
		Cabinet, medicine, non-refrigerant	1	Each
		Glucometer	1	Each
		Baby Cot	1	Each bed
		Radiant wanner	1	Each bed
		Phototherapy Machine, blue light	5	Each
		Electric sucker , Pediatric	2	Each
		View Box for X-Ray, double	1	Each

Department	Section	Name of Equipment	Qty	Unit
		Infusion Pump	2	Each
		Syringe pump	2	Each
		Flowmeter, oxygen, with accessories	1	Each
		Glucometer	1	Each
		Ophthalmoscope, pediatrics	1	Each
		Pulse Oxy meter ( Pediatric sensor)	5	Each
		Apnea Monitor	2	Each
		Laryngoscope, Macintosh, curved, Pediatric	2	Each
		ECG Machine, 12 channel	1	Each
		Monitor, Cardiac	2	Each
		Cabinet, bedside, for patient	2	Each
		Electric sucker , Pediatric	2	Each
		Pulse oximeter, pediatrics sensor	2	Each
		Stadiometer (height scale)	2	Each
		SCANU	Baby cot, for NICU	1
	Monitor, cardiac		1	Each bed strength
	Laryngoscope, Macintosh, straight, Pediatric		4	Each
	Ventilator, ICU, Neonatal		5	Each
	Phototherapy Machine, blue light		1	Each bed strength
	Phototherapy Machine, LED		2	Each
	Phototherapy, Surface, LED		2	Each
	Bili Blanket		2	Each
	Transcutaneous Bilirubinometer		2	Each
	Pulse Oximeter ( Pediatric sensor)		1	Each bed strength
	Apnea Monitor		4	Each
	SCANU	Infusion Pump	15	Each
		Syringe pump	15	Each
		Flowmeter, oxygen, with accessories	15	Each
		Glucometer	5	Each
		Ophthalmoscope, pediatrics	2	Each
		Radiant warmer	1	Each bed strength
		Nebulizer, ultrasonic	5	Each
		Sucker, electronic, foot operating	5	Each
		Sucker, manual, penguin	5	Each
		Resuscitation unit (Ambu), pediatrics (250ml), face mask (00,0,1), set	5	Each
		Resuscitation unit (Ambu), pediatrics (500ml), face mask (00,0,1), set	5	Each
		ECG Machine, neonatal	1	Each
		Analyzer, blood gas	1	Each
	CPAP (Continuous positive airway pressure) machine	5	Each	
Pediatrics		Ultrasound,	1	Each
		X-Ray, portable, 300ma	1	Each

Department	Section	Name of Equipment	Qty	Unit
Physical Medicine	OPD & intervention rooms	Electro therapy Unit	2	Each
		Laser Therapy Unit	2	
		Microwave therapy Unit	3	
		Shortwave Therapy, Continuous & Pulsed	3	
		Traction Unit (Traction bed), for physiotherapy	4	
		Ultrasound Therapy	4	
		IRR (Infrared radiation) Lamp	6	
		TENS (Trans-cutaneous Electrical Nerve Stimulation) Unit	6	
		Paraffin Bath	3	
		Combined Therapy (Ultrasound & Electro) unit	2	
		Hydrotherapy Unit	2	
		CPM (Continuous Passive Mobilize) for Knee	2	
		CPM (Continuous Passive Mobilize) for Shoulder	2	
		CPM (Continuous Passive Mobilize) for Ankle	2	
		CPM (Continuous Passive Mobilize) for Hip	2	
		Walker, for adult	5	
		Walker, for pediatrics	2	
		Vibrator, electric, for physical therapy	4	
		Bicycle, Static	4	
		Treadmill (ETT), electric	2	
		Cryo-therapy	1	
		Arm & Hand Therapy (Functional), pediatrics	1	
Physical Medicine	OPD & intervention rooms	Shock wave therapy, extra-corporeal (ESWT)	1	
		Standing Frame	1	
		Wheel Chair	6	
		Parallel Bar, physiotherapy	1	
		Ultraviolet (UV) Therapy Unit	1	
		Occupational Therapy Unit	1	
		Interferential Therapy (IFT) unit	1	
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer (BP Machine), Aneroid	5	Each ward
		Stethoscope	5	Each ward
		Thermometer, Clinical	3	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Hammer, medical, for percussion	1	Each
		Trolley, Instrument	1	Each ward
		Wheel Chair	2	Each ward
		ViewBox for X-ray Film, double	2	Each ward
		Scale, Height and weight	1	Each



Department	Section	Name of Equipment	Qty	Unit
Plastic Surgery	IPD acute	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer, Aneroid	5	Each
		Stethoscope	5	Each
		Trolley, Patient	5	Each
		Trolley, Instrument	3	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	2	Each
		View Box for X-ray, double	3	Each
		Wheel Chair	3	Each
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	2	Each
		Scale, Height & Weight	1	Each
		Cabinet, medicine, refrigerant	1	Each
		Gas Cylinder, oxygen	2	Each
		Flow meter, oxygen, with accessories	2	Each
	IPD acute	ECG Machine, 12 channel	1	Each
		Resuscitation unit (Ambu), adult, set	1	Each
		Resuscitation unit (Ambu), pediatrics, set	1	Each
		Set, Tracheostomy	1	Each
		Sucker Machine	2	Each
		Pulse oxymeter	2	Each
		Sterilizer, electric, ss	2	Each
		Tub, for Hydrotherapy	1	Each
		Table, for dressing	1	Each
	IPD non-acute	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer, Aneroid	5	Each
		Stethoscope	5	Each
		Trolley, Patient	5	Each
		Trolley, Instrument	3	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	2	Each
		View Box for X-ray, double	3	Each
		Wheel Chair	3	Each
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	2	Each
		Scale, Height & Weight	1	Each
		Cabinet, medicine, refrigerant	1	Each
		Gas Cylinder, oxygen	2	Each
		Flow meter, oxygen, with accessories	2	Each
		ECG Machine	1	Each
		Resuscitation unit (Ambu), adult, set	1	Each

Department	Section	Name of Equipment	Qty	Unit
		Set, Tracheostomy	1	Each
		Sucker Machine	2	Each
		Pulse oxymeter	2	Each
		Sterilizer, electric, ss	2	Each
		Tub, for Hydrotherapy	1	Each
		Table, for dressing	2	Each
	IPD Septic	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer, Aneroid	5	Each
	IPD Septic	Stethoscope	5	Each
		Trolley, Patient	5	Each
		Trolley, Instrument	3	Each
		Trolley, Medicine	2	Each
		Trolley for Gas Cylinder	2	Each
		View Box for X-ray, double	3	Each
		Wheel Chair	3	Each
		Saw, Plaster cutting, electric	2	Each
		Saw, Plaster cutting, manual	2	Each
		Scale, Height & Weight	1	Each
		Cabinet, medicine, non-refrigerant	1	Each
		Cabinet, medicine, refrigerant	1	Each
		Gas Cylinder, oxygen	2	Each
		Flow meter, oxygen, with accessories	2	Each
		ECG Machine, 12 channel	1	Each
		Resuscitation unit (Ambu), adult, set	1	Each
		Set, Tracheostomy	1	Each
		Sucker Machine	2	Each
		Pulse oxymeter	2	Each
		Sterilizer, electric, ss	2	Each
		Tub, for Hydrotherapy	1	Each
		Table, for dressing	2	Each
	OPD	Sphygmomanometer, Aneroid	2	Each visit room
		Stethoscope	2	Each visit room
		View Box for X-ray, double	1	Each visit room
		Plaster Cutting Saw, electric	2	Each visit room
		Thermometer, Clinical	2	Each visit room
		Trolley, Patient	2	Each
		Trolley, Medicine	1	Each visit room
		Trolley, for Gas Cylinder	1	Each visit room
		Trolley, Instrument	1	Each
		Gas Cylinder, Oxygen	1	Each visit room
		Flow meter, oxygen, with accessories	1	Set Each visit room
		Saw, Plaster cutting, electric	2	Each

Department	Section	Name of Equipment	Qty	Unit
		Saw, Plaster cutting, manual	1	Each visit room
		ViewBoxfor X-ray, double	1	Each visit room
		Scale, Height&Weight	1	Each visit room
		Sterilizer, electric, ss	1	Each
		OT Light, rechargeable, portable, single arm	3	Each
		Table, for dressing	5	Each
Psychiatry	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Nebulizer, ultrasonic	2	Each
		Glucometer	2	Each
		Scale, weighing	2	Each
		Cabinet, medicine, refrigerant	1	Each
		Wheel Chair	2	Each
		Bio-feedback Machine	1	Each
		ECT (Electro-convulsive Therapy) Machine	2	Each
		Hcalth Club Machine	1	Each
		Sucker Machine	1	Each
		Illicit drug detector	1	Each
		Pulse Oxymeter	1	Each
		ECG Machine, 12 channel	1	Each
		Ophthalmoscope, direct	1	Each
		Television, LED, 32"	1	Each
		View Box for X-Ray, double	2	Each
		Analyzer, Electrolyte, Li	1	Each
		Tools, Speech Therapy	1	Each
		Sphygmomanometer, aneroid	2	Each
		Laryngoscope, Macintosh, all blades, curved	1	Each
		Stethoscope	2	Each
		Flow meter, oxygen, with Accessories	1	Each
		Gas Cylinder, oxygen	2	Each
		Trolley, for patient	2	Each
		Torch, halogen, for eye exam	2	Each
		Hammer, medical, for percussion	2	Each
	OPD	ECG Machine, 12 channel	1	Each
		Ophthalmoscope, direct	1	Each
		Pulse oxymeter	1	Each
		View box for x-ray, double	2	Each
		Sphygmomanometer, aneroid	4	Each
		Stethoscope	4	Each
		Scale, weighing	2	Each
		Torch, halogen, for eye exam	2	Each
		Hammer, Medical, for percussion	2	Each

Department	Section	Name of Equipment	Qty	Unit
Radiology and Imaging	Radiology and Imaging	X-Ray 1000mA Digital Radiography (DR)	1	Each
		X-Ray 500mA Digital Radiography (DR)	2	Each
		MRI (Magnetic Resonance Imaging), Super conducting, 1.5T	1	Each
		X-Ray, 300mA, Portable, digital	1	Each
		Fluoroscopy	1	Each
		ViewBox for X-ray, multi-planner, LED	2	Each
		Lead Apron	4	Each
		Thyroid Protector	2	Each
		Lead Goggles	1	Each
		Gonad Protector	2	Each
		Dosimetry system	1	Each
		CT Scan; 64 slice	1	Each
		CT Scan; 16 slice	1	Each
		BMD (Bone Material Densitometer)	1	Each
		Ultrasound, B&W, Convex & Linear probe	1	Each
		Ultrasound, 4D, color Doppler, 3 Probe	1	Each
		ViewBox for X-Ray Film, double	2	Each
		Ultrasound, color Doppler, 3 Probe	1	Each
		Mammography with CR	1	*Each (Optional)
Radiotherapy	Radiation Therapy Unit	Linear Accelerator, Dual Energy, 6-15 MEV	2	Each
		CT- Simulator	1	Each
		Dosimetry System	1	Each
		Brachytherapy HDR with multiple applicator	1	Each
		Treatment Planning System	1	Each
		Quality Assurance equipment	1	Each
	Medical Oncology Unit	Infusion Pump	1	Each 2 beds
		Biosafety Cabinet,	1	Each
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer (BP Machine), Aneroid	5	Each ward
		Stethoscope	5	Each ward
		Thermometer, Clinical	3	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Hammer, medical, for percussion	1	Each
		Trolley, Instrument	1	Each ward
		Wheel Chair	2	Each ward
		ViewBox for X-ray Film, double	2	Each ward
		Scale, Height and weight	1	Each
	OPD	Sphygmomanometer (BP Machine), Aneroid	2	Each visit room
		Stethoscope	2	Each visit room

Department	Section	Name of Equipment	Qty	Unit
		Thermometer, Clinical	2	Each visit room
		Trolley, Patient	1	Each visit room
		Wheel Chair	2	Each
		ViewBox for X-ray Film, double	2	Each visit room
Radiotherapy	OPD	Scale, Height and weight	1	Each visit room
		Table, Patient examination	1	Each visit room
Dermatology and VD	OPD Examination Room	Light, Examination, for skin	1	Each
		Torch, Pencil	1	Each
		Glass, Magnifying, white light	1	Each
		Sphygmomanometer, Aneroid	1	Each
		Stethoscope	1	Each
		Auroscope, with Light	1	Each
		Wood's Lamp (U-V Examination Lamp)	1	Each
		Tongue Depressor	1	Each
		Thermometer, Clinical	2	Each
		Set, peripheral nerve examination	1	Each
	Consultant's room	Light, Examination, for skin	1	Each
		Torch, Pencil	1	Each
		Glass, Magnifying, white light	1	Each
		Sphygmomanometer, Aneroid	1	Each
		Stethoscope	1	Each
		Auroscope, with Light	1	Each
		Wood's Lamp (U-V Examination Lamp)	1	Each
		Tongue Depressor	1	Each
		Clinical Thermometer	2	Each
		Set, peripheral nerve examination	1	Each
	OPD Camera Unit	Camera, Digital	1	Each
		Set, Photo Processing	1	Each
	OPD Nursing Unit	Microscope, Binocular	1	Each
		Table, patient examination, tilted	2	Each
		Dispensing & mixing Equipment, Ointment	1	Each
		Bath Tub, for hydrotherapy	1	Each
		Scale, Height & weight	1	Each
		Wheel Chair	2	Each
		Glucometer	1	Each
		Iontophoresis machine	1	Each
		Patch Test Equipment	1	Each
		Trolley, dressing	1	Each
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Cabinet, medicine, non-refrigerant	1	Each ward
		Trolley, Patient	1	Each
		Sphygmomanometer, Aneroid	2	Each ward

Department	Section	Name of Equipment	Qty	Unit
Dermatology and VD		ECG Machine	1	Each ward
		Monitor, Patient	1	Each ward
		Stethoscope	2	Each ward
		View box for x-ray, double	1	Each ward
		Scale, Height & weight	1	Each
		Wheel Chair	2	Each
		Glucometer	2	Each
		Thermometer, clinical	2	Each
		Bath tub, for hydrotherapy	1	Each
Surgery	OPD	Sphygmomanometer, Aneroid	2	Each visit room
		Stethoscope	2	Each visit room
		Trolley, Patient	2	Each
		ViewBoxfor X-rayFilm, double	1	Each visit room
		Scale, Height&Weight	1	Each visit room
	OPD OT	OT Table, Hydraulic	1	Each
		OT Light, ceiling, double dome, halogen	1	Each
		Electro-surgical unit (Diathermy)	1	Each
		Autoclave, 50 Liter, Vertical	1	Each
		OT Light, portable, single arm (spot light)	1	Each
		Table, patient examination	1	Each
		Trolley, Medicine	2	Each
		Cabinet, Medicine, non-refrigerant	1	Each
		Surgical Drum, large	2	Each
		Surgical Drum, medium	2	Each
		Wheel Chair	2	Each
		Suction apparatus	1	Each
		Gas Cylinder, oxygen	2	Each
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Sphygmomanometer, Aneroid	3	Each ward
		Stethoscope	3	Each ward
		Thermometer,Clinical	4	Each ward
		Trolley, Patient	2	Each ward
		Trolley, Medicine	2	Each ward
		Trolleyfor GasCylinder	2	Each ward
		Trolley for dressing, ss	2	Each ward
		GasCylinder,Oxygen	2	Each ward
		Flow meter, oxygen, with accessories	2	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		ViewBoxfor X-ray, double	2	Each ward
		Scale, Height&Weight	1	Each ward
		Glucometer	1	Each ward
		CPR Machine, Automated, adult	1	Each

Department	Section	Name of Equipment	Qty	Unit
	IPD	ECG Machine, 12 channel	1	Each
		Suction Machine	1	Each ward
		Sterilizer, electric, ss	2	Each ward
		Surgical Drum, large	2	Each ward
		Surgical Drum, medium	2	Each ward
		Cabinet, Medicine, refrigerant	1	Each
Surgery		Wheel chair	2	Each ward
		Cabinet, bed side, for patient	1	Each bed
		Stethoscope	3	Each ward
		View Box for X-ray, double	1	Each ward
Urology	OPD	Uroflowmetry Machine with accessories	1	Each (optional)
	Urology	Urodynamic Machine with accessories	1	Each
		Sphygmomanometer, Aneroid	1	Each visit room
		Stethoscope	1	Each visit room
		Trolley, Patient	1	Each visit room
		ViewBoxfor X-ray, double	1	Each visit room
		Scale, Height&Weight	1	Each visit room
		Chair, wheel	1	Each
		Table, patient examination	1	Each visit room
	IPD	Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Erectile Dysfunction Treatment Unit	1	Each (optional)
		Sphygmomanometer, Aneroid	5	Each ward
		Stethoscope	5	Each ward
		Thermometer,Clinical	3	Each ward
		Cabinet, Medicine, non-refrigerant	1	Each ward
		Trolley, Patient	1	Each ward
		Trolley, Medicine	2	Each ward
		Trolleyfor GasCylinder	2	Each ward
		Trolley,Instrument	1	Each ward
		Suction Machine	1	Each ward
		Pulse Oxymeter	1	Each ward
		GasCylinder,Oxygen	2	Each ward
		Flow meter, Peak Expiratory, with accessories	2	Each ward
		Resuscitation Unit(Ambu), adult, set	1	Each ward
OT Complex	Common	OTTable, Electro-Hydraulic, manual over-ride	1	Each
Common 08	Min 400 Sqft each			
Urology 01				
Orthopedics 01				

Department	Section	Name of Equipment	Qty	Unit
<b>Eye 01</b>  <b>Neurosurgery 01</b>  <b>Pediatric Surgery 01</b>  <b>Thoracic Surgery 01</b>  <b>Total 14</b>  <b>OT Complex</b>		OT Light, ceiling, double dome, LED	1	Each
		OT Light, rechargeable, portable, single arm	1	Each
		Electrosurgical unit (Diathermy), 400W, vessel sealing	1	Each
		SuctionMachine, electric	2	Each
		Sterilizer, Electric, SS	1	
		Glucometer	1	Each
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each
		Stool, revolving, Height adjustable, ss	3	Each
		Trolley, Mayo's	1	Each
		Humby knife	1	Each
		GasCylinder,Oxygen	2	Each
		GasCylinder,Nitrous Oxide	2	Each
		Anesthesia Machine, with ventilator, Yolk 2+2	1	Each
		Resuscitation Unit(Ambu), adult, set	1	Each
<b>OT Complex</b>		Resuscitation Unit(Ambu), pediatrics, set	1	Each
		Laryngoscope, Fiber-optic, video, all sizes blade	1	Set
		Laryngoscope, curved blade, all sizes, Macintosh	1	Set
		View box for X-ray, double, electric	2	Each
		Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
		Trolley, Patient	2	Each
		Trolley,Instrument	2	Each
		Trolleyfor GasCylinder	2	Each
		Bowl stand, double, ss	2	Each
		Saline stand, ss	2	Each
	<b>Standby equipment for OTcomplex</b>	Duodenoscope, side view (ERCP), set	1	Each
		Cavitron Ultrasound Surgical Aspirator (CUSA), Set	1	Each
		Colonoscope, video, set	1	Each
		Ultrasonic Dessicator (Harmonic scalpel)	3	Each
		Nebulizer, ultrasonic	3	Each
		Video system, with recording, two monitors	2	Each
		Laparoscope, adult, with Surgical accessories	2	Each
		Laparoscope, adult, with gyne accessories	2	Each
		Defibrillator, External, Automated	2	Each
		Blood Warmer	3	Each
		Autoclave, Fast, 30 liter, horizontal type	3	Each
	<b>Neuro-surgery</b>  <b>Min 600 sqft</b>	OTTable, Electro-Hydraulic, manual over-ride, neuro attachment	1	Each
		OT Light, ceiling, double dome, LED	1	Each
		OT Light, rechargeable, portable, single arm	1	Each
		Electrosurgical unit (Diathermy)	1	Each
		SuctionMachine, electric	2	Each
		Sterilizer, Electric, SS	1	Each



Department	Section	Name of Equipment	Qty	Unit
OT Complex		Monitor, Multiparameter (IBP, NIBP, ETCO2, Temp)	1	Each
		Trolley, Mayo's	1	Each
		GasCylinder,Oxygen	4	Each
		GasCylinder,Nitrous Oxide	3	Each
		C-ArmMachine, 5kw, 9" Image Intensifier	1	Each
		Anesthesia Machine, with ventilator, Yolk 2+2	1	Each
		Resuscitation Unit(Ambu), adult, set	1	Each
		Resuscitation Unit(Ambu), Pediatrics, set	1	Each
		Laryngoscope, fibre-optic,with all blade sizes	1	Set
		Laryngoscope, Macintosh, with all blade sizes	1	Set
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each
		View box for X-ray, double, electric	2	Each
		Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
		Microscope, Operating, Neuro-surgery	1	Each
		Craniotome, electric, set	1	Each
		Trolley, Patient	2	Each
		Trolley,Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolleyfor GasCylinder	2	Each
		Bowl Stand	2	Each
		Stool, revolving, Height adjustable, ss	3	Each
		Glucometer	1	Each
		Saline stand	2	Each
	Orthopedic	OTTable, Electro-Hydraulic, manual over-ride, Orthopedic attachment	1	Each
	600 sqft	OT Light, ceiling, double dome, LED	1	Each
		OT Light, rechargeable, portable, single arm	1	Each
		Electro-Surgical Unit, 400w	1	Each
	Orthopedic	SuctionMachine, electric	2	Each
	600 sqft	Anesthesia Machine, with ventilator, Yolk 2+2	1	Each
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each
		Sterilizer, Electric, SS	1	Each
		Trolley, Mayo's	1	Each
		Monitor, Multiparameter (IBP, NIBP, ETCO2 & temp)	1	Each
		Resuscitation Unit(Ambu), adult, set	1	Each
		Resuscitation Unit(Ambu), Pediatrics, set	1	Each
		Laryngoscope, Fiber-optic, video, all sizes blade	1	Set
		Laryngoscope, curved blade, all sizes, Macintosh	1	Set
		FractureTable	1	Each
		C-ArmMachine, 5w, 9" Image Intensifier	1	Each
		Arthroscope Set	1	Each
		Glucometer	1	Each

Department	Section	Name of Equipment	Qty	Unit
OT Complex	Urology 600 sqft	Stool, revolving, Height adjustable, ss	3	Each
		GasCylinder,Oxygen	4	Each
		GasCylinder,Nitrous Oxide	3	Each
		Trolley, Patient	2	Each
		Trolley,Instrument	2	Each
		Trolley, Medicine	1	Each
		Trolleyfor GasCylinder	2	Each
		Bowl Stand	2	Each
		View box for X-ray, double, electric	2	Each
		Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
		Saline stand	2	Each
		Cystoscope, Adult, rigid, with accessories	2	Each
		Cystoscope, Pediatric, rigid, with accessories	2	Each
		Cystoscope, Adult, flexible, with accessories	1	Each
		Stone punch	2	Each
		Resectoscope, Adult, with accessories	2	Each
		Resectoscope, Pediatrics, with accessories	2	Each
		Urethrotome, Optical, adult, with accessories	2	Each
		Urethrotome, Optical, pediatrics, with accessories	2	Each
	Urology 600 sqft	Uretero-renoscope, semi-rigid, long, adult, with accessories	2	Each
		Uretero-renoscope, flexible, adult, with accessories	1	Each (optional)
		Uretero-renoscope, semi-rigid, short, adult, with accessories	2	Each
		Uretero-renoscope, semi-rigid, Pediatrics, with accessories	2	Each
		Urethrotome, Otis	1	Each
		Lithotripter, Pneumatic, with accessories	1	Each
		Lithotripter, ultrasonic, with accessories	1	Each
		Lithotripter, laser, with accessories	1	Each (optional)
		C-Arm Machine, 5kw, 9" Image Intensifier	1	Each
		Table, C-Arm compatible for Urology	1	Each
		Laser, YAG, Holmium, urology	1	Each (optional)
		PCNL (Percutaneous Nephroscope), set	1	Each
		Laparoscope, adult, with urology accessories	2	Each
		OT Light, ceiling, double dome, LED	1	Each
		OT Light, rechargeable, portable, siugle arm	1	Each
		ESWL (Extra-corporeal Shock wave lithotripter)	1	Each
		Electrosurgical Machine, TUR, vessel sealing	2	Each
		Ultrasonic Dessicator (Harmonic Scalpel)	1	Each
		OTTable, Electro-Hydraulic, manual over-ride	1	Each
		Resuscitation Unit(Ambu), pediatric, set	1	Each
		Resuscitation unit (Ambu), adult, set	1	Each

Department	Section	Name of Equipment	Qty	Unit
OT Complex	Pediatric Surgery 400 sqft	Glucometer	1	Each
		SuctionMachine, electric	2	Each
		GasCylinder,Oxygen	2	Each
		GasCylinder,Nitrous Oxide	1	Each
		Flow meter, Oxygen, with accessories	2	Each
		Laryngoscope, Fiber-optic, video, all sizes blade	1	Each
		Laryngoscope, curved blade, all sizes, Macintosh	1	Each
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each
		Trolleyfor GasCylinder	1	Each
		Trolley,Instrument	2	Each
		Trolley, Patient	2	Each
		Saline stand,SS	2	Each
		Bowl Stand	1	Each
		Stool, revolving, Height adjustable, ss	3	Each
		Electro-Surgical Unit	1	Each
		OTTable, Electro-Hydraulic, manual over-ride	1	Each
		OT Light, ceiling, double dome, LED	1	Each
		OT Light, rechargeable, portable, single arm	1	Each
	Pediatric Surgery 400 sqft	SuctionMachine, electric	2	Each
		Laparoscope, pediatric, with Surgical accessories	1	Each
		Trolley, Mayo's, ss	1	Each
		Anesthesia Machine, with ventilator, yolk 2+2	1	Each
		Resuscitation Unit(Ambu), pediatrics, set	1	Each
		Sterilizer, Electric, SS	1	Each
		Laryngoscope, pediatric, Macgill	1	Each
		Laryngoscope, straight blades, neonatal, Macintosh	1	Each
		Laryngoscope, pediatric, fiber-optic		Each
		Laryngoscope, Macgill , all size blades, set	1	Each
		Laryngoscope, curved blade, all sizes, Macintosh	1	Each
		Laryngoscope, Fiber-optic, video, all sizes blade	1	Each
		ViewBoxfor X-rayFilm, electric	2	Each
		Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
	Thoracic Surgery 400 sq. ft	GasCylinder,Oxygen	2	Each
		GasCylinder,Nitrous Oxide	2	Each
		Trolley, Patient	2	Each
		Trolley,Instrument	2	Each
		Trolleyfor GasCylinder	2	Each
		Bowl Stand	2	Each
		Saline stand, ss	2	Each
		Stool, revolving, Height adjustable, ss	3	Each
		OTTable, Electro-Hydraulic, manual over-ride	1	Set
		OT Light, ceiling, double dome, LED	1	Each

Department	Section	Name of Equipment	Qty	Unit
OT Complex		OT Light, rechargeable, portable, single arm	1	Each
		Electro-Surgical Unit, 400 W, vessel sealing & Argon Plasma Unit	1	Each
		Suction Machine, electric	2	Each
		Bronchoscope, video	1	Each
		Esophagoscope, rigid and flexible	1	Each
		Esophageal Dilator, assorted sizes, set	1	Each
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each
		Anesthesia Machine, with ventilator, Yolk2+2	1	Each
		Laryngoscope, Fiber-optic, all sizes blade	1	Set
		Laryngoscope, curved blade, all sizes, Macintosh	1	Set
		Resuscitation Unit(Ambu), adult, set	1	Each
		Resuscitation Unit(Ambu), pediatrics, set	1	Each
		Trolley, Mayo's	1	Each
		Sterilizer, Electric, SS	1	Each
		Laparoscope, adult, with Surgical accessories	1	Each
		Stool, revolving, Height adjustable, ss	3	Each
	Thoracic Surgery	Gas Cylinder, Oxygen	2	Each
		Gas Cylinder, Nitrous Oxide	2	Each
		Trolley, Patient	2	Each
		Trolley, Instrument	2	Each
		Trolley for Gas Cylinder	2	Each
		View Box for X-ray Film, electric	2	Each
		Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
		Bowl Stand	2	Each
		Saline stand, ss	2	Each
		Glucometer	1	Each
		OT Table, Electro-Hydraulic, manual over-ride	1	Each
	400 sq. ft			
		OT Light, ceiling, double dome, LED	1	Each
		OT Light, rechargeable, portable, single arm	1	Each
		Sterilizer, Hot Air, Medical	1	Each
		Autoclave, 20L, Bench top	1	Each
		Phaco-emulsifier with accessories	1	Each
		LASER, DCR	1	Each
		LASER, Argon	1	Each
		LASIK Machine	1	Each
		Vitreectomy Machine	1	Each
	600 sqft	Cryo-surgery set	1	Each
		Anesthesia Machine	1	Each
		Gas Cylinder, Oxygen	1	Each
		Gas Cylinder, Nitrous Oxide	1	Each

Department	Section	Name of Equipment	Qty	Unit
		Flow meter with accessories, set	1	Each
		Laryngoscope, curved blade, all sizes, Macintosh	1	Each
		PulseOximeter	1	Each
		Microscope, Operating, Ophthalmic, with extra view access	1	Each
		Ophthalmoscope, Direct	1	Each
		Ophthalmoscope, Indirect	1	Each
		Retinoscope	1	Each
		Lens, for Gonioscopy	1	Each
	<b>EYE</b>  <b>600 sqft</b>	Set, Cataract surgery	2	Each
		Set, Glaucoma surgery	2	Each
		Set, DCR	2	Each
		Set, extra-ocular surgery	2	Each
		Trail Lens Box (6 cylinder) with Trail frame	1	Each
		Sphygmomanometer	1	Each
		Stethoscope	1	Each
		Trolley, Patient	1	Each
		Trolley, Instrument, Aseptic	1	Each
		Trolley, Instrument, Septic	1	Each
		Suction Machine	1	Each
		Cabinet, Medicine/Instrument	2	Each
		Trolley for Gas Cylinder Oxygen	1	Each
		Gas Cylinder, Oxygen	3	Each
		Gas Cylinder, Nitrous Oxide	2	Each
		Bowl Stand	2	Each
		Head Light, for Surgeon	1	Each
		Magnifying Loupe, Binocular	1	Each
		Torch, halogen, for eye exam	1	Each
		Scale, weighing adult	1	Each
		View box for x-ray, double, electric	1	Each
<b>Outside OT complex</b>	<b>Obstetrics</b>  <b>2 OTs</b>  <b>400 sq. ft each</b>	OT Table, Electro-Hydraulic, manual over-ride	1	Each
		OT Light, ceiling, double dome, LED	1	Each
		OT Light, rechargeable, portable, single arm	0	Each
		Electrosurgical unit (Diathermy), 300W	1	Each
		Suction Machine, electric	2	Each
		Anesthesia Machine, with ventilator, 2+2yolk	1	Each
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each
		Sterilizer, Electric, SS	1	Each
		Resuscitation Unit(Ambu), adult, set	1	Each
<b>Outside OT complex</b>	<b>Obstetrics</b>	Resuscitation Unit(Ambu), pediatrics, set	1	Each
		Laryngoscope, Fiber-optic, video, all sizes blade	1	Set
		Laryngoscope, curved blade, all sizes, Macintosh	1	Set

Department	Section	Name of Equipment	Qty	Unit
	2 OTs 400 sq. ft each	Scale, Height&Weight	1	Each
		Blood Warner	1	Each
		Trolley, Patient	4	Each
		Trolley,Instrument	4	Each
		Trolley, Mayo's	1	Each
		Glucometer	2	Each
		Scale, weighing, neonatal	1	Each
		Trolleyfor GasCylinder	2	Each
		GasCylinder,Oxygen	2	Each
		GasCylinder,Nitrous Oxide	2	Each
		Stool, revolving, Height adjustable, ss	3	Each
		Bowl Stand	2	Each
		Saline stand, ss	2	Each
		Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
	Casualty OT Min 400 Sqft each	OTTable, Electro-Hydraulic, manual over-ride	1	Set
		OT Light, ceiling, double dome, LED	1	Each
		OT Light, rechargeable, portable, single arm	1	Each
		Electro-Surgical Unit, 400 W, vessel sealing	1	Each
		SuctionMachine, electric	2	Each
		Sterilizer, Electric, SS	1	Each
		Glucometer	1	Each
		Monitor, Vital sign (Pulse oximetry + NIBP)	1	Each
		Stool, revolving, Height adjustable, ss	3	Each
		Trolley, Mayo's	1	Each
		Humby knife	1	Each
		GasCylinder,Oxygen	2	Each
		GasCylinder,Nitrous Oxide	2	Each
		Anesthesia Machine, with ventilator, Yolk2+2	1	Each
		Resuscitation Unit(Ambu), adult, set	1	Each
		Resuscitation Unit(Ambu), pediatrics, set	1	Each
		Laryngoscope, Fiber-optic, video, all sizes blade	1	Each
		Laryngoscope, curved blade, all sizes, Macintosh	1	Each
		ViewBoxfor X-ray, double, electric	2	Each
		Sphygmomanometer, Aneroid	3	Each
		Stethoscope	3	Each
		Trolley, Patient	2	Each
		Trolley,Instrument	2	Each
		Trolleyfor GasCylinder	2	Each
		Bowl Stand	2	Each
		Saline stand, ss	2	Each
		Cystoscope, Flexible	1	Each
		Set, Chest drainage	1	Each

Department	Section	Name of Equipment	Qty	Unit
Respiratory Medicine	IPD	Set, Supra pubic cystostomy	1	Each
		Hospital bed	1	per bed strength
		Cabinet, bed side, for patient	1	per bed strength
		Resuscitation unit (ambu), adult, set	5	Each
		Nebulizer,Pneumatic	5	Set
		Wheel Chair	5	Each
		Infusion Pump	4	Each
		Glucometer	5	Each
		ViewBoxfor X-ray, double	5	Each
		Pulse Oxymeter	5	Each
		Analyzer, Blood Gas	2	Each
		Sphygmomanometer, Aneroid	5	Each
		Stethoscope	5	Each
		Thermometer,Clinical	10	Each
		Cabinet, medicine, refrigerant	1	Each
		Trolley, Patient	5	Each
		Trolley, Medicine	5	Each
		Trolleyfor GasCylinder	5	Each
		Trolley,Instrument	5	Each
		GasCylinder,Oxygen	10	Each
		Flow meter, oxygen, with accessories	10	Each
		Infusion Pump	5	Each
		ViewBoxfor X-ray, double	1	Each
		ECG Machine, 12 channel	1	Each
	Mini procedure room for indoor	Instrument Trolley	1	Each
		Abraham Needle	5	Each
		Drum, dressing, medium	1	Each
		Scale, weighing	1	Each
		Sucker Machine	1	Each
	Intervention Room	Bronchoscope, Fiber-optic	1	Each
		Bronchoscope, rigid	2	Each
Respiratory Medicine		Esophagoscope, rigid, adult	2	Each
		Ultrasound, with Endobronchial probe	1	Each
		Pleuroscope Machine	1	Each
		Bronchoscope, Fiber-optic, pediatrics	1	Each
		Nebulizer,Pncumatic	2	Each
		Resuscitator unit (Ambu), adult, set	1	Each
		Resuscitator unit (Ambu), pediatrics, set	1	Each
		Spirometer	1	Each
		STENT, Endobronchial	1	Each
		Laser, Endobronchial	1	Each

Department	Section	Name of Equipment	Qty	Unit
	Resuscitation room	Resuscitator unit (Ambu), adult, set	1	Each
		Resuscitator unit (Ambu), pediatrics, set	1	Each
		Sucker machine	1	Each
		Nebulizer, pneumatic	2	Each
		Gas Cylinder, Oxygen	2	Each
		Flow meter, oxygen, with accessories	2	Each
		Trolley, for oxygen cylinder	2	Each
		Pulse Oxymeter	1	Each
		Trolley for Patient	2	Each
	Visit room	Sphygmomanometer, Aneroid	1	Each
		Stethoscope	1	Each
		Thermometer, Clinical	1	Each
		Scale, weighing	1	Each
		Table, patient examination	1	Each
		View box for x-ray, double	1	Each
Blood Bank and Transfusion	Blood Bank and Transfusion	Refrigerator, blood bank, $\geq 180$ unit capacity	1	Each
		Refrigerator, domestic, $\geq 300$ L capacity	1	Each
		Freezer, plasma storage, -30 to -40 deg C	1	Each
		Monitor, Blood Collection	2	Each
		Centrifuge, Refrigerated, for Blood Bank (4 bags)	1	Each*
		Centrifuge, 15holes, digital	1	Each
		Tube Sealer	2	Each
		Microscope, Binocular, Laboratory	2	Each
		Blood Warmer	2	Each
		Bath, Plasma Thawing	1	Each*
		Water Bath, Digital	2	Each
		Oven, Hot Air, 50 Liter	1	Each
		Incubator, Lab, 50 Liter	1	Each
		Incubator, platelet, with agitator	1	Each*
		Plasma Expressor, manual	2	Each*
		Autoclave, Lab, 50 Liter	1	Each
		Balance, Digital, 1gm-1500gm	1	Each
		Lab Rotator	2	Each
		Analyzer, Cell Counter	1	Each
		Donor's station (blood donation chair)	4	Each
		Elisa System, Complete (reader, shaker, incubator), Semi-auto	1	Each
		Striper, Blood Bag	1	Each
		Hydrometer	1	Each
		Coomb's Washer	1	Each
		Refrigerator, Cryogenic-	1	Each
Anatomy	Histology	Microscope, Binocular	20	Each
		Microscope, Binocular, Teaching	1	Each



Department	Section	Name of Equipment	Qty	Unit
For 200 students		Microscope, Dissecting	1	Each
		Micrometer, ocular	1	Each
		Cadaver injector	1	Each
		Set, Cadaver dissection*	2	Each
		Bone & Meat cutting machine	1	Each
		Bone Saw	2	Each
		Razor Hone	2	Each
		Table, for dissecting cadaver	2	Each
		Trolley Table, for cadaver, ss	6	Each
		Cadaver Tanks, portable, fiber glass	4	Each
		Timer, 0-2 hrs	4	Each
		Magnifying glass	4	Each
		Slide calipers	50	Each
		View Box, for X-Ray, double	2	Each
	Gross Anatomy & Embryology	Model, 1st three weeks of development	2	Each
		Model, fetus with placenta & umbilical cord	2	Each
		Model, joint of limbs (upper & lower)	2	Each
		Model, GI tract with liver, pancreas & spleen	2	Each
		Model, KUB (kidney, ureter, urinary bladder)	2	Each
		Model, ovary & fallopian tube	2	Each
		Model, heart with great vessels	2	Each
		Model, lungs	2	Each
		Model, larynx & tracheo-bronchial tree	2	Each
		Model, hemisection of head & neck	2	Each
		Model, cerebrum	2	Each
		Model, cerebellum	2	Each
		Model, spinal cord cross section & nerve formation	2	Each
		Model, eyeball	2	Each
		Model, ear (external, middle & internal)	2	Each
		Model, Torso	2	Each
Physiology For 200 students Physiology For 200 students	Educational	Microscope, Teaching	1	Each
		Sterilizer, Electric, ss	1	Each
		Centrifuge, digital	1	Each
		Colorimeter, digital	1	Each
		ECG- 12 channel	2	Each
	Educational	Kymograph	2	Each
		Spirometer	2	Each
		Spirometer, digital	4	Each
		Pulse oximeter	4	Each
		Osmometer	2	Each
		Scale, Height & Weight	1	Each
		Refrigerator, Lab, 300 liter	1	Each
		Voltage stabilizer	2	Each

Department	Section	Name of Equipment	Qty	Unit
Hospital Kitchen	Receiving area	Scale, Platform, ss	1	Each
		Sink table, with grease trap	1	Each
		Pre-rinse unit	1	Each
		Floor pan, with grating	1	Each
		Garbage bin, mobile	1	Each
	Cold room & dry storage area	Walk-in-freezer	1	Each
		Walk-in-chiller	1	Each
		Shelf, 4-tier, warm food holding	12	Each
		Floor pan, with grating	2	Each
		Shelf, 4-tier, solid, wrought iron	7	Each
	Preparation area (vegetable)	Sink table, with grease trap	1	Each
		Potato peeler	1	Each
		Floor pan, with grating	1	Each
		Vegetable cutter	1	Each
		Garbage bin, mobile	1	Each
		Work table, with cutting board	1	Each
	Preparation area (meat/fish)	Sink table, with grease trap	1	Each
		Floor pan, with grating	1	Each
		Garbage bin, mobile	1	Each
		Chopping block	1	Each
		Work table, with cutting board	1	Each
	Cooking area	Exhaust hood	1	Each
		Burner, high power	2	Each
		Bratt pan, electric, 100 liter	2	Each
		Boiling pan, electric, 100 liter	1	Each
		Sink table, with grease trap	2	Each
		Work table, with shelf	1	Each
		Floor pan, with grating	1	Each
		Trolley, utility	2	Each
		Rice cooker, electric, 3 deck	2	Each
		Hand sink, with soap & towel dispenser	2	Each
		Fire suppression system	1	Each
Hospital Kitchen	Meal assembly	Bain Marie	2	Each
		Shelf, for trays	1	Each
		Work table	2	Each
		Cart, hot food, electric heating, 60 deg C	8	Each
		Cart, cold food, +2 to +4 deg C	4	Each
	Pantry area	Sink table, with grease trap	1	Each
		Floor pan, with grating	1	Each
		Work table	1	Each
		Milk boiler, 20 Liter	1	Each
		Blender, electric	1	Each
		Garbage bin, mobile	1	Each

Department	Section	Name of Equipment	Qty	Unit
	Pot wash area	Sink, pot wash, 3-bowl, with grease trap	1	Each
		Pre-rinse unit	1	Each
		Floor pan, with grating	2	Each
		Garbage bin, mobile	1	Each
		Shelf, 4-tier, solid, wrought iron	3	Each
	Dish wash area	Sink table, soiled dish, with garbage hole	1	Each
		Pre-rinse unit	1	Each
		Garbage bin, mobile	1	Each
		Dish washing machine	1	Each
		Table, clean dish landing	1	Each
		Shelf, 4-tier, solid, wrought iron	2	Each
		Floor pan, with grating	1	Each
		Plate racks	10	Each
		Glass racks, for 25 glasses of 18 cm	10	Each
		Racks, for cutlery	5	Each
		Racks, for trays	10	Each
	Trolley wash area	Hose reel	1	Each
		Floor drain pan, with grating	2	Each
Hospital Laundry	Soil Area	Washer extractor, ≥60kg	2	Each
		Washer extractor, ≥25kg	1	Each
		Dryer, ≥50kg	2	Each
		Sink, soaking, 2 Bowl, ss	1	Each
		Sink, hand wash, ss	1	Each
		Trolley, for soil linens	10	Each
Hospital Laundry	Pressing area	Steam Boiler (1000kg/hr)	1	Each
		Ironer, flat work	1	Each
		Work table, mobile, for flat work ironing	2	Each
		Table, vacuum ironing	4	Each
		Trolley, for clean linens	6	Each
		Sink, hand wash, ss	2	Each
	Pressing area	Dryer, ≥30kg	1	Each
		Hanger trolley	2	Each
	Dryer area	Dryer, ≥50kg	2	Each
		Dryer, ≥30kg	1	Each
	Plant equipment	Steam boiler, 1000kg/hr	1	Each
		Air Compressor (5 HP), for laundry	1	Each
		Dryer, Air	1	Each
		Package booster pump-set	1	Each
	Detergent store room	Shelve, slatted, 4 tiers	2	Each
	Trolley washing area	Hose reel, retractable	1	Each
		Floor pan grating, ss	1	Each

## Annex F: Guide for TOE Users

### Probable users and guidance for use:

#### 1. Hospital Planners

Project Director will consult the TOE as well as approximate cost of equipment for preparation of DPP. Health Engineering Department will consult the TOE for designing space, calculating electrical load and requirements of other utilities.

#### 2. Hospital Authority

For preparation of demand list of equipment for procurement:

Hospital authority will prepare a demand list annually. For Upazila Health Complexes, the administrator of the hospital will consult the TOE to see the list of equipment and the quantities entitled for procurement for the level of hospital. If entitled, he will take into consideration the status of inventory of the said equipment (number of the equipment functional / non-functional / repairable / non-repairable etc). He will include in the requisition list for non-repairable quantities. He will also take step for the disposal of the equipment as per guideline for condemnation of equipment to free the space for new equipment. The administrator will have to fill in the Medical Equipment Acquisition Form attached with this annex (Annex- F1).

For district hospitals with different departments headed by subject specialists, the departmental heads will consult the TOE for preparation of list of equipment for procurement. The department is entitled to include equipment in the list ONLY if the equipment is listed in the TOE for the level hospital the department is based. If entitled, the department will consider the inventory of the equipment and its functionality as mentioned in the above paragraph to quantify the requisition. He will have to fill in the 'Medical Equipment Acquisition Form' attached with this annex (Annex- F1). The hospital administrator will consolidate the list received from the departments.

#### 3. Head of Directorates

For development of Annual Procurement Plan:

Head of Directorates will consolidate the list of equipment requested from different cost centers under his directorate. The list from the cost centers must be accompanied by filled in 'Medical Equipment Acquisition Form' (Annex- F1) that requires the requisition be tallied with TOE. Director will review and finalize the procurement list as per availability of fund with prioritization, if necessary, as per policy of the directorate or its programs. Directors will take assistance of the sub-committee or Procurement cell in the Directorate for review, finalization and prioritization of the list.

The compilation quantity of requirement will be reflected as the quantities of the items of procurement plan of the concerned Line Director. After submission of the procurement plan, this will be further reviewed and approved by PLMC, MOHFW. It is recommended that all requests for high end equipment will be accompanied by filled in 'Medical Equipment Acquisition Form'. The whole process may be a step or attempt to ensure need-based procurement planning. For the exceptional cases, where the concerned hospital may undergo procurement using their own budget, they should also follow the same process.

#### 4. Procuring Entity:

For finalization of specification and terms and conditions of procurement

Procuring entity, after receiving a request from users, will consult Annex- F1b for inclusion of other requirements in the specification as well as in the concerned section of the bidding document. This is obligatory for the high end equipment requiring installation. For example, air conditioners, dehumidifiers, etc. may be included as accessories and renovation in terms and conditions.

# Annex- F1: Medical Equipment Acquisition Form

Name and district of health facility: \_\_\_\_\_

No of Bed: \_\_\_\_\_

SI #	Generic name of equipment	Basic configuration of equipment	Department of Installation	Number(s) entitled as per TOE	Number of the existing equipment (functional / repairable)	Required number of the equipment	Fulfill infrastructure requirement as per annex-F1a (Yes / No)	Availability of Manpower as per annex-F1b (Yes/ No)	Remarks
	A	B	C	D	E	F=D-E	G	I	
1									
2									
3									
4									
5									

Prepared by: \_\_\_\_\_

(name and designation of the health facility with official seal)

Reviewed by: \_\_\_\_\_

(name and designation of the UHFPO/CS/Superintendent of health facility with official seal)

## Annex- F1a: Infrastructure and Electrical Requirements for Health Facility

Equipment	Room Requirement	Electrical Requirements
MRI	<p>Space requirement for 3 rooms</p> <p>Magnet Room - 21 ft x 16 ft</p> <p>Control Room - 10 ft x 16 ft</p> <p>Electronics Room - 21 ft x 7 ft</p> <p>A standard drawing is attached for each room (Annex F1d figure 1)</p> <p>10 inch brick wall is good enough for each room.</p> <p>Space to be given in ground floor (preferable)</p> <p>If machine to be installed in upper floors then at least 16 ton load bearing capacity to be ensured for Permanent Magnet MRI and 7 Ton for Supercon MRI</p> <p>Magnet Room should not be within 20 ft of roads or any moving equipment like lift, generator etc.</p>	<p>Power Line : 3 Phase 400 V, 4 Wire Power line up to Magnet Room with neutral and individual earthing</p> <p>Power Cable diameter should be minimum 70 mm</p> <p>Power Consumption (Max.) : 160 KVA (1.5T) or 30 KVA (0.3 T)</p> <p>Separate power cable line for AC, Dchumidifier, lights etc.</p> <p>Distribution Box with 200 A MCB and required bus bar.</p> <p>Substation with minimum 200 KVA load dedicated to MRI is a must for 1.5 T MRI and 40 KVA for 0.3 T MRI. Also should include Voltage Regulator at output.</p>
CT	<p>Space requirement for 3 rooms</p> <p>Machine Room - 20 ft x 16 ft</p> <p>Control Room - 10 ft x 16 ft</p> <p>Electronics Room - 8 ft x 16 ft</p> <p>A standard drawing is attached for each room (Annex F1d figure 2)</p> <p>10 inch brick wall is good enough for each room.</p>	<p>Power Line : 3 Phase 400 V, 4 Wire Power line up to Magnet Room with neutral and individual earthing</p> <p>Power Cable diameter should be minimum 35 mm</p> <p>Power Consumption (Max.) : 160 KVA (64 Slice)</p> <p>Separate power cable line for AC, Dehumidifier, lights etc.</p> <p>Distribution Box with 150 A MCB and required bus bar.</p> <p>Substation with minimum 200 KVA load dedicated to CT is preferable for 64 Slice CT. Also should include Voltage Regulator at output.</p>
Cathlab	<p>Space requirement for 3 rooms</p> <p>Machine Room - 25 ft x 20 ft</p> <p>Control Room - 10 ft x 20 ft</p> <p>Electronics Room - 8 ft x 20 ft</p> <p>A standard drawing is attached for each room (Annex F1d figure 3)</p> <p>10 inch brick wall is good enough for each room.</p>	<p>Power Line : 3 Phase 400 V, 4 Wire Power line up to Magnet Room with neutral and individual earthing</p> <p>Power Cable diameter should be minimum 70 mm</p> <p>Power Consumption (Max.) : 160 KVA max.</p> <p>Separate power cable line for AC, Dehumidifier, lights etc.</p> <p>Distribution Box with 200 A MCB and required bus bar.</p> <p>Substation with minimum 200 KVA load dedicated to cathlab is preferable. Also should include Voltage Regulator at output.</p>
X-Ray machine (Analog)	<p>Space recommended:</p> <p>Machine Room: 14' x 12';</p> <p>Operating Console room: 14' x 6'</p> <p>10 inch brick wall thickness</p> <p>Standard diagram is attached (Annex F1d figure 4)</p>	<p>3 Phase, 5 wires (L1, L2, L3, N &amp; PE) 380 VAC power cable line in equipment room</p> <p>Sub-station</p>
X-ray machine (Digital)	<p>Space recommended:</p> <p>Machine Room: 14' x 12';</p> <p>Operating Console room: 14' x 6'</p> <p>10 inch brick wall thickness</p> <p>Standard diagram is attached (Annex F1d figure 4)</p>	<p>3 Phase, 5 wires (L1, L2, L3, N &amp; PE) 380 VAC power cable line in equipment room</p> <p>Sub-station</p>

## Annex- F1b: Manpower Requirements

----- To be addressed during TOE of hospitals of 500 bedded and above -----

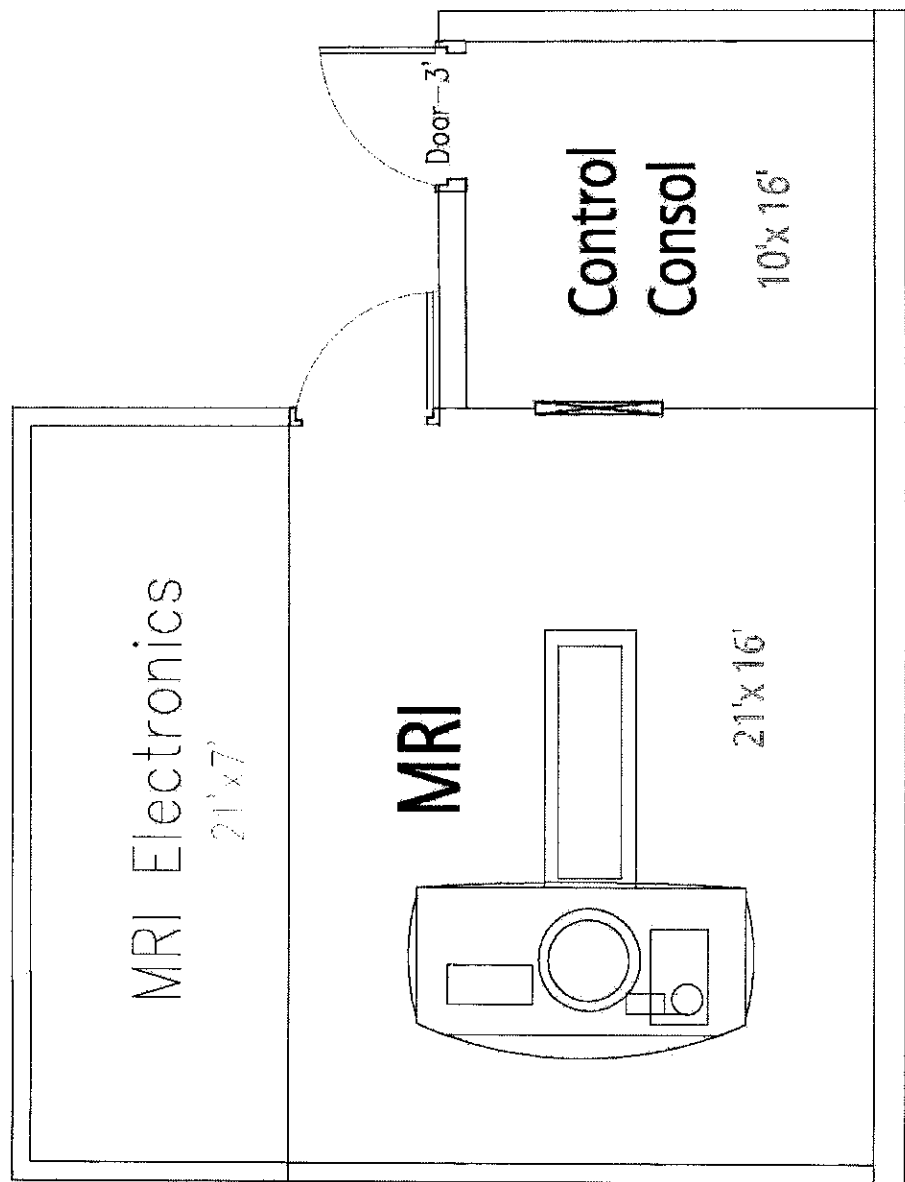
## Annex- F1c: Requirements to be addressed by procuring entity

Equipment	Renovation and other requirements	Remarks
MRI	<p>Renovation of existing room as required by supplying vendor including :</p> <p>RF Cabin in Magnet Room for shielding</p> <p>Floor and Wall Tiles for Electronics &amp; Control Room</p> <p>False Ceiling for Electronics &amp; Control Room</p> <p>Internal wiring and lighting as required.</p> <p>Painting of walls if needed.</p> <p>Doors as per requirement</p> <p>5 Ton central type AC with dehumidification for Magnet Room - 1 running and 1 backup. (for 1.5 T)</p> <p>2.5 Ton central type AC with dehumidification for Magnet Room - 1 running and 1 backup. (for 1.5 T)</p> <p>2.5 Ton split AC for Electronics Room - 1 running and 1 backup</p> <p>2 Ton split AC for Control Room - 1 no.</p> <p>20 Ltr. Dehumidifier for Electronics and Control Room - 2 nos</p> <p>250 KVA max. Generator (for 1.5 T)</p> <p>160 KVA max. Online UPS for the whole system (1.5 T)</p> <p>30 KVA max. Online UPS for the whole system (0.3 T)</p>	
CT	<p>Renovation of existing room as required by supplying vendor including :</p> <p>Floor and Wall Tiles for all Rooms</p> <p>False Ceiling for all Rooms</p> <p>Internal wiring and lighting as required.</p> <p>Painting of walls if needed.</p> <p>Doors with lead protection as per requirement</p> <p>Lead Glass window with installation.</p> <p>2.5 Ton Split AC for Machine Room - 1 running and 1 backup.</p> <p>2.5 Ton split AC for Electronics Room - 1 running and 1 backup</p> <p>2 Ton split AC for Control Room - 1 no.</p> <p>20 Ltr. Dehumidifier for all Rooms - 4 nos (2 for Machine Room)</p> <p>160 KVA max. Online UPS for the whole system (64 Slice)</p>	
Cathlab	<p>Renovation of existing room as required by supplying vendor including :</p> <p>Floor and Wall Tiles for all Rooms</p> <p>False Ceiling for all Rooms</p> <p>Internal wiring and lighting as required.</p> <p>Painting of walls if needed.</p> <p>Doors with lead protection as per requirement</p> <p>Lead Glass window with installation.</p> <p>2.5 Ton Split AC for Machine Room - 1 running and 1 backup.</p> <p>2.5 Ton split AC for Electronics Room - 1 running and 1 backup</p> <p>2 Ton split AC for Control Room - 1 no.</p> <p>20 Ltr. Dehumidifier for all Rooms - 4 nos (2 for Machine Room)</p> <p>160 KVA max. Online UPS for the whole system</p>	

Equipment	Renovation and other requirements	Remarks
X-Ray machine (Analog)	Renovation of existing room as required by supplying vendor including : Floor and Wall Tiles for all Rooms False Ceiling for all Rooms Internal wiring and lighting as required. Painting of walls if needed. Doors with lead protection as per requirement Lead Glass window with installation. 2.5 Ton Split AC for Machine Room 1.5 Ton split AC for Console Room Dehumidifier Voltage stabilizer Film processor with printer	
X-ray machine (Digital)	Renovation of existing room as required by supplying vendor including : Floor and Wall Tiles for all Rooms False Ceiling for all Rooms Internal wiring and lighting as required. Painting of walls if needed. Doors with lead protection as per requirement Lead Glass window with installation. 2.5 Ton Split AC for Machine Room 1.5 Ton split AC for Console Room Dehumidifier Voltage stabilizer	

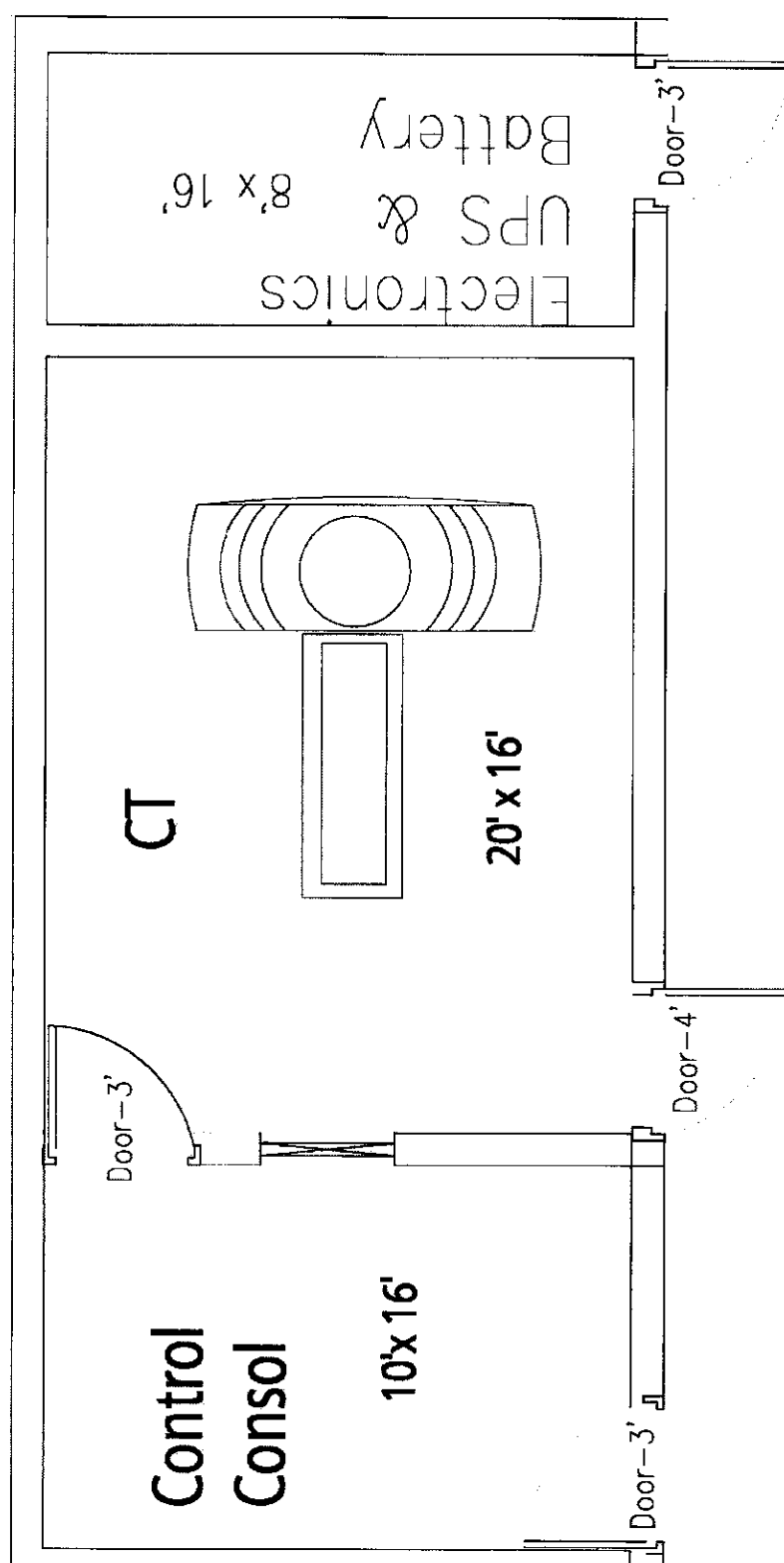


**Annex- F1d: drawing of Different Rooms**



Room plan for MRI  
Prepared by Siemens Bangladesh Ltd.

*Figure 1: Drawing of MRI Room*



Room plan for CT Scan  
Prepared by Siemens Bangladesh Ltd.

Figure 2: Drawing of CT Room

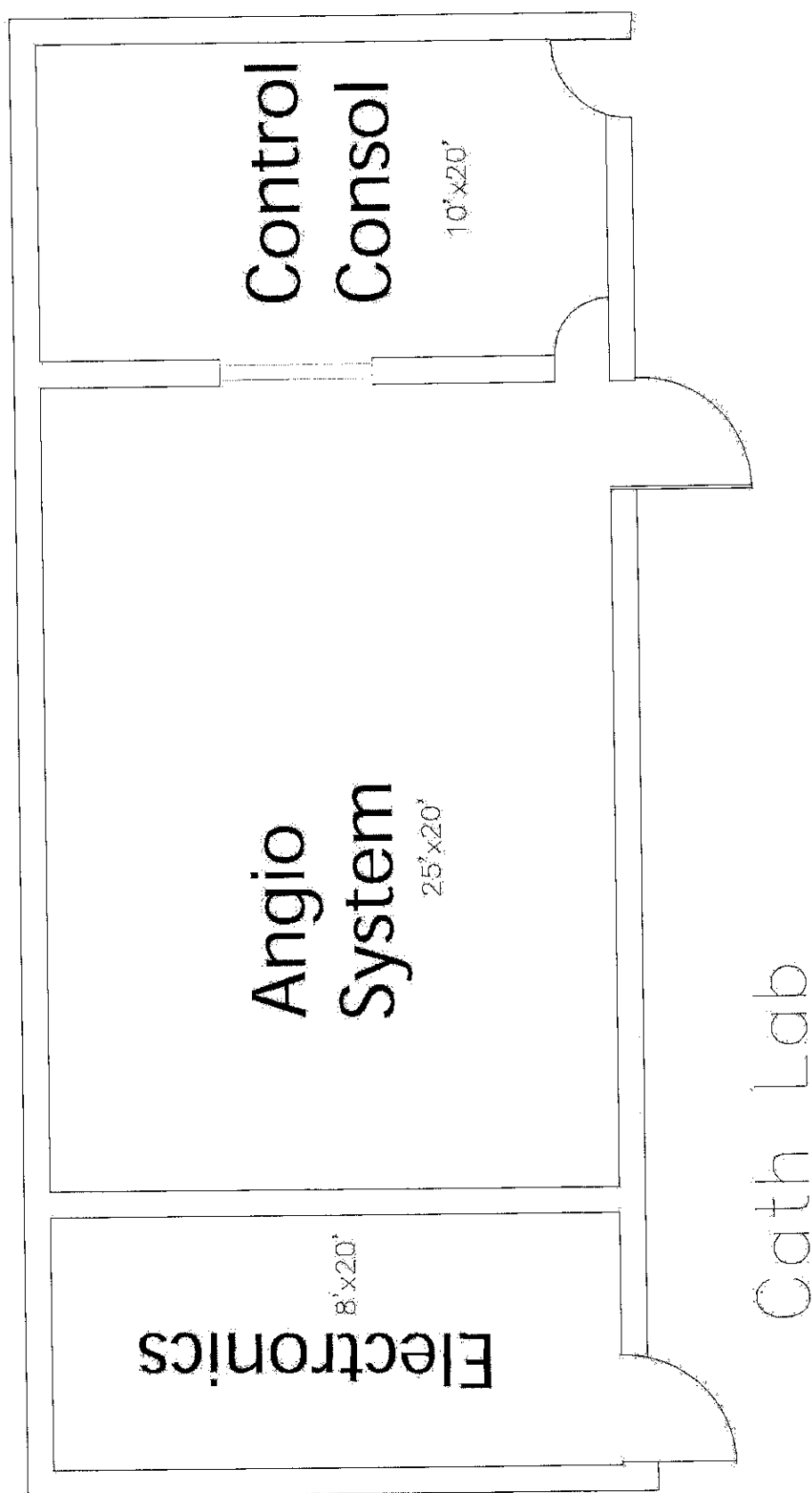


Figure 3: Drawing of Cat Lab

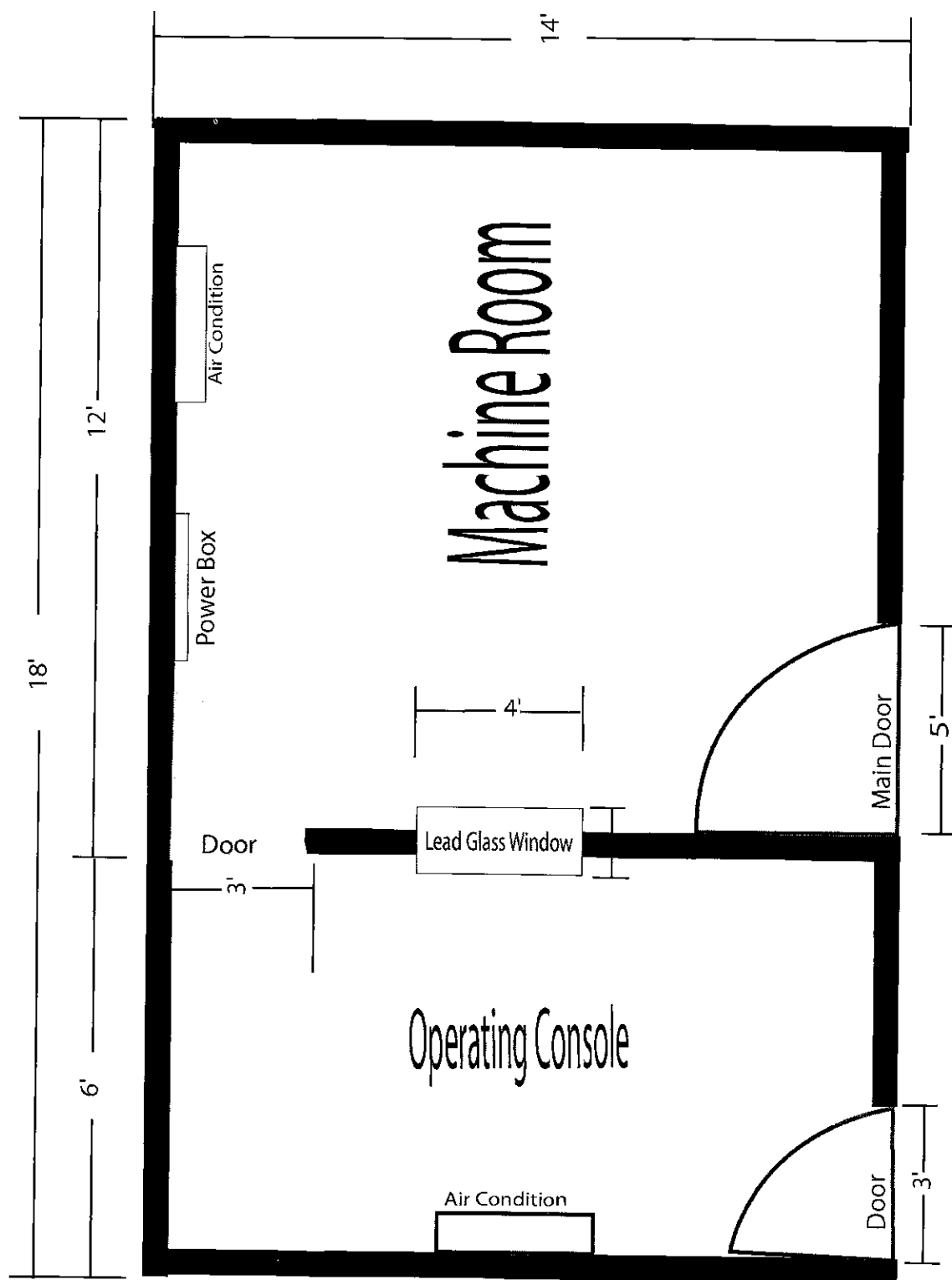


Figure 4: Drawing of X-ray room (both analog and digital)

## Annex G: List of Contributors

No.	Name	Designation & Organization
1.	Md. Ayubur Rahman Khan	Additional Secretary (Dev. & ME)
2.	Dr. Md Rezaul Hasan	Assistant Professor (Ophthalmology) Pabna Medical College & Hospital
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10.	DR. Md. Mashiur Arefin	Junior Consultant (Urology), 500 bed General Hospital Mughda
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20.	Brig. Gen. Md. Golam Rasul	Director, CMSD, DGHS
21.	Dr. Faruk Ahmed Bhuiyan	Director (Planning), DGHS
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23.	Dr. Md. Abdus Sobur	AD(Proc), CMSD, DGHS
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34.	Prof. Dr. M.A. Kashem Bhuiyan	Prof. of Surgery Dhaka Medical College & Hospital
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38.	Dr. Md. Ibrahim Khalil	Asst. Prof.( Surgery for Casualty block) Dhaka Medical College & Hospital
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124.	Dr. Dewan Kabir Khokon	Civil Surgeon, Tangail
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139.	Dr. Mahmudul Hasan	Associate Professor , Bogra Medical College & Hospital
140.	Dr. Nazrul Islam	Asstt. Prof, Bogra Medical College & Hospital
141.	Dr.A.K Salim Al Den	Asstt. Prof, Bogra Medical College & Hospital
142.	Dr. Md. Hasanat Al Matin	Consultant, 500 bed General Hospital Mughda
143.	Dr.Md. Ziaur Rahman	Consultant, 500 bed General Hospital Mughda
144.	Dr. Md. Abdullah Al Harun	Sr. Consultant (Pediatrics) , 500 bed General Hospital Mughda
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148.	Dr. Abdul Motaleb Hossain	Asst. Prof (Surgcry), Bogra Medical College & Hospital
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151.	Dr. Md. Mohsen Hasan	Sr. Consultant (Radiology & Imaging), 500 bed General Hospital Mughda
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155.	Dr. AKM Ahsan Habib	Astt. Prof (Radiotherapy), DMC
156.	Dr.Mustafizur Rahman	Deputy Director, Bogra Medical College & Hospital
157.	Prof Dr. Quazi Shumana Akhter	Professor (Physiology), DMC
158.	Dr. Monira pervin	Associate Professor (Virology), DMC
159.	Dr. Mohammad Hafizur Rahman	Associate Professor (Biology), DMC
160.	Dr. Mohammad Jobayer	Lecturer, DMC
161.	Dr. Eliza Omar Eva	Associate Professor, DMC
162.	Dr. Md. Mokter Hossain	Associate Professor, DMC
163.	Dr. Prodip Biswas	Lecturer, DMC
164.	Muhammad Tanvir Ashraf	Jr. Const., 500 bed General Hospital Mughda
165.	Prof Shamim Ara	Professor, DMC
166.	Dr. Hasan Sayeda Khan	Associate Prof, Shahid Suhrawardy Medical College & Hospital

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168.	Dr. Md. Yusuf Rahman	Jr. Consultant , 500 bed General Hospital Mughda
169.	Dr. Farzana Afroz	Jr. Consultant (Pediatric Surgery), 500 bed General Hospital Mughda
170.	Dr. Rakanuzzman Bhuyan	Jr. Consultant, 500 bed General Hospital Mughda
171.	Dr. Chowdhury Sazzad Hyder	Consultant (Burn & Plastic Surgery) 500 bed General Hospital Mughda
172.	Dr. Muhammad Mahmud Alam	Consultant, 500 bed General Hospital Mughda
173.	Dr. Mostafa	Consultant, 500 Bed Kurmitola General Hospital
174.	Dr. Md. Ibrahim Khalil	Consultant (Nephology ), 500 Bed Kurmitola General Hospital
175.	Dr. Md. Faruq Amin Talukder	Consultant,500 Bed Kurmitola General Hospital
176.	Dr. Mahamnad Tanvir Ashraf	Consultant (Neuro Surgery) , 500 Bed Kurmitola General Hospital
177.	Dr. Jannat Ara Ferdeous	Asst. Prof (Gynecology & Obstetrics) Shahid Suhrawardy Medical College & Hospital

## Annex H. Government Order of TOEs

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার  
স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়  
ক্রয় ও সংগ্রহ শাখা

নং-৪৫.১৬৫.০৫২.০১.০০.০০১.২০১৩-২৮৮

তারিখঃ ১৫-০৭-২০১৪ খ্রিঃ

বিষয়ঃ ১০ শয্যা বিশিষ্ট মা ও শিশু কল্যাণ কেন্দ্রের Standard List of Equipment.

উপর্যুক্ত বিষয়ের পরিপ্রেক্ষিতে নির্দেশক্রমে জানানো যাচ্ছে যে, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়ের অধীনস্থ বিভিন্ন ১০ শয্যা বিশিষ্ট মা ও শিশু কল্যাণ কেন্দ্রের Standard List of Equipment-এর তালিকা নিম্নবর্ণিত শর্তে মন্ত্রণালয় কর্তৃক চূড়ান্ত করা হয়েছেঃ

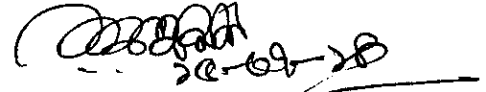
শর্তাবলী:

(ক) চূড়ান্ত ToE নির্দিষ্ট সময় অন্তর সংশ্লিষ্ট সকলের মতামতের ভিত্তিতে হালনাগাদ করা যাবে।

(খ) হাসপাতাল আপগ্রেড এর কারণে Deptt/জনবল সংক্রান্ত যে কোন পরিবর্তনের প্রেক্ষিতে ToE -তে পরিবর্তন/ পরিবর্ধন/ সংযোগজনের সুযোগ থাকবে।

এমতাবস্থায়, ১০ শয্যা বিশিষ্ট মা ও শিশু কল্যাণ কেন্দ্রের Standard List of Equipment এর তালিকা প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য নির্দেশক্রমে এতদসঙ্গে প্রেরণ করা হলো।

সংযুক্তঃ বর্ণনামতে ৪ (চার) পাতা।



(রেজওয়ানুর রহমান)

সিনিয়র সহকারী সচিব

ফোনঃ ৯৫৪০৬৪৫

Emfil: sasproc@mohfw.gov.bd

বিতরণঃ

- ১। মহাপরিচালক, পরিবার পরিকল্পনা অধিদপ্তর, ৬, কাওরান বাজার, ঢাকা।
- ২। যুগ্ম-সচিব (পরিবার কল্যাণ), স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৩। লাইন ডাইরেক্টর (পিএসএসএম), পরিবার পরিকল্পনা অধিদপ্তর, ৬, কাওরান বাজার, ঢাকা।
- ৪। লাইন ডাইরেক্টর (এমসিআরএইচ), পরিবার পরিকল্পনা অধিদপ্তর, ৬, কাওরান বাজার, ঢাকা।
- ৫। পরিচালক (পরিবার পরিকল্পনা), ঢাকা/রাজশাহী/চট্টগ্রাম/খুলনা/বরিশাল/সিলেট/রংপুর বিভাগ, ঢাকা/রাজশাহী/চট্টগ্রাম/খুলনা/বরিশাল/সিলেট/রংপুর।
- ৬। উপপরিচালক (পরিবার পরিকল্পনা) (সকল) ..... (অধীনস্থ সকল মেডিকেল অফিসার (ক্লিনিক)/মেডিকেল অফিসার (এমসিএইচ)-কে তালিকাসহ অবহিত করার অনুরোধসহ)।

অনুলিপিঃ

- ১। সচিব মহোদয়ের একান্ত সচিব, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ২। কান্ট্রি ডাইরেক্টর, এমএসএইচ, বাড়ি নং-৩ (৩য় ও ৪র্থ তলা), রোড-২৩ বি, গুলশান-১, ঢাকা-১২১২।
- ৩। অতিরিক্ত সচিব (উন্নয়ন ও চিশিজ) মহোদয়ের ব্যক্তিগত কর্মকর্তা, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৪। যুগ্ম-সচিব (উন্নয়ন) মহোদয়ের ব্যক্তিগত কর্মকর্তা, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।

**গণপ্রজাতন্ত্রী বাংলাদেশ সরকার**  
**স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়**  
**ক্রয় ও সংগ্রহ শাখা**

নং-৪৫.১৬৫.০৫২.০১.০০.০০১.২০১৩-২৮৯

তারিখঃ ১৫-০৭-২০১৪ খ্রিঃ

**বিষয়ঃ ৫০ শয্যা বিশিষ্ট হাসপাতালের Standard List of Equipment.**

উপর্যুক্ত বিষয়ের পরিপ্রেক্ষিতে নির্দেশক্রমে জানানো যাচ্ছে যে, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়ের অধীনস্থ বিভিন্ন ৫০ শয্যা বিশিষ্ট হাসপাতালের Standard List of Equipment -এর তালিকা নিম্নবর্ণিত শর্তে মন্ত্রণালয় কর্তৃক চূড়ান্ত করা হয়েছেঃ

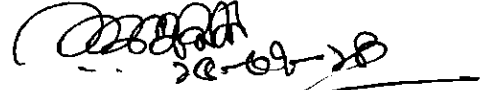
**শর্তাবলী:**

(ক) চূড়ান্ত ToE নির্দিষ্ট সময় অন্তর সংশ্লিষ্ট সকলের মতামতের ভিত্তিতে হালনাগাদ করা যাবে।

(খ) হাসপাতাল আপগ্রেড এর কারণে Deptt/জনবল সংক্রান্ত যে কোন পরিবর্তনের প্রেক্ষিতে ToE -তে পরিবর্তন/ পরিবর্ধন/ সংযোগজনের সুযোগ থাকবে।

এমতাবস্থায়, ৫০ শয্যা বিশিষ্ট হাসপাতালের Standard List of Equipment এর তালিকা প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য নির্দেশক্রমে এতদসঙ্গে প্রেরণ করা হলো।

সংযুক্তঃ বর্ণনামতে ৪ (চার) পাতা।



(রেজওয়ানুর রহমান)  
সিনিয়র সহকারী সচিব  
ফোনঃ ৯৫৪০৬৪৫

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**বিতরণঃ**

- ১। মহাপরিচালক, স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা।
- ২। যুগ্ম-সচিব (হাসপাতাল ও নাসিং), স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৩। পরিচালক, সিএমএসডি, তেজগাঁও, ঢাকা।
- ৪। লাইন ডাইরেক্টর, ইএসডি, স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা।
- ৫। পরিচালক (স্বাস্থ্য), ঢাকা/রাজশাহী/চট্টগ্রাম/খুলনা/বরিশাল/সিলেট/রংপুর বিভাগ, ঢাকা/রাজশাহী/চট্টগ্রাম/খুলনা/বরিশাল/সিলেট/রংপুর।
- ৬। সিভিল সার্জন (সকল) ..... (অধীনস্থ সকল ইউএইচএফপিওকে তালিকাসহ অবহিত করার অনুরোধসহ)।

**অনুলিপিঃ**

- ১। সচিব মহোদয়ের একান্ত সচিব, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ২। কান্ট্রি ডাইরেক্টর, এমএসএইচ, বাড়ি নং-৩ (৩য় ও ৪র্থ তলা), রোড-২৩ বি, গুলশান-১, ঢাকা-১২১২।
- ৩। অতিরিক্ত সচিব (উন্নয়ন ও চিশিজ) মহোদয়ের ব্যক্তিগত কর্মকর্তা, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৪। যুগ্ম-সচিব (উন্নয়ন) মহোদয়ের ব্যক্তিগত কর্মকর্তা, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।

**গণপ্রজাতন্ত্রী বাংলাদেশ সরকার**  
**স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়**  
**ক্রয় ও সংগ্রহ শাখা**

নং-৪৫.১৬৫.০৫২.০১.০০.০০১.২০১৩-২৯০

তারিখঃ ১৫-০৭-২০১৪ খ্রিঃ

**বিষয়ঃ ২৫০ শয্যা বিশিষ্ট হাসপাতালের Standard List of Equipment.**

উপর্যুক্ত বিষয়ের পরিপ্রেক্ষিতে নির্দেশক্রমে জানানো যাচ্ছে যে, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়ের অধীনস্থ বিভিন্ন ২৫০ শয্যা বিশিষ্ট হাসপাতালের Standard List of Equipment -এর তালিকা নিম্নবর্ণিত শর্তে মন্ত্রণালয় কর্তৃক চূড়ান্ত করা হয়েছেঃ

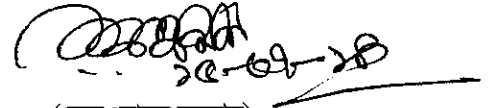
**শর্তাবলীঃ**

(ক) চূড়ান্ত ToE নির্দিষ্ট সময় অন্তর সংশ্লিষ্ট সকলের মতামতের ভিত্তিতে হালনাগাদ করা যাবে।

(খ) হাসপাতাল আপগ্রেড এর কারণে Deptt/জনবল সংক্রান্ত যে কোন পরিবর্তনের প্রেক্ষিতে ToE -তে পরিবর্তন/ পরিবর্ধন/ সংযোগজনের সুযোগ থাকবে।

এমতাবস্থায়, ২৫০ শয্যা বিশিষ্ট হাসপাতালের Standard List of Equipment এর তালিকা প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য নির্দেশক্রমে এতদসঙ্গে প্রেরণ করা হলো।

সংযুক্তঃ বর্ণনামতে ১২ (বার) পাতা।



(রেজওয়ানুর রহমান)

সিনিয়র সহকারী সচিব

ফোনঃ ৯৫৪০৬৪৫

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**বিতরণঃ**

- ১। মহাপরিচালক, স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা।
- ২। যুগ্ম-সচিব (হাসপাতাল ও নাসিং), স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৩। পরিচালক, সিএমএসডি, তেজগাঁও, ঢাকা।
- ৪। লাইন ডাইরেক্টর, এইচএসএম, স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা।
- ৫। পরিচালক (স্বাস্থ্য), ঢাকা/রাজশাহী/চট্টগ্রাম/খুলনা/বরিশাল/সিলেট/রংপুর বিভাগ, ঢাকা/রাজশাহী/চট্টগ্রাম/খুলনা/ বরিশাল/ সিলেট/রংপুর (অধীনস্থ ২৫০ শয্যা বিশিষ্ট সকল হাসপাতালের তত্ত্বাবধায়ক-কে তালিকাসহ অবহিত করার অনুরোধসহ)
- ৬। পরিচালক/তত্ত্বাবধায়ক ..... হাসপাতাল।

**অনুলিপিঃ**

- ১। সচিব মহোদয়ের একান্ত সচিব, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ২। কান্ট্রি ডাইরেক্টর, এমএসএইচ, বাড়ি নং-৩ (৩য় ও ৪র্থ তলা), রোড-২৩ বি, গুলশান-১, ঢাকা-১২১২।
- ৩। অতিরিক্ত সচিব (উন্নয়ন ও চিশিজ) মহোদয়ের ব্যক্তিগত কর্মকর্তা, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৪। যুগ্ম-সচিব (উন্নয়ন) মহোদয়ের ব্যক্তিগত কর্মকর্তা, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়

ক্রয় ও সংগ্রহ শাখা

[www.mohfw.gov.bd](http://www.mohfw.gov.bd)

নং-৪৫.১৬৫.০৫২.০১.০০.০০১.২০১৩ (অংশ)-৩৫৫

তারিখঃ ০৬-০৯-২০১৬ খ্রিঃ


বিষয়ঃ ৫০০ শয্যা বিশিষ্ট হাসপাতালের Standard List of Equipment.

উপর্যুক্ত বিষয়ের পরিশ্রেফিতে নির্দেশক্রমে জানানো যাচ্ছে যে, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়ের অধীনস্থ বিভিন্ন ৫০০ শয্যা বিশিষ্ট হাসপাতালের Standard List of Equipment -এর তালিকা নিম্নবর্ণিত শর্তে মন্ত্রণালয় কর্তৃক চূড়ান্ত করা হয়েছেঃ

শর্তাবলী:

- (ক) চূড়ান্ত ToE নির্দিষ্ট সময় অন্তর সংশ্লিষ্ট সকলের মতামতের ভিত্তিতে হালনাগাদ করা যাবে।
- (খ) হাসপাতাল আপগ্রেড এর কারণে Department/জনবল সংক্রান্ত যে কোন পরিবর্তনের প্রেক্ষিতে ToE -তে পরিবর্তন/পরিবর্ধন/ সংযোগজনের সুযোগ থাকবে।
- (গ) বর্ণিত ToE এর তালিকা Supply Chain Management Portal-এ অন্তর্ভুক্ত করা হবে।

সংযুক্তঃ .....

  
(রেজওয়ানুর রহমান)  
উপসচিব  
ফোনঃ ৯৫৪০৬৪৫

বিতরণঃ

- ১। মহাপরিচালক, স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা।
- ২। যুগ্ম-সচিব (হাসপাতাল), স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৩। পরিচালক.....হাসপাতাল।
- ৪। পরিচালক, সিএমএসডি, তেজগাঁও, ঢাকা।
- ৫। লাইন ডাইরেক্টর, এইচএসএম, স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা।
- ৬। পরিচালক (স্বাস্থ্য), ঢাকা/রাজশাহী/চট্টগ্রাম/খুলনা/বরিশাল/সিলেট/রংপুর/ময়মনসিং বিভাগ।
- ৭। কান্ট্রি প্রজেক্টর ডাইরেক্টর, Systems for Improved Access to Pharmaceutical Services (SIAPS), House # 3, (2<sup>nd</sup>-4<sup>th</sup> floor), Road # 23B, Gulshan-1, Dhaka-1212 বর্ণিত ToE এর তালিকা Supply Chain Management Portal (SCMP)-তে অন্তর্ভুক্তির বিষয়ে কারিগরী সহায়তা প্রদানের জন্য অনুরোধ করা হলো।

অনুলিপিঃ

- ১। মাননীয় মন্ত্রীর একান্ত সচিব, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ২। মাননীয় প্রতিমন্ত্রীর একান্ত সচিব, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৩। সচিব মহোদয়ের একান্ত সচিব, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৪। অতিরিক্ত সচিব (উন্নয়ন ও চিপি) মহোদয়ের ব্যক্তিগত কর্মকর্তা, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।
- ৫। যুগ্ম-সচিব (উন্নয়ন) মহোদয়ের ব্যক্তিগত কর্মকর্তা, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।