



PC-1

Revamping of THQ Hospital, Jampur District Rajanpur

ORIGINAL APPROVED COST	<b>PKR Million. 294.780/-</b>
ORIGINAL APPROVED GESTATION	<b>72 Months</b> <b>Till June 2025</b>
APPROVAL FORUM	<b>DDSC (DDSC)</b>

## **1. NAME OF THE PROJECT**

Revamping of THQ Hospital, Jampur District Rajanpur

## **2. LOCATION OF THE PROJECT**

### **2.1. DISTRICT(S)**

I. RAJANPUR

### **2.2. TEHSIL(S)**

I. JAMPUR

## **3. AUTHORITIES RESPONSIBLE FOR**

### **3.1. SPONSORING AGENCY**

- PRIMARY AND SECONDARY HEALTH CARE

### **3.2. EXECUTION AGENCY**

- PRIMARY AND SECONDARY HEALTH CARE

### **3.3. OPERATIONS AND MAINTENANCE AGENCY**

- PRIMARY AND SECONDARY HEALTH CARE

### **3.4. CONCERNED FEDERAL MINISTRY**

- NATIONAL HEALTH SERVICES, REGULATIONS AND COORDINATION

<b>3</b>	<b>AUTHORITIES RESPONSIBLE</b>	
	3.1 Sponsoring	Government of the Punjab, Primary and Secondary Healthcare Department
	3.2 Execution	PMU for Revamping Program of Primary and Secondary Healthcare Department, District Health Councils and C&W Department.
	3.3 Operation & Maintenance	PMU for Revamping Program of Primary and Secondary Healthcare Department and District Health Authority
	3.4 Concerned Federal Ministry	Ministry of National Health Services, Regulation and Coordination Pakistan

#### 4. PLAN PROVISION

Sr #	Description
1	<b>Source of Funding:</b> Scheme Listed in ADP CFY
2	<b>Proposed Allocation:</b> 0.000
3	<b>GS No:</b> 5270
4	<b>Total Allocation:</b> 0.000
5	<b>Funds Diverted:</b> 0.000
6	<b>Balance Funds:</b> 0.000
7	<b>Comments:</b> Funded out of block provision reflected at G.S No.658 with an allocation of Rs. 1,800 million (Capital = Rs. 1.300 Million & Revenue = Rs. 500 Million).

#### 5. PROJECT OBJECTIVES

attached

## **5. Project objectives and its relationship with Sectorial Objectives and Components**

The Government of Punjab is making strenuous efforts for a better and effective Health Care system. The Defining step in this direction was to recognize the importance of Health Care at Primary & Secondary Levels. As a first step towards better health care at primary and secondary level, the department under the guidance of Government of the Punjab has decided to launch massive revamping of 40 THQ & DHQ Hospitals in the financial year 2016-17 along with revamping of emergencies of 15 selected THQs and emergencies of all Hospitals. In addition to that, Government has assigned the task of revamping of all remaining 85 THQ Hospitals of Punjab during 2017-18. The Project Management Unit, Revamping Program, Primary and Secondary Healthcare Department has started the 2<sup>nd</sup> Phase of the said revamping program in September, 2017.

### **5.1 Background of Primary & Secondary Healthcare Department**

Effective primary and secondary healthcare is particularly important in resource-poor countries. Effective delivery of vaccinations, maternal and child care (MCH) and treatment of common pathologies (such as malaria, gastroenteritis, respiratory tract infections and other vector borne diseases) is essential for the achievement of Sustainable Development Goals (SDGs). Effective diagnostic triage, an organized system of prescription and queue management, an effective and stringent sterilization regime, quality nursing and consultant care, implementation of minimum service delivery standards (MSDS) and delivery of care for chronic pathologies lie at the center for the provision of universal health care at a cost that the community can afford as envisaged in domains established by the 1978 Alma-Ata Declaration of WHO. Primary care serves as the cornerstone for building a strong healthcare system that ensures positive health outcomes and health equity. The deficiencies in quality of care represent neither the failure of professional compassion nor necessarily a lack of resources rather, they result from gaps in knowledge, inappropriate applications of available technology and unstructured planning. Local health care systems in our setup have practically not been able to implement department's objectives. Result is continuous lack of quality improvement to lower health outcomes.

Quality health care is actually provision of health care by timely, skillful application of medical technology in a culturally sensitive manner within the available resource constraints. Eliminating poor quality involves not only giving better care but also eliminating under provision of essential clinical services (system wide microscopy for diagnosing tuberculosis, for example); stopping overuse of some care (prenatal ultrasonography or unnecessary injections, for example); and ending misuse of unneeded services (such as unnecessary hysterectomies or antibiotics for viral infections). A sadly unique feature of quality is that poor quality can obviate all the implied benefits of good access and effective treatment. At its best, poor quality is wasteful and at its worst, it causes actual harm.

Keeping in view this basic essence of primary and secondary health care, The Government of Punjab is dedicated in making strenuous efforts for ensuring a better and effective Health Care system. The Defining step in this direction was to recognize the importance of Health Care at Primary & Secondary Levels. As a first step towards better health care at primary and secondary level, a separate department was created by bifurcating the Health department into two departments Specialized Health Care & Medical Education Department and Primary & Secondary Health Care (P&SH) Department. The principle reason for bifurcation has been to improve governance and service delivery in the spheres of health care across the province. Primary and Secondary Health Care Department has been entrusted the responsibility of primary and secondary level health facilities including preventive health services and Vertical Programs. P&SH Department accordingly has its functional responsibility in respect of 26 District Headquarter Hospitals (DHQs), 129 Tehsil Headquarter Hospitals (THQs), 322 Rural Health Centers (RHCs) and 2,504 Basic Health Units (BHUs). Moreover, specialized programs like Expanded Program for Immunization (EPI), TB Control (DOTS), Hepatitis Control Programs as well as special campaigns such as Dengue Campaign, Polio Eradication Campaigns also fall in purview of the department. The establishments like Director General Health Services (DGHS), Drug Testing Labs (DTLs) and Bio-medical Engineering Workshops also assist the department in discharge of its functions efficiently. Establishment of Internal delivery Unit at Primary and Secondary Health Care Department has been aimed for institutional strengthening and capacity building of Primary and Secondary Health Care Department. Monitoring and follow up remains one of key ingredients for good governance and is at heart of all management models. Therefore, an Internal Delivery Unit, comprising well qualified and experienced persons, is being established within P&SH Department. Internal Delivery Unit shall be manned with qualified and experienced consultants. Internal Delivery Unit shall be responsible for every such task needed to strengthen the PSHD which may range from operational matters to monitoring e.g. tracking pace of all initiatives of the Department through the process such as tracking procurement of medicines by districts, procurement of vaccine by Director EPI, pace of various development schemes and performance of Drug Testing & Bio-mechanical Labs etc.

The basic mandate of Primary & Secondary Health Department is to focus on preventive health care in primary sector along with basic diagnostics and treatment facilities at secondary level. The context is to primarily lessen the load on tertiary care health establishments and to reduce treatment costs. The major challenge for Primary & Secondary Health Department is to boost the confidence of masses and raise the level of trust in the primary health care system. The reality is that most of the health care establishments at secondary level are not currently providing health care services up to the optimal level, owing to a myriad of reasons including heavy patient load, scarcity of resources, human resource constraints and dysfunctional biomedical and allied equipment.

Due to lack of structured planning and monitoring, previous efforts did not materialize into an integrated health care regime, rather these have resulted in

haphazard construction, poor repair and maintenance, lack of basic amenities, absence of waiting areas, substandard diagnostics and therapeutics, shabby outlook and suboptimal level of patient care over all. Such state of affairs has severely jolted level of trust in health care system by common man and hence the patients prefer to visit tertiary level hospitals or even private health facilities for treatment of even very common pathologies. This subsequently has a cascade effect on socioeconomics of common man who has to spend more in shape of travelling from villages to district headquarters and then bearing costs of private treatment, secondly, this has also increased disease load on our tertiary health care establishments.

Keeping in view this importance of primary and secondary health care, the department decided to launch massive revamping program for all DHQs and THQs all over the Punjab.

## **5.2 Project Management Unit (PMU), Primary & Secondary Healthcare Department**

In order to successfully complete the program objectives in the given timeframe, it is imperative to establish a dedicated Program Management Unit (PMU) having technical and administrative expertise and autonomy, as the regular machinery of the department is too busy with the routine work and cannot successfully steer the program. The PMU is responsible for the successful implementation of the Revamping Program through completion of all related projects. After the implementation of all these projects, the Primary & Secondary Healthcare network will be improved. The PMU shall ensure that the DHQ & THQ hospitals have a well-constructed physical infrastructure with vibrant management model for efficient service delivery and improved processes to focus on patient distress in prompt manner. It adheres to Minimum Service Delivery Standards (MSDS) to address the patients' needs in the most efficient and systematic manner.

In this regard, a dedicated team of Project Management Unit (PMU) has been established to execute the project. PMU's office is located at 31-E/1, Shahrah-e-Imam Hussain, Gulberg-III, near Qaddafi stadium, Lahore. It is headed by a Project Director with a committed team comprising of Deputy Project Director, Finance and Administration, ICT), Project Managers, Project Officers, Engineers, supporting administrative and technical staff, experienced and qualified Health consultants., Directors (Operations, Human Resource & Planning and infrastructure, Outsourcing) as well as Procurement Specialist.

## **5.3 Infrastructural Interventions**

The construction of various new blocks of hospital complex is constructed without any proper planning and necessary connection to existing blocks. On the whole, the complete infrastructure of hospital is quite complex and scattered, access to various blocks of hospital is quite inadequate and there is no proper connection or link between different blocks of hospital. In the revamping program of

DHQ and THQ Hospitals, the placement of various facilities of hospitals are re-planned keeping in view the layout of existing blocks for facilitation of patients and some modifications/alterations were proposed in the blocks for necessary link or connection between the blocks.

Major infrastructural interventions can be divided in the following four categories

### **5.3.1 External Development**

### **5.3.2 Internal Development**

### **5.3.3 Medical Infrastructure Development**

### **5.3.4 Emergencies Development**

### **5.3.1 External Development**

#### **5.3.1.1 External Platforms**

In order to improve the communication between blocks, necessary interventions are taken to improve the existing internal metaled road network. Moreover, new internal metaled road network is also designed and proposed to access the blocks of hospital accordingly. Despite the improvement in metaled road network, external platforms except metaled road is also designed and proposed for patients to access the blocks by simply walking among the blocks.

#### **5.3.1.2 Façade Improvement**

In order to improve the aesthetics of hospital, façade uplift with aluminum composite panels with aluminum cladding, false steel structures, façade aluminum windows and aluminum doors are designed in order to give the feel of modern architectural era.

#### **5.3.1.3 Sewerage System**

The most important entity of a hospital lies in its cleanliness. Infrastructural interventions to keep the hospital clean were taken in the form of improvement of sewerage system of the hospital. These interventions include the re designing of sewerage system, construction of new manholes, laying of new sewer lines and connection between trunk sewer and hospital sewer.

#### **5.3.1.4 Landscaping (Horticulture)**

Landscaping in hospital adds aesthetic & beauty to the built environment as well as improves in reducing the pollution. Soft & hard landscape reduces dust particles moment in air, hence contributes in a clean environment. The hours spent



in a hospital can be stressful for patients, staff and visitors. According to research easy access to a natural environment can contribute to stress management and potentially improve health outcomes: physiological studies indicate that 3-5 minutes spent in such Hospital Outdoor Landscape Design environments reduces anger, anxiety and pain and induces relaxation. Research also shows that “positive distractions” can reduce stress and their visual forms include gardens, scenic views and artwork, which play a critical role in modern hospital design: gardens, fountains, and water features provide patients, staff and visitors with restorative experiences of nature. In this regard complete lawns development, placement of benches, dust bins, playing equipment, fruit trees, flower plants, fruit trees and gazebos are proposed in all hospitals under revamping program

#### **5.3.1.5 Water Filtration Plant**

In the modern era, the access to clean water for everyone is becoming rare day by day. Especially in hospitals, the supply of water free from any harmful impurity is one of the most basic needs. To cope up with this problem water filtration system according to the existing nature of water is designed and water filtration plant is proposed accordingly. For ease of patients, drinking water supply network was designed to provide filtered water in wards and in various drinking stations within the hospital building

#### **5.3.1.6 External Electrification**

One of the major hindrances in functionality and ineffectiveness of electro medical equipment and other facilitating electrical appliances is either interrupted power supply or power supply with lesser voltage than required. This problem was solved by providing express line or dual electrical supply in all hospitals under revamping. Despite these two facilities based, on the current and proposed electrical load of hospital new transformers were proposed to step down the voltage to desired level and complete generator backup system was designed and generators along with automatic transfer switches were proposed accordingly. Moreover, to fully lighten up the hospital for proper utilization of all facilities of hospital during the low/no-light hours of the day, external pole lights to lighten up the pathways and garden lights to lighten up the lawns were designed and proposed.

#### **5.3.1.7 Parking and Waiting area**

Non-clinical facilitation of patients and attendants were specially considered in the revamping program. One such facilitation step is designing the parking and waiting areas on basis of daily influx of vehicles and patients/attendants during the

peak hours. Parking and waiting areas on several places of hospital were then proposed according to the design.

#### **5.3.1.8 External Signage**

External signage system is designed including various signage types for complete guidance of patient attendants and to search concerned facility promptly.

### **5.3.2 Internal development**

#### **5.3.2.1 Aesthetic improvement**

In order to improve the aesthetics of hospital wards, corridors, rooms and toilet blocks, flooring and dado design of suitable material in these areas is proposed. Despite of aesthetics, the material of flooring and dado design were chosen to provide ease in cleaning process. For further improvement in aesthetics, paint on exterior and interior part of the hospital, poly-vinyl chloride paneling to conceal the dampness damaged areas and steel cladding of columns are proposed.

#### **5.3.2.2 Ramp and Stretcher improvement**

For hospitals having more than one floor, there is a huge problem of patient transfer with stretcher. This problem is solved by proposing new ramps/stretcher ways where needed. Moreover, in order to further improve the communication between various floors of hospitals improvement of stair cases with hand rail or guard rails is proposed.

#### **5.3.2.3 Seamless flooring and Lead Lining**

To keep high risk areas like Operation theaters, I.C.U, C.C.U, and Gynecology Operation Theater bacteria free is one of the basic medical practices. In the revamping program of hospitals low epoxy paint is proposed in these areas to provide seamless flooring so that the bacterial growth within the grooves can be prevented. Moreover, to make the X-Ray rooms radio-resistant and to keep the patients away from the harm of rays, interventions are taken in X-ray rooms regarding provision of lead lining in walls, ceiling and floor.

Interventions were taken regarding hazardous radiation emitting areas to make them radio-resistant in order to keep patients/attendants away from harmful radiations. These interventions were in the form of provision of lead lining in ceiling, walls and roofs of X-Ray rooms.

#### **5.3.2.4 Aluminum doors and windows**

In order to make sound and heat proof the doors and windows of wards, corridors and major health facilities are proposed as aluminum doors and windows. Which despite of above benefits are also aesthetically pleasing. Corridor wire mesh windows and rolling blinds for windows are proposed in order to invite or stop the day light within the wards according to the requirement. Moreover, existing wooden doors having shabby and dirty look are proposed to be re-polished and washroom doors are proposed to be replaced with PVC doors to make them resistant against water.

#### **5.3.2.5 Improvement of washroom blocks**

The area of hospital which can be dirty at most is its washroom or toilet blocks. To improve the cleanliness of hospital the special interventions were taken regarding the renovation of toilet block of hospital. This renovation includes the re tiling of existing damaged flooring and skirting and addition of water closets etc.

#### **5.3.2.6 Facilitation of attendants and patients**

The facilitation of attendants is also one of the most basic things to be provided in the hospital. The facilitation of attendants contributes towards the facilitation of patients. In order to facilitate the attendants, pantries are designed at that location of hospital where attendants can be effectively facilitated. These pantries include stoves and washing machines. Moreover, it is also very important to educate the patients and attendants regarding the seasonal and general diseases along with its cure and prevention. Installation of LED televisions in various locations of hospitals especially in wards and waiting areas is also proposed in the design in this regard.

#### **5.3.2.7 Furniture and Fixtures**

One more step towards the facilitation of attendants or patients is placement of benches in waiting areas. The most rush positions of hospital are chosen in this regard and placement of benches is designed according to the patient number and flow. In order to improve the efficiency of consultants or doctors, interventions regarding the renovations of doctor or consultant office are designed in this regard. The doctor room furniture is designed for this purpose keeping in view the existing area of room and necessary required equipment. To carry and dispose of the medical and general waste material of hospital, waste bin sets are designed to place at various positions of the hospital. These positions are marked by keeping in view the general circulation of the public and sensitivity of the area.

#### **5.3.2.8 Air Conditioners, Refrigerators and LEDs**

According to the different standards, there is a separate requirement of temperature to control the environment of particular place with respect to the nature of facility. In this regard, air conditioners are proposed according to the required tonnage of the specific area. For better efficiency and performance delivery, cabinet air conditioners are proposed in the wards and other facilities having larger areas. The maintenance and repair services of these air conditioners are outsourced so that uninterrupted performance can be delivered. For further facilitation of patients and attendants, placement of refrigerator is proposed on each nursing counter. These refrigerators are proposed for items requiring specific temperature for storage purposes. LEDs will also be placed at various points to facilitate the patients and attendants.

#### **5.3.2.9 Internal Signage and Paintings**

As described earlier, the information regarding the positions of major health facility especially emergency and labor room etc. is very much essential for any person entering inside the covered area of hospital. For these purposes, different types of signage are proposed including corridor hanging signage, floor map boards, room numbers and room names plaques. For general information duty rooster boards, janitorial station signage, waste bin set signage, emergency exit signage.

Different kinds of paintings are designed according to the nature of area where it is desired to be fixed. These paintings are beneficial in a sense that it improves the aesthetics of hospital and moreover, such painting patterns are designed so that it give the relaxation and soothing feelings to aid in the healing of patients. Moreover, in order to create a healthy, positive, entertaining and friendly environment for interest of children, paintings on children wards is proposed.

#### **5.3.3 Medical Infrastructure Development**

To cope with the emergency condition of clinically serious patient, oxygen supply system is designed by proposing an individual oxygen supply system for each major health facility. This oxygen supply network comprises on copper pipe line, flow meter with bed head units, cylinders and setup and individual central oxygen supply system. The contract of filling of oxygen gas in cylinders is outsourced for uninterrupted oxygen gas supply to the patients.

For patient receiving, information, guidance, appointment or for any other task, separate reception counters are proposed in various blocks so that, all necessary information regarding the block is available on the counter round the clock. In this way, utilization of clinical facilities will be optimized. For indoor patient department, complete facilitation and care of patients admitted in wards is ensured

by proposal of nursing counter in each ward. This nursing counter will be placed or constructed in such a placement that each bed can be monitored by the nurse available.

The design regarding architectural planning of above mentioned facilities are designed according to the patient facilities and architectural planning standards. These designed facilities are then designed in the existing building structure according to the patient flow and sensitivity of facility.

#### **5.3.3.1 Emergency Department:**

All THQS and DHQs are already providing emergency services to critical ill patients. As far as the existing sources including human resources & equipment are not sufficient to fulfill the requirement. Primary and secondary healthcare department is going to take the initiative to improve emergencies of hospitals by providing new equipment and human resource in form of recruitment of doctors, nurses and paramedical staff along with Infrastructure of Causality Department. Ultimate goal of revamping of emergencies is to enhance the quality of medical services to critical ill patient in golden hour to decrease the mortality and morbidity rate in causality department of each hospital.

##### **5.3.3.1.1 General Overview of Emergency Department**

In any hospital, the most important and critical area is its emergency block. Specially, if hospital is situated on a highway where there is a huge flux of rapidly moving traffic which can be a major source of causalities, if patient treatment is not proper. Besides road trauma cases, cardiac cases and burn cases etc. are also more likely to be initially treated in emergency. Proper first aid to patient reduces morbidity and mortality. The emergency department of hospital is a block where in time service delivery is so much essential that delay in proper treatment can cause lot of lives to suffer from serious diseases for rest of their life. In a nutshell, the efficiency and in time service delivery of emergency block depicts the overall efficiency of the hospital.

In order to improve the emergency department and to ensure in time service delivery of the same, special initiatives are being taken in this regard. Infrastructure of emergency department depends a lot on its service delivery and efficiency. An emergency department with all necessary medical and general equipment and equipped with all essential medical facilities but without ineffective and poorly planned infrastructure will never fulfill its need. Conclusively, such infrastructural interventions are planned in this program so that the efficiency of emergency department can be optimized. Some of the following major interventions are listed below:

##### **5.3.3.1.2 Position of Emergency Department**

It is planned that new construction of building should be avoided at most because already existing blocks with no proper utilization are existing in all of the hospitals. The emergency block should be on such a location that the distance between that department and main entrance gate should be minimum with respect to other locations or positions of complex. To fulfill this purpose, that portion of this building block is selected for re planning of emergency department which is most near to the entrance gate. The far positioning of emergency department will result the lost in time for patient during its travelling which can be crucial.

#### **5.3.3.1.3 Access towards the Emergency Department**

The route leading towards the emergency department is important in this aspect that a smooth track and a widened path will be feasible for the movement of vehicle or stretcher. Initiatives are taken in this program for construction of new pathways or renovation of existing ones leading towards the emergency department. Such material of the external platform is selected so that a smooth movement should be observed over it rather than jerks bumps. Moreover, the width of the passage from entrance gate up to emergency department is designed by keeping in view the flux of the vehicles rushing towards the emergency block.

#### **5.3.3.1.4 Medical Infrastructure Emergency:**

The existing emergency department or other block of the hospital according to its access from entrance gate, is designed and re planned according to the above described emergency facilities. The changings or amendments in the existing covered area of the hospital are proposed according space availability. Due to the rush of patients and increased number of minor surgeries performed in the emergency department make it one of the dirtiest department of the hospital. Hence, in this regards it is very much essential to keep the floors of certain area of emergency department bacteria free. Seamless flooring is proposed in this regard to avoid the groves so that the cleaning process can be made easy. Low epoxy paint is designed and proposed in this regard on Minor OT, Gurney area and specialized healthcare unit.

Provision of medical gasses is essential to facilitate the patients suffering from breathing issue due to some disease and ailment. The filling process of oxygen in the cylinders is outsourced to ensure the continuous supply of the oxygen among the beds. The oxygen system comprises on copper pipe, central oxygen supply system for pressure maintenance, oxygen cylinders and flow meter with bed head units.

#### **5.3.3.1.5 General Building Interventions:**

In order to improve the over building condition of emergency blocks following major interventions are taken:

1. Provision of flooring and skirting
2. Painting on interior and exterior side of department

3. Provision of false ceiling
4. Replacement of damaged and renovation of existing wooden doors
5. Provision of aluminum doors and windows
6. Public health work regarding supply of water and gas along with improvement of sewerage system
7. Provision of LED panel lights, ceiling fans, exhaust and wall bracket fans
8. Improvement of existing wiring and distribution including replacement of damaged equipment and proposal of new equipment

#### **5.3.3.2 Monitoring and Quality Assurance (Process Interventions)**

During construction phase, “Construction Supervision” will be carried out by the Procuring Agency (Director Infrastructure) along with Punjab Buildings department (C&W D) who will certify construction activity.

#### **5.3.3.2.1 MSDS (Minimum Service Delivery Standards)**

MSDS are minimum level of services, which the patients and service users have a right to expect. MSDS include minimum package of services, standards of care (level specific) and mandatory requirements/systems for delivery of effective health care services. The World Health Assembly in Alma-Atta in 1978 expressed the need of action to protect and promote the health for all the people of the world. Essential health is to be made universally accessible to individuals and families through their full participation and at a cost that the community and country can afford. MSDS is now being deemed to be of vital importance at Secondary HealthCare level. The THQ hospital provides promotive, preventive, curative, diagnostics, in patients, referral services and also specialist care.

THQ hospitals are supposed to provide basic and comprehensive EmONC. THQ hospital provides referral care to the patients including those referred by the Rural Health Centers, Basic Health Units, Lady Health Workers and other primary care facilities. The District Head Quarters Hospital is located at District headquarters level and serves a population of 1 to 3 million, depending upon the category of the hospital. The THQ hospital provides promotive, preventive, curative, advance diagnostics, inpatient services, advance specialist and referral services. Services package and standards of care at SHC level are also not well defined. Deficient areas include: weak arrangements to deal with non-communicable diseases, mental, geriatric problems and specialized surgical care especially at THQ. There is disproportionate emphasis on maternal and child health services at SHC facilities. Services-package being provided at PHC and SHC are also deficient in terms of Health care providers’ obligations, patients’ rights and obligations.

MSDS umbrella is very vast and it requires a very extensive and planned approach towards, gap analysis, planning, development, implementation,

monitoring and evaluation. MSDS comprises of 10 thematic area, 30 standards and 162 indicators. Government of Punjab has taken an initiative to standardize all hospitals of Punjab in accordance with Punjab Health Care Commission Minimum service delivery standards. PMU team segregated MSDS indicators into various targets and sub-targets to make these targets achievable. Manuals for both clinical and non-clinical specialties are being prepared comprising of departmental organizational plan, criteria for essential human resource, essential equipment, general and specialized SOPs, departmental safety guidelines etc. Standardized Medical Protocols (SMPs) are standard steps to be taken by a health facility during medical or surgical management of a patient. Standard Operating Procedure (SOPs) are detailed description of steps required in performing a task including specifications that must be complied with and are vital to ensure the delivery of these services .It requires literature review, departmental view, facility visits, consultative visits and development of action plan for implementation of MSDS. Effective MSDS implementation requires essential documentation. Documentation is a key for record keeping, monitoring and auditing. For this purpose, registers, forms, displays have to be designed with coding for effective tracking. In addition to this it also requires analysis from field from utilization point of view.

Displays constituting of public serving messages, health related information and general facility related guidelines. In order to monitor effective implementation, compliance monitoring is required to be carried out by field experts which is followed up by further planning to ensure continuous delivery of effective, accessible, continuous and quality services to masses in uninterrupted manner.

MSDS implementation is a complex procedure. Because it requires

1. Capacity building for understanding, development and continuous implementation of MSDS.
2. Ecosystem for establishing its implementation by full cooperation, collaboration, commitment of
3. Continuous monitoring
4. Continuous audit
5. Continuous training, refresher courses with purpose of reinforcement
6. Continuous quality improvement
7. Continuous Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis and gap identification
8. Continuous strategy making and implementation with backup plan for secondary options.
9. Responsibility designation for clinical and non-clinical procedures and activities.
10. Effective utilization, calibration and maintenance of equipment with record maintenance and their audit
11. Establishment of plans, implementation, analysis of gaps with alternate planning regarding fire evacuation plan, hospital infectional control plan, hospital operational and



strategic plans, disaster plan both internal (partial / complete) and external .

### **The PDSA cycle**

1. Developing a plan to test the change (Plan),
2. Carrying out the test (Do),
3. Observing and learning from the consequences (Study), and
4. Determining what modifications should be made to the test (Act).
5. Monitoring effective load sharing of Human resource and equipment within hospitals.
6. Addition of new HR/ rationalization on requirement of MSDS indicator compliance for effective departmental organization and their planned trainings by MPDD, UHS ETC
7. Standard optimization of Standard operating procedures and methods for their effective adoption by hospital human resource.
8. We have also extended our MSDS implementation in 20 more departments such as dentistry, ICU, CCU, Dialysis, mortuary, burn unit, physiotherapy, orthopedics, medicine, nursing, paedes, ophthalmology, derma, TB, urology, patient transfer system, store and purchase, audit and accounts, procurement, planning etc. We are also in process of preparing manuals, SOPS, plans, universal forms, and universal registers with universal tracking system of record.
9. We have developed an application for continuous monitoring of MSDS compliance.

Health managers are considered essential at both the strategic and operational levels of health systems. To gain an initial understanding of the management workforce for service deliver. Every health system desires managers who are competent and have the knowledge, skills and demeanor to be effective. The performance of health services managers will depend in part on how certain standard support systems function. Even good managers will have problems if procedures for running finances, staff, etc., are not working well. Functional systems should have clear rules and regulations, good guides and forms, effective monitoring and supervision and appropriate support staff, e.g. account staff, supplies and information staff and secretarial support A health manager is supposed to be competent in planning, budgeting, financial management systems , personnel management systems, including performance management , procurement and distribution systems for drugs and other commodities , information management and monitoring systems , systems for managing assets and other logistics, infrastructure and transport. Support systems help to ensure uniformity in management practices and ensure that management and administrative systems function and get results.

### **5.3.3.3 Laboratory**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the Laboratory in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of laboratory in vicinity.

#### **5.3.3.4 X-Ray**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the Radiology unit in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of Radiology unit in vicinity. A healthy human being enables not only nutrition of the physical body but also enhances social interaction and promotes self-esteem and feelings of self-esteem and feelings of wellbeing. The radiology equipment serves as a “window “to the patient treatment regarding the body.

#### **5.3.3.5 CCU**

Understanding these ground realities Primary and Secondary Healthcare Department, Government of the Punjab has decided to establish coronary care units (CCU) in THQ hospitals as a part of its Revamping Program. This will improve the quality of healthcare and timely provision of life saving treatment will be possible to large number of patients. A coronary care unit (CCU) is a special department of a hospital or health care facility that provide coronary care to patients. Coronary care units cater to patients with severe and life-threatening cardiac illnesses and which require constant, close monitoring and support from specialized equipment and medications in order to ensure normal bodily functions.

Coronary care units are staffed by highly trained doctors and nurses who specialize in caring for cardiac patients. They are also distinguished from normal hospital wards by a higher staff-to-patient ratio and access to advanced medical resources and equipment that are not routinely available elsewhere. Common conditions that are treated within CCUs including angina, myocardial infection, cardiac arrhythmia, cardiac shock etc. Patients may be transferred directly to coronary care unit from an emergency department or from a ward if they rapidly deteriorate, and immediately require cardiac care treatment.

#### **5.3.3.6 Dialysis Unit**

Chronic kidney disease is now a significant public health problem worldwide. Chronic kidney disease globally affects almost 10 % of general population with Incidence in prevalence of disease are still rising especially in

developing countries .The rise in chronic kidney disease is by aging of the populations and growing problems of obesity, diabetes, high blood pressure and cardiovascular diseases.

Tehsil head Quarter Hospital (THQ) serve large catchment populations of the district and provide a range of specialist care in addition to basic outpatient and inpatient services. Patient who are in need of dialysis, are referred to tertiary care hospital due to non-availability or insufficient number of dialysis machines. Patient's condition not only deteriorate but also compromise the effectiveness of life saving intervention due to approaching to other cites or to costly private setups of dialysis. Primary and Secondary Healthcare Department has decided to establish & strengthening already existing 5 bedded dialysis unit at THQ hospitals. This will improve the quality of healthcare and timely provision of life saving treatment will be possible to large number of patients.

Dialysis unit is a special department of a hospital or health care facility that provides a lifesaving support to patients with chronic renal disease along with pre-existing diseases like diabetes, hypertension, ischemic heart disease to ensure normal bodily functions. Dialysis units are staffed by highly trained doctors, dialysis technicians and dialysis nurses who have done specialized training in caring for such patients. Patients are usually admitted from out door and often from emergency and registered for their timing and schedule of dialysis because these patients are given regular appointments twice or thrice a week as per defined by nephrologist/physician.

#### **5.3.3.7 Labor Rooms/Nurseries**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the Labor Rooms/Nursery unit in THQ hospitals.

#### **5.3.3.8 Operation Theater**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the Operation Theater in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in treatment according to diagnosis in case of lack of Operation Theater in vicinity.

#### **5.3.3.9 Orthopedic unit**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the orthopedic unit in THQ

hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of orthopedic unit in vicinity.

#### **5.3.3.10 Gynecology Department**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the gynecology unit in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of gynecology unit in vicinity.

#### **5.3.3.11 Surgical Unit**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the surgical unit in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of surgical unit in vicinity.

#### **5.3.3.12 Intensive Care Unit (ICU)**

Tehsil Headquarter Hospitals (THQ) serve catchment populations of the whole Tehsil (0.5-1 million) and provide a range of specialist care in addition to basic outpatient and inpatient services. They typically have about 80 to 150 beds and a broad range of specialized services including surgery, medicine, paediatrics, obstetrics, gynaecology, ENT, ophthalmology, orthopaedics, urology, neurosurgery etc. Patient who are in need of intensive care are usually referred to tertiary care hospital but due to long distance they had to travel and time consumed on road due to heavy traffic and other unavoidable circumstance ,patient's condition not only deteriorate but also compromise the effectiveness of life saving intervention. Understanding these ground realities Primary and Secondary Healthcare Department, Government of the Punjab has decided to establish intensive care units (ICU) in THQ hospitals as a part of its Annual Development Plan. This will improve the quality of healthcare and timely provision of life saving treatment will be possible to large number of patients.

Primary and Secondary Healthcare Revamping programme (PSHRP) is the initiative by the Chief Minister of Punjab to strengthen the healthcare delivery system in the province Acquisition of licenses for all THQ Hospital by developing and implementing uniform set of standard Operating procedures (SOPs) & standard medical protocol (SMP) for compliance to MSDS of PHC is planned as a part of PSHRP.

An **intensive care unit (ICU)** is a special department of a hospital or health care facility that provides intensive treatment medicine. Intensive care units cater to patients with severe and life-threatening illnesses and injuries, which require constant, close monitoring and support from specialized equipment and medications in order to ensure normal bodily functions. Intensive care units are staffed by highly trained doctors and nurses who specialize in caring for critically ill patients. They are also distinguished from normal hospital wards by a higher staff-to-patient ratio and access to advanced medical resources and equipment that are not routinely available elsewhere. Common conditions that are treated within ICUs include ARDS, trauma, multiple organ failure and sepsis. Patients may be transferred directly to an intensive care unit from an emergency department if required, or from a ward if they rapidly deteriorate, or immediately after surgery if the surgery is very invasive and the patient is at high risk of complications.

#### **5.3.3.13 Mortuary Unit**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the mortuary unit in THQ hospitals. Postmortem or autopsy is a part of medico legal investigation into a death which is conducted by a judicial medical officer. Realizing the problems countered medico legal process focusing on following important areas;

1. Improving quality and motivation levels of human resource conducting medico legal Examination.
2. Improve methods to collect and preserve samples so that so that these may best be available for further forensic analysis.
3. Improving physical infrastructure at tehsil level to provide enabling environment for better conduct of medico legal cases including improvement in state of mortuaries at tehsil level.
4. Improvement in legal framework including improved forms.

#### **5.3.3.14 Dental Unit**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the dental unit in THQ hospitals. Majority of patients are suffering problems some time life threatening phases due to delay in diagnosis and treatment according to diagnosis in case of lack of dental unit in vicinity.

#### **5.3.3.15 Physiotherapy Unit (33 THQ Hospitals)**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the physiotherapy unit in all THQ hospitals. Majority of patients are suffering problems some time life threatening

phases due to delay in diagnosis and treatment according to diagnosis in case of lack of physiotherapy unit in vicinity.

1. Physiotherapy is a “science of healing and art of caring”. It pertains to the clinical examination, evaluation, assessment, diagnosis and treatment of musculoskeletal, Neurological, Cardio-Vascular and Respiratory systems ‘functional disorders including symptoms of pain, edema, and physiological, structural and psychosomatic ailments. It deals with methods of treatment based on movement, manual therapy, physical agents, and therapeutics modalities to relieve the pain and other complications. Hence, Physical therapy covers basic parameters of healing sciences i.e. preventive, promotive, diagnostic, rehabilitative, and curative.
2. Physiotherapy practice has a very long history and a modern clinical practice is heavily reliant on research and evidence based practice. The Primary and Secondary Healthcare Department Government of Punjab attests to this commitment by adopting and promoting the Standards of Practice for Physiotherapy.

### **Importance of Physiotherapy and Rehabilitation department**

1. Physiotherapy provides services to individuals and populations to develop maintain and restore maximum movement and functional ability throughout the lifespan. This includes providing services in circumstances where movement and function are threatened by aging, injury, disease or environmental factors. Functional movement is central to what it means to be healthy.
2. Physiotherapy is concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation. This encompasses physical, psychological, emotional, and social wellbeing. Physiotherapy involves the interaction between physical therapist, patients/clients, other health professionals, families, care givers, and communities in a process where movement potential is assessed and goals are agreed upon, using knowledge and skills unique to physical therapists.
3. The proposed project entails setting up a Physiotherapy and Rehabilitation Department. Being one of the major players in human service sector, rehabilitation Departments provide a wide range of services relating to physical impairments and disabilities of all age groups. These services range from assessment, evaluation, diagnosis, treatment and plan of care of individuals, from newborns to the very oldest, who have medical problems or other health-related conditions that limit their abilities to move and perform functional activities in their daily lives. These services will be provided by qualified Physiotherapists Consultants. Our consultants

examine each individual and develop a plan using treatment techniques to promote the ability to move, reduce pain, restore function, and prevent disability. In addition, our doctor work with individuals to prevent the loss of mobility before it occurs by developing fitness- and wellness-oriented programs for healthier and more active lifestyles. The proposed Physiotherapy and Rehabilitation Department will provide all these services under one roof.

### **Opportunity Rationale**

Due to vast media exposure over past few years, women, as well as men, have become more conscious about their health especially youngsters. In Pakistan, Rehabilitation Clinics and Fitness Centers have grown over the years. It is easy to open GP clinic as space and skill requirement is very basic. But a Rehabilitation clinic provides more professional services with qualified staff including Physiotherapy doctors and experienced support staff and therefore, requires more planning and arrangement. Quite a few Physiotherapy and Rehabilitation Departments have opened in Lahore, Islamabad, Karachi and other relatively larger cities of Pakistan, which are catering to the demand of the people, but still there is a lot of unfulfilled demand as can be judged from excessive rush at the existing Physiotherapy Departments. The patient's ratio and problems with musculoskeletal disorders and neurological disorders are same in the tehsils and districts levels of Punjab. The business is service-oriented and carries large potential for serving poor people due to its unique nature and uncontrolled spreading of joints and muscles, and neurological problems, especially in the areas where our THQ Hospitals are located. There is lot of potential in this domain, especially for those who are committed to providing quality service.

### **5.3.3.16 Queue Management System (QMS)**

OPD in THQ has enormous patient load, due to the only big public sector serving hospital in Tehsils. At the moment the ticket system is prevailing but there is no mechanism to handle that ticket and assign number to the ticket and its being issued in manual format. This will also create dependency on the person issuing the ticket. After getting the tickets, patient will be provided with no guidance on where to go and when his term will come to meet the doctor and get the required service. This will create confusion and delayed service delivery. On the other hand it will waste lots of time on the end of doctor and patient as patient and doctor has no direct liaison with each other. Moreover, patient will again have to be dependent on some person to check that either doctor is free or any patient sitting in his facility. Here again, human intervention and dependency will come into play.

This project basically aims to remove all the human related dependency till the patient reach the doctors. Moreover, it also includes, recording basic information

for a patient and guiding him to the doctors room from registration count to triage without any dependency on hospital staff. This will improve the transparency as per the vision of good governance and serve the patient in an efficient and transparent manner. This will also help the patient in estimating that time estimate till his term which will give him relief and more belief on the fair system. On the other hand doctor will always have an idea that how many patients will be in queue and give him direct liaison with the patient sitting outside.

The need of queue management system is evident in hospital from the fact of lack of proper mechanism of patient queue management at OPD's, human resource deficiency and non-functional equipment. The Implementation of Queue Management System will provide and streamline Patient Queue Management at OPD with Ticket Generation and Display of Numbers on the counters. This will help in maintaining the queue on First IN First OUT (FIFO) basis. The system will also provide the information counter to the general public to educate them in the use of queue management system and short description of the process. After implementation of this system, the incoming patient will be guided in a manner to get the service on his turn without any dependency or interference of an external resource. All will be handled in an automated way with patient are being served at their turn.

The system manages the patients load, organizes the patient's queues in an adequate manner and gives them the ease in waiting area; and they will be examined gracefully by doctors at their turn. Basic information of the patient is also linked with its ticket, being taken at the first counter. This will help established a unique ID against each patient. This will also lead to the establishment of Electronic Medical Record. The Process flow of Queue Management System at THQ is given as follows:

There are 25 counters at THQ level including basic registration counter, triage counter, consultant office and hospital pharmacy. There is one ticketing machine with a bifurcation of male, female and old age person. The ticket will be issued to the relevant category accordingly. After receiving the ticket the said number will be blinked on male, female and old age counter. The person will move to that counter where he will be asked about his basic details which will be entered in the basic registration form software linked with QMS and that specific token / ticket number. He will also be asked about the disease and accordingly the relevant consultant / specialty area e.g. pediatrics, ophthalmology etc. after registering, he will take the printout and give the slip to patient / attendant along with its token number.



The basic fee of OPD will be received at the registration counter and accounted for in the basic registration software linked with QMS. The same token number will be displayed on the triage counter where his vitals will be taken and written on the same registration slip available with the patient. Now, keeping in view the specialty area the token number will be displayed on the relevant consultant office and he will be checked by relevant consultant. The consultant then diagnosed the medicine or either to admit it after his examination. In case of medicine he will be sent to hospital pharmacy where again the same ticket number will be displayed. There have to be an option available with the doctor to either redirect him to the hospital pharmacy or other (medical tests, referred to IPD). On displaying the same token number at pharmacy counter the patient will move to pharmacy counter along with his token number and registration slip and take prescribed medicine. Patient will be disposed from that window and process of QMS will be completed. There will be no entry in the basic registration software on the counters of triage, doctor at the moment. Detail of equipment is attached.

The process described above for THQ will be implemented. The important constraints for the systems are:

1. Same token number will be used at all the counters and patient will be getting the ticket from ticketing machine only once at the time of entry.
2. QMS will cater for missed, skipped or delayed patient at any counter.
3. There will be two LED displayed at different location in the waiting area to guide patients about the process details and to display token number along with announcement in URDU.
4. The gap between each display panel from ticketing machine to pharmacy can be customized according to requirement e.g. 5, 10, 30, 60 seconds etc.

#### **5.3.3.17 Electronic Medical Record (EMR)**

Establishment of network infrastructure, establishing a central data center, connectivity of different building through fiber, are also the major components of the revamping project in terms of ICT. This will including provision of networking point at all nursing stations and important areas where entries regarding patients' needs to be made e.g. Radiology/Pathology, Indoor, outdoor etc. This will serve as backbone to implement the Electronic Medical Record System in the Hospital which has the key feature of generating Unique Medical Record Number for each patient.

This MR number will serve as an identity for patients during their treatment, retrieval of records and for decision making.

EMR will also be able to log the patient for treatment being provided to him in different areas of hospital i.e. OPD, Pathology, Radiology, Surgery, Indoor, etc. and their integration. This will be achieved by entering the relevant information at each department against specific MR number of a patient in the Customized / Purpose build software (EMR) for these public healthcare facilities.

This entry of MR number against each patient in hospital will build a large database for patient and relevant diseases. This will help in analysis disease / epidemic prevention and better patient care through retrieval of patient history and proper diagnoses at physician end. Implementation of patient registration, Record keeping, physical queue management, E-prescription, supporting IT interventions for EMR and medicine dispensation. Detail of equipment is attached.

#### **5.3.3.18 Video Surveillance through CCTVs**

Installation of network based CCTV cameras is an important module in the ICT part of revamping project. Scope of this component is to install 60 to 80 cameras in each hospitals at important location i.e. entry, exit, OPD, waiting areas, Parking for surveillance and security purposes. This will also serve as major input to the security services by Outsourced Security Company in the hospitals. Moreover, there will be small scale central control room at each hospital to monitor the allocated locations where the cameras have been installed. This system will also have the facility to record the video for 15 days for all the cameras so that recording of specific duration can be produced on demand. This will also have the facility of central control room which has the capacity to access the camera of THQ hospitals and to view and monitor the area of specific camera within specific hospital at any given time. Therefore, it will establish a centralized surveillance and security mechanism for these 85 public sector healthcare facilities. Detail of equipment is attached.

#### **5.3.3.19 Medicine Store**

To improve the quality of medical care of patients, primary and secondary Healthcare Department has decided to improve the medicine store in THQ hospitals.

#### **5.3.3.20 Day Care Center**

On-site (or near-site) child care would lead to improve workplace satisfaction by allowing employers more frequent contact with their children,

reducing stress and anxiety over scheduling, and potentially providing financial benefit to the hospital. Therefore, P&SH Department has decided to establish the Day Care Center at every THQ Hospital. The Medical Superintendent of the concerned hospital will be the overall in-charge of the Day Care Center.

#### **5.4 Out Sourcing of Non Clinical Services**

It was planned to provide Outsourcing of following Non-clinical services through development Budget later on decided to shift to non-development Budget as per the decision of progress review meeting chaired by the Chairman P&D Board dated 01-01-2018 w.e.f. 30-06-2018:-

1. Janitorial services
2. Laundry services (On hold)
3. MEPG Services
4. CT scan
5. Security

##### **5.4.1 Janitorial services**

These services include cleaning of hospitals and its roads and ROW areas. Internal cleaning comprises of complete cleaning along with washrooms cleanliness and material for these services such as hand wash/sanitizer. The Outsourcing is hereby designed keeping in view the sizes of areas assigned to each sanitary worker along with condition and nature of service. Human resources are planned after measuring the total area of hospital, built up area excluding the areas of horticultural land and residential buildings. The workers shall work in three shifts in a day. Half of the total strength of sanitary workers shall work in morning shift due to patients load in OPD. The concerned sanitary work company is bound to provide cleaning services materials and their refilling as and when required.

The companies providing janitorial services will be required to provide quality janitorial services, complete their personnel strength on daily basis which will be ensured through biometric attendance. Also, the companies will be subject to pecuniary penalties by hospital authorities if services provided are not according to the contracts.

##### **5.4.2 Laundry Services**

Different models were being applied by the hospital administrations individually which were not properly catering the basic requirement of washing and disinfection of different items used for hospitals. This model includes the initial procurement of different daily use items such as three different colors bed sheets and pillow covers and are to be changed thrice a day. Moreover, the concerned company must provide washing and cleaning services of bed sheets, pillow covers, blankets along with covers, apparels/OT clothes.

#### **5.4.3 MEPG Services**

The service of the hospitals is suffering badly due to improper functionality of the existing electrical and mechanical equipment which arises due to lack of maintenance. This model satisfies the need of proper maintenance plan which comprises of regular visits of technicians for looking after of electrical and mechanical equipment and accessories. Outsourcing company will be responsible for immediate response and above mentioned services.

#### **5.4.4 CT Scan Services**

CT Scan Services in selected Hospitals of Punjab are also being undertaken as a component of Government's decision to revamp all Secondary Healthcare. The objective of this initiative is to provide high quality CT Scan Services to widely scattered population of low socio-economic groups at their door steps. It will ensure provision of satisfactory diagnose infections, muscle disorders, and bone fractures. The imaging technique of CT Scan can help doctor to study the blood vessels and other internal structures and assess the extent of internal injuries and internal bleeding.

#### **5.4.5 Security**

The outsourcing model is designed due to non-provision of security arrangements and improper parking in different areas of premises of hospital. This model consists of guards who shall work in two shifts to provide security and surveillance for complete premises of hospital excluding residential areas. The devices required for this service to operate are arms, walkie talkie, Base set per unit and torch etc.

#### **5.6 HR & Management Interventions Structure**

HR Interventions can be broadly classified into introduction of New Management Structure (NMS) staff.

## New Organogram of Hospital



### MS

- AMS/ SUPPORT MANAGER
  - IT/Data Analysis
  - IT/ Statistical Officer
    - 4 Data Entry Operators
- Admin
  - Admin Officer
    - 4 Monitors
    - Security
    - Transport
    - Parking
    - Janitorial
    - Canteen
    - External House Keeping
    - Civil Works
    - Technical works
    - Electrical Works
    - Internal House Keeping
    - Laundry
    - Stores & Supplies



#### **5.6.1 Non Clinical HR Interventions (Human Resource (HR) Plan Management Structure)**

Institution will run under the administrative control of Medical Superintendent, who will control this with the collaboration and cooperation of 3 Additional Medical Superintendents including AMS (Admin), AMS (HR & Budget) and AMS (clinical), 3 Deputy Medical Superintendents (morning, evening and night) will be reporting to AMS Clinical. Each clinical facility will be further controlled by head of concerned department and 6 administrative posts of HR & Legal Officer, IT/Static Officer, Budget & Account Officer, Admin Officer, Procurement Officer and Audit Officer will be provided as supporting hands for AMS Admin and AMS HR & Budget for smooth execution of hospital tasks.

#### **Responsibilities / Job Descriptions, Eligibility & Financial Implications for Management Structure of Hospital**

##### **5.6.2.1 Medical Superintendent**

Shall be overall responsible for all the affairs of the Hospital

##### **5.6.2.2 AMS Admin.**

Shall be responsible for following functions in addition to his own duties:

1. General administration
2. IT/Data analysis/statistics keeping (biometric machines, etc.).
3. In case of outsourced interventions like QMS/EMR he shall be responsible for enforcement of contract and in case of violation shall ensure action has been taken as envisaged in the contract.
4. He shall be responsible for entry of data on Citizen Feedback Model.
5. He shall be responsible for ensuring collection of report of actions taken on CFM reports and entry of that on CFM.
6. He shall be responsible for implementation of any IT related initiative in the hospital.
7. He shall be responsible for better record keeping of hospital
8. He shall devise and implement systems for better record keeping of hospital

9. He shall ensure generation of all types of reports/information required of hospital by District Government/P&SHD/any other authorized Public agency

### **New Management Structure (NMS)**

In place of the clerical positions, the P&SH Department has introduced a New Management Structure (NMS), in all District and Tehsil Headquarters Hospitals. The officers recruited as a part of the NMS have a minimum of 16 years of education. Their minimum qualification is MBA / B.Sc. Engineering / M.Com / Pharm-D / M.Cs / LLB / MPA / CA Inter / ACCA / ACMA / Master Degree or equivalent in relevant field etc. Their recruitments were undertaken through a competitive process by a third party testing service.

#### **5.6.2.3 Admin Officer**

Shall be responsible for general administrative affairs of hospital along with following functions:

1. Security
2. Transport
3. Parking
4. Janitorial
5. External housekeeping
6. Electrical works
7. Internal housekeeping
8. Laundry
9. Stores & supplies

In case these functions have been outsourced, he shall be responsible for enforcement of these contracts and shall ensure that penalties are imposed in case of violation of contract. In case he fails to enforce contract and the outsourced function is not performed at par as per contract and penalties have not been imposed he shall be liable for non-action. Moreover, only reporting of violation of contract shall not suffice but he has to ensure follow up till the penalty has been imposed and action as envisaged in contract in case of violation has been taken.

#### **Eligibility Criteria**

1. Minimum qualification Masters' degree in Economics/ Public Administration/ Finance/ MBA Finance/Administration or equivalent from HEC recognized University



2. Minimum 2 years post degree experience of administration  
(Additional credit may be given for hospital administration/  
Public sector administration of similar nature)

#### **5.6.2.4 Human Resource Officer**

Shall be responsible for following:

1. Issuance of monthly Duty rosters & special duty rosters of Eid, Muhurram etc. of all clinical & non-clinical staff in hospital
2. Issuance of Transfer/postings orders within hospital
3. Taking of joining from new incumbents and charge relieving orders of relinquishing officials
4. File maintenance of all employees of hospital
5. Record of all enquires of employees of hospital
6. Leave record of employees
7. Adjustment of officials on duty during leave of concerned employee
8. Litigation/ legal issues of hospital (shall ensure all court cases are well attended and all legal matters of hospital are well taken care of)
9. Any other HR related function assigned by MS/AMS

#### **Eligibility Criteria**

1. Minimum qualification Masters' degree in Economics/ Public Administration/ Finance/ MBA HR/Management/ Finance/Administration or equivalent from HEC recognized University
2. Minimum 1 year post degree experience of administration  
(Additional credit may be given for hospital administration/Public sector experience of similar nature)

#### **5.6.2.5 IT/Statistical Officer**

He shall be responsible for IT support for all IT interventions in the hospital.

He shall be in liaison with HISDU, P&SHD for proper reflection of hospital record on HISDU dashboard. In case there is any discrepancy or error he shall resolve the issue. Moreover, he shall be responsible for functionality of all IT equipment.

#### **Eligibility Criteria**

1. Minimum qualification Masters' degree in Computer Science or equivalent from HEC recognized University
2. 2 years post degree experience of IT/Data analysis(Additional credit may be given for similar assignment experience)

#### **5.6.2.6 Finance & Budget Officer**

Shall be responsible for following:

1. Handling of all financial matters of hospital
2. Petty cash handling
3. Preparation of budget
4. Budget review
5. Maintenance of accounts and record
6. Any other function assigned by AMR HR & Finance/MS/P&SHD

##### **Eigibility Criteria**

1. Minimum qualification Masters' degree in Finance/ MBA Finance or equivalent from HEC recognized University (Additional credit may be given to Charter accountant/ACCA)
2. Minimum 2 years post degree experience of Finance, Accounts & Budget (Additional credit may be given for Public sector experience of similar nature)

#### **5.6.2.7 Procurement Officer**

Shall be responsible for following functions:

1. Procurement of all kinds for hospital
2. Shall be in liaison with P&SHD for procurements being conducted
3. Any other function assigned by AMS HR & Finance /MS/P&SHD

##### **Eigibility Criteria**

1. Minimum qualification Masters' degree in Finance/ MBA Finance or equivalent from HEC recognized University
2. 2 years post degree experience of procurement (Additional credit may be given for public sector experience of procurement)

#### **5.6.2.8 Quality Assurance Officer**

He shall be responsible for quality of all things in the hospital.

**Eligible Criteria**

1. Masters in Total Quality Management / Masters in Public Health/ Masters in Health Administration/ Masters in Hospital Management / Masters in Biochemistry / Biotechnology / Molecular Biology / Microbiology from an HEC recognized University or equivalent.

OR

16 years education along with Post graduate diploma in Total Quality Management/ Post graduate diploma in Health Safety and Environmental Management System / Post graduate diploma in Healthcare and Hospital Management / Quality Assurance or equivalent.

2. Minimum 1 Year post degree relevant experience.

**5.6.2.9 Logistics Officer**

He shall be responsible for Supply Chain, logistics, fleet, warehousing and inventory management, clearing and forwarding in the hospital.

**Eligible Criteria**

1. M.Sc. Supply Chain Management/ MBA or Equivalent.
2. One year experience in Supply Chain, logistics, fleet, warehousing and inventory management, clearing and forwarding.

**5.6.2.10 Data Entry Operators (DEO)**

Four Data entry operators shall help IT officer in dispensation of his responsibilities.

**Eligible Criteria**

1. Minimum qualification BA / B.Sc / B.COM / BCS or equivalent from HEC recognized University. In case of BA/B.COM candidate must have six months computer course / Diploma.

2. Proficient in MS Word/ MS Excel/ MS Power point (additional credit may be given for additional relevant certified computer courses)
3. 1 years post degree relevant experience

#### **5.6.2.11 Assistant Admin Officer**

Shall be responsible for general administrative affairs of hospital and assist the admin officer.

#### **Eligibility Criteria**

1. Minimum qualification Masters' degree in Social Sciences/Economics/ Public Administration/ Finance/ MBA Finance/Administration or equivalent from HEC recognized University
2. Minimum 2 years post degree experience of administration (Additional credit may be given for hospital administration/ Public sector administration of similar nature).

### **5.7 HR for QMS and MSDS and Day Care Center.**

#### **5.7.1.1 QMS Supervisor / Information Desk Officer**

Shall be responsible whole QMS networking

#### **Eligible Criteria**

1. M.Sc. (Comp. Engineering, Electronics, Electrical Engineering, IT, Telecommunication, Com. Science, Software Engineering, MCS), BCS (Comp. Engineering, Electronics, Electrical Engineering, IT, Telecommunication, Com. Science, Software Engineering, MBA, BBA, MPA, IT related 16 years Education.
2. Experience in the field of Software/Hardware/Network/DATA Quality Assurance, IT projects, IT enabled organizations, CCTV Control Room monitoring, Call Centre, Networking, Software Development will be considered as an added advantage during interview process.
3. Excellent communication Skill (Urdu, English) and IQ level
4. Age Limit of 21-28 years for Male & 21-30 years for Female
5. Typing Speed: 30WPM.

#### **5.7.1.2 Computer Operators**

Eight Computer operators shall help QMS Supervisor in dispensation of his responsibilities.

#### **Eligible Criteria**

1. Minimum qualification 14 year or Masters' degree from HEC recognized University
2. Proficient in MS Word/ MS Excel/ MS Power point (additional credit may be given for additional relevant certified computer courses)
3. 35 Word per Minute. Excellent communication in English and Urdu.

### **5.7.2 Consultants (MSDS) Implementation & Clinical Audit**

#### **Eligible Criteria**

1. MBBS & Masters in Public Health, or equivalent qualification.
2. The consultant must have 10 years of hands on experience of third party validation, clinical audit of hospitals, Minimum Service Delivery Standards (MSDSs) implementation / hand holding; Report Writing; working knowledge of international best practices in hospital management will be preferred. Proficiency in MS Office is must. Must have strong communication skills.

#### **5.7.2.1 Terms of Reference (TORs) for Consultants Minimum Service Delivery Standards (MSDS) Implementation & Clinical Audit**

Government of the Punjab, Primary and Secondary Healthcare Department (P&SHD) is implementing multiple initiatives to improve the quality of healthcare at DHQ/THQ level across the province. One of the initiatives is Primary and Secondary Healthcare Revamping program which is being implemented by the Project Management Unit (PMU). Currently PMU is also involved in the standardization of quality of care at facility level through uniform set of Standard Operating Procedures (SOPs) & Standard Medical Protocols (SMPs) for compliance. The department intends to make all DHQs and THQ hospitals of Punjab as MSDS compliant which have been devised by Punjab Healthcare Commission.

Punjab Healthcare Commission was established under the PHC Act 2010 as an autonomous regulatory body for health sector; with the purpose of improving the quality, safety and efficiency of healthcare service delivery for all Public and Private Healthcare Establishments (including Allopaths, Homeopaths and Tibbs) in the province of Punjab. The Punjab Healthcare Commission has developed

Minimum Service Delivery Standards (MSDS) for all hospitals to improve the quality of healthcare services all over the Punjab. All Healthcare Establishments are required to implement MSDS to acquire a License to deliver healthcare services in Punjab.

This standardization effort will not only ensure availability of minimum services delivery standards (MSDS), SOPs, SMPs at all levels, but also the other essential inputs for functioning of systems and processes to ensure the smooth and safe delivery of quality healthcare services. These will also create conducive working environment for healthcare providers.

#### **5.7.2.2 Objectives**

The objective of this assignment is to implement & check all SOPs, SMPs, Minimum Service Delivery Standards (MSDS) & conduct clinical audit for 125 DHQ/THQ hospitals. Furthermore, the consultant will also monitor ongoing multiple trainings at DHQ/THQ hospitals.

#### **5.7.2.3 Scope of Work**

1. Develop policy & strategy for clinical audit of 125 hospitals.
2. Develop detailed clinical audit plan, with expected deliverables from hospitals. 360 degrees clinical audit.
3. Visit DHQ/THQ hospitals, to assess MSDS implementation and detailed report generation with short coming & highlight areas of improvement.
4. Review SOPs, SMPs & ISO Standards in hospitals to identify non-compliance.
5. Visit DHQ/THQ hospitals to implement clinical audit as per devised strategy, as well as monitoring and implementing MSDS standards.
6. Prepare detailed visit reports of clinical short comings; and suggest, and implement improvement plan.
7. Monitoring & auditing of patient referral system, detailed report on error and recommendations on rectification of errors.
8. Visit DHQ/THQ hospitals to implement clinical audit as per devised strategy, as well as monitoring and implementing MSDS standards.
9. Prepare detailed visit reports of clinical short comings; and suggest, and implement improvement plan.
10. Monitoring & auditing of patient referral system, detailed report on error and recommendations on rectification of errors.
11. Monitoring and evaluation of multiple trainings imparted at DHQ/THQ hospitals.
12. Any other relevant task assigned by Project Director/Director Quality Assurance / Project Manager.

#### **5.7.2.4 Reporting Arrangements**

- The Consultant (MSDS & Clinical Audit) will report to the Project Director/Director Quality Assurance/Senior Project Manager, P&SHD

#### **5.7.2.5 Duration of Assignment**

- The duration of assignment will initially be for THREE MONTHS / 120 DAYS which will be extendable subject to satisfactory performance.

#### **5.7.2.6 Outputs / Key Deliverables**

- Study/desk review the relevant Minimum Service Delivery Standards (MSDS) prescribed by PHC & ISO Standards, train the hospital staff/monitor/facilitate their implementation.
- Study/desk review the existing Standard Operating Procedures (SOPs), train the hospital staff/monitor/facilitate their implementation and suggest improvements where necessary.
- Study/desk review the existing SMPs, train the hospital staff/monitor/facilitate their implementation and suggest improvements where necessary.
- Conduct hospital visits of 125 DHQ/THQ hospitals (each DHQ hospital to be visited monthly & each THQ hospital every three months).
- Conduct formal hospital survey for confirming the implementation of MSDS on the relevant Scoring Matrix.
- Submit detailed report of each hospital visit on a standard format prescribed for the purpose.
- Conduct a system, process analysis with special emphasis on clinical audit and submission of detailed report accordingly.

#### **5.7.2.7 Remunerations**

- The consultant will be paid amount of Rs. **4500-6500/- per day** with no other benefits.
- All logistics will be arranged/reimbursed by PMU for field visits (accommodation, refreshments etc).

#### **5.7.2.8 Terms of Payment**

- Consultant will be paid on monthly basis throughout the contract period.

### **5.7.3 HR for Day Care Center**

#### **5.7.3.1 Manager Day Care Center (DCC)**

Shall be responsible for general administrative affairs of DCC.

#### **Eligibility Criteria**

1. Minimum qualification Masters' degree in Economics/ Public Administration/ Finance/ MBA Finance/Administration or equivalent from HEC recognized University
2. Minimum 2 years post degree experience of administration (Additional credit may be given for hospital administration/ Public sector administration of similar nature)

#### **5.7.3.2 Montessori Trained Teacher**

Shall be responsible for basic education of children.

##### **Eligibility Criteria**

1. Minimum qualification BA/BSC or equivalent from HEC recognized University along with B.Ed.
2. Minimum 1 years post degree experience of teaching (Additional credit may be given for Public sector teaching of similar nature)

#### **5.7.3.3 Attendant / Care Giver**

Shall be responsible for special care of the children.

##### **Eligibility Criteria**

Minimum qualification Matric or equivalent alongwith diploma in relevant field





The Planning & Development Board vide letter No.12(24)PO(COORD-II)P&D/2022 dated 14-07-2022 has informed that revised standard pay package were discussed and approved by the 83<sup>rd</sup> PDWP meeting held on 28-06-2022 under the chairmanship of Chairman P&D Board for all ADP funded Project posts of Department /Organizations working in Government of the Punjab:

<b><u>Project Pay Scale (PPS)</u></b>	<b><u>Revised Project Pay Scales (Permissible Range) (PKR)</u></b>	<b><u>Annual Increment Up to % age</u></b>
PPS-1	28,000 --- 44,800	10
PPS-2	35,000 --56,000	10
PPS-3	43,750 -- 70,000	10
PPS-4	52,500 -- 84,000	10
PPS-5	70,000 --112000	10
PPS-6	105,000 -- 172,200	8
PPS-7	157,500 --258,300	8
PPS-8	218,750--358,750	8
PPS-9	306,250--502,250	8

PPS-10	437,500--700,000	5
PPS-11	612,500-- 980,000	5
PPS-12	875,000 --1,400,000	5

In view of the above the Pay package of NMS staff has been revised. Financial Implications of New Management Structure Model based on revised Standard Pay Package (PPS) approved by the 83<sup>rd</sup> PDWP meeting held on 28-06-2022:

Name of Post	No. of Employees	Original Pay package approved		Revised Pay package	
		Per Month Salary	Salary for One Year	Per Month Salary	Salary for One Year
Admin Officer	1	80,000	960,000	105,000	1,260,000
Human Resource Officer	1	80,000	960,000	105,000	1,260,000
IT/Statistical Officer	1	80,000	960,000	105,000	1,260,000
Finance & Budget Officer	1	80,000	960,000	105,000	1,260,000
Procurement Officer	1	80,000	960,000	105,000	1,260,000
Quality Assurance Officer	1	80,000	960,000	105,000	1,260,000
Logistics Officer	1	80,000	960,000	105,000	1,260,000
Data Entry Operator (DEO)	2	35,000	840,000	44,000	1,056,000
Assistant admin Officer	2	50,000	1,200,000	70,000	1,680,000
<b>Total</b>	<b>11</b>		<b>8,760,000</b>	<b>849,000</b>	<b>11,556,000</b>

### **5.8 Other Initiatives:**

There are many other initiatives which government plans to undertake in order to improve healthcare services in the province. These include:

- Rehabilitation of Emergency Ward
- Fixture of Benches
- Addition of Bracket Fans/Water Coolers/LCDs with signage
- Supply of Laboratory/ Equipment/USG/ECG etc.
- CCU Improvement
- Installation of Water filtration plants
- Replacement of Bed sheets/Pillows/Matresses
- Installation of Transformers/Dual Connection
- Improvement of Labor rooms/Nurseries

- Maintenance and replacement of Air-conditioners through Outsourcing
- Blood Bank improvement
- Installation of CCTV Cameras
- Installation of Basic Fire-fighting Equipment
- Up gradation of Pharmacy and medicine Store
- Improvement of Internal Roads and laying of Tough pavers
- External Development
- Rehabilitation of Hepatitis/T.B Control

The PMU is essential to deliver the project end-item within budget and time limitations, in accordance with technical specifications, and, when specified, in fulfillment of project objectives.

## **5.9 Patient Management Protocol**

### **5.9.1 Emergency:**

1. Initial reception and computerization of data, issuance of medical record number and preparation of record file.
2. Patients seen by C.M.O. initial assessment (brief history and physical examination) is entered on the emergency slip/file initial treatment is started.
3. C.M.O calls the medical officer / house officer of the relevant department who takes on of the following action:-
  - i. Discharges the patient from emergency department after the patient is stabilized (himself or after consultation).
  - ii. Returns the patient in emergency department and inform the consultant or call such patient is either discharged after some time i.e. 2 hours of admitted later on
  - iii. Patient is straight way admitted by the medical officer himself or in consultation with the consultant
4. A separate record is maintained by each department. Each patient discusses at the morning meeting and any pitfalls are any pitfalls are corrected.
5. The patient who is admitted is again entered into the computer in the ward, complete history and physical examination is carried out and relevant lab & radiological investigations are ordered. (If not already done in the emergency department).

6. The definitive management is either started by the medical officer himself or in consultation with the consultant. (Telephone or physically). The patient is prepared for surgery if required.
7. At the evening round of the ward, the patients admitted throughout the day (Through OPD or emergency) are seen by the specialist. Appropriate changes in the management are carried out.
8. During the night, medical officer & house officer will be on duty and they will remain in contact with consultant.
9. In the morning round all the new admissions and old patients are thoroughly discussed management / treatment changed, surgery ordered or discharge ordered.
10. The discharge certificate is either prepared by the house officer or medical officer. If prepared by the house officer, it is countersigned by the medical officer

Appropriate changes are made in the computer record after discharge. The file is sent to the central record.

#### **5.9.2 O.P.D:**

1. After the initial registration and issuance of computerized number patient is sent to the relevant medical officer with the OPD slip/file.
2. The medical officer / house officer of the relevant department performs the initial assessment. The medical officer himself advises the treatment / investigation or refers the patients to the specialist or admits the patient.
3. After admission. The same routine is followed which has been mentioned in the case of admission through emergency.

#### **5.9.3 Death or End of Life Management.**

1. The decision regarding resuscitation is made at the initial stages by the medical officer / house officer or specialist in consultation with the patient himself and / attendants.
2. The DNR (Do not resuscitate) patients are only seen by the medical officer/ hose officer at the time of death.
3. For the patients to be resuscitated, a special code (blue code) is declared when patient go onto cardiac or the terminal events.
4. The policy for very sick / terminal and dying patients is formulated at the hospital administration level and appropriate modifications are decided in the relevant department for each patient.

5. Every death is discussed weekly at the mortality committee at the department and at the hospital level cleared by the Medical Superintendent.

#### **5.9.4 Inventory Control System**

The stock keeping and issuance of such items shall also be controlled and monitored through closer supervision and checks and balance system built in the software. The stock and expense of durable and consumable items will be kept in the system and also as hard copies. The main stores computers will be linked with the sub stores computers through networking. The areas like emergency. Outpatient department, Indoor registration desks, Laboratory and Radiology Department, ICUs, etc., will have linkages with the main and sub stores to know about:-

1. Stock in hand of various items
2. New receipt of these items
3. The items which have been issued to other departments
4. The Items which are not available
5. The expenditure incurred on the purchase.

The budget and details of account shall be linked with the financial control system.

#### **5.9.5 Project Monitoring Committee**

A Project Monitoring Committee is proposed hereby as under to monitor the project regarding Revamping of THQ Hospital:

- |    |                                  |                    |
|----|----------------------------------|--------------------|
| 1. | Deputy Commissioner              | (Chairman)         |
| 2. | District Monitoring Officer      | (Member)           |
| 3. | Executive Engineer Buildings     | (Member)           |
| 4. | Assistant Commissioner Concerned | (Member)           |
| 5. | MS THQ Hospital                  | (Secretary/Member) |

The committee will monitor the progress of the project and will hold regular weekly meeting to review the progress.

#### **5.10 Relationship with Sectoral Objectives**

The Government of the Punjab, Primary & Secondary Healthcare Department is in the process of undertaking number of initiatives to improve health care delivery system in the province. The Government of the Punjab is firmly committed to provide health care services at the doorstep of the community through integrated approach. A number of projects to improve emergency health care service particularly targeting on the promptness and quality have been

initiated. Although major focus is on disease prevention and health promotion strategies by providing specialist health care services to victims of various diseases in the patients is one of the top most priority. The instant project will be a major wing to health department with line departments.

Mainly the linkage with social welfare and human empowerment, labour and manpower, Education Department, Special Education, Home of the project will be in a vibrant environment in the holistic manner. The scope of the project itself aims to establish horizontal linkage with all the stakeholders through multi-sectorial approach. The health care facilities and ongoing services provided in the hospital will seek strength and viability from its linkage and public ownership.

## **6. DESCRIPTION AND JUSTIFICATION OF PROJECT**

### **6.1 JUSTIFICATION OF PROJECT**

attached

## **1. Description, Justification and Technical Parameters**

The scheme has been estimated on face of the factual basic requirements and if needed, alterations and has been quoted in this PC-1. The Population of Jampur District Rajanpur is more than 0.429 million. The area of the THQ Hospital Jampur District Rajanpur is 402,774 SFT land.

### **6.1 Description and Justification**

The Project Management Unit, Revamping Program, Primary and Secondary Healthcare Department planned to start the 2<sup>nd</sup> Phase of the said revamping program. The instant PC-I is also meant for provision of requisite biomedical and non-biomedical equipment, Electricity, Furniture & Fixture, Signage, HR and outsourcing of services for THQ Jampur District Rajanpur.

Revamping of THQ Jampur District Rajanpur constitutes of value addition in all major domains of the hospital including improvement of Civil infrastructure, addition of water filtration plant facility, value addition in Emergency ward and making the health facility more equipped with modern bio-medical equipment. State of the art furniture and fixtures complemented by interior and exterior decors are also part of this revamping project backed by the thought of dedicated express line of electricity to ensure smooth operations of hospitals will bring the modern health facilities in healthy and comfortable environment at the door step of masses. Introduction of new model of outsourcing of laundry services to ensure provision of neat and clean bed sheets, pillow covers, blankets etc. round the clock is also a part of this project. Fool proof security and adequate cleanliness measures of whole health facility are also proposed in this PC-I.

Civil work component will be carried out through C&W Department instead of District Health Authority for this hospital. Value addition in Emergency block is proposed in four domains i.e. Triage, Minor O.T, Specialized care room and emergency ward. Addition of Water Filtration Plant facility where it is not available as unclean or polluted water is devastating for human health. A key consideration was made while selecting furniture and its compatibility with hospital grade cleaners, detergents and disinfectants. Signage is an effective interface between the user and intended facility. Effective signage promotes the healthcare facility in a patient friendly manner. Access is an important part of quality of care. A crucial aspect for patient satisfaction is their comfort levels with the facility itself i.e. a person's ease in navigating a facility, and the timeliness in receiving care. Clear and proper signage at strategic points helps patients in reaching their destination without losing much of their valuable time and saves lot of their efforts in unnecessary enquiring from persons. In this regard, the Equipment of Emergency, Bio-Medical, Non-Bio-Medical, Electricity, Signage, Janitorial, Security, Laundry, Maintenance of Generator and Horticulture have been added as per actual requirement of the Hospital. The Equipment of MSDS, IT, Furniture Fixture, Day Care Center, HR, Medical Gases, Cafeteria are fixed in all hospitals as per yardstick



established by P& SH Department. Prior to initiation of this exercise standardization of required facilities was done by committee of experts in P & SH Department and on the basis of it, gaps were identified which would be covered under this PC-I.

### **Justification for 3<sup>rd</sup> Revision of PC-I**

1. Originally the Civil work component of the scheme was planned to be executed by the Health Council of the concerned District Health Authority based on cost estimates prepared by the Infrastructure Wing of PMU and approved by the DDSC. Accordingly, funds of Rs.3, Rs.5 and Rs.10 million were provided during FY 2017-18 for the execution of work as per parameters provided to these THQ Hospitals. However, no reasonable revamping civil work was carried out and hence did not fulfil the requirement and the objectives of the Revamping Program. Now P&SHD has decided to carry out further revamping of Civil work through Communication and Works Department Punjab to accomplish the uniformity of THQ Hospitals with already revamped hospitals of Phase-I. Hence the Rough Cost Estimates of the Punjab Buildings Department has been included in the civil work cost of this scheme.
2. Primary & Secondary Healthcare Department (P&SHD) made a decision to shift all the clerical posts in DHQ / THQ hospitals of Punjab to District Health Authorities as per notification dated 24<sup>th</sup> October, 2017. This administrative decision was taken due to a multiplicity of reasons which were adversely affecting healthcare service delivery in the hospitals. Primarily, these clerical posts were not specialized in any particular field, and therefore, the HR hired against these posts were generalized to the extent that they were not able to perform functions of Hospitals and Health Specific tasks that any medical administration should ideally perform. Additionally, public complaints against the clerical staff on issues such as behavior, performance created an environment of malfeasance in all hospitals. In place of the clerical positions, the Department introduced a New Management Structure (NMS), in all District and Tehsil Headquarters Hospitals. The officers/officials recruited as a part of the NMS have a minimum of 16 years of education. Introduction of New Management Structures (NMS) across all secondary hospitals in the Punjab, has allowed for the overall efficiency of District and Tehsil Headquarters Hospitals. In each Tehsil Headquarter Hospital HR under MNS has been provided for smooth running of the health services. Pay Package for NMS Staff was never been revised since 2017-18, therefore it was decided to approach the P&D Department for revision of Pay package. The PDWP approved revised pay page in its meeting held on 08-02-2022 based on PPS approved in 60<sup>th</sup> PDWP meeting as under: -

Name of Posts	60 <sup>th</sup> PDWP Meeting		
	PPS Assigned	Permissible Range (PKR) & Annual increment	Approved Pay Package
HR & Legal Officer, IT & Statistical Officer, Admin Officer, Procurement Officer, Finance & Budget Officer, Logistics Officer, Quality Assurance Officer, Audit Officer and Biomedical Engineer	PPS-6	75,000-105,000 (8% annual incr.)	75,000
Assistant Admin Officer	PPS-5	50,000-75000 (10% annual incr.)	50,000
Data Entry Operator	PPS-3	35,000-55,000 (10% annual incr.)	35,000

Now the Planning & Development Board vide letter No.12(24)PO(COORD-II)P&D/2022 dated 14-07-2022 has informed that revised standard pay package were discussed and approved by the 83<sup>rd</sup> PDWP meeting held on 28-06-2022 under the chairmanship of Chairman P&D Board for all ADP funded Project posts of Department /Organizations working in Government of the Punjab. Therefore, the revised Pay Package has been incorporated in the revised PC-I.

3. As the gestation period of the PC-I till 30.06.2023, therefore, the cost of NMS has been revised for smooth running of the Tehsil Headquarter Hospitals and hence PC-I has been proposed till 30- 06-2025.
4. Infrastructure team has conducted the Joint visits with the team of C&W Department. During the field visits, few alterations were recommended by the technical teams which have been incorporated in the Revised Rough Cost Estimates of the subject scheme and have been attached with the PC-I along with comparative statement. Therefore, Civil works component cost has been increased from Rs. 11.668 million to Rs. 77.177 million due to few changes in the scope and MRS rates (2<sup>nd</sup> Bi-annual 2022).

**85 THQ Hospitals covered under the Program:**

The location map of the 85 THQ hospitals that will be taken up for rehabilitation in this program is given below:

PROJECT MANAGEMENT UNIT  
PRIMARY & SECONDARY HEALTHCARE DEPARTMENT



LOCATION OF DHQ AND THQ HOSPITALS IN PUNJAB



## **6.2 SECTORAL SPECIFIC INFORMATION**

Social Sectors, Health Department

## 7. CAPITAL COST ESTIMATES

**Financial Components:** Revenue  
**Cost Center:**OTHERS- (OTHERS)  
**Fund Center (Controlling):**N/A

**Grant Number:**Development - (PC22036)  
**LO NO:**LO17011147  
**A/C To be Credited:**Assan Assignment

S r #	Object Code	2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025	
		Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
1	A12403-Other Buildings	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	A05270-To Others	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total</b>		<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

PKR Million

**Financial Components:** Capital  
**Cost Center:**OTHERS- (OTHERS)  
**Fund Center (Controlling):**LE4203

**Grant Number:**Government Buildings - (PC12042)  
**LO NO:**LO22010063  
**A/C To be Credited:**Account-I

S r #	Object Code	2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025	
		Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
1	A05270-To Others	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	A12403-Other Buildings	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

PKR Million

<b>Total</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
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## Abstract of Cost

Name of THQ Hospital	THQ JAMPUR											
	Original			1st Revised			2nd Revised			3rd Revised		
Scope of work	Cost in million											
	Capital	Revenue	Total	Capital	Revenue	Total	Capital	Revenue	Total	Capital	Revenue	Total
Capital component												
Internal development	0.000	26.626	26.626	0.000	26.626	26.626	19.113	10.000	29.113	38.034	10.000	48.034
External development	0.000	2.373	2.373	0.000	2.373	2.373	20.766	0.000	20.766	7.060	0.000	7.060
Water filtration plant	0.000	5.600	5.600	0.000	5.600	5.600	5.088	0.000	5.088	4.738	0.000	4.738
Total Capital Component	0.000	34.599	34.599	0.000	34.599	34.599	44.967	10.000	54.967	49.832	10.000	59.832
Revenue component												
Emergency	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MSDS	0.000	8.647	8.647	0.000	8.647	8.647	0.000	9.654	9.654	0.000	13.438	13.438
Med. Machinery and Equipment	0.000	44.121	44.121	0.000	44.121	44.121	0.000	59.706	59.706	0.000	94.388	94.388
Electricity	0.000	22.193	22.193	0.000	22.193	22.193	0.000	29.143	29.143	0.000	29.143	29.143
IT & QMS & Surveillance	0.000	14.515	14.515	0.000	14.515	14.515	0.000	16.715	16.715	0.000	20.120	20.120
Furniture and Fixtures	0.000	13.504	13.504	0.000	13.504	13.504	0.000	13.504	13.504	0.000	18.788	18.788
Interior and Exterior decorations/ Signage	0.000	4.374	4.374	0.000	4.374	4.374	0.000	5.980	5.980	0.000	5.980	5.980
Day Care Center	0.000	1.600	1.600	0.000	1.600	1.600	0.000	1.600	1.600	0.000	1.600	1.600
Human resource (HR) plan	0.000	17.220	17.220	0.000	17.220	17.220	0.000	34.110	34.110	0.000	49.704	49.704
LC Deficit during procurement (currency fluctuation)								1.739	1.739		1.739	1.739
Total Revenue component	0.000	126.173	126.173	0.000	126.173	126.173	0.000	172.151	172.151	0.000	234.900	234.900
Outsourcing component												
Janitorial Services	0.000	16.120	16.120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Security and Parking services	0.000	7.384	7.384	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Laundry Services	0.000	3.600	3.600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maintenance (Generator)	0.000	2.020	2.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEP	0.000	4.486	4.486	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Medical Gases	0.000	1.304	1.304	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Cafeteria	0.000	6.743	6.743	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Horticulture services	0.000	2.685	2.685	0.000	0.048	0.048	0.000	0.048	0.048	0.000	0.048	0.048
Total outsourcing cost	0.000	44.343	44.343	0.000	0.048	0.048	0.000	0.048	0.048	0.000	0.048	0.048
Total	0.000	205.116	205.116	0.000	160.820	160.820	44.967	182.199	227.166	49.832	244.948	294.780
Contingency (1%) only on Civil	0.000	0.346	0.346	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Third Party Monitoring (TPM) (1%)	0.000	2.051	2.051	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Third Party Validation (TPV) (1%)	0.000	2.051	2.051	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grand Total	0.000	209.564	209.564	0.000	160.820	160.820	44.967	182.199	227.166	49.832	244.948	294.780



## MSDS

Sr. No.	ITEM DESCRIPTION	Original			1st Revised			2nd Revised			3rd Revised		
		Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)
1	Histology slide boxes	3	3,100	9,299	3	3,100	9,299	3	4,500	13,500	3	4,500	13,500
2	Labeling Device connected with Computer	3	60,000	180,000	3	60,000	180,000	3	80,000	240,000	3	80,000	240,000
3	Safe Transportation Boxes	2	15,750	31,500	2	15,750	31,500	2	18,000	36,000	2	18,000	36,000
4	Portable Safety Exhaust Hood	1	160,000	160,000	1	160,000	160,000	1	250,000	250,000	1	450,000	450,000
5	Centrifuge Machine	0	149,336	-	0	149,336	-	0	250,000	-	0	325,000	-
6	Hot plates	2	26,250	52,500	2	26,250	52,500	2	45,000	90,000	2	55,000	110,000
7	Water bath	1	157,500	157,500	1	157,500	157,500	1	157,500	157,500	1	300,000	300,000
8	Complaint boxes	10	3,150	31,500	10	3,150	31,500	10	3,150	31,500	10	3,150	31,500
9	Spine boards with Neck holders	4	31,080	124,320	4	31,080	124,320	4	31,080	124,320	4	31,080	124,320
10	Sensitometer	1	137,325	137,325	1	137,325	137,325	1	137,325	137,325	1	137,325	137,325
11	Densitometer personal	2	191,391	382,782	2	191,391	382,782	2	191,391	382,782	2	191,391	382,782
12	Box of Films	2	26,250	52,500	2	26,250	52,500	2	30,000	60,000	2	30,000	60,000
13	Aluminium Step Wedge	1	26,250	26,250	1	26,250	26,250	1	26,250	26,250	1	26,250	26,250
14	Non-Mercury thermometer	10	305	3,045	10	305	3,045	10	350	3,500	10	750	7,500
15	Brass or copper mesh screen	2	5,250	10,500	2	5,250	10,500	2	5,250	10,500	2	5,250	10,500
16	Wheel Chairs	0	31,500	-	0	31,500	-	0	35,000	-	0	35,000	-
17	Statures	0	67,830	-	0	67,830	-	0	75,000	-	0	75,000	-
18	Blood Warmer	3	246,750	740,250	3	246,750	740,250	3	275,000	825,000	3	275,000	825,000
19	Sequence Compression Device	2	210,000	420,000	2	210,000	420,000	2	230,000	460,000	2	600,000	1,200,000
20	Blood Bank Refrigerators with	0	682,500	-	0	682,500	-	0	700,000	-	0	1,469,900	-
21	Data Coder	1	84,000	84,000	1	84,000	84,000	1	100,000	100,000	1	-	-
22	Plasma Separator 1	0	4,200,000	-	0	4,200,000	-	0	4,500,000	-	0	4,500,000	-
23	Blood Storage Cabinet	1	682,500	682,500	1	682,500	682,500	1	700,000	700,000	1	1,469,900	1,469,900
24	Resuscitation Trolley	0	244,733	-	0	244,733	-	0	400,000	-	0	491,350	-
25	Ultra sound machine gyne	0	1,403,325	-	0	1,403,325	-	0	1,700,000	-	0	2,150,000	-
26	Delivery Table	0	47,250	-	0	47,250	-	0	47,250	-	0	48,500	-
27	Height and weight scale	4	8,400	33,600	4	8,400	33,600	4	10,000	40,000	4	31,500	126,000
28	Suction Electronic	0	259,350	-	0	259,350	-	0	275,000	-	0	275,000	-
29	Fetal Heart Rate Detector	1	144,375	144,375	1	144,375	144,375	1	175,000	175,000	1	275,000	275,000
30	Ambo bag	0	17,325	-	0	17,325	-	0	19,000	-	0	19,000	-
31	Neonatal size face mask	4	578	2,310	4	578	2,310	4	1,200	4,800	4	1,500	6,000
32	Exchange transfusion trays	2	10,000	20,000	2	10,000	20,000	2	10,000	20,000	2	12,000	24,000
33	Shoe racks SS	4	39,900	159,600	4	39,900	159,600	4	39,900	159,600	4	39,900	159,600
34	Sterilizer	0	2,940,000	-	0	2,940,000	-	0	3,500,000	-	0	7,800,000	-
35	Washer disinfectant	0	-	-	0	-	-	0	-	-	0	-	-
36	Packing table	0	-	-	0	-	-	0	-	-	0	-	-
37	Digital Sealer Printer	1	420,000	420,000	1	420,000	420,000	1	480,000	480,000	1	520,000	520,000
38	Backup Auto Clave	0	441,000	-	0	441,000	-	0	550,000	-	0	789,625	-
39	Racks for Manual	10	21,000	210,000	10	21,000	210,000	10	37,500	375,000	10	56,160	561,600
40	Locked Racks for MSDS Data	2	21,000	42,000	2	21,000	42,000	2	37,500	75,000	2	56,160	112,320
41	Eye Wash Station with shower	3	300,000	900,000	3	300,000	900,000	3	350,000	1,050,000	3	350,000	1,050,000
42	Air Curtain	4	50,190	200,760	4	50,190	200,760	4	60,000	240,000	4	60,000	240,000
43	Fire Sand Buckets with stand	5	15,000	75,000	5	15,000	75,000	5	20,000	100,000	5	20,000	100,000
44	Smoke Detectors	10	7,350	73,500	10	7,350	73,500	10	8,500	85,000	10	8,500	85,000
45	Heat Detector	5	8,400	42,000	5	8,400	42,000	5	10,000	50,000	5	10,000	50,000
46	Gas Detector	5	6,300	31,500	5	6,300	31,500	5	7,500	37,500	5	7,500	37,500
47	Fire Blankets	10	2,783	27,825	10	2,783	27,825	10	3,200	32,000	10	3,200	32,000
48	Fire Alarms	10	5,250	52,500	10	5,250	52,500	10	6,500	65,000	10	6,500	65,000

## MSDS

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	ITEM DESCRIPTION	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)	Quantity Required	Actual Unit Price	Actual Total Cost(Rs)
49	Identification Bands	100	3	315	100	3	315	100	3	300	100	3	300
50	Wet Flooring Signages	0	431	-	0	431	-	0	550	-	0	750	-
51	Key Box	6	8,190	49,140	6	8,190	49,140	6	10,000	60,000	6	10,000	60,000
52	Dehumidifier	0	58,800	-	0	58,800	-	0	70,000	-	0	100,000	-
53	Tourniquet	4	840	3,360	4	840	3,360	4	850	3,400	4	1,500	6,000
54	LAB SAFETY BOX	2	3,150	6,300	2	3,150	6,300	2	4,000	8,000	2	4,000	8,000
55	densitometer	0	210,000	-	0	210,000	-	0	210,000	-	0	210,000	-
56	vending machine	0	630,000	-	0	630,000	-	0	630,000	-	0	630,000	-
57	Automatic shoe cover machine	2	296,100	592,200	2	296,100	592,200	2	332,500	665,000	2	332,500	665,000
58	Vein Finder	2	630,000	1,260,000	2	630,000	1,260,000	2	630,000	1,260,000	2	630,000	1,260,000
59	Blood Sample Vials (BOXES)	3	13	38	3	13	38	3	15	45	3	15	45
60	Bassinets	5	21,000	105,000	5	21,000	105,000	5	22,000	110,000	5	22,000	110,000
61	Chemical Spill Cleanup kit	2	100,000	200,000	2	100,000	200,000	2	100,000	200,000	2	100,000	200,000
62	Digital Temperature Humidity Guage	4	15,000	60,000	4	15,000	60,000	4	15,000	60,000	4	15,000	60,000
63	Bio Cleaning and Disinfection System	1	650,000	650,000	1	650,000	650,000	1	650,000	650,000	1	2,200,000	2,200,000
	<b>Total</b>			<b>8,647,094</b>			<b>8,647,094</b>			<b>9,653,822</b>			<b>13,437,942</b>
				8.647			8.647			9.654			13.438

## Medical Equipment

Sr. No.	Area	Name of Equipment	Yard Stick	Original				1st Revised				2nd Revised				3rd Revised			
				Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost
1	Laboratory	Semi Auto Clinical Chemistry Analyzer	1	2	0	449,295	-	2	0	449,295	-	2	0	550,000	-	2	0	550,000	-
2		Hematology Analyzer	1	1	0	427,350	-	1	0	427,350	-	1	0	550,000	-	1	0	750,000	-
3		Electrolyte Analyzer	1	1	0	427,350	-	1	0	427,350	-	1	0	550,000	-	1	0	550,000	-
4		Blood Gas Analyzer	0	0	0	2,744,858	-	0	0	2,744,858	-	0	0	3,200,000	-	0	0	1,400,000	-
5		Clinical Microscope	1	2	0	132,825	-	2	0	132,825	-	2	0	180,000	-	2	0	250,000	-
6		Water Bath	1	1	0	60,000	-	1	0	60,000	-	1	0	157,500	-	1	0	325,000	-
7		Hot air Oven	1	1	0	210,000	-	1	0	210,000	-	1	0	385,000	-	1	0	450,000	-
8		Distilled water plant	1	0	1	52,500	52,500	0	1	52,500	52,500	0	1	75,000	75,000	0	1	125,000	125,000
9		Auto pipettes	10	0	10	31,500	315,000	0	10	31,500	315,000	0	10	40,500	405,000	0	10	45,000	450,000
10		glass wares	0	0	0	105,000	-	0	0	105,000	-	0	0	105,000	-	0	0	105,000	-
11	X-Rays	Centrifuge Machine	2	2	0	149,336	-	2	0	149,336	-	2	0	250,000	-	2	0	400,000	-
12		Static X-ray Machine	1	2	0	4,200,000	-	2	0	4,200,000	-	2	0	6,000,000	-	2	0	12,000,000	-
13		Mobile X-Ray Machine	0	1	0	3,850,524	-	1	0	3,850,524	-	1	0	4,300,000	-	1	0	9,800,000	-
14		Computerized Radiography System	0	0	0	4,018,245	-	0	0	4,018,245	-	0	0	4,500,000	-	0	0	4,500,000	-
15		Dental X-Ray	0	0	0	282,975	-	0	0	282,975	-	0	0	350,000	-	0	0	525,000	-
16		Lead apron and PPE	2	1	1	52,500	52,500	1	1	52,500	52,500	1	1	60,000	60,000	1	1	85,000	85,000
17		Density meter personal (Add)	0	0	0	210,000	-	0	0	210,000	-	0	0	210,000	-	0	0	250,000	-
18		Lead glass /shield	0	0	0	105,000	-	0	0	105,000	-	0	0	105,000	-	0	0	150,000	-
19		Lead Walls	0	0	0	525,000	-	0	0	525,000	-	0	0	525,000	-	0	0	525,000	-
20		Portable/Mobile Ultrasound	0	2	0	1,371,331	-	2	0	1,371,331	-	2	0	1,500,000	-	2	0	2,400,000	-
21	CCU	Color Doppler RADIOLOGY	1	2	0	3,698,310	-	2	0	3,698,310	-	2	0	4,500,000	-	2	0	5,500,000	-
22		ICU MONITOR	2	0	2	301,665	603,330	0	2	301,665	603,330	0	2	900,000	1,800,000	0	2	1,250,000	2,500,000
23		Temporary pace maker	0	0	0	315,000	-	0	0	315,000	-	0	0	315,000	-	0	0	550,000	-
24		Defibrillator	1	0	1	299,153	299,153	0	1	299,153	299,153	0	1	650,000	650,000	0	1	800,000	800,000
25		ECG Machine Three Channel	2	0	2	169,785	339,570	0	2	169,785	339,570	0	2	169,785	339,570	0	2	300,000	600,000
26		ETT Machine	0	0	0	2,021,838	-	0	0	2,021,838	-	0	0	2,200,000	-	0	0	3,000,000	-
27		Color dopler RADIOLOGY	0	0	0	4,681,790	-	0	0	4,681,790	-	0	0	4,800,000	-	0	0	6,000,000	-
28		Suction Pump	2	0	2	259,350	518,700	0	2	259,350	518,700	0	2	275,000	550,000	0	2	300,000	600,000
29		Blood Cabinet	1	0	1	690,539	690,539	0	1	690,539	690,539	0	1	700,000	700,000	0	1	1,500,000	1,500,000
30		Centrifuge Machine	2	1	1	149,336	149,336	1	1	149,336	149,336	1	1	250,000	250,000	1	1	400,000	400,000
31	Blood Bank	Slide viewer	1	0	1	42,000	42,000	0	1	42,000	42,000	0	1	55,000	55,000	0	1	55,000	55,000
32		Clinical Microscope	1	1	0	132,825	-	1	0	132,825	-	1	0	180,000	-	1	0	250,000	-
33		Computerized Hemo Dialysis Machine	5	0	5	1,050,000	5,250,000	0	5	1,050,000	5,250,000	0	5	1,600,000	8,000,000	0	5	3,200,000	16,000,000
34	Nursery	Baby Cot	10	5	5	14,669	73,343	5	5	14,669	73,343	5	5	16,000	80,000	5	5	16,000	80,000
35		Phototherapy Unit	2	2	0	130,200	-	2	0	130,200	-	2	0	655,000	-	2	0	850,000	-
36		Infant Warmer	2	2	0	335,638	-	2	0	335,638	-	2	0	985,000	-	2	0	1,050,000	-
37		Pulse Oximeter	6	0	6	104,500	627,000	0	6	104,500	627,000	0	6	160,000	960,000	0	6	225,000	1,350,000
38		Infant Incubator	2	2	0	858,932	-	2	0	858,932	-	2	0	900,000	-	2	0	1,750,000	-
39		Suction Pump	1		1	259,350	259,350	1		259,350	259,350	1		275,000	275,000	1		300,000	300,000
40		Hospital Grade Nebulizer Heavy Duty	2	1	1	125,265	125,265	1	1	125,265	125,265	1	1	215,000	215,000	1	1	300,000	300,000
41	O.T (04)	Anesthesia Machine with Ventilator	1	1	0	2,509,554	-	1	0	2,509,554	-	1	0	3,000,000	-	1	0	7,000,000	-
42		BED SIDE PATIENT MONITOR	2	3	0	441,000	-	3	0	441,000	-	3	0	550,000	-	3	0	1,200,000	-
43		Defibrillator	2	1	1	308,713	308,713	1	1	308,713	308,713	1	1	650,000	650,000	1	1	800,000	800,000
44		Electrosurgical Unit	1	1	0	507,530	-	1	0	507,530	-	1	0	700,000	-	1	0	900,000	-
45		Operation Table	1	2	0	1,426,215	-	2	0	1,426,215	-	2	0	2,000,000	-	2	0	2,500,000	-
46		Ceiling Operating Light	1	2	0	413,013	-	2	0	413,013	-	2	0	800,000	-	2	0	950,000	-
47		STEAM STERILIZER	1	1	0	3,465,000	-	1	0	3,465,000	-	1	0	4,000,000	-	1	0	7,800,000	-
48		Suction Pump	2		2	259,350	518,700	2		259,350	518,700	2		275,000	550,000	2		300,000	600,000
49		Resuscitation trolley With Crash Cart	2	1	1	244,733	244,733	1	1	244,733	244,733	1	1	400,000	400,000	1	1	600,000	600,000
50		mayo table	4	0	4	21,000	84,000	0	4	21,000	84,000	0	4	23,000	92,000	0	4	23,000	92,000
51	Orthopedic	MOBILE OPERATING LIGHT	1	0	1	304,220	304,220	0	1	304,220	304,220	0	1	400,000	400,000	0	1	900,000	900,000
52		Operation Table	0	0	0	1,426,215	-	0	0	1,426,215	-	0	0	2,000,000	-	0	0	5,000,000	-
53		ORTHOPEDIC DRILL	0	0	0	1,108,740	-	0	0	1,108,740	-	0	0	1,500,000	-	0	0	4,000,000	-
54		Plaster Cutting Pneumatic	1	0	1	276,250	276,250	0	1	276,250	276,250	0	1	450,000	450,000	0	1	1,500,000	1,500,000
55		Pneumatic Tourniquets	0	0	0	262,500	-	0	0	262,500	-	0	0	262,500	-	0	0	300,000	-
56		Orthopedic Instruments	0	0	0	432,623	-	0	0	432,623	-	0	0	550,000	-	0	0	550,000	-
57		Portable/Mobile Ultrasound	1	1	0	1,418,958	-	1	0	1,418,958	-	1	0	1,500,000	-	1	0	2,400,000	-
58		Autoclave	1	1	0	441,000	-	1	0	441,000	-	1	0	550,000	-	1	0	850,000	-

## Medical Equipment

Sr. No.	Area	Name of Equipment	Yard Stick	Original				1st Revised				2nd Revised				3rd Revised			
				Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost
59	Gynea (20 beds)	Delivery Set	10	2	8	31,500	252,000	2	8	31,500	252,000	2	8	40,000	320,000	2	8	65,000	520,000
60		Delivery Table	2	4	0	47,250	-	4	0	47,250	-	4	0	47,250	-	4	0	55,000	-
61		BED SIDE PATIENT MONITOR	2	1	1	294,000	294,000	1	1	294,000	294,000	1	1	550,000	550,000	1	1	1,200,000	1,200,000
62		D & C Set	2	2	0	34,650	-	2	0	34,650	-	2	0	40,000	-	2	0	60,000	-
63		Vacume Extractor	1	0	1	259,350	259,350	0	1	259,350	259,350	0	1	300,000	300,000	0	1	350,000	350,000
64		CTG Machine	1	1	0	628,049	-	1	0	628,049	-	1	0	725,000	-	1	0	900,000	-
65		ECG Machine Three Channel	1	0	1	169,785	169,785	0	1	169,785	169,785	0	1	180,000	180,000	0	1	300,000	300,000
66		Portable O.T Light	2	1	1	304,220	304,220	1	1	304,220	304,220	1	1	400,000	400,000	1	1	900,000	900,000
67		Baby Cot	2	2	0	14,669	-	2	0	14,669	-	2	0	16,000	-	2	0	16,000	-
68		Delivery trolley	2	1	1	47,250	47,250	1	1	47,250	47,250	1	1	47,250	47,250	1	1	47,250	47,250
69	Surgical Emergency (10 beds)	Desktop Fetal Heart Rate Detector	1	0	1	144,375	144,375	0	1	144,375	144,375	0	1	175,000	175,000	0	1	200,000	200,000
70		Steam Sterilizer	0	0	0	3,355,849	-	0	0	3,355,849	-	0	0	4,000,000	-	0	0	7,800,000	-
71		Operation Table	0	2	0	1,426,215	-	2	0	1,426,215	-	2	0	2,000,000	-	2	0	2,500,000	-
72		MOBILE OPERATING LIGHT	0	1	0	285,466	-	1	0	285,466	-	1	0	400,000	-	1	0	900,000	-
73		Suction Pump	0	3	0	259,350	-	3	0	259,350	-	3	0	275,000	-	3	0	300,000	-
74		Laryngoscope	0	1	0	9,744	-	1	0	9,744	-	1	0	12,000	-	1	0	20,000	-
75		Set of Surgical Instruments	0	2	0	141,750	-	2	0	141,750	-	2	0	160,000	-	2	0	220,000	-
76		Stretcher	10	0	10	68,250	682,500	0	10	68,250	682,500	0	10	69,300	693,000	0	10	69,300	693,000
77		wheel chair	10	0	10	31,500	315,000	0	10	31,500	315,000	0	10	35,000	350,000	0	10	35,000	350,000
78		foot support	6	0	6	4,200	25,200	0	6	4,200	25,200	0	6	4,500	27,000	0	6	5,148	30,888
79	Others	Resuscitation trolley With Crash Cart	5	3	2	237,618	475,236	3	2	237,618	475,236	3	2	400,000	800,000	3	2	600,000	1,200,000
80		BP Appratus	15	10	5	15,750	78,750	10	5	15,750	78,750	10	5	16,000	80,000	10	5	16,000	80,000
81		Ventilator	0	0	0	2,195,080	-	0	0	2,195,080	-	0	0	3,500,000	-	0	0	5,500,000	-
82		CPAP	1	0	1	1,098,510	1,098,510	0	1	1,098,510	1,098,510	0	1	2,100,000	2,100,000	0	1	2,800,000	2,800,000
83		X-RAY PROCESSOR	1	0	1	858,440	858,440	0	1	858,440	858,440	0	1	925,000	925,000	0	1	1,200,000	1,200,000
84		Hand wash Scrub Double Bay	2	0	2	94,500	189,000	0	2	94,500	189,000	0	2	100,000	200,000	0	2	140,000	280,000
85		Image Intensifier	0	0	0	4,667,460	-	0	0	4,667,460	-	0	0	4,667,460	-	0	0	12,000,000	-
86		Central Medical Gass Pipe Line System	7	0	7	850,000	5,950,000	0	7	850,000	5,950,000	0	7	-	-	0	7	-	-
87		Motorized Patient bed with bed side,Mattress,IV stand, Attendant Bench	4	0	4	210,000	840,000	0	4	210,000	840,000	0	4	400,000	1,600,000	0	4	600,000	2,400,000
88		Sphygmomanometer wall mtd	4	0	4	15,750	63,000	0	4	15,750	63,000	0	4	30,000	120,000	0	4	35,000	140,000
89	ICU	Resuscitation trolley With Crash Cart	2	0	2	244,733	489,466	0	2	244,733	489,466	0	2	400,000	800,000	0	2	600,000	1,200,000
90		Defibrillator	1	0	1	299,153	299,153	0	1	299,153	299,153	0	1	650,000	650,000	0	1	800,000	800,000
91		Defibrillator with Monitor	0	0	0	330,750	-	0	0	330,750	-	0	0	650,000	-	0	0	800,000	-
92		ECG Machine Three Channel	0	0	0	169,785	-	0	0	169,785	-	0	0	180,000	-	0	0	300,000	-
93		Syringe pump	1	0	1	108,780	108,780	0	1	108,780	108,780	0	1	125,000	125,000	0	1	200,000	200,000
94		Suction Pump	0	0	0	259,350	-	0	0	259,350	-	0	0	275,000	-	0	0	300,000	-
95		ICU Monitor	0	0	0	298,200	-	0	0	298,200	-	0	0	900,000	-	0	0	1,250,000	-
96		Instrument Trolley	1	0	1	55,000	55,000	0	1	55,000	55,000	0	1	55,000	55,000	0	1	55,000	55,000
97		Ward instruments	0	0	0	-	-	0	0	-	-	0	0	-	-	0	0	-	-
98		Ventilator intensive care	2	0	2	1,600,000	3,200,000	0	2	1,600,000	3,200,000	0	2	3,500,000	7,000,000	0	2	5,500,000	11,000,000
99		CPAP with humidifier	0	0	0	1,098,510	-	0	0	1,098,510	-	0	0	2,100,000	-	0	0	2,800,000	-
100		DELIVERY TROLLEY STAINLESS STEEL	1	0	1	23,835	23,835	0	1	23,835	23,835	0	1	47,250	47,250	0	1	47,250	47,250
101		Ambu-Bag, adult	4	0	4	17,325	69,300	0	4	17,325	69,300	0	4	19,000	76,000	0	4	19,000	76,000
102		Ambu-Bag, paedrs	4	0	4	17,325	69,300	0	4	17,325	69,300	0	4	19,000	76,000	0	4	19,000	76,000
103		TWO BODY REFRIGERATOR WITH CASTERS 220v 50Hz Along with Atopsy Table & Lifter Trolley	1	0	1	2,470,546	2,470,546	0	1	2,470,546	2,470,546	0	1	3,000,000	3,000,000	0	1	3,500,000	3,500,000
104	Dental Unit	Dental Unit	2	0	2	2,190,000	4,380,000	0	2	2,190,000	4,380,000	0	2	2,820,000	5,640,000	0	2	2,820,000	5,640,000
105		Autoclave	1	0	1	441,000	441,000	0	1	441,000	441,000	0	1	550,000	550,000	0	1	850,000	850,000
106		Dental X-RAY Machine	1	0	1	282,975	282,975	0	1	282,975	282,975	0	1	350,000	350,000	0	1	525,000	525,000
107		Digital Intra Oral Camera	0	0	0	94,500	-	0	0	94,500	-	0	0	150,000	-	0	0	600,000	-
108		DENTAL CAUTERY	0	0	0	84,000	-	0	0	84,000	-	0	0	160,000	-	0	0	900,000	-
109		Ultrasonic scaling	1	0	1	120,750	120,750	0	1	120,750	120,750	0	1	175,000	175,000	0	1	300,000	300,000
110		Curing lights	1	0	1	52,500	52,500	0	1	52,500	52,500	0	1	95,000	95,000	0	1	150,000	150,000
111		Endo motor system	1	0	1	199,601	199,601	0	1	199,601	199,601	0	1	265,000	265,000	0	1	500,000	500,000
112		Dental cabinet	0	0	0	42,000	-	0	0	42,000	-	0	0	70,000	-	0	0	160,000	-
113		Dental examination/surgical instrument sets	4	0	4	157,500	630,000	0	4	157,500	630,000	0	4	175,000	700,000	0	4	175,000	700,000
114		Shortwave diathermy	1	0	1	844,562	844,562	0	1	844,562	844,562	0	1	1,500,000	1,500,000	0	1	2,750,000	2,750,000
115		Infrared Radiation	1	0	1	142,916	142,916	0	1	142,916	142,916	0	1	315,222	315,222	0	1	526,500	526,500

### Medical Equipment

Sr. No.	Area	Name of Equipment	Yard Stick	Original				1st Revised				2nd Revised				3rd Revised			
				Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost	Available Quantity	Required Quantity	Cost per Unit	Total Cost
116	Physiotherapy unit	TENS(Transcutaneous Electrical Nerve Stimulation)	1	0	1	132,577	132,577	0	1	132,577	132,577	0	1	275,000	275,000	0	1	585,000	585,000
117		Treatment couch	4	0	4	10,080	40,320	0	4	10,080	40,320	0	4	75,000	300,000	0	4	760,500	3,042,000
118		A. Electrical Heating Pads	3	0	3	6,300	18,900	0	3	6,300	18,900	0	3	20,000	60,000	0	3	117,000	351,000
119		B. Hot pack unite	1	0	1	131,782	131,782	0	1	131,782	131,782	0	1	253,485	253,485	0	1	1,053,000	1,053,000
120		C. Paraffin bath	1	0	1	154,082	154,082	0	1	154,082	154,082	0	1	308,071	308,071	0	1	819,000	819,000
121		Therapeutic ULTRASOUND unit	1	0	1	141,748	141,748	0	1	141,748	141,748	0	1	275,000	275,000	0	1	819,000	819,000
122		Treadmill	1	0	1	335,111	335,111	0	1	335,111	335,111	0	1	950,000	950,000	0	1	1,404,000	1,404,000
123		Mats	1	0	1	75,817	75,817	0	1	75,817	75,817	0	1	150,000	150,000	0	1	292,500	292,500
124		Quadriceps Bench	1	0	1	189,164	189,164	0	1	189,164	189,164	0	1	425,000	425,000	0	1	750,000	750,000
125		Ergometer Cycling	1	0	1	66,087	66,087	0	1	66,087	66,087	0	1	175,000	175,000	0	1	409,500	409,500
126		Mirror	1	0	1	24,640	24,640	0	1	24,640	24,640	0	1	45,000	45,000	0	1	400,000	400,000
127		Floor Mounted Parallel Bars	1	0	1	87,821	87,821	0	1	87,821	87,821	0	1	150,000	150,000	0	1	590,000	590,000
128		Pully System	1	0	1	41,826	41,826	0	1	41,826	41,826	0	1	128,594	128,594	0	1	409,500	409,500
129		Trolleys	4	0	4	2,520	10,080	0	4	2,520	10,080	0	4	35,000	140,000	0	4	50,000	200,000
130		Stool(Steel)	4	0	4	2,520	10,080	0	4	2,520	10,080	0	4	7,000	28,000	0	4	10,000	40,000
131	Beds	Fowler beds with Mattress	80	0	80	70,000	5,600,000	0	80	70,000	5,600,000	0	80	110,000	8,800,000	0	80	150,000	12,000,000
		<b>Total</b>					<b>44,120,537</b>				<b>44,120,537</b>				<b>59,706,441</b>				<b>94,388,388</b>
							<b>44,121</b>				<b>44,121</b>				<b>59,706</b>				<b>94,388</b>

**Electricity**

		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	Item Name	Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost
1	Transformers (200 KVA)	1	600,000	600,000	1	600,000	600,000	1	3,550,000	3,550,000	1	3,550,000	3,550,000
2	Transformers (100 KVA)	1	450,000	450,000	1	450,000	450,000	1	450,000	450,000	1	450,000	450,000
3	Generator (200 KVA)	1	4,000,000	4,000,000	1	4,000,000	4,000,000	1	4,000,000	4,000,000	1	4,000,000	4,000,000
4	Generator (100 KVA)	0	2,300,000	-	0	2,300,000	-	0	2,300,000	-	0	2,300,000	-
5	2 Ton air conditioners (split)	42	55,500	2,331,000	42	55,500	2,331,000	42	55,500	2,331,000	42	55,500	2,331,000
6	2 Ton air conditioners (Cabinet)	78	78,000	6,084,000	78	78,000	6,084,000	78	78,000	6,084,000	78	78,000	6,084,000
7	4 Ton air conditioners (Cabinet)	26	120,000	3,120,000	26	120,000	3,120,000	26	120,000	3,120,000	26	120,000	3,120,000
8	Ceiling Fans 56"	60	3,090	185,400	60	3,090	185,400	60	3,090	185,400	60	3,090	185,400
10	Bracket Fans 18"	96	3,280	314,880	96	3,280	314,880	96	3,280	314,880	96	3,280	314,880
9	Exhaust Fans	36	3,000	108,000	36	3,000	108,000	36	3,000	108,000	36	3,000	108,000
11	Dual Connection of Electricity / Express Line	1	5,000,000	5,000,000	1	5,000,000	5,000,000	1	9,000,000	9,000,000	1	9,000,000	9,000,000
	<b>Total</b>			<b>22,193,280</b>			<b>22,193,280</b>			<b>29,143,280</b>			<b>29,143,280</b>
				<b>22.193</b>			<b>22.193</b>			<b>29.143</b>			<b>29.143</b>

### IT & QMS & Surveillance

Sr. No.	Item Name	Original			1st Revised			2nd Revised			3rd Revised		
		Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost	Quantity	Per Unit Cost	Total Cost
1	Desktop, UPS, LED	30	75,000	2,250,000	30	75,000	2,250,000	30	130,000	3,900,000	30	216,000	6,480,000
2	MS Windows License	30	20,000	600,000	30	20,000	600,000	30	20,000	600,000	30	20,000	600,000
3	Scanner Flatbed with ADF	3	90,000	270,000	3	90,000	270,000	3	150,000	450,000	3	150,000	450,000
4	Heavy duty Printer	7	40,000	280,000	7	40,000	280,000	7	50,000	350,000	7	110,000	770,000
5	Multimedia Projector with Screen	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000
6	Tabs	4	50,000	200,000	4	50,000	200,000	4	50,000	200,000	4	50,000	200,000
7	Laptop	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000
8	MS Windows License	1	20,000	20,000	1	20,000	20,000	1	20,000	20,000	1	20,000	20,000
9	QMS System	1	3,700,000	3,700,000	1	3,700,000	3,700,000	1	4,000,000	4,000,000	1	4,000,000	4,000,000
10	Networking	1	995,000	995,000	1	995,000	995,000	1	995,000	995,000	1	1,200,000	1,200,000
11	Monitoring & Surveillance (CCTV)	1	5,000,000	5,000,000	1	5,000,000	5,000,000	1	5,000,000	5,000,000	1	5,000,000	5,000,000
12	Public Address System	1	1,000,000	1,000,000	1	1,000,000	1,000,000	1	1,000,000	1,000,000	1	1,200,000	1,200,000
	<b>Total</b>			<b>14,515,000</b>			<b>14,515,000</b>			<b>16,715,000</b>			<b>20,120,000</b>
				<b>14.515</b>			<b>14.515</b>			<b>16.715</b>			<b>20.120</b>

## Furniture and Fixtures

Sr. No.	Item Name	Original			1st Revised			2nd Revised			3rd Revised		
		Quantity	Unit Price	Total	Quantity	Unit Price	Total	Quantity	Unit Price	Total	Quantity	Unit Price	Total
1	Benches (internal)	60	30,000	1,800,000	60	30,000	1,800,000	60	30,000	1,800,000	60	40000	2,400,000
2	Benches (external)	10	10,000	100,000	10	10,000	100,000	10	10,000	100,000	10	40000	400,000
3	Electric Water Cooler	8	45,000	360,000	8	45,000	360,000	8	45,000	360,000	8	60000	480,000
4	Doctors rooms Furniture	30	70,000	2,100,000	30	70,000	2,100,000	30	70,000	2,100,000	30	125000	3,750,000
5	Examination couches	10	35,000	350,000	10	35,000	350,000	10	35,000	350,000	10	35000	350,000
6	Fire Blanket	5	2,500	12,500	5	2,500	12,500	5	2,500	12,500	5	3000	15,000
7	Fire Extinguisher (Water Based)	30	8,000	240,000	30	8,000	240,000	30	8,000	240,000	30	2500	75,000
8	Acrylic Board	150	2,200	330,000	150	2,200	330,000	150	2,200	330,000	150	2000	300,000
9	Rostrum	2	18,000	36,000	2	18,000	36,000	2	18,000	36,000	2	20000	40,000
10	Blinds for windows	6000	150	900,000	6000	150	900,000	6000	150	900,000	6000	200	1,200,000
11	Paintings	100	6,000	600,000	100	6,000	600,000	100	6,000	600,000	100	5000	500,000
12	Waste Bin Sets (3 bin)	40	6,000	240,000	40	6,000	240,000	40	6,000	240,000	40	9000	360,000
13	Printing			1,000,000			1,000,000			1,000,000			1,000,000
	<b>Machinery and Equipment's</b>												
14	Refrigerator(Domestic) front glass double door	2	160,000	320,000	2	160,000	320,000	2	160,000	320,000	2	150000	300,000
15	Refrigerator glass single door	5	80,000	400,000	5	80,000	400,000	5	80,000	400,000	5	90000	450,000
16	Refrigerator 16 cft	5	36,000	180,000	5	36,000	180,000	5	36,000	180,000	5	50000	250,000
17	Air Curtain On Door	5	50,000	250,000	5	50,000	250,000	5	50,000	250,000	5	75000	375,000
18	Washing machines for pantries	3	13,000	39,000	3	13,000	39,000	3	13,000	39,000	3	11000	33,000
19	Gas Burner for pantries	10	4,800	48,000	10	4,800	48,000	10	4,800	48,000	10	80000	800,000
20	Fire Extinguishers DCP	30	4,800	144,000	30	4,800	144,000	30	4,800	144,000	30	6500	195,000
21	LED TV	15	55,000	825,000	15	55,000	825,000	15	55,000	825,000	15	140000	2,100,000
22	Industrial Exhaust	5	50,000	250,000	5	50,000	250,000	5	50,000	250,000	5	60000	300,000
23	Acrylic Display Board	4	20,000	80,000	4	20,000	80,000	4	20,000	80,000	4	20000	80,000
	<b>Laundry &amp; Washing</b>												
24	Bed Sheets and pillow covers	300	1,250	375,000	300	1,250	375,000	300	1,250	375,000	300	2500	750,000
25	Pillows	150	400	60,000	150	400	60,000	150	400	60,000	150	500	75,000
26	Blankets with covers	100	5,000	500,000	100	5,000	500,000	100	5,000	500,000	100	4000	400,000
	<b>Medicine Store</b>												
27	Medicine (Iron Racks) 8x6x2 (Required)	20	50,000	1,000,000	20	50,000	1,000,000	20	50,000	1,000,000	20	60000	1,200,000
28	Moveable Iron Stairs (Required)	2	15,000	30,000	2	15,000	30,000	2	15,000	30,000	2	20000	40,000
29	Lifters (Required)	2	37,000	74,000	2	37,000	74,000	2	37,000	74,000	2	35000	70,000
30	Pallets 3x4 (Plastic) (Required)	20	12,000	240,000	20	12,000	240,000	20	12,000	240,000	20	10000	200,000
31	Dehumidifier (Required)	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	125000	125,000
32	Insect Killer (Required)	25	8,000	200,000	25	8,000	200,000	25	8,000	200,000	25	6500	162,500
33	Thermometer (Required)	20	16,000	320,000	20	16,000	320,000	20	16,000	320,000	20	600	12,000
	<b>Total</b>			<b>13,503,500</b>			<b>13,503,500</b>			<b>13,503,500</b>			<b>18,787,500</b>
				<b>13.504</b>			<b>13.504</b>			<b>13.504</b>			<b>18.788</b>



## Signage and plaques

Sr No	Type	Kinds of Sign Boards	Original			1st Revised			2nd Revised			3rd Revised		
			Quantity	Rates	Cost	Quantity	Rates	Cost	Quantity	Rates	Cost	Quantity	Rates	Cost
		<b>External Sign Boards</b>												
1	A1	External Platform/Road Signage (Circular)	10	10,221	102,210	10	10,221	102,210	10	13,951	139,510	10	13,951	139,510
2	A2	External Platform/Road Signage (Triangular)	10	9,350	93,500	10	9,350	93,500	10	12,762	127,624	10	12,762	127,624
3	B1	Main Directional Board	2	113,632	227,264	2	113,632	227,264	2	155,107	310,215	2	155,107	310,215
4	C1	Directional Board (Single Sheet)	12	14,600	175,200	12	14,600	175,200	12	19,929	239,148	12	19,929	239,148
5	C2	Directional Board (Two Sheets)	1	22,722	22,722	1	22,722	22,722	1	31,016	31,016	1	31,016	31,016
6	C3	Directional Board (Three Sheets)	2	30,463	60,926	2	30,463	60,926	2	41,581	83,163	2	41,581	83,163
7	C4	Directional Board (Four Sheets)	2	37,619	75,238	2	37,619	75,238	2	51,351	102,701	2	51,351	102,701
8	C5	Directional Board (Five Sheets)	1	45,685	45,685	1	45,685	45,685	1	62,360	62,360	1	62,360	62,360
9	C6	Directional Board (Six Sheets)	1	53,341	53,341	1	53,341	53,341	1	72,810	72,810	1	72,810	72,810
10	C7	Additional Panel (For Fixation on existing Foundation & Posts)	3	8,024	24,072	3	8,024	24,072	3	10,952	32,857	3	10,952	32,857
11	D1	Departmental Signage on Building	7	47,683	333,781	7	47,683	333,781	7	65,087	455,612	7	65,087	455,612
12	E1	External Map Boards	4	41,603	166,412	4	41,603	166,412	4	56,788	227,153	4	56,788	227,153
		<b>Internal Signage</b>	0		-	0		-	0		-	0		-
1	F1	Internal Hanging Signage (Main Entrance)	7	90,791	635,537	7	90,791	635,537	7	125,294	877,061	7	125,294	877,061
2	F2	Internal Hanging Signage (Main Entrance 2)	7	69,887	489,209	7	69,887	489,209	7	95,396	667,772	7	95,396	667,772
3	F3	Internal Hanging Signage (Corridor)	6	51,759	310,554	6	51,759	310,554	6	70,651	423,906	6	70,651	423,906
4	F4	Internal Hanging Signage (Corridor 2)	5	52,359	261,795	5	52,359	261,795	5	71,470	357,350	5	71,470	357,350
5	G1	Internal Department Signage on wall	10	13,239	132,390	10	13,239	132,390	10	18,071	180,712	10	18,071	180,712
6	H1	Specialist Name Plaques fixed on wall	20	3,805	76,100	20	3,805	76,100	20	5,194	103,880	20	5,194	103,880
7	J1	Room Name Plaques and Numbers fixed on wall	120	875	105,000	120	875	105,000	120	1,194	143,304	120	1,194	143,304
8	K1	Internal Wall Signage	120	1,437	172,440	120	1,437	172,440	120	1,961	235,368	120	1,961	235,368
9	L1	Room Numbers Fixed on Wall	80	3,647	291,760	80	3,647	291,760	80	4,978	398,272	80	4,978	398,272
10	M1	Advance Fire Exit Sign	15	1,856	27,840	15	1,856	27,840	15	2,534	38,010	15	2,534	38,010
11	M2	Fire Exit Sign Mounted Above the Door	15	1,284	19,260	15	1,284	19,260	15	1,753	26,292	15	1,753	26,292
12	N1	Fire Safety/Equipment Signage	25	2,459	61,475	25	2,459	61,475	25	3,357	83,930	25	3,357	83,930
13	P1	Floor Map Board	8	21,301	170,408	8	21,301	170,408	8	29,075	232,602	8	29,075	232,602
14	Q1	Caution Signage	30	2,195	65,850	30	2,195	65,850	30	2,996	89,880	30	2,996	89,880
15	Q2	Caution Signage	10	660	6,600	10	660	6,600	10	902	9,016	10	902	9,016
16	Q3	Caution Signage	15	1,155	17,325	15	1,155	17,325	15	1,576	23,646	15	1,576	23,646
17	Q4	Caution Signage	25	897	22,425	25	897	22,425	25	1,225	30,625	25	1,225	30,625
		<b>Total</b>			<b>4,246,319</b>			<b>4,246,319</b>			<b>5,805,793</b>			<b>5,805,793</b>
		Designing and Site Supervision			127,390			127,390			174,174			174,174
		<b>Grand Total</b>			<b>4,373,709</b>			<b>4,373,709</b>			<b>5,979,967</b>			<b>5,979,967</b>
					4.374			4.374			5.980			5.980

DAY CARE CENTER													
Yard Stick as per Women Dvelopment Department													
		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	ITEMS	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total
1	Cylinder Block	1	3,000	3,000	1	3,000	3,000	1	3,000	3,000	1	3,000	3,000
2	Geometrical Cabinet (36 pcs)	1	4,000	4,000	1	4,000	4,000	1	4,000	4,000	1	4,000	4,000
3	Geometrical Solids (10 pcs)	1	2,200	2,200	1	2,200	2,200	1	2,200	2,200	1	2,200	2,200
4	Base for Geometrical Solids (14 pcs)	1	2,000	2,000	1	2,000	2,000	1	2,000	2,000	1	2,000	2,000
5	Constructive Triangles (4 box)	1	400	400	1	400	400	1	400	400	1	400	400
6	Metal Insets (10 - shape)	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000
7	Stand for metal insets	1	2,000	2,000	1	2,000	2,000	1	2,000	2,000	1	2,000	2,000
8	Paper Board for metal insets (10 Boards)	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000
9	Sandpaper Alphabets (English)	3	2,000	6,000	3	2,000	6,000	3	2,000	6,000	3	2,000	6,000
10	Sandpaper Alphabets (Urdu)	3	3,500	10,500	3	3,500	10,500	3	3,500	10,500	3	3,500	10,500
11	Sandpaper Number	3	2,000	6,000	3	2,000	6,000	3	2,000	6,000	3	2,000	6,000
12	Hammer Case	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000
13	Soft Reading Book	15	200	3,000	15	200	3,000	15	200	3,000	15	200	3,000
14	Shape Sorting Case	2	500	1,000	2	500	1,000	2	500	1,000	2	500	1,000
15	Transport Set (Model)	2	700	1,400	2	700	1,400	2	700	1,400	2	700	1,400
16	Model Puzzles (S)	7	300	2,100	7	300	2,100	7	300	2,100	7	300	2,100
17	Model Puzzles (B)	7	500	3,500	7	500	3,500	7	500	3,500	7	500	3,500
18	Storybook	20	100	2,000	20	100	2,000	20	100	2,000	20	100	2,000
19	Information Book (Large)	20	350	7,000	20	350	7,000	20	350	7,000	20	350	7,000
20	Basket (L)	10	1,000	10,000	10	1,000	10,000	10	1,000	10,000	10	1,000	10,000
21	Basket (S)	10	600	6,000	10	600	6,000	10	600	6,000	10	600	6,000
22	Color table Box	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000
23	ABC Block	4	500	2,000	4	500	2,000	4	500	2,000	4	500	2,000
24	Number Block	4	500	2,000	4	500	2,000	4	500	2,000	4	500	2,000
25	Color Pensils (Large)	5	450	2,250	5	450	2,250	5	450	2,250	5	450	2,250
26	Color Crayons (Large)	5	300	1,500	5	300	1,500	5	300	1,500	5	300	1,500
27	Marker Color (Board and Permanent)	15	395	5,925	15	395	5,925	15	395	5,925	15	395	5,925
28	Fruits Basket (Model Set)	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000
29	Vegetables Basket (Model Set)	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000	2	1,000	2,000
30	Animal Sets	2	600	1,200	2	600	1,200	2	600	1,200	2	600	1,200
31	Insects sets	2	400	800	2	400	800	2	400	800	2	400	800
32	Shape Sorting House	2	1,500	3,000	2	1,500	3,000	2	1,500	3,000	2	1,500	3,000
33	Flash card (Small)	10	120	1,200	10	120	1,200	10	120	1,200	10	120	1,200
34	Flash card (Big)	10	325	3,250	10	325	3,250	10	325	3,250	10	325	3,250
35	Sand Play	2	1,000	4,000	2	1,000	4,000	2	1,000	4,000	2	1,000	4,000
36	Gym Play	2	2,000	3,000	2	2,000	3,000	2	2,000	3,000	2	2,000	3,000
37	Straight Mats	20	1,500	40,000	20	1,500	40,000	20	1,500	40,000	20	1,500	40,000
38	Folding Mats	20	2,000	6,000	20	2,000	6,000	20	2,000	6,000	20	2,000	6,000
39	Diaper Changing Mats	3	300	1,500	3	300	1,500	3	300	1,500	3	300	1,500
40	Cube Cushion	2	500	1,000	2	500	1,000	2	500	1,000	2	500	1,000
41	Square Cushion	2	500	600	2	500	600	2	500	600	2	500	600
42	Baby Mirror	3	300	2,400	3	300	2,400	3	300	2,400	3	300	2,400
43	Pink Tower With Stand	1	800	500	1	800	500	1	800	500	1	800	500
44	Dressing Frames	10	500	8,000	10	500	8,000	10	500	8,000	10	500	8,000
45	Monkey Stuffed	2	800	2,400	2	800	2,400	2	800	2,400	2	800	2,400
46	Lion Stuffed	2	1,200	3,400	2	1,200	3,400	2	1,200	3,400	2	1,200	3,400
47	Cater Pillar Stuffed	2	1,700	3,000	2	1,700	3,000	2	1,700	3,000	2	1,700	3,000
48	Stuffed toys (Animal shaped i.e. Moneky, lion, caterpillar etc)	6	1,500	9,000	6	1,500	9,000	6	1,500	9,000	6	1,500	9,000
49	Long Roads with Stands	1	1,500	1,500	1	1,500	1,500	1	1,500	1,500	1	1,500	1,500
50	Number Rods	1	500	500	1	500	500	1	500	500	1	500	500
51	Stand Number Rods	1	800	800	1	800	800	1	800	800	1	800	800

DAY CARE CENTER													
Yard Stick as per Women Dvelopment Department													
		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	ITEMS	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total
52	Soft toys	2	700	1,400	2	700	1,400	2	700	1,400	2	700	1,400
53	Infants Manual Weight Machine	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000
54	Toddlers Manual Weight Machine	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000
55	Tri Cycles	4	3,500	14,000	4	3,500	14,000	4	3,500	14,000	4	3,500	14,000
56	Wooden Cots	10	10,000	100,000	10	10,000	100,000	10	10,000	100,000	10	10,000	100,000
57	Mattresses for Cots	10	1,200	12,000	10	1,200	12,000	10	1,200	12,000	10	1,200	12,000
58	Pillows	10	300	3,000	10	300	3,000	10	300	3,000	10	300	3,000
59	Bed Sheets and pillow covers	20	400	8,000	20	400	8,000	20	400	8,000	20	400	8,000
60	Nets	10	600	6,000	10	600	6,000	10	600	6,000	10	600	6,000
61	High Chairs for feeding	15	3,000	45,000	15	3,000	45,000	15	3,000	45,000	15	3,000	45,000
62	Rockers Cum Bouncer	8	2,500	20,000	8	2,500	20,000	8	2,500	20,000	8	2,500	20,000
63	Cot Mobile	10	1,500	15,000	10	1,500	15,000	10	1,500	15,000	10	1,500	15,000
64	Plastic Chairs (Round edges Animal Shapes)	7	600	4,200	7	600	4,200	7	600	4,200	7	600	4,200
65	Multi-Purpose Table	2	3,000	6,000	2	3,000	6,000	2	3,000	6,000	2	3,000	6,000
66	Writing Board	1	500	500	1	500	500	1	500	500	1	500	500
67	Electric Sterilizer	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000
68	Electric Warmer	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000
69	Table sets	2	4,000	8,000	2	4,000	8,000	2	4,000	8,000	2	4,000	8,000
70	Rocker	6	3,200	19,200	6	3,200	19,200	6	3,200	19,200	6	3,200	19,200
71	Activity Gym (Infants)	5	2,000	10,000	5	2,000	10,000	5	2,000	10,000	5	2,000	10,000
72	Play Gym	5	2,700	13,500	5	2,700	13,500	5	2,700	13,500	5	2,700	13,500
73	Activity Gym (Toddlers)	5	2,000	10,000	5	2,000	10,000	5	2,000	10,000	5	2,000	10,000
74	Toiler Training Seat	10	3,000	30,000	10	3,000	30,000	10	3,000	30,000	10	3,000	30,000
75	Infant Toys	30	4,000	120,000	30	4,000	120,000	30	4,000	120,000	30	4,000	120,000
76	Bath Toys	15	1,000	15,000	15	1,000	15,000	15	1,000	15,000	15	1,000	15,000
77	Fun Links Teether	15	300	4,500	15	300	4,500	15	300	4,500	15	300	4,500
78	Fun Pal Teether	15	500	7,500	15	500	7,500	15	500	7,500	15	500	7,500
79	Fun Rattle	15	400	6,000	15	400	6,000	15	400	6,000	15	400	6,000
80	Mother feeding Chair	1	3,000	3,000	1	3,000	3,000	1	3,000	3,000	1	3,000	3,000
81	Soft Books (duplication)	20	500	10,000	20	500	10,000	20	500	10,000	20	500	10,000
82	Bottle Brushes	3	300	900	3	300	900	3	300	900	3	300	900
List of others Items i.e. Kitchen, Office, Electric items				-			-			-			-
1	Water Dispenser	1	14,000	14,000	1	14,000	14,000	1	14,000	14,000	1	14,000	14,000
2	Microwave Oven	1	12,400	12,400	1	12,400	12,400	1	12,400	12,400	1	12,400	12,400
3	Fridge	1	34,000	34,000	1	34,000	34,000	1	34,000	34,000	1	34,000	34,000
4	Kitchen Accessories / Cutleries etc.	24	200	4,800	24	200	4,800	24	200	4,800	24	200	4,800
5	Sofa Set	1	40,000	40,000	1	40,000	40,000	1	40,000	40,000	1	40,000	40,000
6	Office Table	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000
7	Office Chairs	5	10,000	50,000	5	10,000	50,000	5	10,000	50,000	5	10,000	50,000
8	Air Conditioner	2	42,000	84,000	2	42,000	84,000	2	42,000	84,000	2	42,000	84,000
9	LCD	1	27,000	27,000	1	27,000	27,000	1	27,000	27,000	1	27,000	27,000
10	DVD player	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000	1	5,000	5,000
11	CCTV Cameras	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000
12	Fire Alarms	3	5,000	15,000	3	5,000	15,000	3	5,000	15,000	3	5,000	15,000
13	UPS	1	10,000	10,000	1	10,000	10,000	1	10,000	10,000	1	10,000	10,000
14	Vacuum Cleaner	1	7,000	7,000	1	7,000	7,000	1	7,000	7,000	1	7,000	7,000
15	Fire Extinguishers (Large)	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000
16	Electric Insect Killer	2	7,800	15,600	2	7,800	15,600	2	7,800	15,600	2	7,800	15,600
17	Electric Hand Dryer	1	4,000	4,000	1	4,000	4,000	1	4,000	4,000	1	4,000	4,000
18	Electric Heater	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000	2	5,000	10,000
19	Ceiling/bracket Fans	4	8,000	32,000	4	8,000	32,000	4	8,000	32,000	4	8,000	32,000
20	Curtains	2	45,000	90,000	2	45,000	90,000	2	45,000	90,000	2	45,000	90,000
21	Carpets	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000	1	100,000	100,000

DAY CARE CENTER													
Yard Stick as per Women Dvelopment Department													
		Original			1st Revised			2nd Revised			3rd Revised		
Sr. No.	ITEMS	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total	Yard Stick (DCC of 25 Kids)	Unit Cost	Total
22	Other miscellaneous items	1	218,675	218,675	1	218,675	218,675	1	218,675	218,675	1	218,675	218,675
	TOTAL			1,600,000			1,600,000			1,600,000			1,600,000
				1.600			1.600			1.600			1.600

### Human Resource Model of THQ Hospital

		Original				1st Revised				2nd Revised				3rd Revised				
Sr. No.	NAME OF POST	No. of Employees	Per Month Salary	Per Month Salary for Person	Salary for One Year	No. of Employees	Per Month Salary	Per Month Salary for Person	Salary for One Year	No. of Employees	Per Month Salary	Per Month Salary for Person	Salary for Two Years	No. of Employees	Project Pay Scale	Per Month Salary	Per Month Salary for all Person	Salary for Two Years
1	ADMIN OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
2	HUMAN RESOURCE & LEGAL OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
3	IT/STATISTICAL OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
4	FINANCE, BUDGET & AUDIT OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
5	PROCUREMENT OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
6	QUALITY ASSURANCE OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
7	LOGISTICS OFFICER	1	60,000	60,000	720,000	1	60,000	60,000	720,000	1	80,000	80,000	1,920,000	1	6	105,000	105,000	3,255,000
8	DATA ENTRY OPERATOR (DEO)	2	25,000	50,000	600,000	2	25,000	50,000	600,000	2	35,000	70,000	1,680,000	2	3	44,000	88,000	2,728,000
9	ASSISTANT ADMIN OFFICER	2	40,000	80,000	960,000	2	40,000	80,000	960,000	2	50,000	100,000	2,400,000	2	5	70,000	140,000	4,340,000
10	HR FOR QMS and MSDS and Day Care Center																	
11	QMS Supervisor / Information Desk Officer	2	25,000	50,000	600,000	2	25,000	50,000	600,000	2	25,000	50,000	600,000	2		25,000	50,000	600,000
12	Computer Operator	8	20,000	160,000	1,920,000	8	20,000	160,000	1,920,000	8	20,000	160,000	1,920,000	8		20,000	160,000	1,920,000
13	Consultants (MSDS) Implementation & Clinical Audit	1	100,000	100,000	1,200,000	1	100,000	100,000	1,200,000	1	100,000	100,000	1,200,000	1		100,000	100,000	1,200,000
14	Training on MSDS Compliance for Staff of THQ Hospital	1000	4,000	4,000,000	4,000,000	1000	4,000	4,000,000	4,000,000	1000	4,000	4,000,000	4,000,000	1000		4,000	4,000,000	4,000,000
15	Rent for Vehicle				500,000				500,000				500,000				0	500,000
16	Manager Day Care Center	1	45,000	45,000	540,000	1	45,000	45,000	540,000	1	45,000	45,000	540,000	1		45,000	45,000	540,000
17	Montessori Trained Teacher	1	35,000	35,000	420,000	1	35,000	35,000	420,000	1	35,000	35,000	420,000	1		35,000	35,000	420,000
18	Attendant / Care Giver	4	25,000	100,000	1,200,000	4	25,000	100,000	1,200,000	4	25,000	100,000	1,200,000	4		25,000	100,000	1,200,000
19	Office Boy	1	20,000	20,000	240,000	1	20,000	20,000	240,000	1	20,000	20,000	240,000	1		20,000	20,000	240,000
	<b>Sub Total of HR Model</b>			<b>4,860,000</b>	<b>17,220,000</b>			<b>4,860,000</b>	<b>17,220,000</b>			<b>5,040,000</b>	<b>28,140,000</b>				5,273,000	40,473,000
					<b>17,220</b>				<b>17,220</b>				<b>28,140</b>					<b>40,473</b>
	<b>Utilization of HR Component</b>								<b>5,970</b>				<b>9,23</b>					
	<b>Total of HR Component</b>												<b>34.11</b>					<b>49,704</b>

## Janitorial Services

	Original		From 1st Revised to onward
Assumptions			<p>In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&amp;D Board; it was inter alia decided as under:</p> <p><b>"It would be made sure by the P&amp;SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".</b></p> <p>In view of above, Outsourcing cost has been excluded from this PC-I.</p>
Covered area excluding residential area	63,756	sft	
Covered area assigned to one sweeper	7,500	sft	
Number of sweepers required for covered area	9	Persons	
Road and ROW area	59,859	sft	
Road and ROW assigned to one sweeper	15,000	sft	
Number of sweepers required for road and ROW area	4	Persons	
Number of washroom blocks	17	blocks	
Number of washroom block assigned to one sweeper	3	Persons	
Number of sweepers required for total washroom blocks	6	Persons	
Total sweeper in morning shift	18	Persons	
Total number of sweepers in evening shift	9	Persons	
Total number of sweepers in night shift	9	Persons	
Total number of sweepers in all shifts	36	Persons	
Number of sewer men required	3	Persons	
Number of supervisors	3	Persons	
<b>Salary component</b>			
<b>Type of worker</b>	<b>No of workers</b>	<b>Salary per month</b>	<b>Salary for One Year</b>
Sweepers / Janitors	36	22,000	9,592,422
Sewer men	3	22,000	792,000
Supervisors	3	26,000	936,000
Cost of Supply per Month		400,000	4,800,000
<b>Sub Total (Salary component)</b>			<b>16,120,422</b>
16,120			

16.120

## Security and Parking

		Original			From 1st Revised to onward
<b>Assumptions</b>					<p>In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&amp;D Board; it was inter alia decided as under:</p> <p><b>"It would be made sure by the P&amp;SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".</b></p> <p>In view of above, Outsourcing cost has been excluded from this PC-I.</p>
Covered area excluding residences	63,756				
Covered Area per guard	15,000				
<b>Number of guards</b>	<b>4</b>				
Open area excluding parking area	59,859				
Area covered per guard per shift for open area excluding parking	15,000				
<b>Number of guards for total area excluding parking area</b>	<b>4</b>				
Number of gates	3				
<b>Number of guards at gates</b>	<b>6</b>				
<b>Total No of Guard</b>	<b>14</b>				
Total number of all guards for second shift	7				
<b>Lady Searcher</b>	<b>4</b>				
Number of parking areas	1				
Number of guards for parking lot per shift (Morning+ Evening)	2				
Total no. of Supervisors	2				
<b>Type of worker</b>	<b>No of workers</b>	<b>Salary per month</b>	<b>Salary per Month for all Person</b>	<b>Salary for One year</b>	
Supervisors	2	24,675	49,350	592,200	
Ex-Army	8	21,525	172,200	2,066,400	
Civilian	13	21,000	273,000	3,276,000	
Lady Searcher	4	21,525	86,100	1,033,200	
Parking	2	21,525	43,050	516,600	
<b>Sub total</b>				<b>7,484,400</b>	
<b>Equipment cost</b>					
Lump sum Provision (Walk Through Gate=1, Metal Detector=4, Walkies Talkies=8, Base Set=1)				400,000	
<b>Sub total</b>				<b>400,000</b>	
<b>Subtracting Parking Fees</b>				500,000	
<b>Total Security and Parking Services</b>				<b>7,384,400</b>	
				<b>7.384</b>	

## Laundry Services

	Original		From 1st Revised to onward
Number of beds	80		
Type of Item	No of Beds	Per bed cost per year	Total Cost
No of Bed	80	30,000	2,400,000
Transport Charges			1,200,000
<b>Total for laundry items</b>			<b>3,600,000</b>
<b>Total</b>			<b>3.600</b>

In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under:  
**"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".**  
 In view of above, Outsourcing cost has been excluded from this PC-I.



## Maintenance of Generator

	Original			From 1st Revised to onward
Item Name	Quantity	Cost per year	Total Cost	
<b>Periodical Maintenance Cost</b>				
Number of Generators (200 KVA)	-	500,000	-	
Number of Generators (100 KVA)	-	325,000	-	
Number of Generators (50 KVA)	2	175,000	350,000	
Repairs Cost	1	350,000	350,000	
<b>HR Cost</b>				
Supervisor	1	40,000	240,000	
Generator Operator	3	30,000	1,080,000	
Technical Staff/Mechanic	-	30,000	-	
<b>Total</b>			<b>2,020,000</b>	
			<b>2.020</b>	

In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&D Board; it was inter alia decided as under:  
**"It would be made sure by the P&SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".**  
 In view of above, Outsourcing cost has been excluded from this PC-I.

## MEP

Original					From 1st Revised to onward
Type of worker / Component	No of workers	Salary per month	Salary per Month for all persons	Salary for One Year	<p>In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&amp;D Board; it was inter alia decided as under:</p> <p><b>"It would be made sure by the P&amp;SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".</b></p> <p>In view of above, Outsourcing cost has been excluded from this PC-I.</p>
Supervisors	1	56,420	56,420	677,040	
Plumber	1	32,550	32,550	390,600	
AC/ Technician	1	34,720	34,720	416,640	
Electrician	2	31,465	62,930	755,160	
Car painter	1	30,380	30,380	364,560	
<b>Total (Salary component)</b>			<b>217,000</b>	<b>2,604,000</b>	
	No.	Per Unit Cost per Year	Cost per Year for all Items	Cost for One Year	
A/C	170	6,665	1,133,050	1,133,050	
Fridge	10	4,000	40,000	40,000	
UPS	15	8,000	120,000	120,000	
Water Cooler	20	4,000	80,000	80,000	
Exhaust	10	3,000	30,000	30,000	
Geyser	20	4,000	80,000	80,000	
Water Pump	8	3,000	24,000	24,000	
Carpentry Work		-	180,000	180,000	
Electrical Work		-	120,000	120,000	
Plumbing Work		-	75,000	75,000	
<b>Sub Total</b>				<b>1,882,050</b>	
<b>General Total</b>				<b>4,486,050</b>	
				<b>4.486</b>	

## Medical Gases

		Original				From 1st Revised to onward
Scope of Work		Monthly Consumption per THQ Hospital	Annual Consumption per THQ Hospital	Rate per Cylinder	Total Annual Cost per THQs	
Oxygen	Medical Oxygen Gas in 240 CFTCylinder (MM)	12	144	1850	266,400	<p>In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&amp;D Board; it was inter alia decided as under:</p> <p><b>"It would be made sure by the P&amp;SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".</b></p> <p>In view of above, Outsourcing cost has been excluded from this PC-I.</p>
	Medical Oxygen Gas in 48 CFTCylinder (MF)	30	360	1,000	360,000	
	Medical Oxygen Gas in 24 CFTCylinder (ME)	40	480	800	384,000	
Nitrous Oxide	Nitrous Oxide in 1,620 Liter (XE)	2	24	5,000	120,000	
	Nitrous Oxide in 16,200 Liter (XM)	1	12	12,500	150,000	
Nitrogen Gas	Nitrogen Gas	1	12	2,000	24,000	
Total					1,304,400	

1.304

## Cafeteria

### Pre-Fabrication Cateen (Procurement)

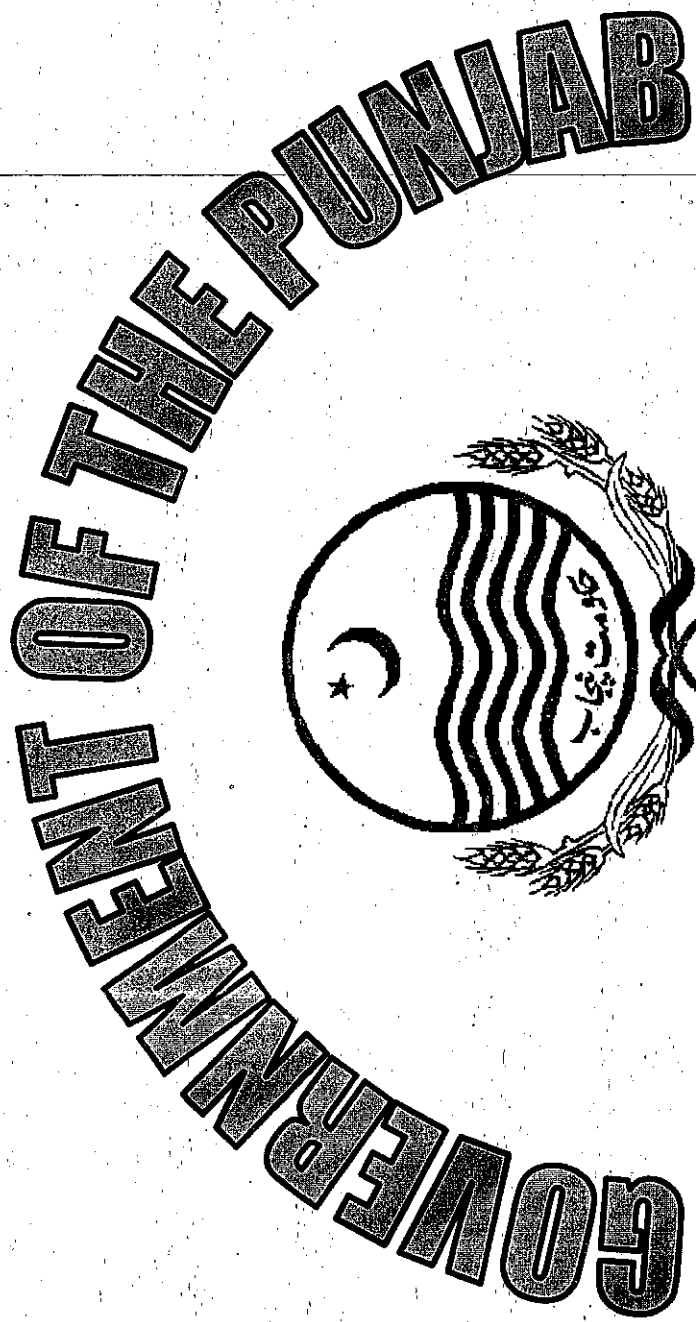
		Original				From 1st Revised to onward
Sr. No.	Description of work	Unit	Qty	Rate (Rs)	Amount (Rs)	<p>In the light of decision made during the Progress Review Meeting of Revamping of DHQ/THQ Hospitals held on 01-01-2018 under the Chairmanship of Chairman, P&amp;D Board; it was inter alia decided as under:</p> <p><b>"It would be made sure by the P&amp;SH Department that the outsourcing would be shifted to the non-development side from 1st July 2018 next FY".</b></p> <p>In view of above, Outsourcing cost has been excluded from this PC-I.</p>
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) for ordinary soil	Cft	2545	6.13	15,602	
2	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	Sft	4305	2.21	9,514	
3	Supplying and filling sand of approved quality from outside sources under floors etc complete in all respects.	Cft	2268	15.62	35,426	
4	Providing, laying, watering and ramming brick ballast 1½" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for floor and foundation, complete in all respects.	Cft	998	39.15	39,069	
5	Providing and laying damp proof course (1½" thick (40 mm) ) of cement concrete 1:2:4, with one coat bitumen and one coat polythene sheet 500gauge	Sft	318	43.34	13,789	
6	Brick work with cement, sand mortar ratio 1:5	Cft	1792	180.25	323,071	
7	Cement concrete plain Ratio 1: 4: 8 including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate)	Cft	427	170.72	72,893	
8	Cement concrete plain Ratio 1: 2 : 4 including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate)	Cft	1043	190.48	198,746	
9	Placing Granite tiles (24"x24"x0.5") using white cement over a bed of ¾" (20 mm) thick cement mortar 1:6.	Sft	2160	200.00	432,000	
10	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect.	Sft	720	118.00	84,960	
<b>Total Amount of Platform Construction</b>					<b>1,225,070</b>	
<b>Pre-Fabrication of Canteen Structure</b>						
11	Providing and fixing aluminium frame window with double glazed glass 6mm+6mm thick complete in all respect as approved by engineer	Sft	48	1100.00	52,800	
12	Providing and fixing aluminium frame door with single glazed glass 6mm thick complete in all respect as approved by engineer	Sft	56	700.00	39,200	
13	Fixing of frameless Glass wall of approved quality and design as approved by engineer	Sft	550	1500.00	825,000	
14	Providing Granite skirting or dado 4/8"(13 mm) thick including rounding of corner and straight ening of top edge and finishing to smooth surface afterplastering	Sft	491	212.00	104,177	
15	Placing & erection of pre-painted Box section tube Columns of M.S sheet 4mm thick of size 4" x4" complete in all respect.	Kg	693	150.00	103,950	

## Cafeteria

### Pre-Fabrication Cateen (Procurement)

		Original				From 1st Revised to onward
16	Placing & erection of pre-painted Box section tube Rafters of M.S sheet 4mm thick of size 3" x3" with all fittings, complete in all respect.	Kg	1040	150.00	155,925	
17	Placing & erection of pre-painted Box section tube Purlins of M.S sheet 1.6 mm thick ( 16 Gauge) of size 2" x2", with all fittings, complete in all respect.	Rft	676	120.00	81,144	
18	Placing & erection of pre-painted, Galvanized Sandwitched board of 0.5 mm thick M.S sheet with 50mm PU insulation with all fittings, complete in all respect.	Sft	2640	400.00	1,055,800	
19	Placing & fixing glass wool complete in all respect.	Sft	3024	50.00	151,200	
20	Placing & fixing Gypsum False Ceiling, complete in all respect.	Sft	3024	70.00	211,680	
21	Providing & Fixing corrugated galvanized iron sheets 22 gauge with EPDM screw fittings, complete in all respect.	Sft	3629	145.00	526,176	
	<b>Total Cost of Pre-Fabrication of Canteen Structure</b>				<b>3,307,052</b>	
	<b>Total Amount (Rs)</b>				<b>4,532,121</b>	
22	Electrification				998,735	
23	Plumbing and Sanitary				410,000	
24	Kitching Fixtures				802,000	
	<b>Grand Total Amount (Rs)</b>				<b>6,742,856</b>	
					6.743	

LANDSCAPE DEVELOPMENT WORKS					
COST ESTIMATE					
		Original			From 1st Revised to onward
Sr. No.	Description	Unit	Quantity	Unit Rate Rs.	Amount Rs.
1	SOFT LANDSCAPE				
1.1	TOP SOIL				
	Providing, spreading and leveling of topsoil (sweet soil including manure and fertilizers) as required complete in all respects as per Drawings, Specifications and as approved by the Engineer.	Cft	6,174	22	135,828
1.2	STONE / PEBBLES				
	Supply and laying a layer of pebbles/stone at specified locations with Landscape base as in Landscape Design approved by the Engineer.	Truck	1	34,375	34,375
1.3	GRASSING				
a	GRASSING (EXISTING NON MAINTANE LAWNS)				
	Providing and dibbing of Fine Dacca grass where required, including mud filling/leveling and contour shape preparation conforming to the criteria outlined in the Specifications, complete in all respects as per Drawings, Specifications and as approved by the Engineer.	Sft	8,468	7	59,276
b	GRASSING (NEW LAWNS)				
	Providing and dibbing of Fine Dacca grass, including mud filling/leveling and contour shape preparation conforming to the criteria outlined in the Specifications, complete in all respects as per Drawings, Specifications and as approved by the Engineer.	Sft	10,585	11.25	119,081
1.4	TREE / SHRUBS (SPREADING)				
	Providing and planting tree / shrub as listed and as arrangement and type shown in the Drawings, in pits of size 305mm x 305mm x 305mm. Dug in improved soil 610mm. deep filled by adding 10% cow dung manure and confirming to the criteria outlined in the Specifications, complete in all respects and to the satisfaction of Engineer.				
a	Trees 18" pot 6'-7" - Terminally, Cassia Fistula, Bauhinia Variegated, Alstonia Choirs, Ficus Yellow, Ficus Black, Jacaranda, Pilken, Mangifera etc.	No's	43	1,500	64,500
b	Trees 12" pot 3'-4" - Polyalthia Long folia, Terminally, Cassia Fistula, Bauhinia Variegated, Latonia Choirs, Delonix Regia, Ficus Yellow, Focus Black, ficus Starlight, Melaluca, Mimuspss, Pine, Ficus Amestal, Pilken, Palms etc.	No's	10	270	2,700
c	Plantation of Fruit Plants in the vacant area 12" pot 3'-4" - Am road, Jaman, Berri, Mango, Citrus. Including site preparation, plantation, watering and maintenance for six months.	No's	30	600	18,000
1.5	Shrubs and Ornamental Plants 10" pot Pittosporum Variegated, Murray Small, Ixora Coccinea, Juniper Variegated, Hibiscus Variegated, Carronda Dwarf Spg, Jasmine Sambac(Mottya), Leucophyllum Frutescens(Silvery), Rose, Nerium, Lantana, Canna, Asparagress, Conocarpus, Acalypha, Callistemon Dwarf, Cestrum, Thabernaemontara Variegated etc.	No's	3,849	69	265,581
a	Shrubs and Ornamental Plants 12" pot Pittosporum Variegated, Ixora Cochinea, Juniper Variegated, Carronade Dwarf, Jasmine Thai, Plumer Robar, Cassia Malacca, Largest mea, Euphorbia, Jestropha Thai etc	No's	605	195	117,975
1.6	GROUND COVERS				
	Providing and planting ground covers as listed and as arrangement and type shown in the Drawings, in pits of size 150mm x 150mm x 150mm. Dug in improved soil 610mm deep filled by adding 10% cow dung manure and confirming to the criteria outlined in the Specifications, complete in all respects and to the satisfaction of Engineer.				
	Ground Cover Plastic Bag Plants Alternant Hera, Dianella, Iresine (Red), Hemercolis(Davilvi), Duranta etc	No's	4,110	12	49,320
1.7	PALMS				
	Providing and planting palms as per Drawings, specifications and to the satisfaction of Engineer.				
a	Palm 18" pot - Queen Palm, Wodyetia Bifurcate, Washingtonian Palm, Biskarkia etc.	No's	5	3,675	18,375
b	Palm 18" pot - Phoenix Palm, Cyrus Palm	No's	7	1,800	12,600
1.8	CREEPERS				
	Providing and planting Creepers as listed and as arrangement and type shown in the Drawings, in pits of size 305mm x 305mm x 305mm. Dug in improved soil 610mm. deep filled by adding 10% cow dung manure and confirming to the criteria outlined in the Specifications, complete in all respects and to the satisfaction of Engineer.				
	Creepers 12" Pot - Bougainvillea, Bonsai, Quusqualus, Bombay Creeper etc.	No's	21	195	4,095
2	HARD LANDSCAPE				
2.1	WALK WAYS				
a	Excavation of walkways and edging including brick ballast under 12"x14" curb stones fixing with 1:2:4 PCC, supply of 7000PSI tuff tiles 60mm as per approved design fixing on 4" brick ballast compacted and grouting with sand.	Sft	847	150	127,050
2.2	BENCHES				
	Concrete Bench 5' wide complete in all respects and to the satisfaction of Engineer as per approved design.	No's	4	14,698	58,792
2.3	DUSTBINS				
	Complete in all respects and to the satisfaction of Engineer as per approved design.	No's	3	27,700	83,100
2.4	PLAYING EQUIPMENTS				
	Complete in all respects and to the satisfaction of Engineer as per approved design.	No's	1	544,939	544,939
2.5	PLANTERS				
	Concrete planters 2' X 2'-1/2' complete in all respects and to the satisfaction of Engineer as per approved design.	No's	4	3,850	15,400
2.6	WATER POINTS (Injector Pump 1HP)				
		No's	1	45,000	45,000
3	SOFT LANDSCAPE MAINTENANCE (Including maintenance and up keeping of site for 6 months) after development as per specifications and to the satisfaction of Engineer.	Sft	21,169	9.00	190,521
4	CONSTRUCTION OF PLANTERS				
	Large Size with keystones fixed with cement with top concrete slab as per design and to the satisfaction of Engineer.	No's	82	550	45,100
4.2	Medium Size with keystones fixed with cement with top concrete slab as per design and to the satisfaction of Engineer.	No's	11	550	6,050
4.3	Small Size with keystones fixed with cement with top concrete slab as per design and to the satisfaction of Engineer.	No's	20	550	11,000
5	GAZEBO Construction of Gazebo 12' X 12' with top fiberglass 3 layer canopy as per approved design and to the satisfaction of Engineer.	No's	1	200,000	200,000
Total Amount of - Landscaping					2,228,658
PRA(16%)					356,585
Design Consultancy					100,000
Grand Total					2,685,244



**BUILDINGS CIRCLE DERA GHAZI KHAN**

**BUILDINGS DIVISION RAJAN PUR**

**ROUGH COST ESTIMATE FOR THE WORK**  
**"REVAMPING OF THQ HOSPITAL,**  
**JAMPUR".**

MRS BI-ANNUAL PERIOD  
(1<sup>ST</sup> JULY 2022 TO 31<sup>ST</sup> DECEMBER 2022)

ESTIMATED COST  
49.832  
= 48.379 (M)

RECEIVED & ENTERED	
Diary No:	6799
Date:	10-11-2022
PM/O IAC:	PMU, PASMD
Deputy PD	
Finance & Admin	
Procurement	
Consolidation	
Construction	
Training & HR	
ICT	
Operations	
Health	
Legal	
I & C	
BERG	

**BUILDINGS SUB DIVISION JAMPUR**  
**SIGNATURES**

PROVINCE: -

PUNJAB

CIRCLE:

BUILDINGS CIRCLE DERA GHAZI KHAN

DIVISION:

BUILDINGS DIVISION RAJANPUR

SUB DIVISION:

BUILDINGS SUB DIVISION JAMPUR

NAME OF WORK:

ROUGH COST ESTIMATE FOR THE WORK  
"REVAMPING OF THQ HOSPITAL, JAMPUR".

MAJOR HEAD:

MINOR HEAD:

ESTIMATED COST:

49,832

Rs: 48,379 (M)



**ROUGH COST ESTIMATE FRAMED IN THE OFFICE OF THE EXECUTIVE ENGINEER BUILDINGS DIVISION RAJAN PUR FOR THE WORK "REVAMPING OF THQ HOSPITAL, JAMPUR".**

**HISTORY:-**

The Project Manager (Civil), PMU P&S, Healthcare Department Punjab Lahore has requested to the undersigned for preparation of rough cost estimate of the said scheme and provided scope of work through whatsapp mobile number of the undersigned.

On the basis of unsigned scope of work, the Rough Cost Estimate for above cited scheme amounting to **Rs. 48,379 (M)** has been prepared on the basis of Plinth Area Rates / MRS Rates for the Period 2<sup>nd</sup> Bi-Annual (1<sup>st</sup> July 2022 to 31<sup>st</sup> December 2022) for arranging administrative approval from the competent authority.

**SCOPE OF WORK:-**

Revamping of THQ Hospital, Jampur

- i) Replacement Flooring 24"x24" Porcelain Tile
- ii) Granite Marble in Front Entrance Steps
- iii) Laying of China Verna Marble in Stair Steps
- iv) Erection of LED lights
- v) Painting to door & Window, & replacement of some doors and window as required
- vi) Emulation Paint to inside of all building
- vii) Weather shield outside of building
- viii) Roof treatment.
- ix) Revamping of Internal Electrification

**EXECUTION:-**

The work will be got executed in accordance with the Provincial Buildings Department specifications and to the entire satisfaction of the Engineer Incharge, after observing all codal formalities etc.

**SPECIFICATION / CARRYING OUT OF WORK:-**

The work will be carried out according to building Department specifications with latest edition through the approved contractors of P.W.D after calling tenders on competitive grounds.

**RATE:-**

The rates of this estimate are based on **Plinth Area Rate / MRS 2<sup>nd</sup> Bi-Annual Period (1<sup>st</sup> July 2022 to 31<sup>st</sup> Decembers 2022) for District Rajanpur.**

**LAND:-**


No provision for acquisition of land has been made in the estimate as the same is already available with the client department.


**COST:-**

The total cost of the scheme comes to **Rs. 48,379 (M)**

**TIME:-**

It will take about **24 Months** to complete the work from the date of actual commencement of the work if full funds to be provided.

  
**Sub Divisional Officer,**  
Buildings Sub Division,  
Jampur.

  
**Executive Engineer,**  
Buildings Division,  
Rajanpur

## Field Visit Plan of South Zone Hospitals - Revamping of Secondary and Tertiary Healthcare Hospitals

Sr No	Name	District	Category	Dept	Zone	Visit Date
1	Mr Tariq Mahmood (Project Director, PMU) 0321-6482753 Mr Farhan Waheed (Director Infrastructure, PMU) 0331-4427972 Mr. Hamza Naseem (Focal Person for South Zone) 0300-9491582	Multan	Hospital	P&SHD	South	Visit Date 27-6-22 to 28-6-22
2	Balance work of Revamping of THQ Hospital Shujabad	Multan	Hospital	P&SHD	South	Visit Date 27-6-22 to 28-6-22
3	Revamping of THQ Hospital, Jaisalpur Pirwala District Multan	Multan	Hospital	P&SHD	South	Visit Date 27-6-22 to 28-6-22
4	Nishtar Hospital Multan - Emergency and OPD	Multan	Hospital	P&SHD	South	Visit Date 27-6-22 to 28-6-22
5	Children Hospital Multan	Multan	Hospital	SH&ME	South	Visit Date 27-6-22 to 28-6-22
6	College of Allied Health sciences, Nishtar Medical University, Multan	Multan	Hospital	SH&ME	South	Visit Date 27-6-22 to 28-6-22
7	The children Hospital & The institute of child Health, Multan	Multan	Paramedical School	SH&ME	South	Visit Date 27-6-22 to 28-6-22
8	College of Nursing, NMU / Nishtar Hospital, Multan	Multan	Paramedical School	SH&ME	South	Visit Date 27-6-22 to 28-6-22
9	Multan Nursing Hostel	Multan	Nursing School	SH&ME	South	Visit Date 27-6-22 to 28-6-22
10	DG Khan Teaching Hospital	Dera Ghazi Khan	Hospital	SH&ME	South	Visit Date 29-06-22
11	School of Allied Health sciences, D.G Khan	Dera Ghazi Khan	Paramedical School	SH&ME	South	Visit Date 29-06-22
12	College of Nursing, DGMC, Dera Ghazi Khan	Dera Ghazi Khan	Nursing School	SH&ME	South	Visit Date 29-06-22
13	DG Khan Nursing School	Dera Ghazi Khan	Nursing Hostel	SH&ME	South	Visit Date 29-06-22
14	Revamping of THQ Hospital, Fort Munro District Dera Ghazi Khan	Khan	Hospital	P&SHD	South	Visit Date 29-06-22
15	Balance work of Revamping of DHQ Hospital Rajanpur	Rajanpur	Hospital	P&SHD	South	Visit Date 30-06-22
16	Revamping of THQ Hospital, Rojhan District Rajanpur	Rajanpur	Hospital	P&SHD	South	Visit Date 30-06-22
17	Revamping of THQ Hospital, Jampur District Rajanpur	Rajanpur	Hospital	P&SHD	South	Visit Date 30-06-22
18	CON, DHQ Hospital, Rajanpur	Rajanpur	Nursing School	SH&ME	South	Visit Date 30-06-22
19	Rajanpur Nursing Hostel	Rajanpur	Nursing Hostel	SH&ME	South	Visit Date 30-06-22
20	Revamping of THQ Hospital, Chowk Azam District Layyah	Layyah	Hospital	P&SHD	South	Visit Date 01-07-22
21	Revamping of THQ Hospital, Kot Sultan District Layyah	Layyah	Hospital	P&SHD	South	Visit Date 01-07-22
22	Govt. paramedical school, Layyah	Layyah	Paramedical School	SH&ME	South	Visit Date 01-07-22
23	CON, DHQ Hospital, Layyah	Layyah	Nursing School	SH&ME	South	Visit Date 01-07-22
24	Layyah Nursing Hostel	Layyah	Nursing Hostel	SH&ME	South	Visit Date 01-07-22

S. No	Name	District	Category	Dept	Zone	Visit Date
25	Balance work of Revamping of THQ Hospital Ahmedpur East	Bahawalpur	Hospital	P&SHD	South	Visit Date 05-7-22 to 06-7-22
26	Revamping of THQ Hospital, Hasilpur District Bahawalpur	Bahawalpur	Hospital	P&SHD	South	Visit Date 05-7-22 to 06-7-22
27	Revamping of THQ Hospital, Yazman District Bahawalpur	Bahawalpur	Hospital	P&SHD	South	Visit Date 05-7-22 to 06-7-22
28	Bahawalpur Victoria Hospital - Old Blocks	Bahawalpur	Hospital	SH&ME	South	Visit Date 05-7-22 to 06-7-22
29	Govt. paramadical school, bahawalpur	Bahawalpur	Paramedical School	SH&ME	South	Visit Date 05-7-22 to 06-7-22
30	College of Nursing, QAMC / Bahawal Victoria Hospital, Bahawalpur	Bahawalpur	Nursing School	SH&ME	South	Visit Date 05-7-22 to 06-7-22
31	Bahawalpur Nursing Hostel	Bahawalpur	Nursing Hostel	SH&ME	South	Visit Date 05-7-22 to 06-7-22
32	Revamping of THQ Hospital, Liaquatpur District Rahim Yar Khan	Rahim Yar Khan	Hospital	P&SHD	South	Visit Date 07-7-22 to 08-07-22
33	DHQ Rahim Yar Khan	Rahim Yar Khan	Hospital	SH&ME	South	Visit Date 07-7-22 to 08-07-22
34	College of Nursing, SZMC / Sheikh Zayed Hospital, Rahim Yar Khan	Rahim Yar Khan	Nursing School	SH&ME	South	Visit Date 07-7-22 to 08-07-22
35	Rahim Yar Khan Nursing Hostel	Rahim Yar Khan	Nursing Hostel	SH&ME	South	Visit Date 07-7-22 to 08-07-22
36	Balance work of Revamping of DHQ Hospital Bahawalnagar	Bahawalnagar	Hospital	P&SHD	South	Visit Date 12-7-22 to 13-7-22
37	Balance work of Revamping of THQ Hospital Chishtian	Bahawalnagar	Hospital	P&SHD	South	Visit Date 12-7-22 to 13-7-22
38	Revamping of THQ Hospital, Fort Abbas District Bahawalnagar	Bahawalnagar	Hospital	P&SHD	South	Visit Date 12-7-22 to 13-7-22
39	Revamping of THQ Hospital, Minchinabad District Bahawalnagar	Bahawalnagar	Hospital	P&SHD	South	Visit Date 12-7-22 to 13-7-22
40	CON, DHQ Hospital, Bahawalnagar	Bahawalnagar	Nursing School	SH&ME	South	Visit Date 12-7-22 to 13-7-22
41	Bahawalnagar Nursing Hostel	Bahawalnagar	Nursing Hostel	SH&ME	South	Visit Date 12-7-22 to 13-7-22
42	Balance work of Revamping of DHQ Hospital Khanewal	Khanewal	Hospital	P&SHD	South	Visit Date 14-7-22
43	Balance work of Revamping of THQ Hospital Mian Channu	Khanewal	Hospital	P&SHD	South	Visit Date 14-7-22
44	Revamping of THQ Hospital, Jahanian District Khanewal	Khanewal	Hospital	P&SHD	South	Visit Date 14-7-22
45	Revamping of THQ Hospital, Kabilwala District Khanewal	Khanewal	Hospital	P&SHD	South	Visit Date 14-7-22
46	CON, DHQ Hospital, Khanewal	Khanewal	Nursing School	SH&ME	South	Visit Date 14-7-22
47	Khanewal Nursing Hostel	Khanewal	Nursing Hostel	SH&ME	South	Visit Date 14-7-22
48	Revamping of THQ Hospital, Kehror Pacca District Lodharan	Lodharan	Hospital	P&SHD	South	Visit Date 15-7-22
49	Revamping of THQ Hospital, Duniapur District Lodharan	Lodharan	Hospital	P&SHD	South	Visit Date 15-7-22
50	CON, DHQ Hospital, Lodharan	Lodharan	Nursing School	SH&ME	South	Visit Date 15-7-22
51	Lodharan Nursing Hostel	Lodharan	Nursing Hostel	SH&ME	South	Visit Date 15-7-22
52	Balance work of Revamping of DHQ Hospital Muzafargarh	Muzafargarh	Hospital	P&SHD	South	Visit Date 18-7-22

Sr No	Name	District	Category	Dept	Zone	Visit Date
53	Balance work of Revamping of THQ Hospital Kot Addu	Muzaffargarh	Hospital	P&SHD	South	Visit Date 18-7-22
54	Revamping of THQ Hospital, Allpur District Muzaffargarh	Muzaffargarh	Hospital	P&SHD	South	Visit Date 18-7-22
55	College of Nursing, Muzaffargarh	Muzaffargarh	Nursing School	SH&ME	South	Visit Date 18-7-22
56	Muzaffargarh Nursing Hostel	Muzaffargarh	Nursing Hostel	SH&ME	South	Visit Date 18-7-22
57	Balance work of Revamping of DHQ Hospital Vehari	Vehari	Hospital	P&SHD	South	Visit Date 19-7-22
58	CON, DHQ Hospital, Vehari	Vehari	Nursing School	SH&ME	South	Visit Date 19-7-22
59	Vehari Nursing Hostel	Vehari	Nursing Hostel	SH&ME	South	Visit Date 19-7-22

**SCOPE OF WORK FOR REVAMPING OF HEALTH FACILITY  
THQ HOSPITAL JAMPUR DISTRICT RAJANPUR**

Sr No	Item	OPD Block	Diagnostic Block (X-Ray, Lab and OT's)	Indoor Block (Male and Female Wards)
1	Porcelain Floor Tile replacement	<p>All floor tiles full body porcelain needs to be retained in entire OPD Block (inside side/main corridors).</p> <p><b>Note Only in rooms/offices</b> indicated during site visit where at present Terrazo flooring exists full body porcelain tiles need to be fixed.</p>	<p>All floor tiles full body porcelain needs to be fixed in entire Diagnostic Block (inside side/main corridors and inside rooms).</p> <p><b>Note Only in rooms/offices</b> indicated during site visit where at present Terrazo flooring exists full body porcelain tiles need to be fixed.</p>	<p>All floor tiles full body porcelain need to be fixed in entire Indoor block (Inside main/side corridors and in male/female wards).</p> <p><b>Note Only in rooms/offices</b> indicated during site visit where at present Terrazo flooring exists full body porcelain tiles need to be fixed.</p>
2	Porcelain Wall Tile replacement	<p>All wall/dado tiles full body porcelain needs to be retained in entire OPD Block (Inside side/main corridors).</p> <p><b>Note Only in rooms</b> indicated during site visit where at present Terrazo flooring exists full body porcelain skirting tiles need to be fixed.</p> <p><b>Note Wall/dado</b> must be upto 6 ft. in corridor and inside wards. Skirting level must be 6" inside rooms/offices.</p>	<p>All wall/dado tiles full body porcelain need to be fixed in entire Diagnostic Block (X-Ray &amp; Lab).</p> <p><b>Note Only in rooms</b> indicated during site visit where at present Terrazo flooring exists full body porcelain skirting tiles need to be fixed.</p> <p><b>Note Wall/dado</b> must be upto 6 ft. in corridor and inside wards. Skirting level must be 6" inside rooms/offices.</p>	<p>All wall/dado tiles full body porcelain needs to be fixed in entire Indoor block (Inside main/side corridors and in Male/Female Wards).</p> <p><b>Note Wall/dado</b> must be upto 6 ft. in corridor and inside wards. Skirting level must be 6" inside rooms/offices.</p>
3	Wooden Doors flush or Solid/ Main Doors and Aluminum Doors	<p>Only damaged doors in OPD needs to be replaced with new wooden doors.</p> <p>All Entrance doors of OPD needs to be replaced with Aluminum doors half Solid and Half glass doors.</p>	<p>Most of the doors are damaged and needs to be replaced by new wooden doors.</p> <p>Remaining doors in good condition will only be repainted properly after scrapping the old paint.</p>	<p>All doors in Indoor block need to be replaced with new wooden doors.</p> <p>All wards entrance and exit doors need to be replaced with Aluminum doors half solid and half glazed glass doors.</p>

4	Verandah opening (opening to open area)/ MS Windows on Façade	All MS Angle windows need to be retained and should have a new mesh fixed on it from outer side and repainting the MS Angle.	All MS Angle windows need to be retained and should have a new mesh fixed on it from outer side and repainting the MS Angle.	All MS Angle windows need to be retained and should have a new mesh fixed on it from outer side and repainting the MS Angle.
5	Existing Internal Windows	All Existing MS internal windows need to be replaced with Aluminium Windows. MS Windows at façade and inside rooms/offices other than Aluminium windows need to be replaced with Aluminium windows.	All Existing MS internal windows in Diagnostic Block (X-Ray & Lab) needs to be replaced with Aluminium Windows. All windows other than Aluminium inside Diagnostic Block (X-Ray & Lab) needs to be replaced with Aluminium.	All Existing MS internal windows inside male and female wards and in entire Indoor block needs to be replaced with Aluminium Windows.
6	Internal Electric fittings	All Electric fittings including switch boards, plates, sockets, wires, DBs & bracket fans should be replaced and installed at standard height from Finish Floor level and all must be identical. All old switch fittings & DBs if requires need to be changed.	All Electric fittings including switch boards, plates, sockets, wires, DBs & bracket fans should be replaced and installed at standard height from Finish Floor level and all must be identical. All old switch fittings & DBs if requires need to be changed.	All Electric fittings including switch boards, plates, sockets, wires, DBs & bracket fans should be replaced and installed at standard height from Finish Floor level and all must be identical. All old switch fittings & DBs if requires need to be changed.
7	Internal Lighting Fixtures	All corridors and rooms should lit with SMD's with concealed wiring.	All corridors and rooms should lit with SMD's with concealed wiring at 8 ft distance. All old switch fittings & DBs if requires need to be changed.	All corridors and rooms should lit with SMD's with concealed wiring.

8	Revamping of Public Toilets	2 x Patient/Attendant washrooms in OPD Block needs to be revamped completely by fixing full body porcelain tiles on floor and full body porcelain tiles on wall up to a minimum height of 7 ft. All existing fixtures should be replaced with new fixtures along with new water supply (where damaged) and sewerage connections (where damaged). Entrance doors of all washrooms need to be replaced with UPVC doors. Common vanities to be made. Exhaust fans 24" two or three as per requirement with Aluminum ventilators need to be fixed.	All Patient/Attendant washrooms in Diagnostic Block (X-Ray & Lab) needs to be revamped completely by fixing full body porcelain tiles on floor and full body porcelain tiles on wall up to a minimum height of 7 ft. All existing fixtures should be replaced with new fixtures along with new water supply (where damaged) and sewerage connections (where damaged). Entrance doors of all washrooms need to be replaced with UPVC doors. Common vanities to be made. Exhaust fans 24" two or three as per requirement with Aluminum ventilators need to be fixed.	All Patient/Attendant washrooms in male and female wards need to be revamped completely by fixing full body porcelain tiles on floor and full body porcelain tiles on wall up to a minimum height of 7 ft. All existing fixtures should be replaced with new fixtures along with new water supply (where damaged) and sewerage connections (where damaged). Entrance doors of all washrooms need to be replaced with UPVC doors. Common vanities to be made. Exhaust fans 24" two or three as per requirement with Aluminum ventilators need to be fixed.
9	Wall Paint	Surface of walls of OPD Block should be prepared after plastering in patches (where required only) and wall Putty prior to paint works.	Surface of walls of Diagnostic Block should be prepared after plastering in patches (where required only) and wall Putty prior to paint works.	Surface of walls of all Blocks should be prepared after plastering in patches (where required only) and wall Putty prior to paint works.
10	Roof Treatment	Required as per C&W standards.	Required as per C&W standards	Required as per C&W standards
11	Nursing Counter (Ward)	Not required.	Nursing counter will be provided upto 2.5' height with granite/ marble on top as per C&W standards.	Nursing counter will be provided upto 2.5' height with granite/ marble on top as per C&W standards.
12	Stairs - Marble and Railing	On steps of stairs leading to first floor marble needs to be fixed along with skirting and railing.	Not Required.	Not required.
13	Entrance	On all Entrances on Podium and steps Marble/Granite needs to be fixed.	On all Entrances Podium and steps Marble/Granite needs to be fixed.	On all Entrances Podium and steps Marble/Granite needs to be fixed.
14	Ramps - Tile and Railing	Ramp at Entrance of OPD needs to have Antiskid tiles fixed on it with SS railing.	Antiskid tiles need to be fixed on ramp at entrance with SS Railing fixed on it.	On ramp at Entrance Antiskid tiles with SS railing needs to be fixed.

15	Façade Uplifting	Façade needs to be uplifted and seepage issues need to be treated after using appropriate sealers as per C&W standards.	Façade needs to be uplifted and seepage issues need to be treated after using appropriate sealers as per C&W standards.	Façade needs to be uplifted and seepage issues need to be treated after using appropriate sealers as per C&W standards.
16	Lead lining Walls (X-Ray)	Not required.	Lead Lining needs to be done inside X-Ray Room.	Not required.
17	Antimicrobial Treatment (OTs)	Not required.	Inside 2 x OT's Antimicrobial flooring, Antimicrobial wall panelling and non-porous ceiling needs to be done inside OT (where surgery takes place).	Not required.
18	External Weather Shield	External weather shield of grey and white pattern of first class quality needs to be done on the front Elevation missing as per IDAP revamped area.	External weather shield of grey and white pattern of first class quality needs to be done on the front Elevation only.	External weather shield of grey and white pattern of first class quality needs to be done on the front Elevation only.
19	Edge Protection	SS Edge Protection needs to be fixed on all corners up to height of Wall/Dado tiles.	SS Edge Protection needs to be fixed on all corners up to height of 5 ft. till the height of Wall/Dado tiles.	SS Edge Protection needs to be fixed on all corners up to height of Wall/Dado tiles.
20	Columns SS Cladding	SS Cladding required to be done on Columns at entrance.	SS Cladding required to be done on Columns at entrance.	SS Cladding required to be done on Columns at entrance.
21	Plumbing Works	Damaged Water supply & sewerage pipes causing seepage to be repaired & rectified.	Damaged Water supply & sewerage pipes causing seepage to be repaired & rectified.	Damaged Water supply & sewerage pipes causing seepage to be repaired & rectified.
22	Fire Alarm System	Required.	Required.	Required.
23	Expansion joint of Building	Treat expansion joint of building properly & cover it with SS plate and water bearer inside as per C&W standards. Expansion joints on roof top to have double wall covered with pre cast slabs and sealing gaps between slabs properly.	Treat expansion joint of building properly & cover it with SS plate and water bearer inside as per C&W standards. Expansion joints on roof top to have double wall covered with pre cast slabs and sealing gaps between slabs properly.	Treat expansion joint of building properly & cover it with SS plate and water bearer inside as per C&W standards. Expansion joints on roof top to have double wall covered with pre cast slabs and sealing gaps between slabs properly.



24	Specific Points	<p>1) Two Rooms Partition wall needs to be dismantled and room needs to be extended for NCD.</p> <p>2) Doors at Entrance needs to be closed.</p> <p>3) Pharmacy desk to have marble fixed on its top and Aluminum window to be fixed at place of receipt counter.</p> <p>4) Washroom inside Eye OT needs to be dismantled.</p> <p>5) In Entire Labor Room block floor tiles and wall/dado tiles need to be changed. All cemented benches to be dismantled. Reception counters to be made as per C&amp;W Standards.</p>
25	Electrification	<p>All external main cables of hospital which are hanging in Air should be concealed in all respects. Similarly, few existing DB's need to replace as per site condition along with proper earthing of complete hospital.</p>

ROUGH COST ESTIMATE FOR THE WORK "REVAMPING OF THQ HOSPITAL, JAMPUR".

S.No.	Description	C.Area			Rate			Total	Estimated Cost	Remarks
		B.P.	E.I.	P.H.						
1	Revamping of THQ Hospital	1 Job						Rs. 32863700 /- P.Job	38034200 ✓	Detail Attached
2	Provision/Installation of Electrical Equipment.	1 Job						Rs. 5248000 /- P.Job	<del>3358000</del> ✓ 3258000	--do--
3	R.O. Plant l/c Boring with Solar System	1 Job						Rs. 4738000 6414000 /- P.Rft	4738000 ✓ 6114000 /-	--do--
Total.								Rs. 41225700 /- <del>48026200</del>	46030200	
Add 5% PRT.								Rs. 2211285 /- <del>240510</del>	2301510	
<del>Add 1% Tree Plantation / Horticulture.</del>								<del>Rs. 442257 /-</del>		
Add WAPDA Connection Charges.								Rs. 1500000 /-		
Total.								Rs. 48379242 /- 49831700		
Say.								Rs. 48379000 /-	49831700	
Or In Million.								Rs. 48.379 (M)	49.832	

Sub Engineer

Sub Divisional Officer,  
Buildings Sub Division,  
Jampur.

Executive Engineer,  
Buildings Division,  
Rajampur.

Superintending Engineer,  
Buildings Circle,  
Dera Ghazi Khan.

DETAILED ESTIMATE FOR THE WORK "REVAMPING OF THE HOSPITAL, JAMPUR".

## 1 Removing cement or lime plaster.

Room	2 x	2 x	59.25 x	6 =	1422 Sft
Corridor	2 x	2 x	101 x	6 =	2424 Sft
	2 x	2 x	17.5 x	6 =	210 Sft
	2 x	2 x	16.75 x	6 =	201 Sft
	2 x	2 x	14.5 x	6 =	174 Sft
Doctor	2 x	2 x	2 x	6 =	24 Sft
	2 x	2 x	9 x	6 =	108 Sft
	2 x	2 x	11.5 x	0.5 =	12 Sft
	1 x	1 x	42 x	0.5 =	21 Sft
Mosque	2 x	2 x	12.25 x	0.5 =	12 Sft
	1 x	1 x	13 x	0.5 =	7 Sft
	2 x	2 x	11.75 x	0.5 =	12 Sft
	2 x	2 x	4 x	0.5 =	4 Sft
Entrance	2 x	2 x	17 x	0.5 =	17 Sft
	2 x	2 x	16.5 x	6 =	198 Sft
	1 x	1 x	20.5 x	6 =	123 Sft
	1 x	1 x	59.16 x	6 =	355 Sft
Wash room	1 x	1 x	4.5 x	6 =	27 Sft
	21 +	21 +	16 x	7 =	518 Sft
	5 +	5 +	3.5 x	7 =	68 Sft
	15.75 +	15.75 +	12 x	0.5 =	56 Sft
	19.12 +	19.12 +	26.62 x	0.5 =	46 Sft
	14.5 +	14.5 +	11 x	0.5 =	26 Sft
Secondary Pathology	26.25 +	26.25 +	20.5 x	0.5 =	47 Sft
	10 +	10 +	15.5 x	0.5 =	204 Sft
X-Ray	11.5 +	11.5 +	15.5 x	0.5 =	54 Sft
	7.25 +	7.25 +	13.25 x	0.5 =	21 Sft
Pharmacy	12 +	12 +	11.5 x	0.5 =	24 Sft
	16.5 +	16.5 +	20.5 x	0.5 =	37 Sft
Inspection room	16 +	16 +	25 x	0.5 =	41 Sft
	16 +	16 +	12 x	0.5 =	112 Sft
MCH centre	8 +	8 +	9 x	0.5 =	17 Sft
	12.5 +	12.5 +	16.25 x	0.5 =	29 Sft
Physiotherapy	11.5 +	11.5 +	6 x	0.5 =	18 Sft
	20 +	20 +	20 x	0.5 =	40 Sft
N.C.D. Room	16 +	16 +	12 x	0.5 =	28 Sft
	26.5 +	26.5 +	25.33 x	0.5 =	52 Sft
	5 +	5 +	12 x	6 =	204 Sft
	16 +	16 +	16 x	0.5 =	32 Sft
	20 +	20 +	16 x	0.5 =	36 Sft
	12 +	12 +	13.5 x	6 =	306 Sft
	22 +	22 +	16 x	6 =	1368 Sft
	15 +	15 +	14 x	6 =	1008 Sft
	22 +	22 +	35 x	6 =	348 Sft
	13.25 +	13.25 +	10 x	6 =	684 Sft
	43 +	43 +	27 x	6 =	279 Sft
	25 +	25 +	35 x	6 =	840 Sft
	42 +	42 +	10 x	6 =	720 Sft
	12 +	12 +	10 x	6 =	624 Sft
	10 +	10 +	10 x	6 =	528 Sft
	14 +	14 +	10 x	6 =	1152 Sft
	22 +	22 +	30 x	6 =	624 Sft
	12 +	12 +	21 x	6 =	396 Sft
	20 +	20 +	15 x	6 =	420 Sft
	54 +	54 +	6 x	6 =	720 Sft
	12 +	12 +	21 x	6 =	396 Sft
	10.66 +	10.66 +	12 x	6 =	1088 Sft
	55 +	55 +	10 x	6 =	780 Sft
	22 +	22 +	10 x	6 =	384 Sft
	10 +	10 +	20 x	6 =	360 Sft
	5 +	5 +	10 x	6 =	180 Sft
	24.875 +	24.875 +	20 x	6 =	1077 Sft
	15 +	15 +	16.5 x	7 =	882 Sft
	5 +	5 +	4.5 x	7 =	1064 Sft
	5 +	5 +	5 x	7 =	280 Sft
D/d of opening	5 +	5 +	7.5 x	7 =	350 Sft
	4 x	4 x	6 x	=	23916 Sft
	3 x	3 x	3.5 x	2.5 =	60 Sft
	4 x	4 x	3.5 x	2.5 =	26 Sft

- 2 Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3) cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.  
a) Full body Glazed tiles (ii) 600mmx 600 mm.

Social welfare office Pharmacy	2 x	2 x	5 x	7.5 =	75 Sft
		2 x	5 x	5 =	50 Sft
2 x	2 x	15 x	16.5 =	495 Sft	
	2 x	15.75 x	12 =	378 Sft	
	1 x	19.12 x	26.62 =	509 Sft	
	2 x	59.25 x	8.75 =	2074 Sft	
Physiotherapy	1 x	101 x	4 =	404 Sft	
	2 x	60.5 x	9 =	1089 Sft	
Mosque	1 x	11 x	14.5 =	160 Sft	
	1 x	26.25 x	20.5 =	538 Sft	
	8 x	10 x	15.5 =	1240 Sft	
	2 x	11.5 x	15.5 =	357 Sft	
	1 x	13 x	15.5 =	202 Sft	
	1 x	16 x	16 =	256 Sft	
	1 x	20 x	16 =	320 Sft	
	1 x	12 x	13.5 =	162 Sft	
	3 x	22 x	16 =	1056 Sft	
	1 x	12 x	17 =	204 Sft	
2 x	2 x	22 x	20 =	880 Sft	
	1 x	15 x	14 =	210 Sft	
	1 x	22 x	35 =	770 Sft	
	1 x	13.25 x	10 =	133 Sft	
	1 x	43 x	27 =	1161 Sft	
	1 x	25 x	35 =	875 Sft	
	1 x	42 x	10 =	420 Sft	
	3 x	20 x	14 =	840 Sft	
	1 x	12 x	10 =	120 Sft	
	1 x	12 x	10 =	120 Sft	
	2 x	14 x	10 =	560 Sft	
	1 x	22 x	30 =	660 Sft	
	1 x	12 x	21 =	252 Sft	
	2 x	20 x	15 =	600 Sft	
2 x	1 x	54 x	6 =	324 Sft	
	1 x	12 x	21 =	252 Sft	
	4 x	10.66 x	12 =	512 Sft	
	1 x	55 x	10 =	550 Sft	
	1 x	22 x	10 =	220 Sft	
	1 x	10 x	20 =	200 Sft	
	1 x	5 x	10 =	50 Sft	
	1 x	7.25 x	13.25 =	96 Sft	
	1 x	12 x	11.5 =	138 Sft	
	1 x	16.5 x	20.5 =	338 Sft	
	1 x	16 x	25 =	400 Sft	
	1 x	8 x	9.25 =	74 Sft	
	1 x	12.5 x	16.25 =	203 Sft	
	4 x	16 x	12 =	768 Sft	
X-Ray Pharmacy Inspection Room Social Welfare S.M.O Women MCH Physiotherapy	1 x	11.5 x	16 =	184 Sft	
	1 x	20 x	20 =	400 Sft	
	Total = 21879 Sft				
@ 340.50 P.Sft					

- 3 Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting / dado of specified size, Color and Shade with adhesive / bond over 1/2" thick (1:2) cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. a) Full body Glazed Tile (ii) 600mm x600 mm.

Take same quantity item No.1

@				=	23616 Sft
@				340.50 P.Sft	8041309

- 4 Scraping:- b) Ordinary distemper, oil bound distemper, or paint of wall.

1 x	90 x	7 =	630 Sft
2 x	17 x	4 =	136 Sft
1 x	13 x	16 =	208 Sft
2 x	7 x	4.5 =	63 Sft

Entrance washroom		2 x	5 x	9 =	90 Sft
		2 x	13 x	11 =	286 Sft
		1 x	15 x	10 =	150 Sft
		1 x	10.25 x	8 =	82 Sft
		1 x	5 x	6 =	30 Sft
		1 x	12.25 x	6.25 =	77 Sft
		2 x	20 x	10 =	400 Sft
		2 x	10 x	16 =	320 Sft
		2 x	6 x	16 =	192 Sft
		1 x	16.5 x	20.5 =	338 Sft
		1 x	21 x	16 =	336 Sft
		2 x	59.25 x	8.75 =	1037 Sft
		1 x	101 x	4 =	404 Sft
		2 x	60 x	9 =	1080 Sft
		1 x	17.5 x	7 =	123 Sft
		90 +	7 x	7 =	1358 Sft
Walls	2 x(	2 x	4 x	7 =	588 Sft
	2 x(	13 +	16 x	7 =	406 Sft
	2 x(	7 +	4.5 x	7 =	322 Sft
	2 x(	5 +	9 x	7 =	392 Sft
	2 x(	13 +	11 x	7 =	672 Sft
	2 x(	15 +	10 x	7 =	350 Sft
	2 x(	10.25 +	8 x	7 =	256 Sft
	2 x(	5 +	6 x	5 =	110 Sft
	2 x(	12.25 +	6.25 x	5 =	185 Sft
	2 x(	20 +	10 x	7 =	840 Sft
	2 x(	10 +	16 x	7 =	728 Sft
	2 x(	6 +	16 x	7 =	616 Sft
	2 x	2 x	16.5 x	7 =	231 Sft
	1 x	21 +	20.5 x	7 =	144 Sft
	2 x(	59.25 +	16 x	7 =	518 Sft
	2 x(	101 +	8.75 x	7 =	1904 Sft
Waiting room	2 x(	60 +	4 x	7 =	1470 Sft
	2 x(	17.5 +	9 x	7 =	1932 Sft
	2 x(	1 x	7 x	7 =	343 Sft
	1 x	24 x	16.5 =	16.5 =	396 Sft
	1 x	12 x	15.75 =	15.75 =	189 Sft
	2 x	20 x	16 =	16 =	640 Sft
	3 x	7.58 x	15.75 =	15.75 =	358 Sft
	2 x	20 x	16 =	16 =	640 Sft
	3 x	7.58 x	15.75 =	15.75 =	358 Sft
	1 x	18 x	17.5 =	17.5 =	315 Sft
	2 x	7.5 x	16.5 =	16.5 =	248 Sft
	1 x	12 x	16.5 =	16.5 =	198 Sft
	1 x	11.5 x	16.5 =	16.5 =	190 Sft
	1 x	42 x	7 =	7 =	294 Sft
	1 x	15.5 x	16.5 =	16.5 =	256 Sft
	1 x	15.75 x	15.75 =	15.75 =	248 Sft
	1 x	15.75 x	15.75 =	15.75 =	248 Sft
Corridor	2 x	15.75 x	11.5 =	11.5 =	362 Sft
	2 x	8 x	7 =	7 =	112 Sft
	1 x	19.12 x	26.83 =	26.83 =	513 Sft
	3 x	16 x	12 =	12 =	576 Sft
	1 x	15.91 x	14.75 =	14.75 =	235 Sft
	1 x	188 x	7.25 =	7.25 =	1363 Sft
	1 x	77 x	4.5 =	4.5 =	347 Sft
	1 x	126 x	7 =	7 =	882 Sft
	1 x	144 x	7 =	7 =	1008 Sft
	1 x	26.25 x	20.41 =	20.41 =	536 Sft
	1 x	10.91 x	14.5 =	14.5 =	158 Sft
	1 x	10.91 x	5.83 =	5.83 =	64 Sft
	1 x	24.87 x	20 =	20 =	497 Sft
	1 x	16.25 x	20 =	20 =	325 Sft
	1 x	20.37 x	20 =	20 =	407 Sft
	1 x	11.08 x	15 =	15 =	166 Sft
	2 x	16.5 x	11.5 =	11.5 =	380 Sft
Walls	2 x	11.83 x	11.5 =	11.5 =	272 Sft
	1 x	7.58 x	11.5 =	11.5 =	87 Sft
	24 +	16 x	7 =	7 =	560 Sft
	12 +	15.75 x	7 =	7 =	2720 Sft
	20 +	16 x	7 =	7 =	504 Sft
	7.58 +	15.75 x	7 =	7 =	980 Sft
	18 +	17.5 x	7 =	7 =	497 Sft
	7.5 +	16.5 x	7 =	7 =	336 Sft
	11.5 +	16.5 x	7 =	7 =	392 Sft
	42 +	7 x	7 =	7 =	686 Sft
	15.5 +	16.5 x	7 =	7 =	448 Sft
	2 x(	2 x(			
	2 x(	2 x(			
	2 x(	2 x(			
	2 x(	2 x(			
	2 x(	2 x(			
	2 x(	2 x(			
	2 x(	2 x(			



1 x	22 x	10 =	220 Sft
1 x	10 x	20 =	200 Sft
1 x	5 x	10 =	50 Sft
42 +	10 x	7 =	728 Sft
12 +	10 x	7 =	616 Sft
22 +	26 x	7 =	1344 Sft
14 +	10 x	7 =	1344 Sft
22 +	30 x	7 =	728 Sft
12 +	21 x	7 =	462 Sft
20 +	15 x	7 =	490 Sft
54 +	6 x	7 =	840 Sft
12 +	21 x	7 =	462 Sft
10.66 +	12 x	7 =	1269 Sft
55 +	10 x	7 =	910 Sft
22 +	10 x	7 =	448 Sft
10 +	20 x	7 =	420 Sft
5 +	10 x	7 =	210 Sft
Total =			92217 Sft
@			761.90 % Sft
			702604

5 Distemper:- two coats on old surface.

1 x	90 x	7 =	630 Sft
2 x	17 x	4 =	136 Sft
1 x	13 x	16 =	208 Sft
2 x	7 x	4.5 =	63 Sft
2 x	5 x	9 =	90 Sft
2 x	13 x	11 =	286 Sft
1 x	15 x	10 =	150 Sft
1 x	10.25 x	8 =	82 Sft
1 x	5 x	6 =	30 Sft
1 x	12.25 x	6.25 =	77 Sft
2 x	20 x	10 =	400 Sft
2 x	10 x	16 =	320 Sft
2 x	6 x	16 =	192 Sft
1 x	16.5 x	20.5 =	338 Sft
1 x	21 x	16 =	336 Sft
2 x	59.25 x	8.75 =	1037 Sft
1 x	101 x	4 =	404 Sft
2 x	60 x	9 =	1080 Sft
1 x	17.5 x	7 =	123 Sft
2 x	16.5 x	7 =	231 Sft
1 x	20.5 x	7 =	144 Sft
1 x	24 x	16.5 =	396 Sft
1 x	12 x	15.75 =	189 Sft
2 x	20 x	16 =	640 Sft
3 x	7.58 x	15.75 =	358 Sft
2 x	20 x	16 =	640 Sft
3 x	7.58 x	15.75 =	358 Sft
1 x	18 x	17.5 =	315 Sft
2 x	7.5 x	16.5 =	248 Sft
1 x	12 x	16.5 =	198 Sft
1 x	11.5 x	16.5 =	190 Sft
1 x	42 x	7 =	294 Sft
1 x	15.5 x	16.5 =	256 Sft
1 x	15.75 x	15.75 =	248 Sft
1 x	15.75 x	15.75 =	248 Sft
2 x	15.75 x	11.5 =	362 Sft
2 x	8 x	7 =	112 Sft
1 x	19.12 x	26.83 =	513 Sft
3 x	16 x	12 =	576 Sft
1 x	15.91 x	14.75 =	235 Sft
1 x	188 x	7.25 =	1363 Sft
1 x	77 x	4.5 =	347 Sft
1 x	126 x	7 =	882 Sft
1 x	144 x	7 =	1008 Sft
1 x	26.25 x	20.41 =	536 Sft
1 x	10.91 x	14.5 =	158 Sft
1 x	10.91 x	5.83 =	64 Sft
1 x	24.87 x	20 =	497 Sft
1 x	16.25 x	20 =	325 Sft
1 x	20.37 x	20 =	407 Sft
1 x	11.08 x	15 =	166 Sft
2 x	16.5 x	11.5 =	380 Sft
2 x	11.83 x	11.5 =	272 Sft
1 x	7.58 x	11.5 =	87 Sft
2 x	88 x	7 =	1232 Sft

1 x	8.25 x	11.5 =	95 Sft
1 x	35 x	7 =	245 Sft
1 x	16.25 x	20 =	325 Sft
1 x	8 x	20 =	160 Sft
1 x	15.83 x	20 =	317 Sft
2 x	7.5 x	11.5 =	173 Sft
1 x	11.5 x	11.5 =	132 Sft
1 x	11.83 x	11.5 =	136 Sft
1 x	46 x	6 =	276 Sft
1 x	60 x	9 =	540 Sft
1 x	77 x	4.5 =	347 Sft
1 x	77 x	7 =	539 Sft
1 x	16 x	16 =	256 Sft
1 x	20 x	16 =	320 Sft
1 x	12 x	13.5 =	162 Sft
3 x	22 x	16 =	1056 Sft
1 x	12 x	17 =	204 Sft
2 x	22 x	20 =	880 Sft
1 x	15 x	14 =	210 Sft
1 x	22 x	35 =	770 Sft
1 x	13.25 x	10 =	133 Sft
1 x	43 x	27 =	1161 Sft
1 x	25 x	35 =	875 Sft
1 x	42 x	10 =	420 Sft
3 x	20 x	14 =	840 Sft
1 x	12 x	10 =	120 Sft
1 x	12 x	10 =	120 Sft
2 x	22 x	26 =	1144 Sft
2 x	14 x	10 =	560 Sft
1 x	22 x	30 =	660 Sft
1 x	12 x	21 =	252 Sft
2 x	20 x	15 =	600 Sft
1 x	54 x	6 =	324 Sft
1 x	12 x	21 =	252 Sft
4 x	10.66 x	12 =	512 Sft
1 x	55 x	10 =	550 Sft
1 x	22 x	10 =	220 Sft
1 x	10 x	20 =	200 Sft
1 x	5 x	10 =	50 Sft
Total			36593 Sft
@			705.15 % Sft

258036

6 Preparing surface and painting with emulsion paint:-  
two coats on old surface.

1 x	2 x(	90 +	7 )x	1358 Sft
2 x	2 x(	17 +	4 )x	588 Sft
1 x	2 x(	13 +	16 )x	406 Sft
2 x	2 x(	7 +	4.5 )x	322 Sft
2 x	2 x(	5 +	9 )x	392 Sft
2 x	2 x(	13 +	11 )x	672 Sft
1 x	2 x(	15 +	10 )x	350 Sft
1 x	2 x(	10.25 +	8 )x	256 Sft
1 x	2 x(	5 +	6 )x	110 Sft
1 x	2 x(	12.25 +	6.25 )x	185 Sft
2 x	2 x(	20 +	10 )x	840 Sft
2 x	2 x(	10 +	16 )x	728 Sft
2 x	2 x(	6 +	16 )x	616 Sft
1 x	2 x(	21 +	16 )x	518 Sft
2 x	2 x(	59.25 +	8.75 )x	1904 Sft
1 x	2 x(	101 +	4 )x	1470 Sft
2 x	2 x(	60 +	9 )x	1932 Sft
1 x	2 x(	17.5 +	7 )x	343 Sft
1 x	2 x(	24 +	16 )x	560 Sft
7 x	2 x(	12 +	15.75 )x	2720 Sft
1 x	2 x(	20 +	16 )x	504 Sft
3 x	2 x(	7.58 +	15.75 )x	980 Sft
1 x	2 x(	18 +	17.5 )x	497 Sft
1 x	2 x(	7.5 +	16.5 )x	336 Sft
1 x	2 x(	11.5 +	16.5 )x	392 Sft
1 x	2 x(	42 +	7 )x	686 Sft
1 x	2 x(	15.5 +	16.5 )x	448 Sft
1 x	2 x(	15.75 +	11.5 )x	382 Sft
1 x	2 x(	15.75 +	15.75 )x	441 Sft
2 x	2 x(	8 +	7 )x	420 Sft
1 x	2 x(	19.12 +	26.83 )x	643 Sft
3 x	2 x(	11 +	22 )x	1386 Sft
1 x	2 x(	15.91 +	14.75 )x	429 Sft

Walls



1 x	2 x(	77 +	4.5 )x	7 =	1141 Sft
1 x	2 x(	26.25 +	20.41 )x	7 =	653 Sft
1 x	2 x(	10.91 +	14.5 )x	7 =	356 Sft
1 x	2 x(	10.91 +	5.16 )x	7 =	225 Sft
1 x	2 x(	24.87 +	20 )x	7 =	628 Sft
1 x	2 x(	16.25 +	20 )x	7 =	508 Sft
1 x	2 x(	16.25 +	20 )x	7 =	508 Sft
1 x	2 x(	20.37 +	20 )x	7 =	565 Sft
1 x	2 x(	11.08 +	15 )x	7 =	365 Sft
2 x	2 x(	16.5 +	11.5 )x	7 =	784 Sft
2 x	2 x(	11.83 +	11.5 )x	7 =	653 Sft
1 x	2 x(	7.58 +	11.5 )x	7 =	267 Sft
1 x	2 x(	8.25 +	11.5 )x	7 =	277 Sft
1 x	2 x(	35 +	7 )x	7 =	588 Sft
1 x	2 x(	16.25 +	20 )x	7 =	508 Sft
1 x	2 x(	8 +	20 )x	7 =	392 Sft
1 x	2 x(	15.83 +	20 )x	7 =	502 Sft
2 x	2 x(	7.5 +	11.5 )x	7 =	532 Sft
1 x	2 x(	11.5 +	11.5 )x	7 =	322 Sft
1 x	2 x(	11.83 +	11.5 )x	7 =	327 Sft
1 x	2 x(	46 +	6 )x	7 =	728 Sft
1 x	2 x(	60 +	9 )x	7 =	966 Sft
1 x	2 x(	77 +	4.5 )x	7 =	1141 Sft
1 x	2 x(	77 +	7 )x	7 =	1176 Sft
1 x	2 x(	16 +	16 )x	7 =	448 Sft
1 x	2 x(	20 +	16 )x	7 =	504 Sft
1 x	2 x(	12 +	13.5 )x	7 =	357 Sft
3 x	2 x(	22 +	16 )x	7 =	1596 Sft
2 x	2 x(	22 +	20 )x	7 =	1176 Sft
1 x	2 x(	15 +	14 )x	7 =	406 Sft
1 x	2 x(	22 +	35 )x	7 =	798 Sft
1 x	2 x(	13.25 +	10 )x	7 =	326 Sft
1 x	2 x(	43 +	27 )x	7 =	980 Sft
1 x	2 x(	25 +	35 )x	7 =	840 Sft
1 x	2 x(	42 +	10 )x	7 =	728 Sft
2 x	2 x(	12 +	10 )x	7 =	616 Sft
2 x	2 x(	22 +	26 )x	7 =	1344 Sft
4 x	2 x(	14 +	10 )x	7 =	1344 Sft
1 x	2 x(	22 +	30 )x	7 =	728 Sft
1 x	2 x(	12 +	21 )x	7 =	462 Sft
1 x	2 x(	20 +	15 )x	7 =	490 Sft
1 x	2 x(	54 +	6 )x	7 =	840 Sft
1 x	2 x(	12 +	21 )x	7 =	462 Sft
4 x	2 x(	10.66 +	12 )x	7 =	1269 Sft
1 x	2 x(	55 +	10 )x	7 =	910 Sft
1 x	2 x(	22 +	10 )x	7 =	448 Sft
1 x	2 x(	10 +	20 )x	7 =	420 Sft
1 x	2 x(	5 +	10 )x	7 =	210 Sft
Total = 55624 Sft					1131762
1151.55 + 883.10 @ 2034.65 % Sft					

7 Applying floating coat of cement-1/32" (0.8 mm) thick.

1 x	190 x	45 =	8550 Sft
1 x	165 x	30 =	4950 Sft
1 x	125 x	12 =	1500 Sft
1 x	223 x	55 =	12265 Sft
1 x	85 x	75 =	6375 Sft
Total = 33640 Sft			617597
@ 1835.90 % Sft			

8 Single layer of tiles 9" x 4.5" x 1.5"

1 x	46 x	55 =	2530 Sft
Total = 2530 Sft			136662
@ 5401.65 % Sft			

9 Painting of doors and windows two coats on old surface

40 x	2 x	3.5 x	7 =	1960 Sft
6 x	2 x	6 x	7 =	504 Sft
1 x	2 x	5 x	7 =	70 Sft
6 x	2 x	4 x	7 =	336 Sft
20 x	2 x	2.5 x	7 =	700 Sft
Total = 3570 Sft			59532	
@ 1667.55 % Sft				

- 10 Supply & Installation of Phillips, LED Panel Light 24"x24" (RC 091 LED 38S / 865 40-W ) in Fasle Cellign of approved manufacturer /c cost of all labour & material complete, as approved by the Engineer Incharge.

Total = 130 Nos.  
= 130 Nos.  
@ 14800.00 Each 1924000

- 11 Street lights pole with SMD lights

Total = 15 Nos.  
= 15 Nos.  
@ 98000.00 Each 1470000

- 12 Providing and applying weather shield paint of approved quality on external surface of building including preparation of surface, application of primer complete in all respect: on old surface.

( 35 + 20 + 144 +	191.5 )	14 =	5467 Sft
( 65 + 24 + 42 +	32 )	14 =	2282 Sft
( 26.5 + 77 + 120 +	120 )	14 =	4809 Sft
( 77 + 43 + 43 +	77 )	14 =	3360 Sft
( 56 + 200 + 180 )		14 =	6888 Sft
Gynee 1 x 2 x( 85 +	75 )x	28 =	8960 Sft
Total		=	31766 Sft
@	1925.45 %Sft		611638

- 13 P/L Non slipery tiles complete in all respect as approved by the Engineer Incharge.

Gynee 2 x	4 x	5 =	40 Sft
room of entery 1 x	15 x	5 =	75 Sft
2 x	16 x	5 =	160 Sft
Total		=	275 Sft
@	232.00 P.Sft		63800

- 14 Providing & Laying Anti Microbial /Anti-Static Self Leveling Pvc Merp Conductive Epoxy Flooring / Dado (Imperfect) To Avoid Ericion With All Chemical Composition Labour And Carriage Charges Etc As Approved By The Engineer Incharge

1 x	24.833 x	20 =	497 Sft
1 x	16.25 x	20 =	325 Sft
1 x	20.375 x	20 =	408 Sft
1 x	11.083 x	15 =	166 Sft
2 x	22 x	26 =	1144 Sft
1 x	24.833 +	10.5 =	941 Sft
1 x	16.25 +	10.5 =	761 Sft
1 x	20.375 +	10.5 =	848 Sft
1 x	11.083 +	10.5 =	548 Sft
2 x	22 +	10.5 =	2016 Sft
Total		=	7654 Sft
@	550.00 P.Sft		4209899

*Handing* 2540 1397000  
3418 x 22.00 = 7519600

Supply and Installation of Clip-in tile of specified thickness non-porous Aluminium false ceiling of specified size fitted with 'Clip-in' suspension system hanged on Concealed T/Shiplap edge/runners @ 600 mmX600 mm grid, Edge Trims fasten on wall with plug and screw @ 500 mm c/c i/c cutting charges of tiles to required size, suspension rods and joints sealed with silicon if required of DAMPA/Demark, as approved and directed by the (b) Bevelled edges & flange 21.5 mm

(iii) 600 mmX 600 mm

directed by the Engineer Incharge. 12 mm thick

1 x	24.833 x	20 =	497 Sft
1 x	16.25 x	20 =	325 Sft
1 x	20.375 x	20 =	408 Sft
1 x	11.083 x	15 =	166 Sft
1 x	24.833 +	10.5 =	941 Sft
1 x	16.25 +	10.5 =	761 Sft
1 x	20.375 +	10.5 =	848 Sft
1 x	11.083 +	10.5 =	548 Sft
Total		=	4494 Sft
@	99.86 P.Sft		448762

2540 (As item 2540) 762,000

16. Providing and laying Prepolished Granite of specified thickness and shade of full width of approved quality laid with adhesive bond over 3/4" thick (1:2) cement sand mortar bed, complete in all respect as approved and directed by the Engineer Incharge. 3/4" thick	26 x 1 x 2 x	6 x 15 x 26.5 x	1 = 5.833 = 1 = =	156 Sft 87 Sft 53 Sft 296 Sft	387449
17. Providing and laying Prepolished Granite of specified thickness and shade of full width of approved quality laid with adhesive bond over 3/4" thick (1:2) cement sand mortar bed, complete in all respect as approved and directed by the Engineer Incharge. 1/2" thick	26 x 2 x	6 x 26.5 x	0.5 = 0.5 = =	78 Sft 27 Sft 105 Sft	124210
18. P/F lead sheet 1/8" thick X-Ray Room Wall	1 x	2 x( 16.25 + 20 )x	11.5 = =	834 Sft 834 Sft	1000500
19. Providing and fixing G.I. wire gauze 24 SWG, 12x12 meshes per square inch, fixed to steel windows or doors, etc., complete in all respects.	5 x 7 x 1 x 1 x 1 x 11 x 1 x	8.25 x 7.75 x 7.33 x 7.583 x 7.66 x 7.833 x 1.916 x	4.5 = 4.66 = 4.66 = 4.66 = 4.66 = 4.66 = 2.25 = =	186 Sft 253 Sft 34 Sft 35 Sft 36 Sft 402 Sft 4 Sft 950 Sft	137085
20. Providing and fixing all types of partly fixed and partly openable glazed anodised/ powder coated aluminium doors, using delux section of M/s Al-Cop or Pakistan Cables, having chowkat frame of size 40 x 100 mm (1½" x 4") and leaf frame of 60x40mm (2½"x1½") wide sections including the cost of ¼" (5 mm) thick imported tinted glass with aluminium triangular gola and rubber gasket to support the glass and leaf edging, using approved standard fittings, locks, 3" (75 mm) wide long handles etc., and hardware any required as approved by the engineer in-charge.	4 x 6 x 2 x	7.5 x 5 x 8 x	7 = 7 = 10 = =	210 Sft 210 Sft 160 Sft 580 Sft	833808
21. Making And Fixing Pvc Doors 1-1/2" Thick Consisting Of Pvc Frame And Pvc Leaves I/C Hinges Complete In All Respects As Approved Design /Color By The Engineer Incharge	25 x	2.5 x	7 = =	438 Sft 438 Sft	385440

22	Providing and fixing 2'-9" high stair railing comprising of non magnetic (304) Stain less steel 2" dia pipe railing of 18 SWG welded with vertical posts of 2" dia stainless steel round/ Squar pipe/ Tong (chimta) @ 2-ft c/c fixed on alternate steps with 3" long steel screws and brass rawal plugs , 3-Nos diagonal stainless steel pipes of 1/2" dia passes through gotties fixed on vertical post, i/c stainless steel welding, fixing & polishing complete in all respects as approved and directed by the Engineer Incharge.	2 x	15	=	30 Rft	
				=	30 Rft	
		@		2361.46 P.Rft		70844
23	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): 1:2:4	1 x	100 x	8 x	0.25 =	200 Cft
				Total =	200 Cft	
		@		38126.10 % Cft		76252
24	Supply and erection of copper conductor cables for service connection, in prelaidd pipe/G.I. wire/trenches, etc. (rate for cable only):- d) PVC insulated, PVC insulated, PVC sheathed 4 core, 600/1000 volt non armoured cable:- xi) 70 mm sq (19/0.083")			=	600 Rft	
				=	600 Rft	
		@		2655.80 P.Rft		1593480
25	Supplying ,Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaidd DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge. a) Tripple Pole (xi) 300-630 Amp(50 KA)			=	1 Job	
				=	1 Job	
		@		72033.00 P.Job		72033
		Total		Rs. 31906468		36926408
		Add 3% Contingency		Rs. 957494		1107792
		Total		Rs. 32863862		38034200
		SAY		Rs. 32863700		28034200

Sub Engineer

Sub Divisional Officer,  
Buildings Sub Division,  
Jampur.

Executive Engineer,  
Buildings Division,  
Rajampur.

## THQ JamPur Provision/Installation of Electrical Equipment.

S.#	Description	Qty:	Unit	Rate	Amount
<b>A</b>	<b><u>L.T. (LV) SUB-STATION EQUIPMENT:</u></b>				
<b>1</b>	<b>Construction of ELECTRICAL ROOM</b>	<b>1</b>		<b>As per requirement</b>	
<b>2</b>	P/F floor mounted Electric Panel board of required depth and size, fabricated with 14SWG M.S sheet (Indoor/Outdoor Type),derusting, zinc Phosphated, finish with electro static powder coating in approved colour i/c the cost of Lock, Indication lights,thimbles, Copper Comb, Wiring, Natural & Earth Bar, glands,Current Transformers of specified capacity ,Door Earthing, Brass glands,bus bars,controlles complete in all respects as approved and directed by the Engineer Incharge (Breakers will be Paid Separately).				
	<b>MDB-1(For PDBs)</b>				
	<b>Incoming from Transformer</b>				
(i)	LT Switchboards				
(a)	12" deep				
(i)	200A (3.0x6'x2.5')	<b>1</b>	<b>each</b>	<b>4,512.80</b>	<b>203076</b>
	<b>Incoming breakers for MDB-1</b>				
<b>1.</b>	Supplying, Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaidd DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
(a)	Tripple Pole 300A(36 KA) 1*2=2	<b>2</b>	<b>each</b>	<b>62,434.30</b>	<b>124869</b>
	<b>Outgoing breakers for MDB-1</b>				
(a)	Tripple Pole 100A(36 KA) 1*3=3	<b>3</b>	<b>each</b>	<b>17,434.30</b>	<b>52303</b>
(b)	Tripple Pole 150A(36 KA) 1*3=3	<b>3</b>	<b>each</b>	<b>18,094.30</b>	<b>54283</b>
(b)	Tripple Pole 200A(36 KA) 1*2=2	<b>2</b>	<b>each</b>	<b>39,814.30</b>	<b>79629</b>
<b>3</b>	<b>MDB</b>				
	<b>Incoming from Transformer</b>				
	Tripple Pole 400A(36 KA) 1*=1	<b>1</b>	<b>each</b>	<b>62,434.30</b>	<b>62434</b>
	Tripple Pole 200A(36 KA) 1*2=2	<b>2</b>	<b>each</b>	<b>39,814.30</b>	<b>79629</b>
<b>4</b>	P/F floor mounted ATS (Auto Transfer Switch) panel board , fabricated with 14S WG M.S sheet (Indoor Type) duly painted with 100 microns powder coated paint in approved colour , front access ,extendable,insulation class of 600 volts IP-44, incoming & outgoing connections from bottom with flexible copper cable suitable for 415 VAC, 3-phase 4 wire, 50 HZ TPN&E system having rated service, short circuit breaking capacity at 400VAC conforming to IEC-947-2 to accomodate given no of circuit components, instruments & accessories,assembled & wired with Electrolitic Copper bus bars at 50 deg and cables duly cleaned down to bare shining metal phosphat, manual change Over i/c the cost of Lock, Indication lights,thimbles, Copper Comb, Wiring, Natural & Earth Bar,CTs,Contactors,Relays, Door Earthing, Brass glands complete in all respects as approved and directed by the Engineer Incharge. (Breakers will be paid additionally).				
	<b>ATS (for 200 KVA Generator and Transformer)</b>				
	<b>Incoming from Generator and ATS for dual supply</b>				
(a)	2.00 Ft deep	<b>1</b>	<b>each</b>	<b>1,833,923.45</b>	<b>1833923</b>
(ii)	200KVA				

S.#	Description	Qty:	Unit	Rate	Amount
	<b>Incoming Breakers For ATS (for 200 KVA Generator and Transformer)</b>				
1	Supplying, Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/ SIEMEN/ ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
(a)	Tripple Pole 200A(36 KA) ( 1* 1=1)	1	each	39,814.30	39814
	<b>Outgoing Breakers For ATS (for 200 KVA Generator and Transformer)</b>				
	Supplying, Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/ SIEMEN/ ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
(a)	Tripple Pole 100A(36 KA) ( 3* 2=6)	6	each	17,434.30	104606
5	P/F wall mounted DB (Distribution Board) made with 16SWG Sheet (Recessed/Surface mounted Type), Powder coated Paint, i/c the cost of Lock, Indication lights, Thimble, Copper Comb, Wiring, Neutral & Earth Bar, Door Earthing, Digital Voltmeter, Digital Ammeter, Volt Selector Switch, Ammeter selector switch, Current Transformers and Controles Complete in all respect as approved and directed by the Engineer Incharge (Breakers will be Paid Separately).				
	<b>PDBs (For OPD &amp; Emergency)</b>				
(a)	6" deep				
(ii)	100A (30"x22"x6")	4	each	13,809.80	126360
	<b>Incoming Breakers for PDBs (For OPD &amp; Emergency)</b>				
1	Supplying, Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/ SIEMEN/ ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
(a)	Tripple Pole 100A(36 KA) (1*4=4)	4	each	17,434.30	69737
	<b>Outgoing Breakers for PDBs (For OPD &amp; Emergency)</b>				
2	Supplying, Installation and commissioning of MCB (Miniature Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / SIEMEN GERMANY/ TERASAKI JAPAN/ ABB SWITZERLAND in prelaid DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
(a)	Tripple Pole 63A(10 KA) (1*4=4)	4	each	11,434.30	45737
(b)	Single Pole 32A(10 KA) (5*4=20)	20	each	1,299.95	25999
(d)	Single Pole 16A(10 KA) (6*4=24)	24	each	1,299.95	31199
6	P/F wall mounted DB (Distribution Board) made with 16SWG Sheet (Recessed/Surface mounted Type), Powder coated Paint, i/c the cost of Lock, Indication lights, Thimble, Copper Comb, Wiring, Neutral & Earth Bar, Door Earthing, Digital Voltmeter, Digital Ammeter, Volt Selector Switch, Ammeter selector switch, Current Transformers and Controles Complete in all respect as approved and directed by the Engineer Incharge (Breakers will be Paid Separately).				
	<b>PDBs (For wards)</b>				
(a)	12" deep				
(ii)	150A (3"x3"x12")	3	each	5,146.40	138953

S.#	Discription		Qty:	Unit	Rate	Amount
	<b>Incoming Breakers for PDBs (For wards)</b>					
	Supplying ,Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.					
	(a)	Tripple Pole 150A(36 KA) (1*3=3)	3	each	18,094.30	54283
	<b>Outgoing Breakers for PDBs (For wards)</b>					
	Suppling,Installation and comissioning of MCB (Miniature Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY /SIEMEN GERMAN/TERASAKI JAPAN/ ABB SWITZERLAND in prelaid DBs and Panels i/c the cost of screws,necessary wire complete in all respect as approved and directed by the Engineer Incharge.					
	(a)	Tripple Pole 63A(36 KA) (3*3=9)	9	each	17,434.30	156909
	(b)	Single Pole 32A(10 KA) (5*3=15)	15	each	1,299.95	19499
	(c)	Single Pole 16A(10 KA) (5*3=15)	15	each	1,299.95	19499
7	P/F wall mounted DB (Distribution Board) made with 16SWG Sheet (Recessed/Surface mounted Type), Powder coated Paint, i/c the cost of Lock, Indication lights,Thimble, Copper Comb, Wiring, Nétural & Earth Bar, Door Earthing, Digital Voltmeter,Digital Ammeter,Volt Selector Switch,Ammeter selector switch,Current Transformers and Controles Complete in all respect as approved and directed by the Engineer Incharge (Breakers will be Paid Separately).					
	<b>PDBs (For wards)</b>					
	(a)	12" deep				
	(ii)	200A (3'x3'x12")	2	each	4,512.80	81230
	<b>Incoming Breakers for PDBs (For wards)</b>					
	Supplying ,Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.					
	(a)	Tripple Pole 200A(36 KA) (1*2=2)	2	each	39,814.30	79629
	<b>Outgoing Breakers for PDBs (For wards)</b>					
	Suppling,Installation and comissioning of MCB (Miniature Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY /SIEMEN GERMAN/TERASAKI JAPAN/ ABB SWITZERLAND in prelaid DBs and Panels i/c the cost of screws,necessary wire complete in all respect as approved and directed by the Engineer Incharge.					
	(a)	Tripple Pole 63A(36 KA) (3*2=6)	6	each	17,434.30	104606
	(b)	Single Pole 32A(10 KA) (5*2=10)	10	each	1,299.95	13000
	(c)	Single Pole 16A(10 KA) (5*2=10)	10	each	1,299.95	13000
8	P/F wall mounted DB (Distribution Board) made with 16SWG Sheet (Recessed/Surface mounted Type), Powder coated Paint, i/c the cost of Lock, Indication lights,Thimble, Copper Comb, Wiring, Nétural & Earth Bar, Door Earthing, Digital Voltmeter,Digital Ammeter,Volt Selector Switch,Ammeter selector switch,Current Transformers and Controles Complete in all respect as approved and directed by the Engineer Incharge (Breakers will be Paid Separately).					
	<b>LDBs (For OPD &amp; Emergency)</b>					
	(a)	6" deep				
	(ii)	63A (18"x24"x6")	3	each	18,691.40	112148

S.#	Discription	Qty:	Unit	Rate	Amount
	<b>Incoming Breakers for LDBs (For Wards)</b>				
	Supplying ,installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/SIEMEN/ABB SWITZERLAND (with fixed Thermal-Magnetic Trip ) in prelaid DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
	(a) Tripple Pole 63A(36 KA) (1*3=3)	3	each	17,434.30	52303
	<b>Outgoing Breakers for LDBs (For Wards)</b>				
	Suppling,Installation and comissioning of MCB (Miniature Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY /SIEMEN GERMAN/TERASAKI JAPAN/ ABB SWITZERLAND in prelaid DBs and Panels i/c the cost of screws,necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
	(a) Single Pole 20A(10 KA) (4*3=12)	12		1,299.95	15599
	(b) Single Pole 16A(10 KA) (4*3=12)	12		1,299.95	15599
	(c) Single Pole 10A(10 KA) (6*3=18)	18		1,299.95	23399
<b>B</b>	<b>LT POWER CABLE.</b>				
1	95 mm sq (37/0.072") PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable (For Transformer and MDB-1)	200	rft	3,676.95	735390
2	50 mm sq (19/0.072") PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable (For PDBs)	250	rft	1,859.25	464813
3	7/1.12 mm (7/0.044") PVC insulated, PVC sheathed twin core, 250/440 volts. copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc (For LDBs and ACs)	300	rft	160.75	48225
4	7/0.74 mm (7/0.029") PVC insulated, PVC sheathed twin core, 250/440 volts. copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc (for Internal Wiring of Hospital)	100	rft	87	8700
5	3/0.74 mm (3/0.029") PVC insulated, PVC sheathed twin core, 250/440 volts. copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc (for Internal Wiring of Hospital)	100	rft	43.65	4365
	<b>TOTAL</b>				<b>5094746</b>
	<b>ADD 3% CONTINGENCY</b>				<b>152842</b>
	<b>TOTAL</b>				<b>5247588</b>
	<b>SAY</b>				<b>5248000</b>

Sub Engineer

Sub Divisional Officer  
Buildings Sub Division  
Jampur

Executive Engineer  
Buildings Division  
Rajampur



DETAILED ESTIMATE FOR R.O. PLANT.

GENERAL ABSTRACT OF COST

SUB WORK NO. 1	CONSTRUCTION OF PLANT ROOM	1 No	Rs.	2.094	Million
SUB WORK NO. 2	BORE AND SUBMERSIBLE PUMPS FOR R.O PLANTS	1 No	Rs.	0.457	Million
SUB WORK NO. 3	R.O PLANT (REVERSE OSMOSIS 2000 LPH CAPACITY)	1 No	Rs.	2.050	Million
SUB WORK NO. 4	SOLAR POWER SYSTEM 7000 WATT	1 No	Rs.	<del>4.386</del>	<del>Million</del>
TOTAL.				Rs.	<del>5.936</del> Million 4.6
Add. 3% CONTINGENCY CHARGES				Rs	<del>0.178</del> Million 0.138
G.TOTAL				Rs	<del>6.114</del> Million 4.738(M)

*Project*  
Executive Engineer  
Building Division  
Rajasthan Purkh

## CONSTRUCTION OF PLANT ROOM

S.N	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
	<b>Ch.No.3 item No.21(a, ii) Page.No.30</b>				
1	Excavation in ordinary soil of foundation, building, bridges and other structure, i/c dag-belling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain and lift upto 5 feet ( By Manual)				
	Long Wall 2 x 28.25 x 2 x 2.25 = 254.25				
	Short Wall 4 x 10.75 x 2 x 2.25 = 193.50				
	4 x 32.00 x 2 x 2.25 = 576.00				
	Total = 1023.75	1023.75	%0 Cft	10,677.75	10,931
	<b>Ch.No.6 item No.3 (e) Page.No.41</b>				
2	Cement concrete 1:6:18 brick or stone ballast 1-1/2" to 2" gauge in foundation and plinth, complete in all respect				
	Long Wall 2 x 28.25 x 2 x 0.75 = 84.75				
	Short Wall 4 x 10.75 x 2 x 0.75 = 64.50				
	4 x 32.00 x 2 x 0.5 = 128.00				
	Total = 277.25	277.25	% Cft	19,583.65	54,296
	<b>Ch.No.7 item No.4 (i) Page.No.51</b>				
3	Pacca brick work 1:5 in foundation and plinth				
	1st Step				
	Long Wall 2 x 27.75 x 1.50 x 0.5 = 41.63				
	Short Wall 4 x 11.25 x 1.50 x 0.5 = 33.75				
	2nd Step				
	Long Wall 2 x 27.38 x 1.13 x 0.5 = 30.80				
	Short Wall 4 x 11.63 x 1.13 x 0.5 = 26.16				
	3rd Step				
	Long Wall 2 x 27.00 x 0.75 x 2.5 = 101.25				
	Short Wall 4 x 12.00 x 0.75 x 2.5 = 90.00				
	4 x 32.00 x 1.125 x 0.5 = 72.00				
	4 x 32.00 x 0.75 x 2.5 = 240.00				
	Total = 503.25	503.25	%Cft	29,620.30	149,064
	<b>Ch.No.6 item No.33 (b-i) Page.No.47</b>				
4	Providing and laying 1-1/2" damp proof course of cement concrete 1:2:4 (using cement, sand and shingle) with 2 coats of bitumen and one coat of Polythene sheet(500 gauge)				
	Long Wall 2 x 27.00 x 0.75 = 40.50				
	Short Wall 4 x 12.00 x 0.75 = 36.00				
	Total = 76.50				
	Deduction				
	Doors 1 x 4.0 x 0.75 = 3.00				
	1 x 4.5 x 0.75 = 3.38				
	Ver. opening 1 x 10.5 x 0.75 = 7.88				
	Total for deduction 14.25				
	Net = 62.25	62.25	%Sft	9,241.65	5,753

S.N	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
Page 2 of 8					
5	<b>Ch.No.7 item No.5 (i) Page.No.53</b> Pacca brick work in 1:6 cement sand mortar in ground floor Long Wali 2 x 27.00 x 0.75 x 10 = 405.00 Short Wali 4 x 12.00 x 0.75 x 10 = 360.00 Parapit 1 x 81.00 x 0.75 x 1.25 = 75.94 Doors Step 1 x 2.00 x 2.00 x 0.50 = 2.00 Total = 842.94 Deduction Doors 1 x 4.50 x 6.50 x 0.75 = 21.94 1 x 4.00 x 6.50 x 0.75 = 19.50 Windows 4 x 4.00 x 4.50 x 0.75 = 54.00 2 x 3.00 x 6.5 x 0.75 = 29.25 Ver. Opening 1 x 10.50 x 6.50 x 0.75 = 51.19 Lintels Doors 1 x 5.50 x 0.75 x 0.5 = 2.06 1 x 5.00 x 0.75 x 0.5 = 1.88 Windows 4 x 5.00 x 0.75 x 0.5 = 7.50 2 x 4.00 x 0.75 x 0.5 = 3.00 Verandah 1 x 13.50 x 0.75 x 0.75 = 7.59 Total for deduction = 197.91 Net = 645.03	645.03	%Cft	31,086.50	200,517
6	<b>Ch.No.3 item No.15 (ii) Page.No.29</b> Filling, watering and ramming earth under floor with new earth (excavated from outside) lead upto one chain Rooms 1 x 9.00 x 12 x 2.50 = 270.00 Rooms 1 x 11.00 x 12 x 2.50 = 330.00 Verandah 1 x 12.00 x 4.00 x 2.50 = 120.00 2 x 33.00 x 3 x 2.50 = 495.00 2 x 19.50 x 3.00 x 2.50 = 292.50 Total = 1507.50 Deduction: 2/3 of item no. 1 = 298.50 Net = 1209.00	1209.00	%0Cft	10,959.65	13,250
7	<b>Ch.No.3 item No.15 (i) Page.No.29</b> Filling, watering and ramming earth under floor with surplus earth from foundation etc. As per deduction of item no. 6				
8	<b>Ch.No.7 item No.30 Page.No.57</b> Supplying, filling, sand underfloor or plugging in wells Room 1 x 9.00 x 12 x 1 = 108.00 Room 1 x 11.00 x 12 x 1 = 132.00 Verandah 1 x 12.00 x 4.00 x 1 = 48.00 2 x 33.00 x 3 x 0.5 = 99.00 2 x 19.50 x 3.00 x 0.5 = 58.50 Total = 445.50	298.50	%0Cft	5,090.45	1,519
		445.50	%Cft	2,823.30	12,578

S.N	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
Page 3 of 8					
9	<b>Ch.No.10 item No.15 (c) Page.No.69</b> Providing Laying topping of cement concrete 1:2:4 including surface finishing and dividing in pannel 1-1/2" thick. Room 1 x 9 x 12 = 108 Room 1 x 11.00 x 12 = 132 Verandah 1 x 12.00 x 4.00 = 48 Doors 1 x 4.50 x 0.75 = 3.38 1 x 4.00 x 0.75 = 3.00 Total = 294.4 Sft.	294.38	%Sft	7,008.30	20,625
10	<b>Ch.No.10 item No.9 Page.No.68</b> Brick on edge flooring, laid in 1:6 cement mortar, over a bed of 3/4" thick cement mortar 1:6 Plinth Protection Long side 2 x 32 x 2.50 = 160 Short side 2 x 13.50 x 2.50 = 67.5 Total = 227.5 Sft.	227.50	%Sft	13,033.90	29,652
11	<b>Ch.No.6 item No.6 (3-c.i) Page.No.42</b> Providing and laying reinforced cement concrete (i/c pre-stressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, i/c forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exp a). Reinforced cement concrete in roof slab, beams, columns, lintels, girders and other structural members laid in situ or pre-cast laid in position, or pre-stressed members cast in situ, complete in all respect, Type C (nominal mix 1:2:4) Room 1 x 27.00 x 13.5 x 0.5 = 182.25 Lintels Door 1 x 5.50 x 0.75 x 0.5 = 2.06 1 x 5.00 x 0.75 x 0.5 = 1.88 Windows 4 x 5.00 x 0.75 x 0.5 = 7.50 2 x 4.00 x 0.75 x 0.5 = 3.00 Veranda 1 x 13.50 x 0.75 x 0.75 = 7.59 Opening Slab on Sullage Carrier 1 x 5.00 x 3.25 x 0.5 = 8.13 Total = 212.41	212.41	P.Cft	614.20	130,462
12	<b>Ch.No.25 item No.31 Page.No.204</b> Making and fixing steel grated doors with 1/16" thick sheeting i/c angle iron fram, 2"x2"x3/8" (50x50x10 mm) and 3/4" (20 mm) square bars 4" (100 mm) centre to centre complete with locking arrangement. Doors 1 x 4.5 x 6.5 = 29.25 1 x 4.0 x 6.5 = 26.00 Total = 55.25 Sft	55.25	P.Sft	2,374.05	131,166

S.N	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
Page 4 of 8					
13	<b>Ch.No.25 item No.41 (a-v) Page.No.206</b> Providing and fixing steel windows with openable glazed panels,using beam section for frame11/2"x1"x5/8"x1/8"(40x25x16x3mm),Z-section for leaves 3/4"x1"x3/4"x1/8"(20x25x20x3mm),T-section sashes 1"x1"x1/8"(25x25x3mm),glass panes,wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves,brass including all cost of material and labour,etc as per approved design and as directed by the Engineer-in-charge. a): without wire gauze: v): glass pane 4 x 4.0 x 4.5 = 72.00 5mm thick Total = 72.00 sft	72.00	P.Sft	922.35	66,409
14	<b>Ch.No.25 item No.58 Page.No.208</b> Providing and fixing MS flat 1/2" x 1/8" grill, i/c 3/4" x 1/8" MS flat frame, in windows of approved design, i/c painting 3 coats, complete in all respect Windows 4 x 4 x 4.5 = 72 or 2 x 3 x 6.5 = 39 = 111 Sft	111.00	P.sft	492.30	54,645
15	<b>Ch.No.13 item No.5 (c-i+ii+iii) Page.No.93</b> Painting of new surface three coats, preparing surface and painting of doors and windows etc; any type (i/c edges) (3 Coats)Double of item no. 13 = 2 (55.25 + 72) = 254.5 S.ft	254.50	%Sft	2,714.80	6,909
16	<b>Ch.No.11 item No.11(b) Page.No.76</b> Cement plaster 1/2" thick in 1:5 upto 20 ft height Room 1 x 2 (9+ 12) x 10 =420 Room 1 x 2 (11 + 12) x 10 =460 Verandah 1x2 (12 + 4) x 10 =320 Total = 1200 sft Deduction Doors 1 x 4.5 x 6.5 = 29.25 1 x 4 x 6.5 = 26.00 Ver. Opening 1 x 10.5 x 6.5 = 68.25 Total deduction = 123.5 Sft Net = 1077 Sft	1076.50	%Sft	3,092.10	33,286
17	<b>Ch.No.11 item No.25 (a-iii) Page.No.73-74</b> White washing 3 coats on new surface Room 2 (9 + 12)x 10 =420 Room 2 (11 + 12) x10 =460 Verandah 2 (12 + 4) x10 =320 Ceiling Room 1 x 9 x 12 = 108 Room 1 x 11 x 12 = 132 Verandah 1 x 12 x 4 = 48 Total = 1488 sft	1488.00	%Sft	628.30	9,349

S.N	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
Page 5 of 8					
18	<b>Ch.No.13 item No.33 (a i-ii) Page.No.97</b> Providing and applying weather shield paint of approved quality on external surface of building including preparation of surface, application of primer complete in all respect Rooms Short wall 2 x 12 x 11.25 = 270 Long wall 2 x 27 x 11.25 = 607.5 Total = 877.5 sft Deduction Door 1 x 4.5 x 6.5 = 29.25 Door 1 x 4 x 6.5 = 26.00 Windows 4 x 4 x 4.5 = 72.00 2 x 3 x 10.5 = 63.00 Total deduction = 190.3 Net = 687.3 sft a) new surface 1st coat	687.25	%Sft	5,245.30	36,048
19	<b>Ch.No.11 item No.18 a+31 Page.No.77+78</b> Cement pointing 1:2 struck joints, on wall upto 20' height, i/c extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks Rooms Short wall 2 x 12 x 11.25 = 270 Long wall 2 x 27 x 11.25 = 607.5 Total = 877.5 sft Deduction Door 1 x 4.5 x 6.5 = 29.25 Door 1 x 4 x 6.5 = 26.00 Windows 4 x 4 x 4.5 = 72.00 2 x 3 x 10.5 = 63.00 Total deduction = 190.3 Net = 687.3 sft	687.25	%Sft	4,168.65	28,649
20	<b>Ch.No.6 item No.12 b Page.No.45</b> Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastening, i/c cost of bending wire and labour charges for bending of steel reinforcement (also includes removal of rust from deformed (G-40). = 212.41 = 204.28x6.75/2.204 = 650.53 kg	650.53	% kg	31,433.55	204,485
21	<b>Ch.No.9 item No.5 Page.No.61</b> Single layer of tiles 9"x41/2"x11/2"(225x113x40mm) laid over 4"(100mm) earth and 1"(25mm)mud plaster without Bhoosa,grouted with cement sand 1:3 on top of RCC roof slab,provided with 34 lbs. per %Sft or 1.72kg/sq.m bitumen coating sand blinded Room 1 x 26.25 x 12.75 = 334.7 Sft				

S.N	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
	Verandah Total = 334.7 Sft	334.69	%Sft	11,515.10	38,540
22	<b>Ch.No.12 item No.55 Page.No.89</b> Providing and fixing G.I wire gauze 22 SWG, 12 x 12 meshes per square inch, fixed to steel window, complete with flat iron patti 1/2" x 1/8", and machine made screws Windows 4 x 4 x 4.5 = 72	72.00	P.Sft	171.35	12,337
24	<b>Ch.No.10 item No.43 b-ii Page.No.70</b> Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/dado of specified size, Color and Shade with adhesive/bond over 1/2" thick (1:2) cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge. b) Half body Tile. ii) 300mm x 300 mm 1 x 12 x 4 = 48 Sft 1 x 20 x 6 = 120 Sft	168.00	P.Sft	335.10	56,297
25	<b>Ch.No.20 item No.6-a Page.No.135</b> Constructing Punjab Standard drain of cement concrete of (1:2.5:5) with cement concrete bedding ratio (1:6:12) complete laid to line grades, Slopes and shapes rendering exposed surface of concrete with 1:1 cement sand mortar 1/4"(6mm) thick as per engineer's drawing (brick ballast, pucca brick work, pucca brick on edge) Type 1 = 15 Rft.	15.00	P.Rft	600.00	9,000
27	<b>Ch.No.25 item No.36 Page.No.157</b> Providing and fixing collapsible gate made of 2"x2"x1/2"(50x50x6mm) tee iron at top and bottom, channel iron verticals 3/4"x1/4"x1/8"x920x6x3mm at 3"(75mm) to 5"(125mm) centre to centre (approx.) and flat iron crosses 3"x3/16"(75x5mm), and best quality rollers and bottom of 3"(75mm) diameter including holdfasts handles 12"(300mm) long of 3/4"x1/4"x1/4"x1/8"(20x6x6x3mm) channel iron, locking arrangement inside and outside, painting 3 coats of black Japan enameled complete in working order 1 x 10.5 x 6.5 = 68.25 Sft	68.00	P.Sft	1,597.85	108,654
28	<b>Ch.No.10 item No.41-b Page.No.72</b> Providing and laying Tuffpavers, having 7000PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion / c grouting with sand in joints i/c finishing to require slope. complete in all respect (50% Grey / 50% Coloured) ( b) 60-mm thick etc complete in all respect to the entire satisfaction of Engineer Incharge of the work. 1 x 50 x 30 = 1500 Sft	1500.00	P.Sft	157.40	236,100
29	<b>PUBLIC HEALTH ITEMS</b> <b>Ch.No.3 item No.44 Page.No.33</b> Excavation of trenches for water supply pipe line in all kinds of soil except cutting rock for water supply pipe lines upto 5 ft depth from ground level including trimming dressing the sides, levelling the beds of trenches to correct grade and cutting pits for joints etc. complete in all respects. 200 x 2 x 3 = 1200 Cft.	1200	% Cft	7,622.75	9,147

S.N	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
Page 7 of 8					
30	<b>Ch.No.23 item No.27-d Page.No.136</b> Providing, laying, cutting, jointing, testing PVC pipeline of B.S.S. with 'B' Class working pressure pipe in trenches, complete in all respect. (a) 6" i/d (150 mm) = 200 Rft	200	P.Rft	871.55	174,310
31	<b>Ch.No.3 item No.13-a. Page.No.29</b> Rehandling of earthwork: Lead upto a single throw of Kass, phaoorah or shovel 1200 x 0.80	960.00	%0cft	2,539.70	2,438
32	<b>Ch.No.19 item No.34-ii Page.No.129</b> P/Fitting "P" trap 10 cm (4") glazed with cover complete. 1 No	1	Each	283.10	283
35	Providing & Installing super tuff (Dia 67", Hight 73") vertical poly ethylene (food graded quality) OHR 500 Gallon capacity with float valve, union, socket, tee, elbow, non return valve etc Complete in all respect.	1	Each	40,000.00	40,000
36	<b>Ch.No.23 item No.22-b Page.No.134</b> Providing, laying, cutting, jointing, testing and disinfecting G.I. pipeline in trenches, with socket joints, using G.I pipes of B.S.S. 1387-1967 complete in all respects, with specials and valves. 3/4" i/d 2.35mm thick	50.00	Rft	216.00	10,800
<b>ELECTRIC ITEMS</b>					
1	<b>Ch.No.24 item No.3-ii-iii Page.No.167</b> Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, hooks, cutting jharries and repairing surface etc. complete with all specials. i) 20 mm i/d = 325 Rft ii) 25 mm i/d = 325 Rft	325.00 325.00	P.Rft P.Rft	81.70 94.60	26,553 30,745
2	<b>Ch.No.24 item No.10-i-iii Page.No.168</b> Supply and erection of single core PVC insulated copper conductor cables, in prelaidd PVC pipe/M.S conduit/G.I pipe / wooden strip batten casing and capping/G.I. wire/trenches (rate for cable only) i) 3/0.74 mm = (3/0.029) = 700 Rft (3/0.029") ii) 7/0.74 mm = (7/0.029) = 525 Rft (7/0.029")	700.00 525.00	P.Rft P.Rft	25.70 40.75	17,990 21,394
3	<b>Ch.No.24 item No.14-i-ii Page.No.171</b> Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep kwith 4.75 mm thick (3/16") backlite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. i) 10 x 10 cm (4" x 4") ii) 17.5 x 10 cm (7" x 4")	5.00 2.00	Each Each	270.50 372.25	1,353 745



S.N	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
Page 8 of 8					
	<b>Ch.No.24 item No.30 Page.No.174</b>				
4	Supply and erection of ceiling rose, bakelite.	4.00	Each	66.30	265
5	<b>Ch.No.24 item No.31-b Page.No.174</b> Supply and erection of switches 5 Amp. i) Plano type	12.00	Each	72.00	864
6	<b>Ch.No.24 item No.31-b Page.No.174</b> Supply and erection of 3 pin, switches and combined, recessed type Supply and erection of 3 pin, switches and combined, recessed type i) 5 Amp	3.00	Each	125.00	375
7	<b>Ch.No.24 item No.39-i Page.No.174</b> Supply and erection of button holder i) bakelite large size	4.00	Each	53.75	215
8	Water tight wall luminaire with cleared lens suitable for 1 x 18 W(Energy saver), die cast aluminium and stainless steel body.	4.00	Each	500.00	2,000
9	Supplying of 56" sweep ceiling fans (Pak, G.F.C, Millat or equal quality)	2	Each	8000	16,000
10	Supplying of 12" metal body exhaust fans (Pak, G.F.C, Millat or equal quality)	1.00	Each	4,500.00	4,500
11	Distribution board complete with all component MCBs etc.as per site requirement as per drawing.	1.00	Each	25000	25,000
12	<b>Ch.No.24 item No.70 Page.No.179</b> Earthing of iron clad/aluminium switches etc with G.I. wire No.8 SWG in G.I. pipe 15mm(1/2")dia, recessed or on surface of wall and floor, complete with 1.5 metre long G.I. pipe, 50mm(2") dia reducing socket 4 to 5 metre below ground level, and 2 metre away from building Plinth	1.00	Each	9,592.45	9,592
13	<b>Ch.No.24 item No.13-a(vi) Page.No.170</b> Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):- PVC insulated, PVC sheathed twin core, 250/440 volts. 7/1.63 mm (7/0.064")	125	Rft	306.30	38,288
14	<b>Ch.No.24 item No.49 Page.No.151</b> Supply and erection of 3/8"(10mm) dia M.S bar fan hook, placed at the time of casting of slab	2	Each	67.8	136
<b>Total=</b>					<b>2,093,515</b>
Cost for 1 No. Plant Room					Rs. 2093515/-
Cost for. 1 No.s Plant Room					Rs. 2093515/-
Say Rs. In Million					Rs. 2.094 Million

( CARRIED OVER TO GENERAL ABSTRACT OF COST)

*Amjad*  
Executive Engineer  
Building Division  
Rajasthan Power Co.

**SUB WORK NO.2****TUBE WELL BORING & SUBMERSIBLE PUMPING UNIT FOR RO PLANTS**

Sr. #	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
	<b>Ch.No.23 item No.1-e Page.No.144</b>				
1	Boring of Tubewell in all types of soil except shingle & rock from ground level to 100 ft depth, including sinking & with drawing of casing pipe complete. 8" i/d. Length = 100 Rft	100	Rft	1157.50	115,750 /-
	<b>Ch.No.23 item No.13-iv (e) Page.No.147</b>				
4	P/Installing PVC bail/ end plug in tubewell bore hole. BSS class D 6" i/d.	1	Each	1,851.45	1,851 /-
	<b>Ch.No.23 item No.12-g Page.No.146</b>				
5	P/Installaof PVC strainer BSS class D in tubewell bore hole i/c sockets solvents etc. complete. 6"i/d Length = 20 Rft	20	Rft	822.15	16,443 /-
	<b>Ch.No.23 item No.17-G Page.No.148</b>				
6	P/Installing of PVC blind Pipe BSS class D in tubewell borehole i/c sockets and solvents and jionting with strainer etc. complete. 6" i/d Length = 85 Rft	85	Rft	1683.10	143,064 /-
	<b>Ch.No.23 item No.18 Page.No.148</b>				
7	Shrouding with graded pea gravel 3/8" to 1/8" (10 to 3 mm), around tubewell in bore hole. 3.14 x 0.67 x 0.67 x 0.25 x 120 42.286 D/d 3.14 x 0.58 x 0.58 x 0.25 x 120 31.689 10.598	10.60	P.Cft	145.30	1,540 /-

Sr. #	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
9	Providing, installing and testing at site of work Submersible Pumping Unit with AC Electric Motor manufactured by Approved manufacture of PHED i/c required length and size of copper conductor cable and 1/2" nylon rope, riser pipe and required capacity of DC Inverter with following specification. 1- Discharge = 0.05 Cusec 2- Head = 120 ft 3- BHP = 02 HP Complete in all respect upto commissioning	1	Set	160,000	160,000 /-
10	P/Installing of UPVC Pipe of BSS class D from tubewell bore hole to raw water Tank and raw water tank to plant and plant to distribution taps i/c sockets, elbows, tees, solvents, jointing material etc. complete. 1"/d (N.S) Length = 120 Rft	120	Rft	150.00	18,000 /-
				Total	456,648 /-
				Say	456,600 /-
<b>Cost for 1 No. Bore Hole</b>				<b>Rs. 456600 /-</b>	
Cost for 1 No. Bore Hole				<b>Rs. 456600 /-</b>	
<b>Say Rs. In Million</b>				<b>Rs. 0.457 Million</b>	

(Carried over to General Abstract of Cost)

*Rajendra*  
Executive Engineer  
Building Division  
Rajapur

**SUB WORK NO. 3**

**INSTALLATION OF R.O (REVERSE OSMOSIS ) PLANT**

Sr. #	Description of Items	Qty.	Unit	Rate (Rs.)	Amount (Rs.)
1	Supplying,installing,testing and commissioning Reverse Osmosis (RO) Plant for removal of turbidity, TDS upto 5000 ppm and bacteriological removal, having - 2000 Litre per hour capacity including carriage, loading, unloading charges, inclusive of all Taxes, at the site of work, conforming to standard specifications of water filtration plants, outcome meeting with WHO standards. The details of Specification along with equipment and accessories properly mounted on the Frame/Skid. i/c GST & other Taxes.				
	( Detailed Specification and Qoutations are attached)	1.00 No	Each	2050000	2050000
Or				Rs. 2.050 Million	

(Carried over to General Abstract of Cost)

*Amal*  
Executive Engineer  
Rajasthan Water Development Corporation  
Jaipur

## RO PLANT (REVERSE OSMOSIS)

### 1 **Treated Water Capacity 500 Gallons Per Hour / 1000 Litre Per Hour.**

Type "RO" Plants for TDS and Bacteriological Removal  
Supplying ,installing,testing and commissioning Reverse Osmosis (RO) Plant for Turbidity, TDS (upto 5000 ppm) and Bacteriological Removal, of 2000 Litre per hour capacity including Carriage loading unloading charges, inclusive of all Taxes and Transportation charges to the site of work, conforming to standard specifications of water filtration plants approved by HUD & PHED Govt. of Punjab. The Detailed of Specification along with following equipment and accessories properly mounted in the Frame/Skid. are given as below.

1	Ultra filtration Plant.	USA / ITALY/ TAIWAN
1.1	Filtration units	1 Unit
1.2	Filter Vessel	1 Unit
	Material	FRP
	Size	4" x 40" +
	Thickness	5-7 mm
1.3	Type of Membrane (No of bores)	Multiple bore
1.4	Maximum Flow Rate	500 GPH/ 1000 Ltr Hour
1.4	Membrane Material	PVC
	Make	Applied Membranes/Equivalent/USA/ATS ASPRIN
	Origin	USA / ITALY /TAIWAN
1.5	Membrane Working Pressure	40-150 PSI Max
1.6	Membrane Life	5 Years
1.7	Pore Size of Membrane	0.01 micron
1.8	Bacterial Removal Efficiency of the Ultra filtration	70.90%
1.9	Viruses Removal Efficiency of the Ultra filtration	70.90%
1.10	Cleaning Process of Ultra filtration Plant	
	Cleaning frequency	Manual
	Cleaning duration	Manual
1.11	Working Temperature	77 °F to 140 °F
	Max 140 °F	
1.12	Working Pressure	60 PSI
1.13	High Pressure Pump Coupled with Motor	
2	Raw Water Feed Pump	
2.1	Pump Manufacturer	ITT/KSB/Grundfoss/Seimens, Aqua Treatment system USA/Haulin CNP
2.2	Pump Type	horizontal / Multi stage

2.3	Impeller material	Stainless Steel/ Techno polymer/Equivalent
2.4	Housing material	AISI 304/AISI 316/Equivalent
2.5	Discharge	2 m <sup>3</sup> /hr
2.6	Head	122 ft
2.7	Pump efficiency	50%
2.8	Motor	Built in with pump
2.9	Manufacturer	ITT/KSB/Grundfoss/Seimens, Aqua Treatment system USA/Haulin CNP
2.10	Power rating, kw	0.75 KW to 0.90 KW
2.11	Voltage rating	1x220V/50hz/2900RPM
2.12	Starting current	DOL 3 to 8 Times of Normal Current
2.13	Normal current	5.03
2.14	NEMA Insulation Class	F
2.15	Temperature class	Amb. +80 °C
3	Prefiltration:	
3.1	Manufacturer	Pentair /wave cyber / USA
3.2	Filter Vessel	Pressure Vessel
	Material	FRP
	Size	16" x 65"
	Thickness	5 mm
3.3	Filter media, Material	S 22-D Media
3.4	Pore size	0.15 of grain size
3.5	Size of Media	0.45 to 1mm
3.6	Particle removal range	Below 10 micron
3.7	Cleaning Process	Auto backwash
3.8	Working Temperature	1 to 50 °C
3.9	Working Pressure	2 bar
4	Jumbo filter 20" (5 Micron Cartridge)	2 No.
5	Activated Carbon Filter:	
5.1	Manufacturer	Pentair Water USA
5.2	Filter Vessel	Pressure Vessel
	Material	FRP
	Size	16" x 65"
	Thickness	5 mm
5.3	Base Material	Coconut Shell
5.4	Surface Area	800 m <sup>2</sup> /gm
5.5	Bulk Density	5 gm / cm <sup>3</sup>

5.6	Hardness No.	80 (2)
5.7	Ash Contents	5%
6	Jumbo filter 20 " (1 Micron Cartridge)	2 No.
7	Hardness Removal:	
7.1	Manufactures Type Designation	Aqua Treatment System, USA
7.2	Manufacturer	Aqua Treatment System/Pentair
7.3	Ion-exchanger Media	Sulphmated polyester bea
7.4	Regeneration Media	NACL
7.5	Frequency of Regeneration	Depends on feed water
7.6	Feed Water Requirement (at Prefiltration)	4000 Lit/hr
8	Reverse Osmosis:	
8.1	Manufactures Type Designation.	USA/ ITALY
8.2	Permeate Recovery	60.00%
8.3	Design Temperature	25 C
8.4	Salt Rejection Efficiency	90% to 98%
8.5	Life of R.O Membrane	2-3 Years
8.6	Membrane Dia	8" x 40"
8.7	Blending Requirement	Depends on site requirement)
8.8	Dia of UPVC Pipe / Strainer in the Injection v	Feed 2 Waste Product
8.9	Temperature Control, for High Ambient and Container Temperature.	Max 105 °F
8.10	Pump coupled with motor, (provide data as given	ITT/Goulds/Equivalent /Grounfos/Stairs/CNP
8.11	Under other relevant item)	Multistage centrifugal / pump with as per design
8.12	CIP System	Auto backwash system to clean the R.Omembranes before switch off the R.O. with permeates water to avoid the purging of salts on membranes
9	Feed Water Tank:	
9.1	Manufactures Type Designation/Origin	Pakistan
9.2	Manufacturer	Polycon Supertuff / Mastertuff other
9.3	Tank Capacity (Dimensions)	250 Gallons
9.4	Material Class	Food Grade
9.5	Tank Material	HDPE
9.6	Thickness of Material	Medium 3 to 4 mm
9.7	Working Temperature	-20 °C to 60 °C
9.8	Working Pressure	Atmospheric
	Ancillary Items:	
10	Gages Flow Meter, TDS Meter Etc.	Italy/Taiwan /USA (checking of R.O. membranes Pressure and flow &TDS)

11	Ultra violet lamp. (Water Sterilization / Disinfection Unit)	2 No. Italy/Taiwan /USA (The UV Sterilizer operates using a low pressure mercury vapor to produce the UV. There are five major groups of micro organisms that are destroyed with Ultra Violet Sterilizer; viruses, bacteria, fungi, algae and protozoa.)
12	Arsenic removal	Italy/Australia/USA. (Remove of iron & manganese arsenic.
13	RO Control Panel	Assembled Box
	(Provide Make, Type and rating of the following)	
	Cable Size	4 -6mm
	Voltmeter	on board
	Ammeter	on board
	Indication Lamp	on board
	Push Button	on board
	M C B	on board
	Bus Bar	on board
	Contacton	on board
14	Monitoring System	m2m CS WTP
	Antiscalant system	Digital control valve
	Backwash of Prefiltration	On board
	Backwash of Ultrafiltration	On board
	Inlet (feed water) Flow – Liter/hour	4000 lit/hr
	Storage Tank Level – Meter	Electrical Float switch
15	Pressure gauge	
	Manufactures Type Designation/Origin	Bourdon Tube type SS 316 L
	(EU/China)	
	Manufacturer	WIKA / Equivalent
	Pressure Range	125 PSI
	Gauge Dia	4"
16	Pipe work	
	Manufactures Type Designation/Origin	Pakistan/ Taiwan/UAE
	Manufacturer	New Tech / Dadex/ Beta
	Pipe Material	PP R / UPVC
	Pipe dia	40mm (Min)
	Working Pressure	2 – 6 bar
	Working Temperature	0-60 °C
17	Hyder (Stee Pipe)	Stainless Steel 304 SS, 3" Dia (as per site required)
18	Providing and fixing brass stop cock/bib cock 1/2" dia.	3 No.
	01 to 18 Complete Plant :- 1 Set @ F	2050000
		Rs. 2050000/-
		Total Rs. 2050000/-

( Carried over to General Abstract of Cost )



**SUB WORK NO. 4****SOLAR SYSTEM FOR R.O PLANT**

Sr. No	DESCRIPTION OF ITEMS	QTY	UNIT	RATE	AMOUNT
				In Rupees)	
1	Supply of Solar Pannel at site of work 8000 Watt	8,000	P.Watt	95.00	760,000
2	Supply of mounting stands / Frame (Size 1-1/4"x1-1/4") i/c welding labour and carriage charges on roof slab for required size pannel. 8000 Watt	8,000	P.Watt	40.00	320,000
3	Supply of inverter for 10000 watt 1 Job	1	P.Job	155000	155,000
4	Installation and Transportation charges from factory to site of work i/c cable wiring for Solar to R.O Plant required length and size complete in all respect. 1 Job	1	Job	39000	39,000
5	S/F UPS with battery for internal and outside connection lighting system complete. 1 -No	1	No	62000	62,000
				Rs:-	1,336,000
<b>Cost for 1 No. Solar System for 1 Plant</b>					<b>1,336,000</b>
<b>Cost for</b>				<b>1 No. Solar System for Plant</b>	<b>1336000</b>
				<b>Say Rs. In Million</b>	<b>1.336</b>

(Carried over to General Abstract of Cost)

*Amir*  
CHIEF ENGINEER  
S. G. Khan Port

**PROVIDING AND FIXING LEAD SHEET 1/8" THICK ON WALLS OF X-RAY ROOMS  
ETC COMPLETE IN ALL RESPECT AS APPROVED BY THE ENGINEER INCHARGE**

		Unit	P.Sft
1	Cost of lead sheet 1/8" thick	Take size for analysis 8 x 4	32 Sft
	8 x 4	- =	32 Sft
	@	975	P.Sft 31200
2	Carriage from Lahore to site of work	Lump Sum	550
3	Labour for fixing	Lump Sum	250
			Total 32000
			6400
			Total 38400
		Rate Per Sft 38400 / 32 =	1200
			Say 1200

**CERTIFICATE**

i) certified that input rate of material and labour for item at Sr. No Nil Are as per input rates displayed on Website of Finance Department for the 2nd Bi-Annual 2022.

ii) Certified that rates for items at serial No 1,2,3 Are not avilable on the Website of Finance Department for the 2nd Bi-Annual 2022 such the rate of Rs. 1200/- has been applied after ascetaining it from the market.

SUB ENGINEER

SUB DIVISIONAL OFFICER  
BUILDINGS SUB DIVISION  
JAMPUR

EXECUTIVE ENGINEER  
BUILDINGS DIVISION  
RAJANPUR

# RATE ANALYSIS FOR

Making And Fixing Pvc Doors 1-1/2" Thick Consisting Of Pvc Frame And Pvc Leaves I/C Hinges Complete In All Respects As Approved Design /Color By The Engineer Incharge

Based on 2nd Bi-annual 2022				
Sr. No:	DESCRIPTION OF ITEMS	QUANTITY	UNIT	RATE
<b>A) MATERIAL.</b>				
1	Provision of PVC Frame and Leaf i/c fitting screws (Leaf up-to 7' height) i/c carriage of material	17.5 Sft		
		<b>17.5 Sft</b>	P-Sft	650.00
2	Providing of full hing of door leave	6.875 Rft		
		<b>6.875 Rft</b>	P-Rft	50.00
3	Cost of Screwes / Holdfast	1 Job		
		<b>1 Job</b>	P.Job	250.00
<b>B) LABOUR</b>				
	<b>TOTAL - A</b>			<b>11968.75</b>
i) Carpenter	0.25 No.	P-Day		1300
ii) Helper	0.5 No.	P-Day		965
	10% SUNDRIES			80.75
<b>TOTAL - B</b>				
				<b>888.25</b>
<b>G- TOTAL (A+B)</b>				
				<b>12857.00</b>
ADD 20% CONTRACOR'S PROFIT + OVER HEAD CHRAGES				
				2571.4
<b>OVER ALL TOTAL</b>				
				<b>15428.40</b>
RATE PER Sft = 881.62				
Say Rs: = 880/- P. Sft				

Sub Engineer

Sub Divisional Officer  
Buildings Sub Division  
Jampur

Executive Engineer  
Buildings Division  
Rajampur

### ANALYSIS OF RATE FOR THE ITEM

Supply & Installation of Phillips, LED Panel Light 24"x24" (RC 091 LED 38S / 865 40-W ) in Faste Ceilign of approved manufacturer i/c cost of all labour & material complete, as approved by the Engineer Incharge.

Detail of Cost=1-No.

Unit = Each

2nd Bi-annual 2022

A	Material					
1	Phillips, LED Panel Light 24"x24" (RC 091 LED 38S / 865 40-W )	1	No	Each	11000	11000
					Total "A"	11000

### B Labour

1	Labour for fixing / installation.	1	No	Each	1350	1350
					Total "B"	1350
					Total Cost ="A"+"B" =	12350
	Add 20% Contractor's Profit & Overhead charges on Rs.	12350	/-			2470
					Grand Total: =	14820

Unit Rate P Sft = 14820 / 1 14820 Each  
SAY 14800 Each

- 1 Certified that input rates of material and labour for the item at serial No. Nil are as per input rates displayed on web site of Finance Department for **2nd BI-Annual 2022**
- 2 Certified that rates for items at serial No. except all above are not available on the web site of Finance Department for **2nd BI-Annual 2022** and based on prevailing Market Rates.

Sub Engineer

Sub Divisional Officer  
Buildings Sub Division  
Jampur

Executive Engineer  
Buildings Division  
Rajampur

# **RATE ANALYSIS FOR**

Providing & Laying Anti Microbial /Anti-Static Self Leveling Pvc Merp Conductive Epoxy Flooring / Dado (Imported) To Avoid Eriction With All Chemical Composition Labour And Carriage Charges Etc As Approved By The Engineer Incharge

(10x10=100-Sft) Take For Analysis Propose

2nd Bi-Annual 2022

## **A. MATERIAL**

- 1 Anti-static epoxy self leveling floor / dado PVC MFRP conductive epoxy flooring (imported) to avoid friction with all chemical polish etc

$$\begin{array}{rcl}
 1 \times 10 \times 10 & = & 100 \text{ Sft} \\
 \text{Add 5\% wastage / over lapping} & = & 5 \text{ Sft} \\
 \text{Total} & = & 105 \text{ Sft}
 \end{array}$$

@ 400 /- P.Sft Rs: 42000/-

## **2 Fixing Charges**

$$\begin{array}{rcl}
 \text{Total} & 105 \text{ Sft} & \\
 & @ & 40 \text{ /- P.Sft}
 \end{array}$$

Rs: 4200/-

**Total Rs: 46200/-**

Add 20% Contractor's Profit and OHC

**9240/-**

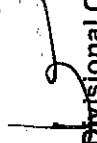
**Total Rs: 55440/-**

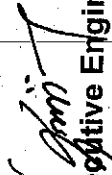
$$\text{Rate P.Sft} = 50040 / 100 = 554/-$$

**Say Rs: 550/- P.Sft**

- 1 Certified that input rates of material and labour for the items are as per input rates displayed on web site of Finance Department 2nd Bi-Annual 2022

  
Sub Engineer

  
Sub Divisional Officer  
Buildings Sub Division  
Jampur

  
Executive Engineer  
Buildings Division  
Rajampur





## 8. ANNUAL OPERATING COST (POST COMPLETION)

**Financial Components:** Capital  
**Cost Center:**OTHERS- (OTHERS)  
**Fund Center (Controlling):**LE4203

**Grant Number:**Government Buildings - (PC12042)  
**LO NO:**LO22010063  
**A/C To be Credited:**Account-I

PKR Million

Sr #	Object Code	2025-2026		2026-2027		2027-2028		2028-2029		2029-2030	
		Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
1	A05270-To Others	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	A12403-Other Buildings	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total</b>		<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**Financial Components:** Capital  
**Cost Center:**OTHERS- (OTHERS)  
**Fund Center (Controlling):**LE4203

**Grant Number:**Government Buildings - (PC12042)  
**LO NO:**LO22010063  
**A/C To be Credited:**Account-I

PKR Million

Sr #	Object Code	2025-2026		2026-2027		2027-2028		2028-2029		2029-2030	
		Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign	Local	Foreign
1	A05270-To Others	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	A12403-Other Buildings	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total</b>		<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>



**8. Annual Operating and Maintenance Cost after Completion of the Project**

The Annual operating and maintenance cost after completion of the project will be borne by the concerned District Health Authority (DHA) as well as Primary and secondary healthcare Department, Lahore.

## **9. DEMAND AND SUPPLY ANALYSIS**

Semi modern health facilities and scientific diagnostics are presently available in this Hospital. This initiative of revamping Hospital will cover all departments and components of healthcare including Medical, Surgical, psychiatric, Cardiac, ENT, Ophthalmic and Pediatrician components. Moreover, women health components i.e. Gynecology and obstetric will also be emphasized upon. In emergency, calamities and natural disasters, valuable lives will be saved through revamping of Emergency Units.

## **10. FINANCIAL PLAN AND MODE OF FINANCING**

### **10.1 FINANCIAL PLAN EQUITY INFORMATION**

### **10.2 FINANCIAL PLAN DEBT INFORMATION**

undefined

### **10.3 FINANCIAL PLAN GRANT INFORMATION**

attached

## 8. Financial Plan and Mode of Financing

The project will be executed / financed through Annual Development Program under the sector Primary and Secondary Healthcare Department, the Government of Punjab. Year wise financial utilization is as under:

### **Revenue Side**

(Rs.in Million)

Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Funds Released	55.000	23.952	1.915	1.998	4.212	7.423	94.500
Utilization	26.326	22.752	1.861	1.744	4.145	0.876	57.704

### **Capital Side:**

Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Funds Released	0	0	0	0	0	10.000	10.000
Utilization	0	0	0	0	0	0	0

**Balance funds may be provided for completion of the project in subsequent years through ADP**

## **10.4 WEIGHT COST OF CAPITAL INFORMATION**

undefined

## **11. PROJECT BENEFITS AND ANALYSIS**

### **11.1 PROJECT BENEFIT ANALYSIS INFORMATION**

#### **Social Benefits with Indicators**

Social economic burden will be decreased due to availability of better medical services in the district. Time and money of community will be saved which were expended in other cities like Lahore Islamabad etc. on treatment of patients and for boarding and logging of attendants. The social status of community will rise.

#### **11.3.1 Social Impact:**

A number of patients lose their lives or suffer serious disabilities for want of timely access to the health facilities. The project will ensure that no one is left to reach the health facilities. The most important beneficiaries will be mothers having complicated delivery conditions. The number of patients transferred to the health facilities for treatment and lifesaving will serve as indicators for performance evaluation. In long term the project will help in improving socio-economic indicators of IMR and MMR.

#### **Employment Generation (Director and Indirect)**

Revamping of this Hospital will lead to generation of employment for highly skilled /professional staff and unskilled staff leading to reduction of unemployment. Huge employments opportunity will be created from the establishment of the project. The Medical doctors and paramedics who are trained in this discipline or intended to specialize in this field can make maximum use of training. A large number of gazette and non-gazette posts will be available for employment directly or indirectly.

### **11.2 ENVIRONMENTAL IMPACT ANALYSIS**

It will have no hazardous effect on the environment. On the other hand, addition of horticulture and landscaping will provide healthy environment to the general public. All the more, the program is environment friendly having no adverse environmental effects. Simultaneously, this shall further improve environment by creating sense of responsibility among employed and beneficiaries of the service.

### **11.3 PACT ANALYSIS**

undefined

### **11.4 ECONOMIC ANALYSIS**

Delay in the implementation of the project will lead to increase in cost and increase financial burden on the Government and general population of Punjab. Since the project is one of the major needs and a long awaited desire of the community, therefore, Government of the Punjab contemplated plan for early execution of Revamping of Emergency Units. The delay will not only deprive the patients of the state of the art facility but also distort the public image of the Government.

## 11.5 FINANCIAL ANALYSIS

### Financial Benefits & Analysis

Tremendous public benefits will be accrued from revamping of Emergency Units:

The Targets of Sustainable Development Goals (SDGs) will be achieved

The Human Development Index of Pakistan (HDI) will improve

Infant Mortality Rate will decrease

Mother Mortality rate will be decreased

The international commitments of Pakistan will be accomplished

Health standard of public will

Better Health Facilities to mother and

Prompt and scientific facility for operation

Rehabilitation of disables and injured

Blindness in this area will be decreased and controlled

Better social and mental health to addict

Provision of better health facilities at doorsteps

Awareness and control for communicable

Survival of heart failure

Social indicators of Pakistan will improve

This will decrease load of patients on teaching hospitals and specialized institutions by promoting physical and mental health. By adopting preventive and Hygienic principles, the number of patients and diseases will decrease. Resultantly budget load of Government for treatment will decrease and saving will be utilized for development programs.

#### 11.1.1 Financial Impact:

In the beginning, It is extremely difficult to put a money value on each life saved by taking/shifting a critically ill patient to the appropriate health facility for treatment. However, the exact amount spent shall be calculated against each patient shifted by analyzing data collected during operations.

#### 11.2 Revenue Generation

Revenue will be generated from:

Indoor fee

Laboratory fees

Diagnostic facility fees

Dental fee

ECG fee

Private room charges

Ambulance charges

From other fees prescribed by Government

## **12. IMPLEMENTATION SCHEDULE**

### **12.1 IMPLEMENTATION SCHEDULE/GANTT CHART**

Original Gestation period (From September, 2017 to June, 2019)

Extension in Gestation period for one year with no change in cost & Scope till June 2020.

1st Revised gestation period till June, 2021

2nd Revised gestation period till June, 2023.

3rd Revised gestation period till June, 2025

### **12.2 RESULT BASED MONITORING (RBM) INDICATORS**

undefined

### **12.3 IMPLEMENTATION PLAN**

undefined

### **12.4 M&E PLAN**

The operation team will monitor the progress of the project and will hold regular weekly meeting to review the progress under the supervision of Project Director.

### **12.5 RISK MITIGATION PLAN**

attached

## RISK REGISTER

### Programme for Revamping of all THQ Hospitals in Punjab

RISK DATA				Pre-Mitigation / Current Qualitative Assessment			MITIGATION
Risk Item No	Risk Description/Event	Cause	Effect / Consequences	Likelihood (1 to 3)	Impact (1 to 3)	Risk Score (1 to 9)	Mitigation / Actions
1	Due date for the completion of some hospital sites may be extended due to increase in scope from the Client	Direct instructions from the Medical Superintendents / Hospital Administration to revamp the remaining areas	Significant scope increase requested by the Hospital administration will result in: 1. Project delays 2. Contractor claims 3. Increase in project cost along with variations	3	3	9	Hospital administration is requested to finalize the scope during joint field visits of C&W and PMU
2	Various unexpected structural issues are being encountered	Unforeseen structural issues are expected to face during execution in hospital buildings approaching end of life	1. Stoppage of work 2. Performance of the Contractor has affected 3. Delays in the project	3	3	9	Various items which are unforeseen and expected to be used during execution may be taken in estimates so that those can be executed to address these issues
3	Change in management of the Client	Management change	Re-briefing is to be carried out	2	2	4	Acceleration of understanding for smooth and expeditious transition, without affecting the project
4	Financial Issues	Funds for these schemes should be provided as per the targets	1) Delay in tendering 2) Effect on quality as the Consultant supervision will not take place 3) Inconvenience to the patients	3	3	9	Approval of PCIs and early release of funds is requested
5	Nationwide spread of pandemic i.e. COVID-19 in 2nd and 3rd quarter of this year	Work delays during nationwide lockdown.	1) Delays in completion of works 2) Claim requests received by Contractor and Consultant	3	3	9	Contractor will be asked to depute fully vaccinated labor

## 12.6 PROCUREMENT PLAN

undefined

## 13. MANAGEMENT STRUCTURE AND MANPOWER REQUIREMENTS

The Organogram of New Management Structure is available in PC-I

## 14. ADDITIONAL PROJECTS / DECISIONS REQUIRED

NA

## 15. CERTIFICATE

**Focal Person Name:**Mr. KHIZAR HAYAT

**Designation:**Project Director, PMU P&SHD

**Email:**

**Tel. No.:**

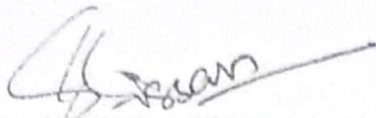
**Fax No:**

**Address:**31/E1, Shahrah-e-imam Hussain? Road? Block E 1 Gulberg III, Lahore, Punjab



15. It is certified that the project titled "Revamping of THQ Hospital Jampur (3<sup>rd</sup> Revised)" has been prepared on the basis of instruction provided by the Planning Commission for the preparation of PC-I for Social Sector projects.

Prepared By:



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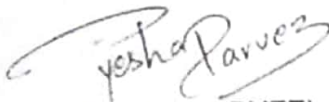


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