

THESIS REPORT ON

“AYURVEDIC MEDICAL COLLEGE”

VARANASI, INDIA

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR

THE DEGREE OF:

BACHELOR OF ARCHITECTURE BY

GAURAV MISHRA

(1170101012)

Under the guidance of AR. SANGEETA SHARMA

SESSION

2021-22

TO THE

SCHOOL OF ARCHITECTURE AND PLANNING

BABU BANARASI DAS UNIVERSITY

LUCKNOW.

SCHOOL OF ARCHITECTURE AND PLANNING
BABU BANARASI DAS UNIVERSITY, LUCKNOW (U.P.).

CERTIFICATE

I hereby recommend that the thesis entitled “**AYURVEDIC MEDICAL COLLEGE, VARANASI** ” under the supervision, is the bonafide work of the students and can be accepted as partial fulfillment of the requirement for the degree of Bachelor’s degree in architecture, school of Architecture and Planning, BBDU, Lucknow.

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Recommendation

Accepted

Not Accepted

External Examiner

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AYURVEDA MEDICAL COLLEGE



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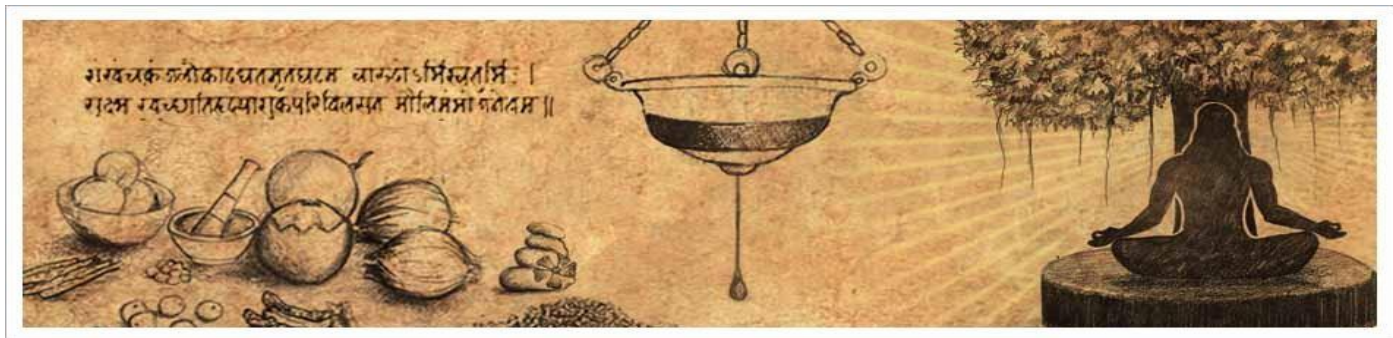
Thanks to all my juniors specially **KARTIKEY, ANVIT**, for their help in the thesis.

At last but not the least, I have no words to express my gratitude for the love and affection of my parents who gave me support at every step of my life. So, this thesis is dedicated to them.

-GAURAV MISHRA

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“Ayurveda, which means the Science of life is erroneously understood and propagated by some of the scholars as just one of the traditional systems of medicine. It encompasses the entire gamut of human life aiming on projection of total personality, mental, physical and intellectual. Ayurveda’s concept of diseases and treatments are different from other systems of medicine and with its wide scope embracing preventive, curative and positive aspects. Ayurveda belongs to a class by itself, unique and distinct.”

PHYSICAL MANIFESTATION

The Body Matrix

Life in Ayurveda is conceived as the union of body, senses, mind and soul. The living man is a conglomeration of three humours (Vata, Pitta & Kapha), seven basic tissues (Rasa, Rakta, Mansa, Meda, Asthi, Majja & Shukra) and the waste products of the body such as faeces, urine and sweat. Thus the total body matrix comprises of the humours, the tissues and the waste products of the body. Ingestion, digestion, absorption, assimilation and metabolism of food have an interplay in health and disease which are significantly affected by psychological mechanisms as well as by bio- fire (Agni).

Panchamahabhutas

According to Ayurveda all objects in the universe including human body are composed of five basic elements (Panchamahabhutas) namely, earth, water, fire, air and vacuum (ether). There is a balanced condensation of these elements in different proportions to suit the needs and requirements of different structures and functions of the body matrix and its parts. The food in turn, is composed of the above five elements, which replenish or nourish the like elements of the body after the action of bio-fire (Agni).



PHYSICAL MANIFESTATION

Health and Sickness

Health or sickness depends on the presence or absence of a balanced state of the total body matrix including the balance between its different constituents. Both the intrinsic and extrinsic factors can cause disturbance in the natural equilibrium giving rise to disease. This loss of equilibrium can happen by dietary indiscretion, undesirable habits and non-observance of rules of healthy living. Seasonal abnormalities, improper exercise or erratic application of sense organs and incompatible actions of the body and mind can also result in creating disturbance of the existing normal balance. The treatment consists of restoring the balance of disturbed body-mind matrix through regulating diet, correcting life-routine and behaviour, administration of drugs and resorting to preventive Panchkarma and Rasayana therapy.

Diagnosis

In Ayurveda diagnosis is always done of the patient as a whole. The physician takes a careful note of the patient's internal physiological characteristics and mental disposition. He also studies such other factors as the affected bodily tissues, humours, the site at which the disease is located, patient's resistance and vitality, his daily routine, dietary habits, the gravity of clinical conditions, condition of digestion and details of personal, social, economic and environmental situation of the patient. The diagnosis also involves the following examinations:

- General physical examination
- Pulse examination
- Urine examination
- Examination of the faeces
- Examination of tongue and eyes
- Examination of skin and ear including tactile and auditory functions.

Ayurvedic treatment

An Ayurvedic practitioner will carry out a thorough body assessment & case history to determine which of the three bodily intelligences are affected, whether Vata, Pitta or Kapha. The practitioner will then assess how deep this imbalance has gone and which tissues have been affected. The practitioner will then assess whether the imbalance is in its preliminary stages or has gone deeper into the body to manifest as a particular ailment and will then structure a specific program for the client to bring the body intelligence back into balance.

Other points of difference

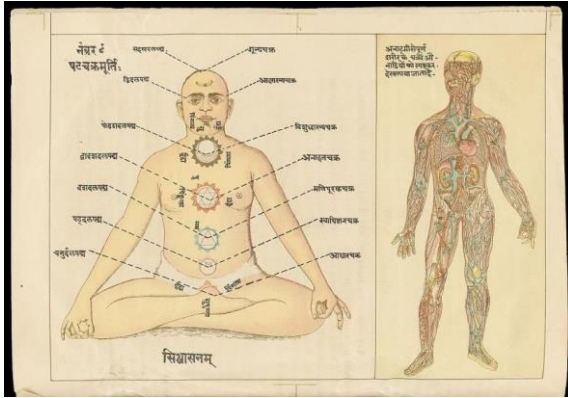
Ayurveda believes that illness begins from disharmony between mind, body and soul. Most of the time the problems & symptoms that manifest at a physical level begin from imbalances at a mental level, so it's very important to identify a patient's mental state. Many illnesses arise from poor metabolism. According to Ayurveda, there is no nutritional benefit from eating only organic foods if we are unable to metabolise these foods properly. Ayurveda has a systematic approach to healing by detoxifying the body and rejuvenating body, mind & spirit. The healing principles of Ayurveda have remained unchanged for centuries. Its philosophy does not change in response to the latest fashions in the health industry but are based on centuries of scientific observation of the natural world.

PHYSICAL MANIFESTATION

Unique Features

- Ayurveda is based on the subjective understanding of the body.
- Treatment is based on the individual as a whole.
- It is a much more systematic & holistic approach to achieve perfect balance between mind, body & soul.
- Whatever is present in the universe, Ayurveda recognises as also being present in the human body.
- The Universe according to Ayurveda is composed of the five great elements - Ether, Air, Fire, Water and Earth (Known as Panchmahabhuta).
- These elements are responsible for all the living and non-living substances in this universe.
- The human body is also composed of the five great elements.
- Man is said to be the microcosm of this macrocosm.
- These elements are recognised in the form of three Doshas or biological humours - Vata, Pitta and Kapha.
- The three Doshas are the intelligences behind each and every function that occurs in the body: Air and Ether = Vata Fire and Water = Pitta Earth and Water = Kapha
- The Doshas govern the psycho-biological and physio-pathological changes in the body.
- Vata, Pitta and Kapha can be found in every body cell, tissue and organ.
- The level of each Dosha varies from person to person which ultimately determines an individual's bodytype (Prakriti).

- It is the most eco-friendly system of medicine as it only uses materials that are natural and compatible to the body.
- Each individual has a unique bodily intelligence that has the power to keep the body in perfect health as long as this intelligence stays in balance.
- Ayurveda gives us a detailed & logical explanation of way the body, mind & soul interact.

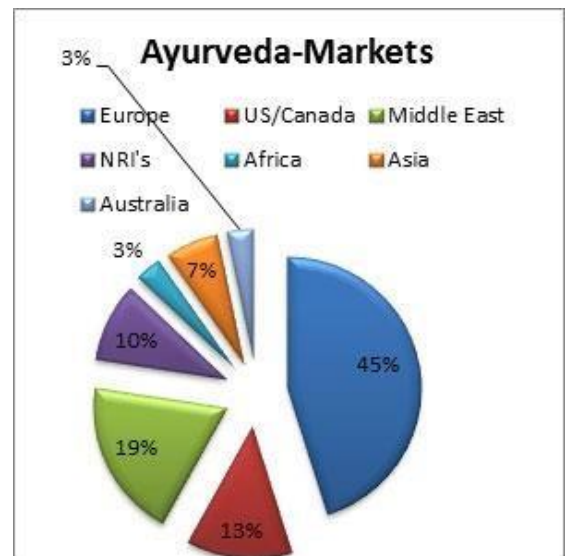


Ayurveda Medical college:

Ayurveda medical colleges are the colleges which pursue degree in Ayurveda and the course duration is of 5.5 years (4.5 years academics and 1 year internship).

Ayurveda Medical college has mainly 3 components:

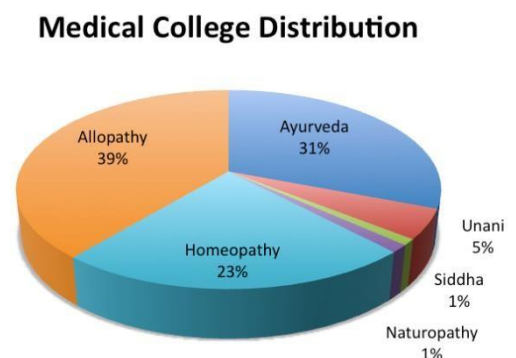
- Academic block
- Hospital block
- Residential block



1. Academic block consists of:

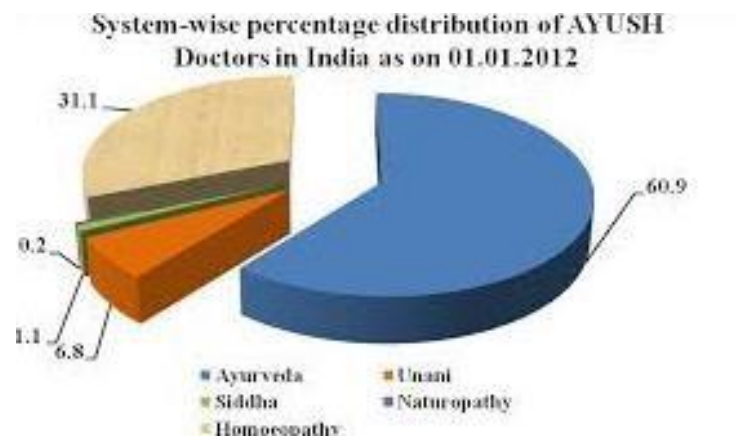
- a. Administrative block
 - b. Lecture Halls
 - c. Seminar/Conference room
 - d. Central Library
 - e. Teaching Pharmacy & Quality Testing Lab
- Commonrooms

Canteen



2. Hospital block components:

1. Administrative block
2. OPD
3. IPD
4. OT
5. Panchkarma block
6. Physiotherapy unit
7. Central Labrotary
8. Radiology or Sonography section
9. Canteen
10. Store
11. Mortuary



Need of the project:

Ayurveda is as early as the civilisation and the origin of its root is in India but it is not in practice as much as allopathy even it is related to finding the root of the disease and after that means to totally eradicate it.

This investigation of restorative treatment is completely mindful of the body framework and it doesn't smother the disturbing component which causes the disease. It goes for searching the origin of the disease and after that cures it. The cure is changeless. Be that as it may, in allopathic treatment the disease isn't cured for all time and it gives just instant help to the patients by destroying the disease-causing organism.



ABOUT THE CITY –

Varanasi officially so revived after 1947, but still widely known as Banaras or Benares and in ancient times as Kashi, is a city on the Ganges river in northern India that has a central place in pilgrimage, death, and mourning in the Hindu world. The city has a syncretic tradition of Muslim artisanship that underpins its tourism. Located in the middle-Ganges valley in the southeastern part of the state of Uttar Pradesh, Varanasi lies on the left bank of the river. It is 692 kilometers (430 mi) to the southeast of India's capital New Delhi, 320 kilometers (200 mi) south-east of the state capital, Lucknow, and 121 kilometers (75 mi) east of Allahabad, another Hindu pilgrimage site.



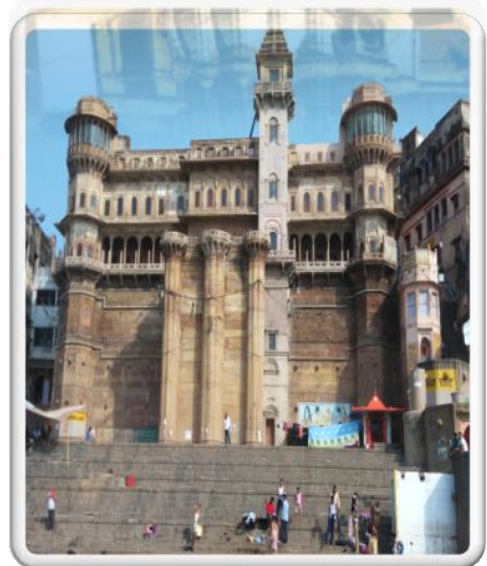
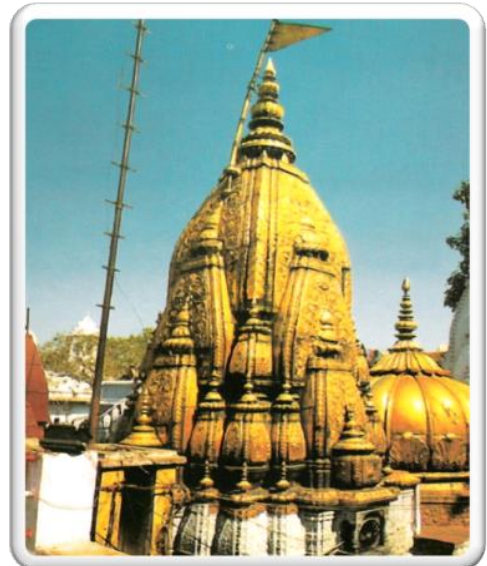
HISTORY OF THE CITY

Hindu mythology

According to Hindu mythology, Varanasi was founded by [Shiva](#), one of [three principal deities](#) A long with [Brahma](#) and [Vishnu](#). During a fight between Brahma and Shiva, one of Brahma's five heads was torn off by Shiva. As was the custom, the victor carried the slain adversary's head in his hand and let it hang down from his hand as an act of ignominy, and a sign of his own bravery. A bridle was also put into the mouth. Shiva thus dishonored Brahma's head, and kept it with him at all times. When he came to the city of Varanasi in this state, the hanging head of Brahma dropped from Shiva's hand and disappeared in the ground. Varanasi is therefore considered an extremely holy site.

MAJOR LANDMARKS –

B.H.U. ,KASHIVISHWANATH TEMPLE , RAM NAGAR PALACE, 80 GATHS



SITE ANALYSIS-

LOCATION:

The site is located at Varanasi near Gangapur village.



SITE APPROACH-

Via Bus:

Near Karan Petrol Pump: 8.5km

Near Chandpur Murena Gt. Road near Sardar Petrol Pump:
8.9km

Via Airport:

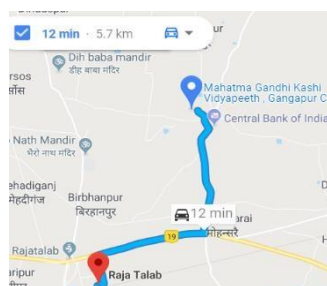
Nearest Airport is Lal bahadur Shashtri International airport at
Babatpur:21.4km

Via Train-

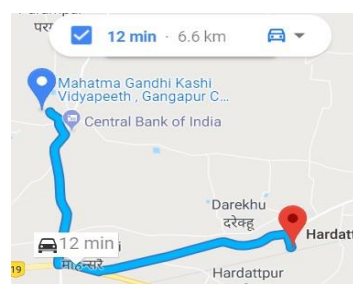
Co ordinates:

25°17'46"N 82°52'14"E

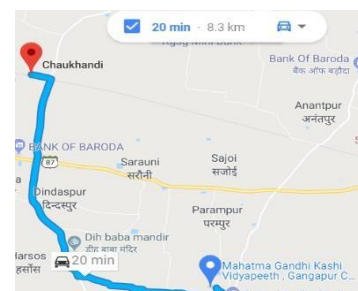
LANDUSE: Agricultural



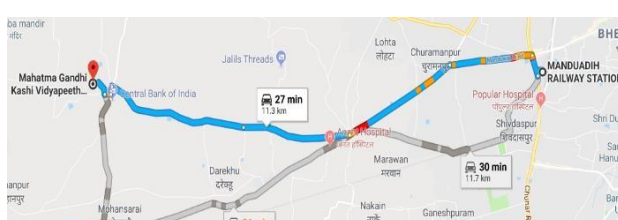
Raja Talab: 5.7km



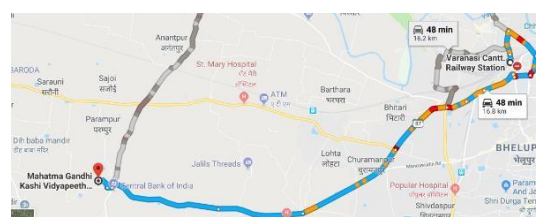
Hardattpur:6.6km



Chaukhandi:8.3km



Manduadih Railway Station: 11.3k

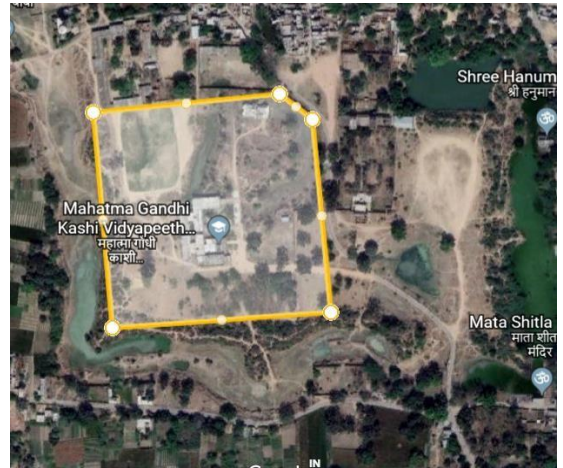


Varanasi Cantt: 16.8km

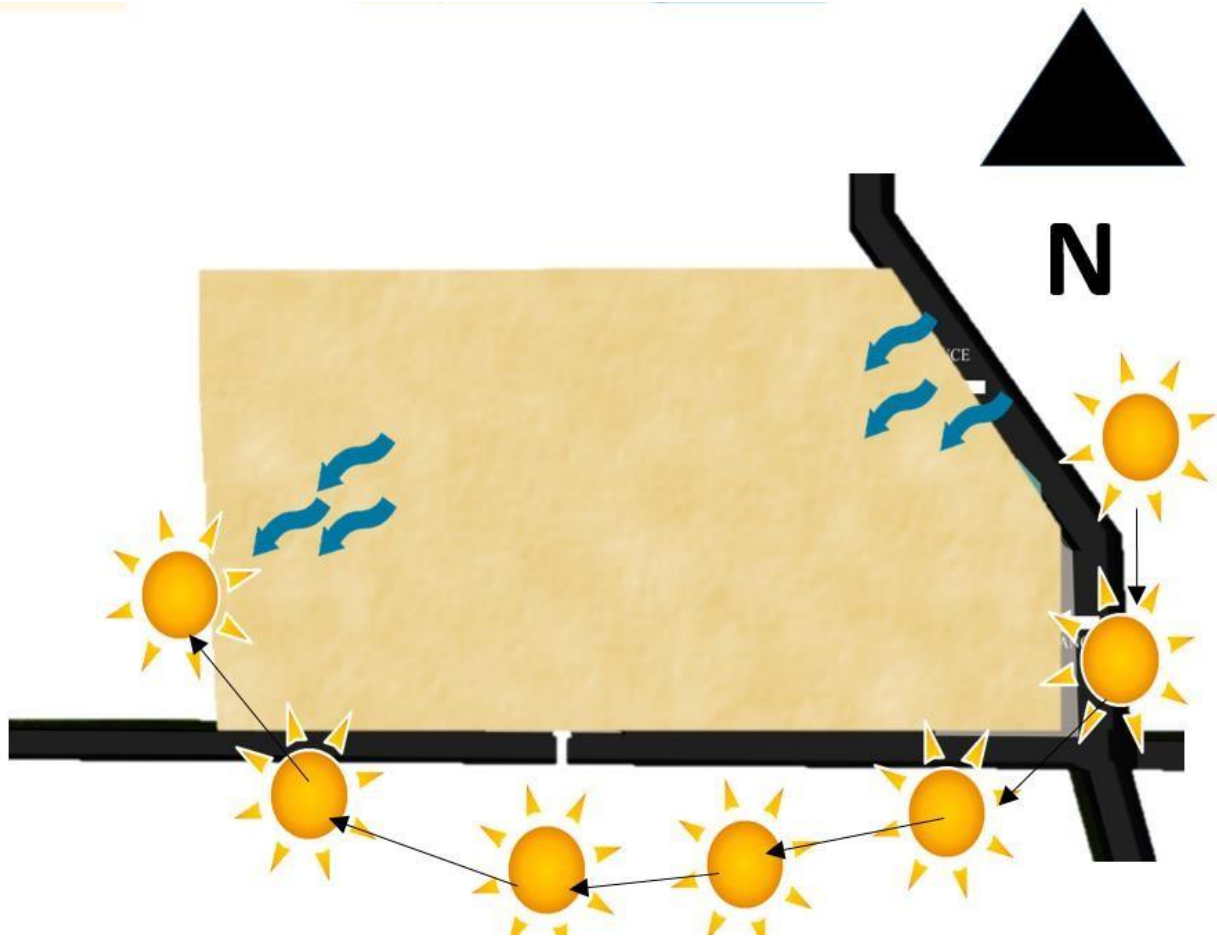


Site Surrounding:

- 7m wide road is on the East side of the plot.
- A pond exists on the West side of the plot.
- The road adjacent to the site connects to NH 19.
- Secondary School adjacent to the site at North.
- Mangifera Indica (Mango) is present at the site and its surrounding.
- A building in dilapidated condition is adjacent to the site in North.
- Gangapur Township is at 200m from the site.



SITE PLAN



SITE SELECTION



SITE SERVICES:

- **Water Supply:** A water tank exists at 100m from the site. Municipal water supply lines don't exist at present but will be provided.
- **Electrical:** Electrical line connections exist in the area, Ganjari power house is at distance of 2.4km.
- **Transportation:** Easy transportation is available. Buses passes from nearby and Auto rickshaw is available most of the time.



SWOT ANALYSIS:

STRENGTH

- This thesis project is live project. Govt. has plan to built medical college to this site.
- Site is in Rural area, so will remain under low density zone and people belong to agricultural background providing compatible environment and situation for Ayurveda institute.
- There are many water mould/trench around the site which keeps water table maintained for herbal gardening.
- Nearby villages will get easy and cheap cure for diseases. by motivating villagers to grow them for health benefit.

WEAKNESS

- This rural area having lack of good road network, most of roads are KUCHCHA road.
- Location of site provide uneasy accessibility.

OPPORTUNITY

- Being near to river (eco-sensitive zone) and farms all around, provides an opportunity for ayurvedic institute as it needs to be more near to nature.
- There is opportunity for preservation of rare species by motivating nearby villagers to grow them for health benefit.

THREAT

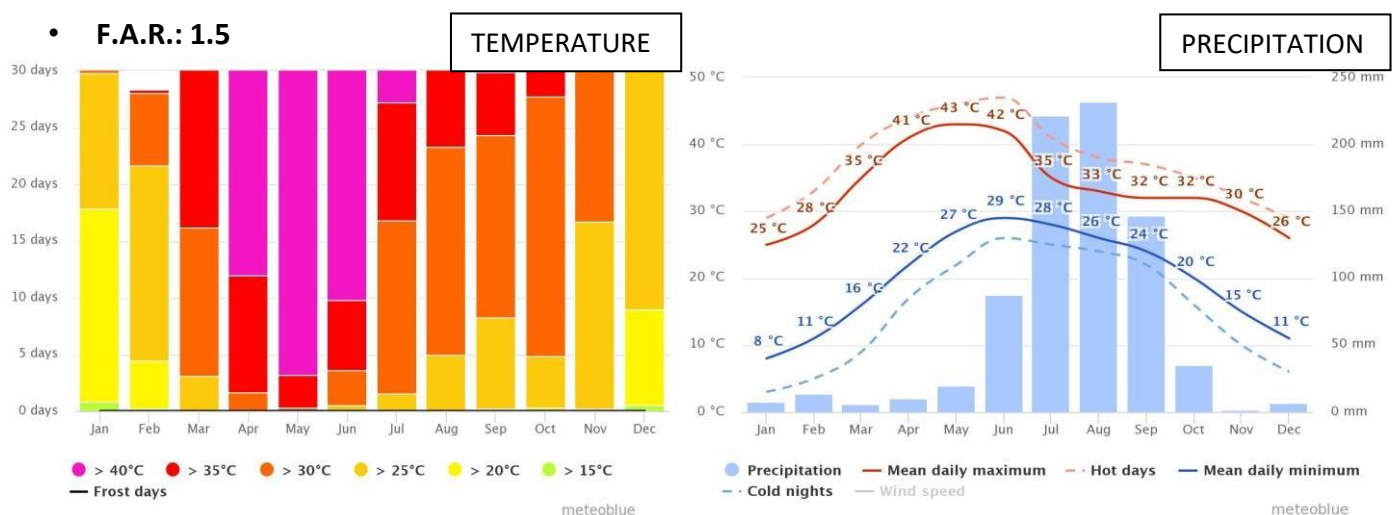
- Site is far away from main city so benefit of this service is only taken by nearer village only.
- Site exists in remote area so student will not get much exposure and service in that area only. They have to go some time to city for marketing needs and study also.

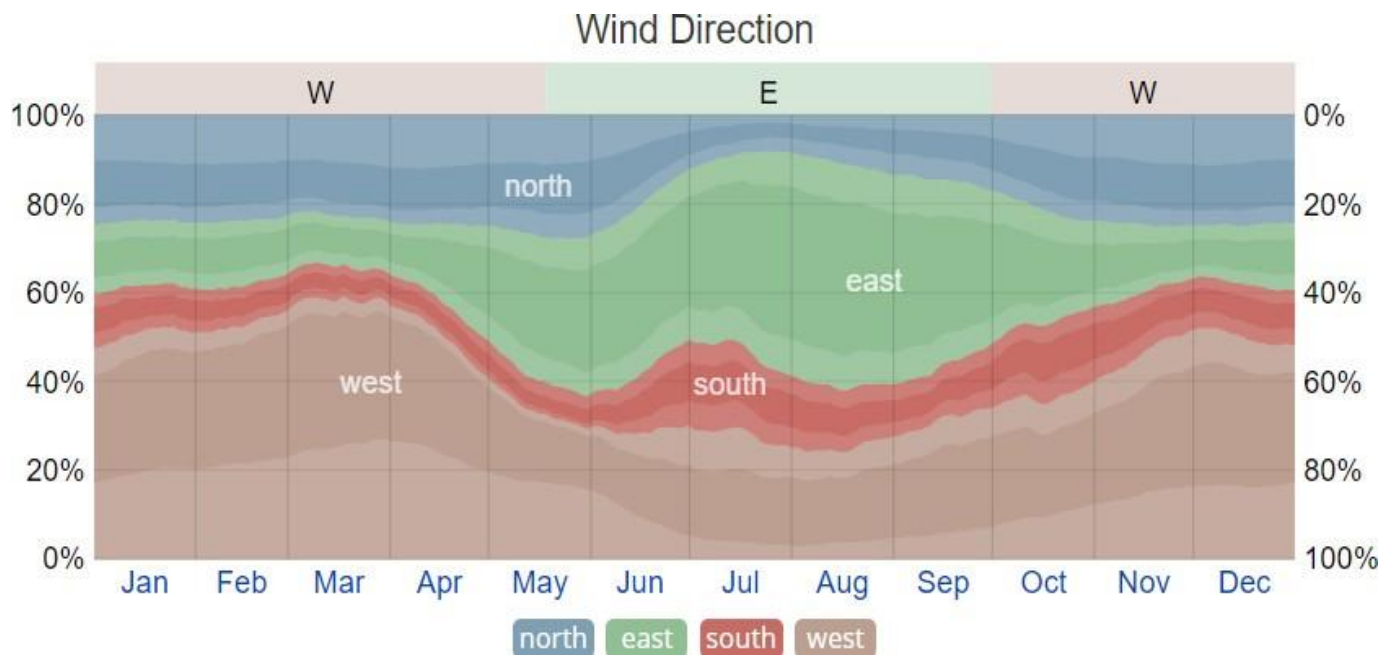
DEVELOPMENT CONTROLS:

SITE AREA IS 16 ACRES.

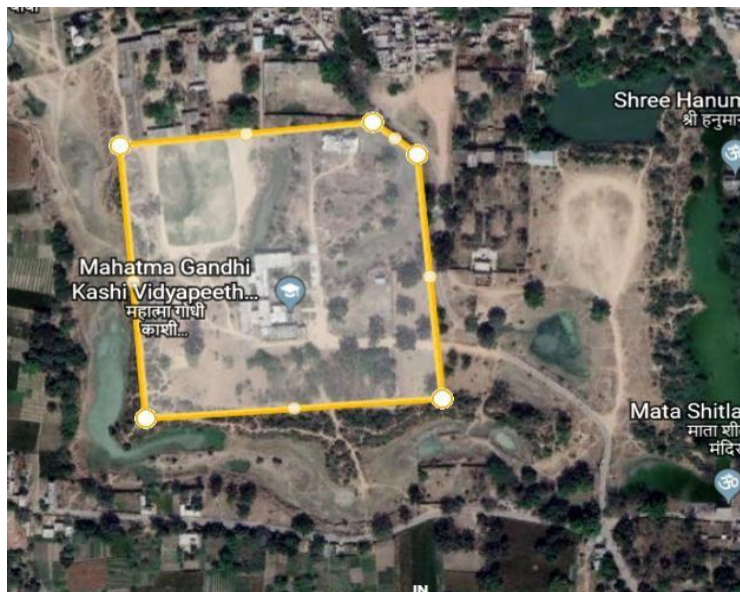
- **GROUND COVERAGE: 35%**

- **F.A.R.: 1.5**





SITE



INFERENCES:

- Blocks of different functionality are placed separately providing proper segregation to every function.
- Different blocks can be brought together depending on relationship.
- Separate entry/exit should be provided such as OPD, Emergency etc.



CASE STUDY 1

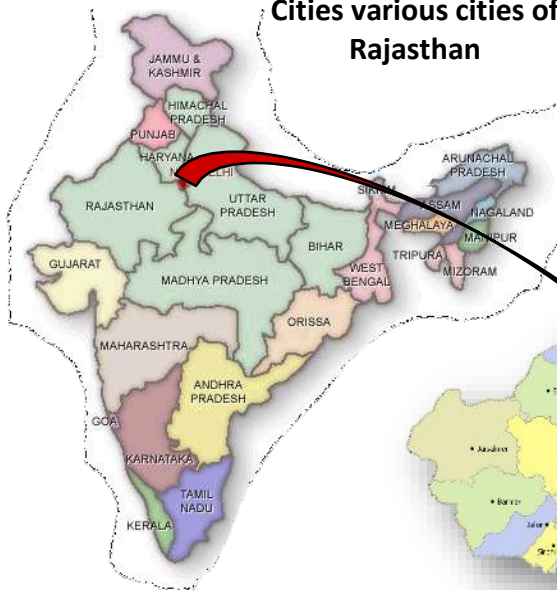
The National Institute of Ayurveda, JAIPUR

LOCATION

The National Institute of Ayurveda is located in Jaipur, the capital of the State of Rajasthan in India. It is also popularly known as The Pink City of India, a name derived from its many pink sandstones buildings.

The Institute is situated about 8 kilometers from the Railway Station and about 15 kilometers from the Air Port. Two National Highways, No.8 from New Delhi to Bombay and No. 11 from Agra to Bikaner in Western Rajasthan pass, through Jaipur.

Map Showing various Cities various cities of Rajasthan

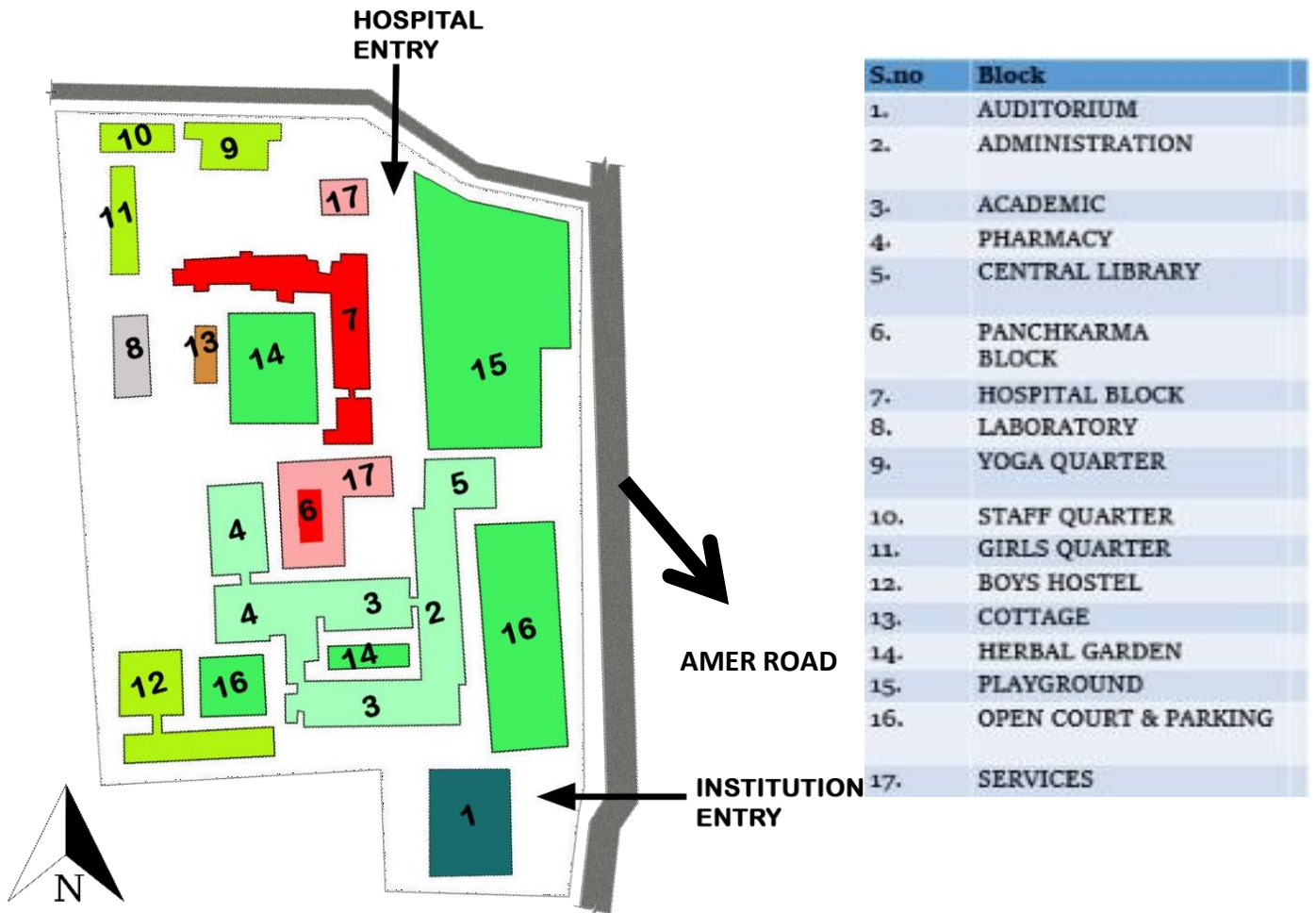


MAP OF INDIA REPRESENTING RAJASTHAN



National Institute of Ayurveda, Jaipur

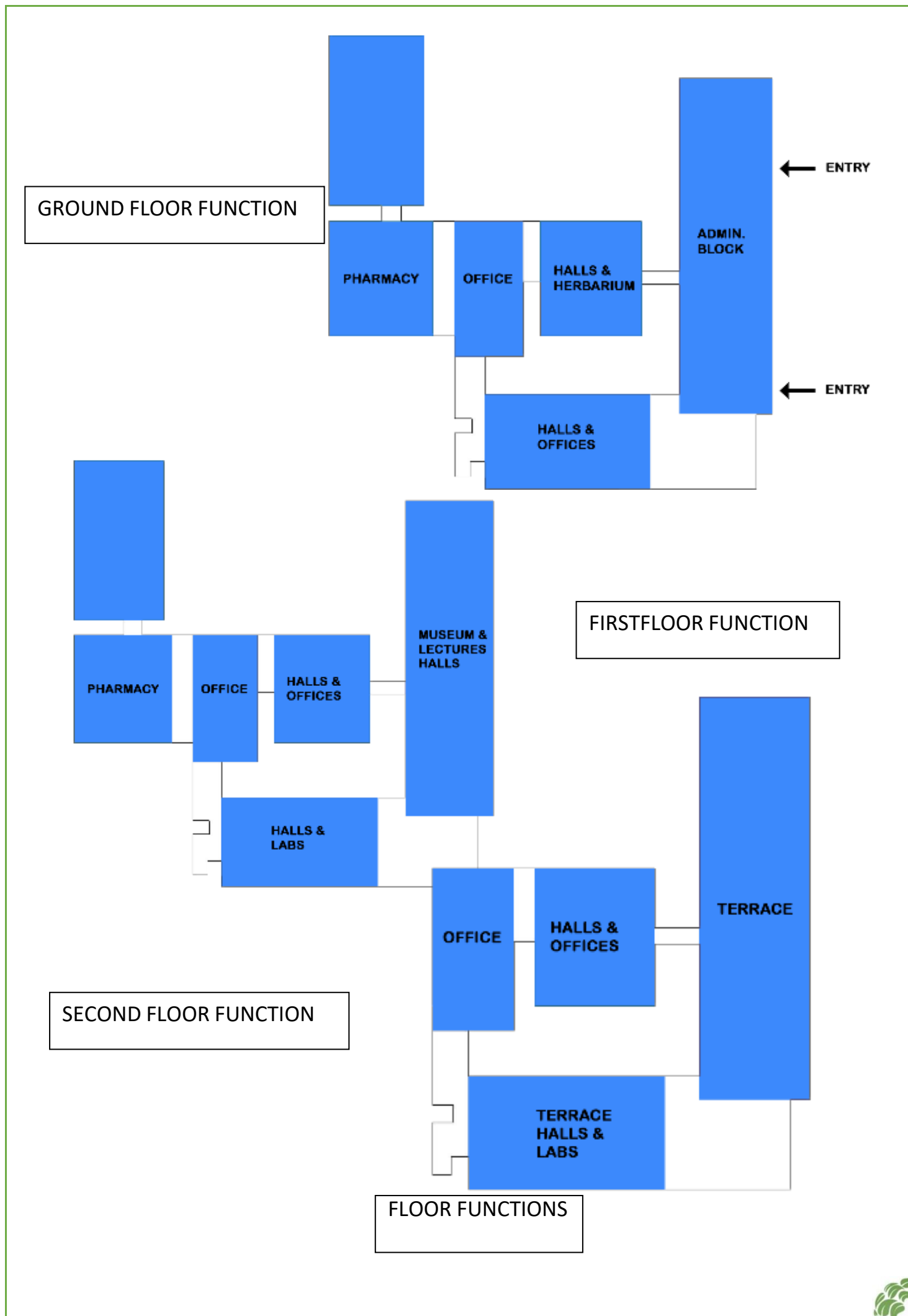




**SITE AREA : 42.6 ACRES
(172359.6sq.m)**

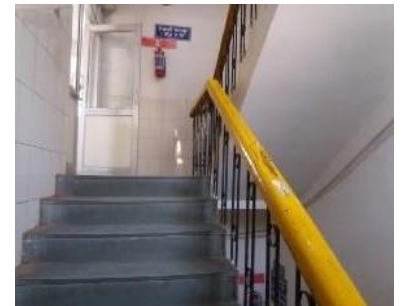
- All the blocks are placed separately, due to different times of construction.
- Students and doctors have to walk to hospital block for check-up and treatment of patients.
- As different departments and courses are added different times so, there is a messy arrangement of halls, museum and offices of same departments.
- Entries to OPD and EMERGENCY seem proper with respect to main entrance to hospital complex.
- Functionally campus seems to be segregated and messy but there are courtyards and open spaces for every block, which creates a nice relationship between built and open.
- In spite of open spaces there is no proper leisure area for students, except one courtyard where students started playing badminton.

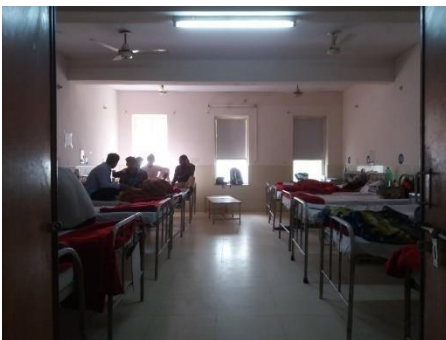
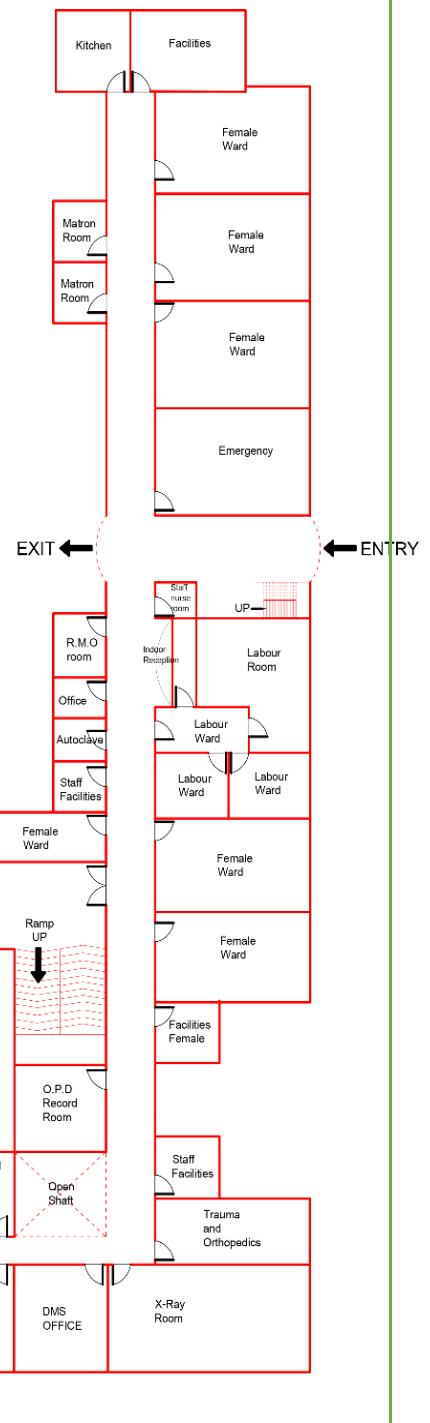
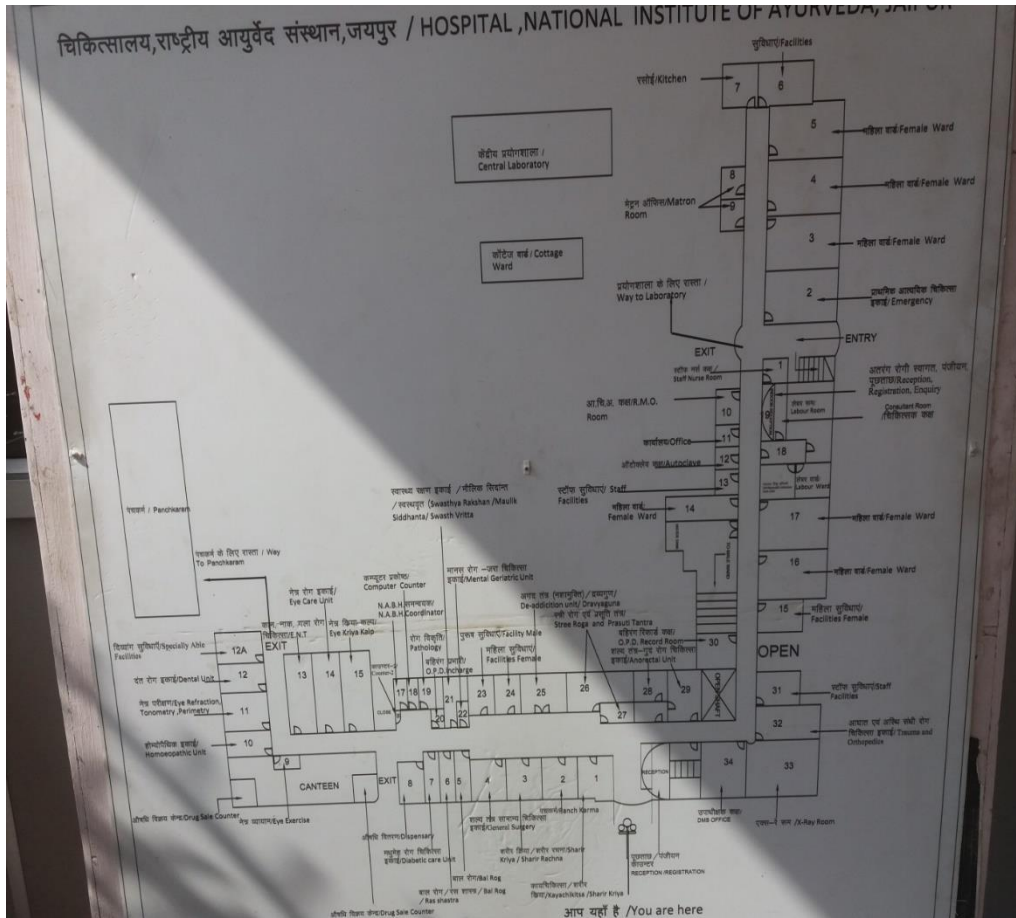




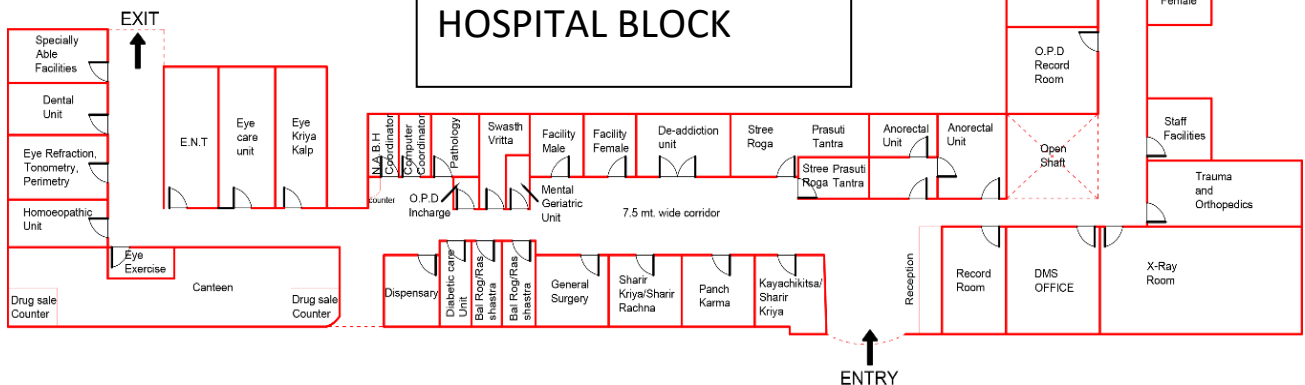
HOSPITAL BLOCK

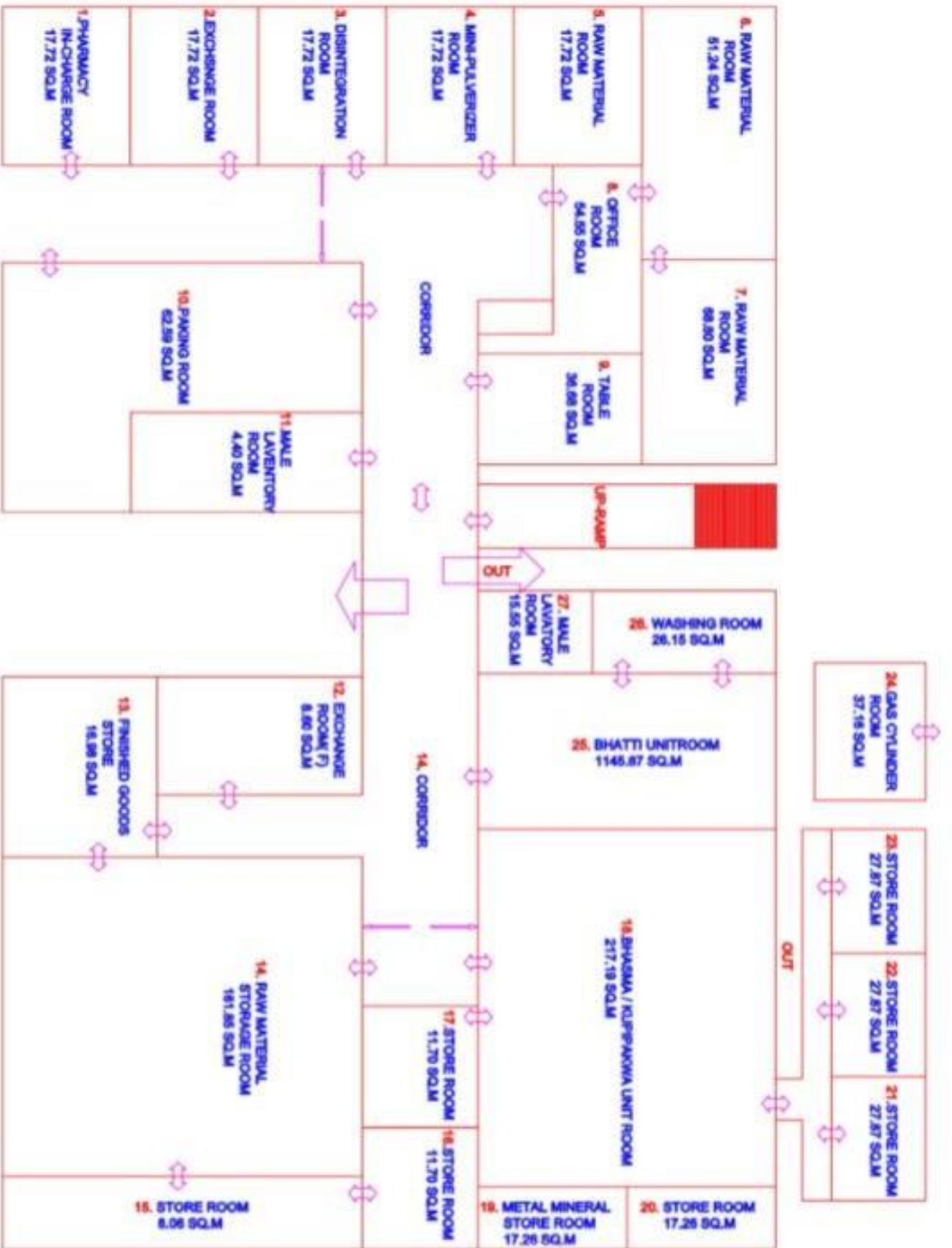
- 354 Bedded Hospital with OPD and a Primary Emergency Care Unit.
- Panchkarma Unit.
- A center of Excellence for Eye Diseases.
- Specially Clinics for Diabetis,Allergy,Geriatric,Dietary,Child Mental Health etc.
- The Central Laboratory has facilities for various investigations like Hematological Tests,Urine Tests,Biochemical Tests,Serological Tests,Sonography,X- Ray,ECG,Spirometry and TMT etc.





GROUND FLOOR PLAN HOSPITAL BLOCK





CASE STUDY 2

AIIMS Jodhpur

- INTRODUCTION

AIIMS Jodhpur is one of the SIX NEW AIIMS established by the Ministry of Health & Family Welfare, Government of India under the *Pradhan Mantri Swasthya Suraksha Yojna* (PMSSY). With the aim of correcting regional imbalances in quality tertiary level healthcare in the country, and attaining self sufficiency in graduate and postgraduate medical education and training the PMSSY planned to set up 6 new AIIMS like institutions in under served areas of the country. These institutions are being established by an Act of Parliament on the lines of the original All India Institute of Medical Sciences in New Delhi which imparts both undergraduate and postgraduate medical education in all its branches and related fields, along with nursing and paramedical training. to bring together in one place educational facilities of the highest order for the training of personnel in all branches of health care activity.

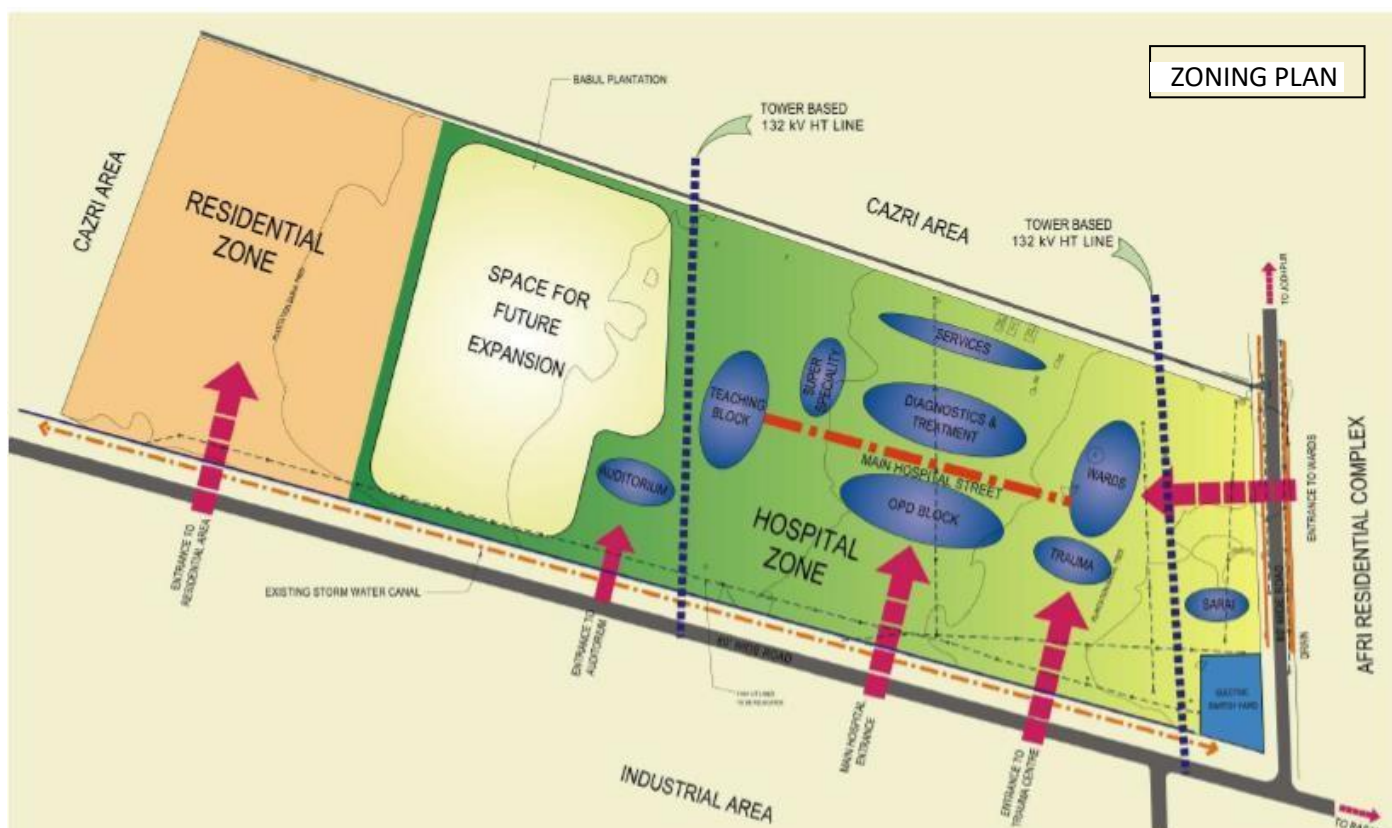
- Project: All India Institute Of Medical Science, Jodhpur
- Location: Jodhpur, Rajasthan, India
- Client: Government Of India
- Design team: Mathur & Kapre Associates
- Built up area: 74 acres (299404 sqm)
- Date of Completion: 2012



LOCATION

Jodhpur, one of the largest district of Rajasthan state is centrally situated in Western region of the State, having geographical area of 22850 sq. Kms. It has population of 28.81 lacs as per 2001 census. The district stretches between 26 00' and 27 037' at north Latitude and between 72 55' and 73 52' at East Longitude. This district is situated at the height between 250-300 meters above sea level. Jodhpur is bound by Nagaur in East, Jaisalmer in west, Bikaner in North and Barmer as well as Pali in the South. The length of the district from North to South and from East to West is 197 Km.& 208 Km. respectively It is well connected with roadways to all the capital towns of the Western States. It also has an airport and Railway station with regular trains, connected to the rest of the country.





ZONING PLAN HOSPITAL

The hospital complex is so located that one gets the feeling of having arrived at the destination, and having arrived it should be clear where to head. When one arrives and enters the institute, the surroundings are magnificent yet serene and pleasing to the eye. Inviting rather than scaring you. Your focus is decided at the entry point itself by means of signage etc. When you approach the hospital complex the Emergency, the OPD as well as the Wards are clearly visible to you. Separate zone for certain super speciality departments like Oncology and PMR have been independently located close to the Hospital. The hospital zone is such that areas like the OPD, Diagnostic and Treatment facilities, Wards as well as the Service facilities like the CSSD, kitchen, laundry etc. are independent and lockable blocks yet accessible without leaving the building premises.

COLLEGE (Academic)

The Medical college and Nursing college have been located such that they are close to the hospital for immediate access yet having their own independent external access. Related activities to coexist i.e. the teaching institute and the students facilities are close by yet independent of the hospital. For professionals dealing with research oriented facilities the path is clear and away from the Hospital building yet close to the College building. The Teaching facility is central to the Hospital, Research and student facilities as also the Auditorium which is so located that it is adjacent to the teaching complex yet has independent access from outside.

RESIDENTIAL

A separate Residential zone has already been earmarked in the campus to create healthy living environs for the staff.



SERVICES

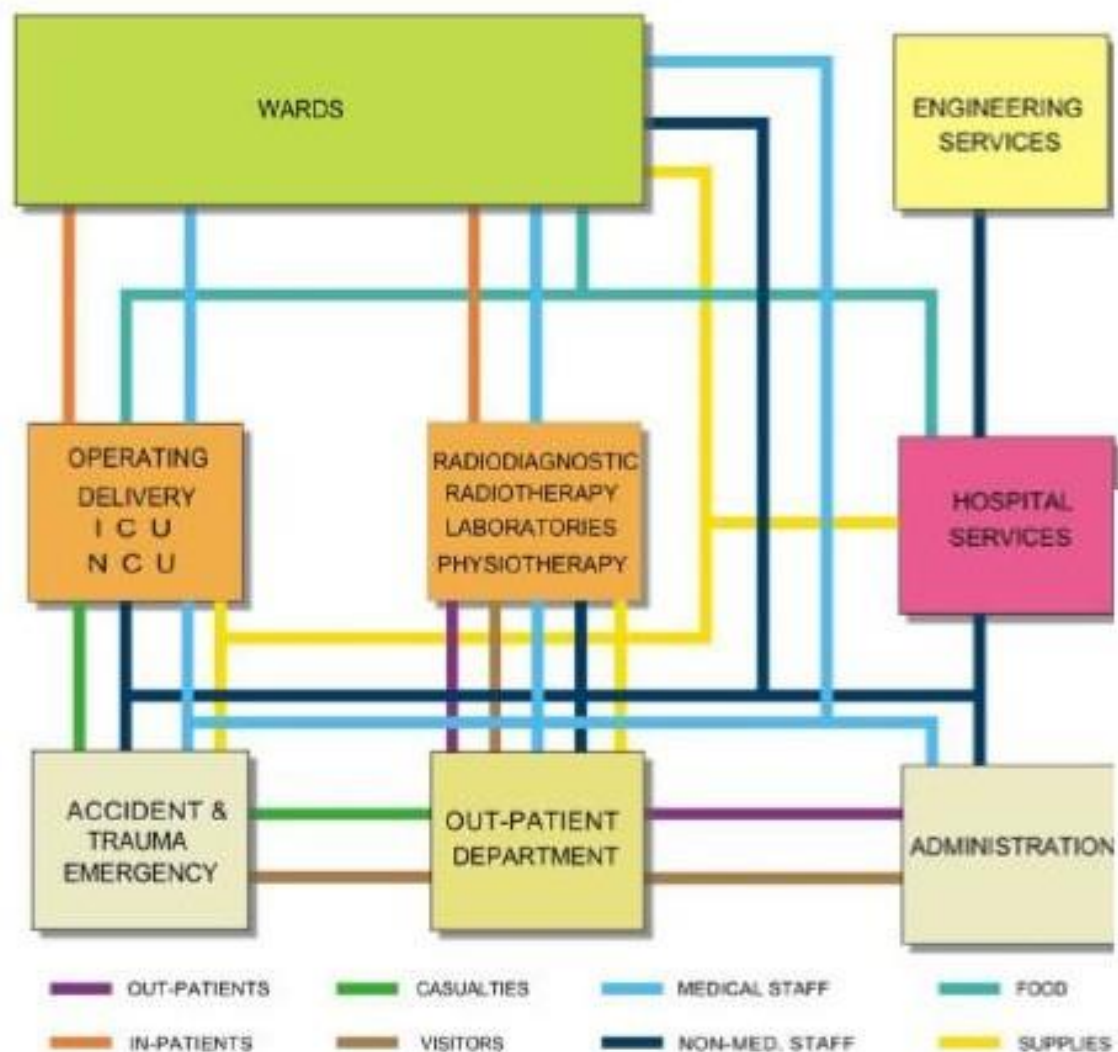
The services zone is located at the rear of the hospital towards the north boundary thereby allowing regular external service through a service road and un-hindered internal servicing of the hospital departments.

BUFFER AREAS

A large chunk of land area between the second HT line and residential complex has been proposed for development for the natural flora and fauna at site to facilitate healing through working in tandem with nature.

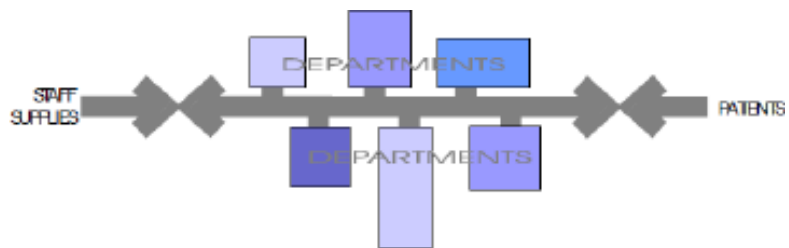
FUTURE ZONES

Future zones need be identified in order to control developments that time & technology may enforce. The design caters for phased development based on fund flow. The expansion could be decided mutually, however the design allows to accommodate the expansion without disturbing the running hospital as also the overall planning strategy.



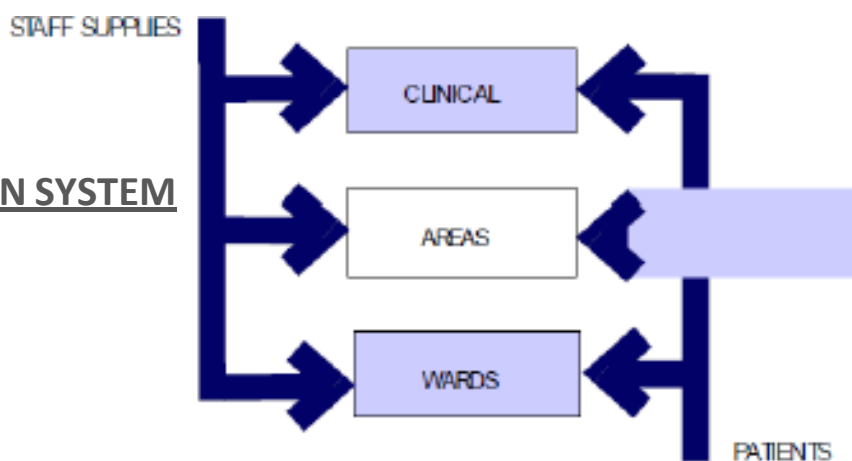
HOSPITAL TRAFFIC SYSTEM





HOSPITAL STREET SYSTEM

SEGRIGATION OF CIRCULATION SYSTEM



SITE PLAN AS PER ZONING, AIIMS, JOHPUR



ZONING OF DISCIPLINES in distinct block helps in identification. However, to achieve "loose-fit", a number of rooms should be inserted between blocks so that they can be used by depts on either side depending on requirement.

FLEXIBILITY in the layout of clinics is achieved by keeping to a standard modular room size which can be adopted for different procedures of consultation, examination, and treatment.

EQUIPMENT AND SERVICES like electrical sockets and X-Ray viewers are located within handy reach of the consultant Doctor reducing his non-productive time.

GENEROUS SUB-WAITING AREAS are welcome in the overloaded situation which inevitably occurs in O P D . This helps in breaking up the crowd.

LABORATORIES ZONING of disciplines in alcoves demarcated by glass partitions within one large hall

COMMON EQUIPMENT to be located within easy reach of all disciplines

SEPARATE SORTING ROOM should be provided for processing of specimens collected from satellite collection centres in O P D or elsewhere

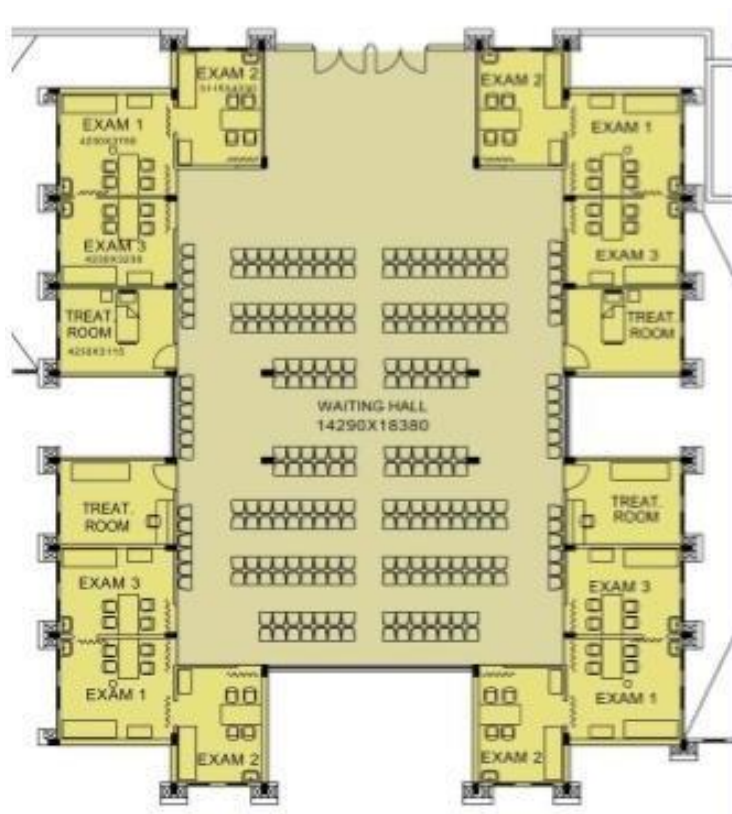
FUTURE EXPANSION to be catered for by addition of alcove modules. **KITCHEN ASSEMBLY LINE** should be laid out to reduce preparation time, wastage and inconsistencies of quality

FRESH AIR INTAKE at the rate of 9 air changes per hour.

LOCATION to be away from In-patient areas and disposal routes. **STORES LOCATION** within easy accessibility of vehicular service entry and unloading dock S

SEPARATE ROOMS for different categories of goods

ENVIRONMENTAL CONTROL wherever necessary



OUT PATIENT DEPARTMENT



WARDS VISUAL INTERACTION between the nurse and patient **MAXIMUM DISTANCE** from nurses station to farthest patient should not exceed 15 meters.

RISK OF CROSS INFECTIONS should be reduced by enclosing patients in cubicles of not more than 8 beds each, preferably 6. This is also better from psycho-sociological viewpoint. **ESSENTIAL EQUIPMENT** required with each bed includes bedside table cum locker, visitors stool, food trolley, pre-piped supply of medical gases, suction attachment, drip attachment, reading light, nurse call bell, and ceiling mounted curtain.

AMBULATORY SPACE for recovering patients should be provided under easy supervision of the nurse.

OPERATION THEATRES

Zoning of rooms is based on the degree of contamination permissible in the environment for functional reasons. The four distinct zones are :

- a) Protective Zone
- b) Clean Zone
- c) Sterile Zone
- d) Dirty Zone



IN PATIENT DEPARTMENT



HIGHER THROUGHPUT is achieved by an arrangement of rooms such that the patient spends only as much time as is clinically necessary. Therefore ancillary spaces, viz. anaesthesia room and exit bay, where the patient goes immediately before and after the operation respectively, are attached to each theatre. A continuous flow of patients is set up through the operating suites ensuring better turnover.

INTERRELATIONSHIP OF ZONES should provide adequate safeguards against accidental contamination of the maximum sterility area, i.e., the operating suite. Since every single item or person entering the theatre department adds to its contamination, a sequential layout is adopted which makes it impossible for any person or article to directly enter the clean zone. By washing and change of clothing the risk is sought to be minimized. Packaged articles are sterilized. **AIRBORNE GERMS** are excluded by controlled airflow from high-pressure to lowpressure areas corresponding to a descending order of sterility. The number of airchanges required in the various rooms of the operating department are as follows :



TYPICAL BLOCK





HOSPITAL BLOCK GROUND FLOOR PLAN

LESSONS LEARNT FROM CASE STUDIES

- Typologies in terms of planning and connectivity of college with teaching hospital.
- It need not to be packed, but can be provided with open spaces with greens and water bodies to enhance learning and healing environment.
- Zoning, entrances and relationship of different blocks and functions, where hospital needs to be easy accessible and visible than college and residence with least in priority.
- There is not much difference in terms of physical aspects of planning and designing of Ayurvedic and modern medicine hospital, except for the few departments like panchkarma and swasthviritta and yoga.



LITERATURE STUDY 1

VAIDYARTNAM AYURVEDIC HOSPITAL AND RESEARCH CENTER ,THAIKKATTUSERRY

The research center, finishing school and other facilities for conducting seminars and classes are located in the same building itself and accommodation facilities for the visiting doctors are also provided inside the hospital building. The site consist of a old building which is not in use and in a bad condition. A canteen is located in the back side of the hospital which provides food for the patients and staff. a small herbal garden is located in the backyard

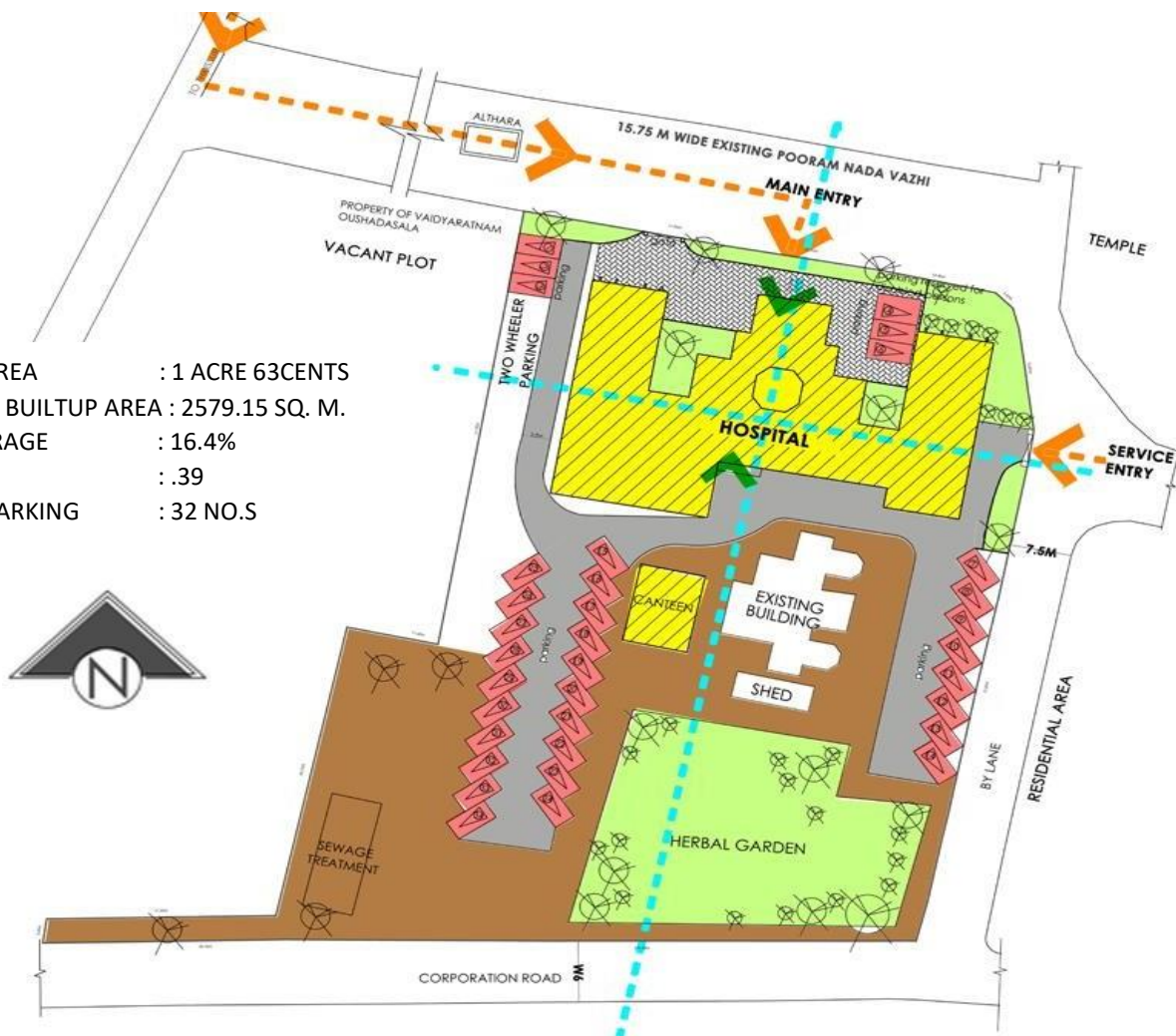
1. Site is north south oriented and the hospital is oriented in east-west direction perpendicular to the main axis of the site.

2.Two entries are provided. one is the main entry from the temple road(north side).and a service entry from the east side .which helps to make un interrupted circulation.

3.Mainly 2 entries are provided into the building. one in front side used by patients and staff. and other one is a service entry and which is also used for the access to the canteen.

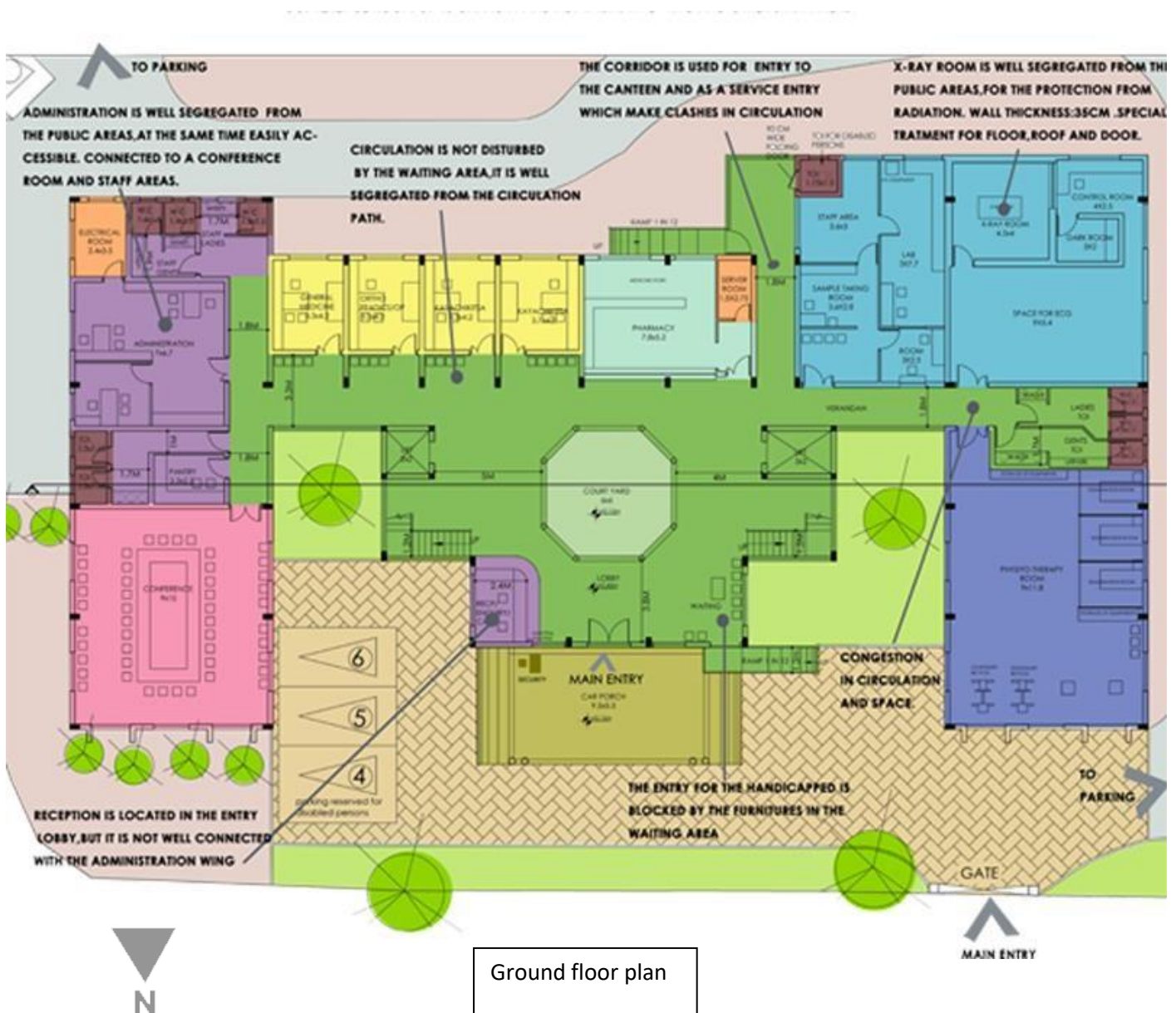
4. 32 car parking are provided .only 3 car parking is provided in the front side including the parking for the differently abled .which is near to the entry to the hospital,and the rest are located in the back side of the hospital

SITE AREA : 1 ACRE 63CENTS
TOTAL BUILTUP AREA : 2579.15 SQ. M.
COVERAGE : 16.4%
FAR : .39
CAR-PARKING : 32 NO.S



Ground Floor consists of O.P.D area, pharmacy, diagnostic department, physiotherapy room, conference room of 40 capacity and administrative wing and other staff areas.

1. Administration is well segregated from the public areas, at the same time easily accessible. connected to a conference room and staff areas.
2. Circulation is not disturbed by the waiting area, it is well segregated from the circulation path.
3. The corridor is used for entry to the canteen and as a service entry, which make clashes in circulation.
4. X-ray room is well segregated from the public areas, for the protection from radiation .wall thickness is 35 cm. special treatment for wall, floor, roof and door.
5. Reception is located in the entry lobby, but it is not well connected to the administrative wing.
6. Entry for the handicapped is blocked by the furniture's in the waiting area.



FIRST FLOOR PLAN

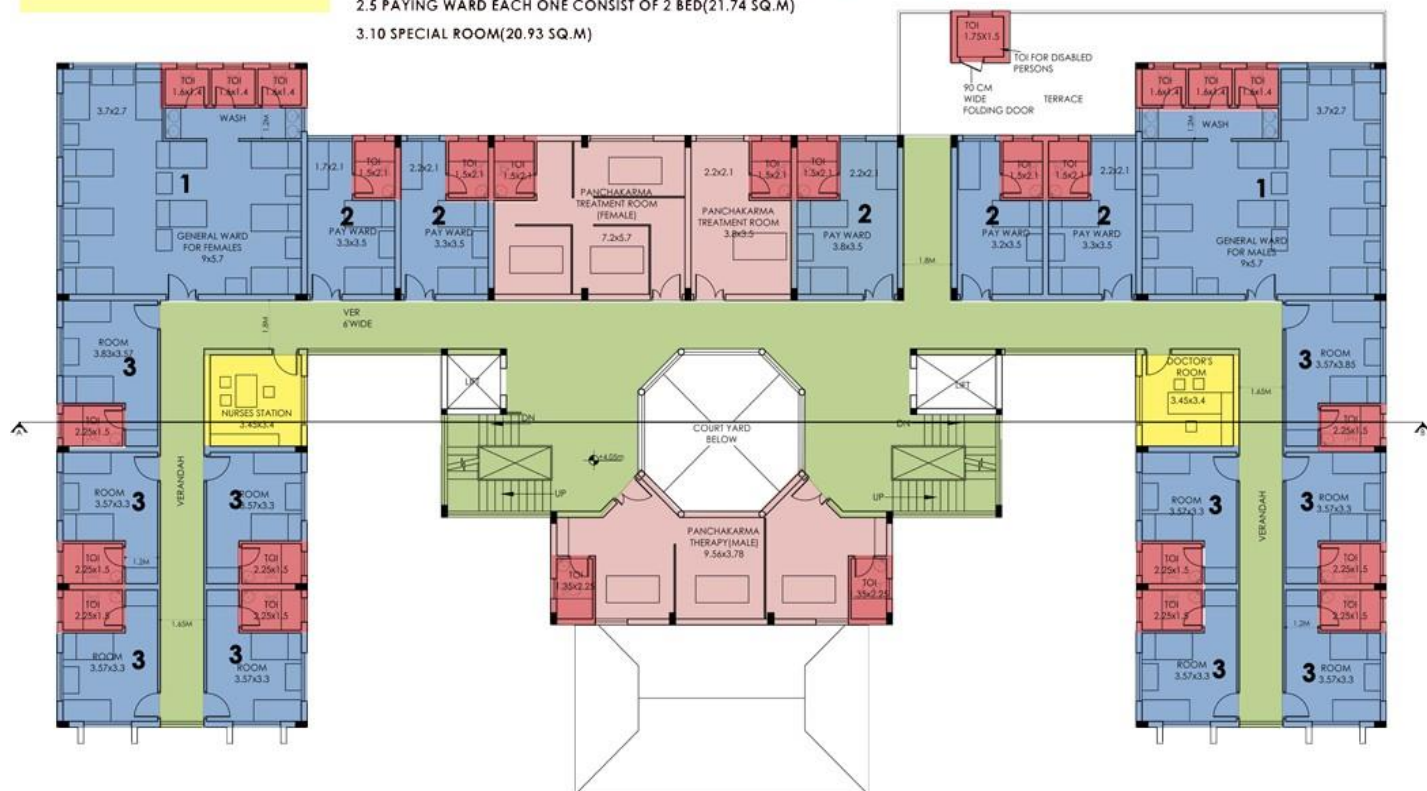
IN PATIENT DEPARTMENT IS FUNCTIONING ON THE FIRST FLOOR OF THIS HOSPITAL

40 BEDED IN PATIENT DEPARTMENT IS GENERALLY DIVIDED INTO 3 CATEGORIES.

1. GENERAL WARD(10 BEDED) BOTH FOR MALE AND FEMALE.(83.81 SQ.M.8.38 SQ.M PER BED)

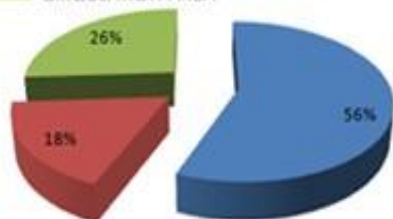
2.5 PAYING WARD EACH ONE CONSIST OF 2 BED(21.74 SQ.M)

3.10 SPECIAL ROOM(20.93 SQ.M)



AREA DISTRIBUTION

- IN PATIENT AREA
- TREATMENT AREA
- CIRCULATION AREA



- IN PATIENT AREA
- TREATMENT AREA
- CIRCULATION /COMMON AREAS

- DOCTORS,NURSES STATION
- TOILET

AREA DETAILS

TOTAL FLOOR AREA : 2579.15 SQ.M

FIRST FLOOR AREA:864.84 SQ.M

CIRCULATION AREA:224.56 SQ.M

INPATIENT AREA :486.51 SQ.M

TREATMENT AREAS :153.77 SQ.M

FIRST FLOOR PLAN

SCALE 1:100

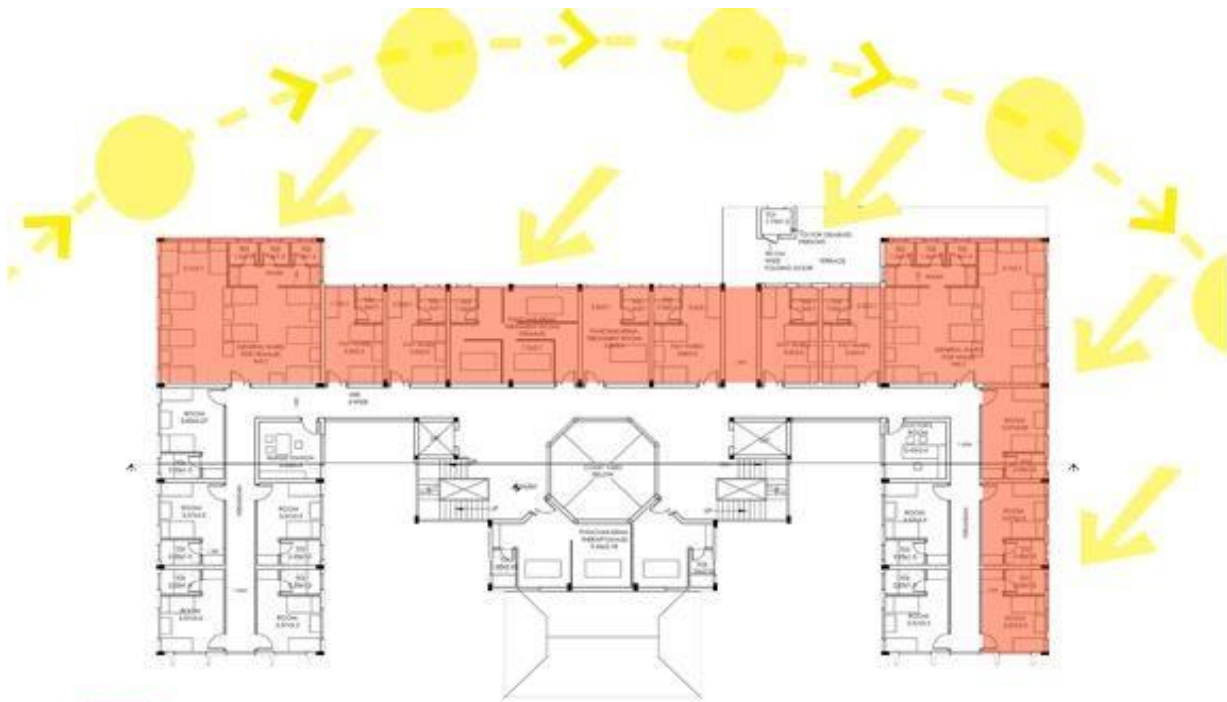
ALL DIMENSIONS ARE IN METERS

STANDARDS AND NORMS

ACCORDING TO THE NORMS AND STANDARDS OF NABH FORAYURVEDA HOSPITAL 4

NURSING STATION IS REQUIRED FOR A 40 BEDED HOSPITAL BUT ONLY ONE IS PROVIDED.

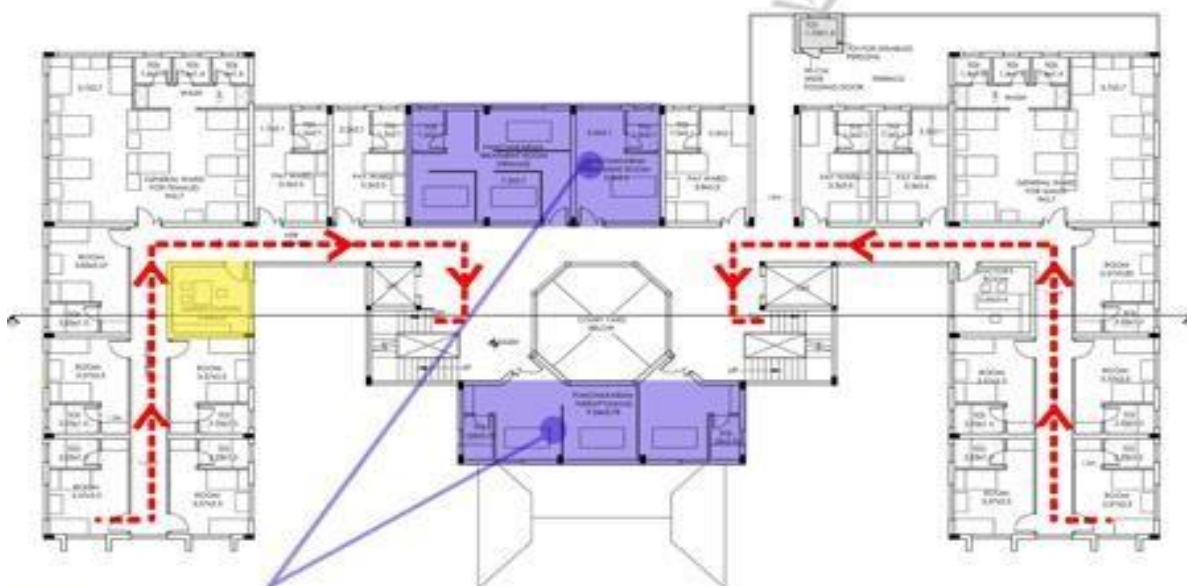




CIRCULATION

THE PATIENTS ROOMS ARE ACCESSED BY DOUBLY LOADED CORRIDOR SPACE IN A LINEAR MANNER WHICH IS CENTRALLY CONNECTED AROUND A COURTYARD WITH A STAIR AND LIFT TO OTHER FLOORS.

HANDICAPPED TOILET IS PROVIDED OUT SIDE WHICH MAKES IT DIFFICULT FOR THE DIFFERNTLY ABLED PERSON TO TRAVEL A LONG DISTANCE



THE CENTRALLY LOCATED TREATMENT AREAS MAKE IT EASILY ACCESSIBLE BY THE PATIENTS. BUT THE PRIVACY FOR BOTH MALE AND FEMALE PATIENTS IS NOT CONSIDERED

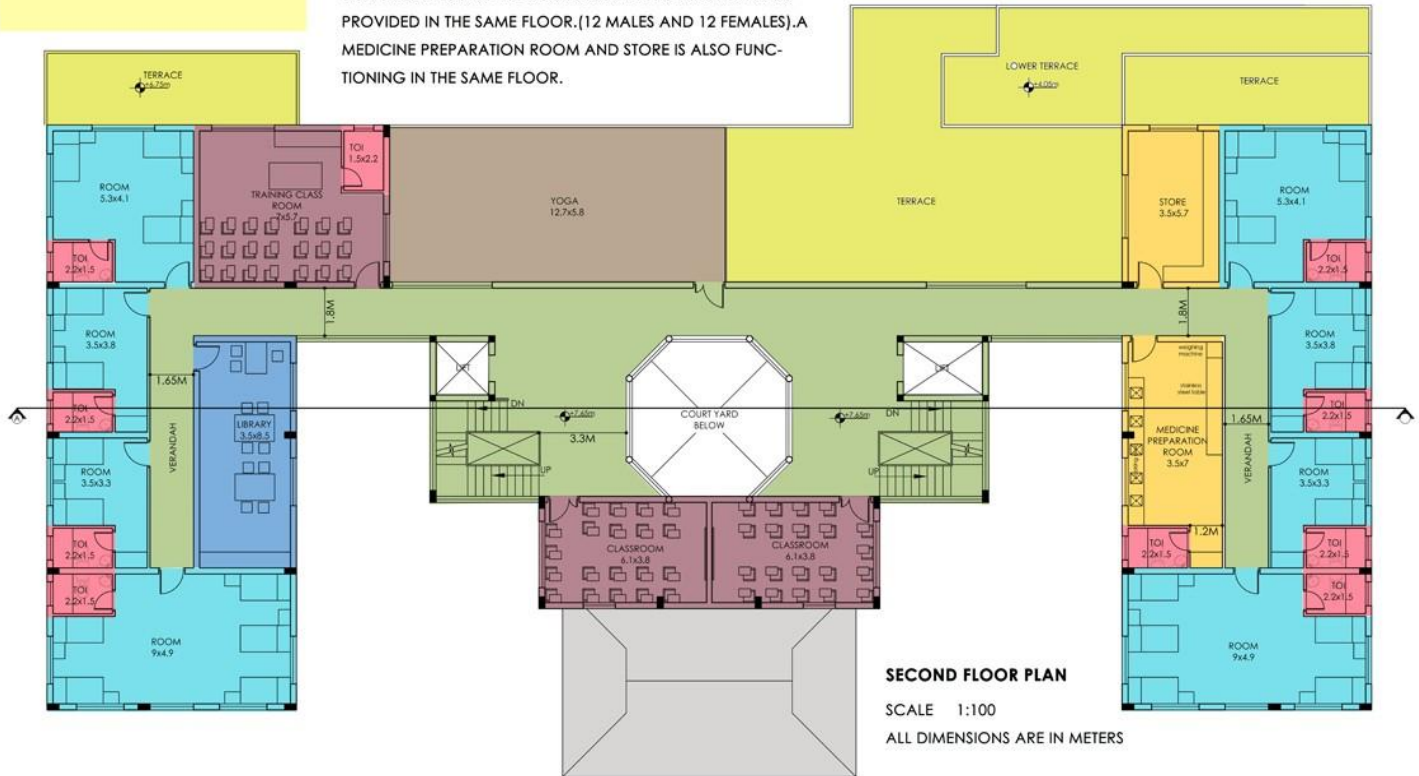
MAXIMUM TRAVEL DISTANCE TO THE VERTICAL CIRCULATION CORE IS 35 M

NURSING STATION SHOULD BE WELL CONNECTED WITH THE PATIENT ROOMS FOR EFFICIENCY AND BETTER SERVICE. IN THIS CASE ONLY ONE NURSING STATION IS PROVIDED. AND WHICH IS NOT EQUALLY CONNECTED TO THE PATIENT AREAS

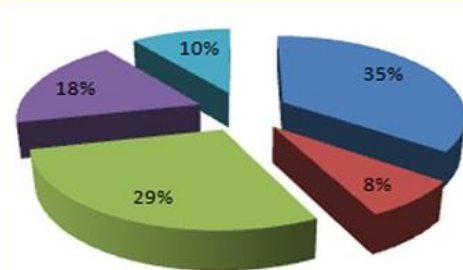


SECOND FLOOR PLAN

SECOND FLOOR CONTAINS 2 CLASSROOMS AND 1 TRAINING ROOM WITH 20 CAPACITY EACH, LIBRARY AND ACCOMODATION FACILITIES FOR THE DOCTORS AND STUDENTS ARE ALSO PROVIDED IN THE SAME FLOOR. (12 MALES AND 12 FEMALES). A MEDICINE PREPARATION ROOM AND STORE IS ALSO FUNCTIONING IN THE SAME FLOOR.



AREA DISTRIBUTION

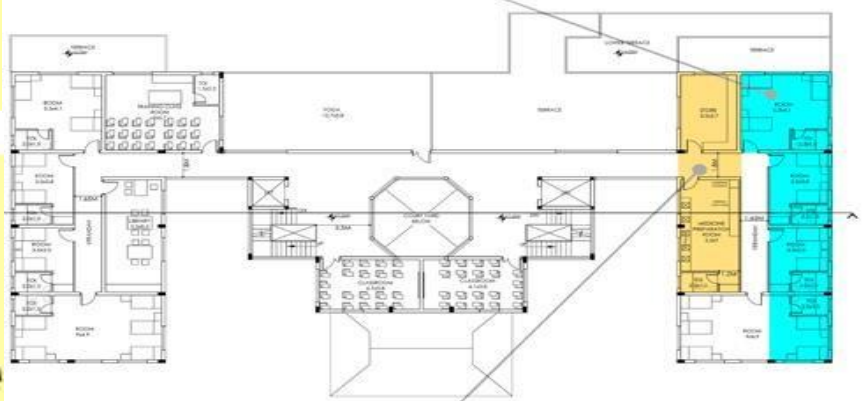


- ACCOMODATION
- MEDICINE PREPARATION
- CIRCULATION
- LIBRARY+CLASS ROOMS
- YOGA

- ACCOMODATION
- CLASS ROOMS AND TRAINING ROOM
- CIRCULATION COMMON AREAS
- MEDICINE PREPARATION+STORE
- LIBRARY
- TOILET
- YOGA
- OPEN TERRACE

CIRCULATION AND ORIENTATION OF ROOMS

ROOMS IN THE WEST WILL BE MORE EXPOSED TO SOLAR RADIATION AND THE ROOMS ARE HAVING HIGH INTERIOR TEMPERATURE



MEDICINE PREPARATION IS PLACED IN THE SECOND FLOOR WILL MAKE UNNECESSARY CIRCULATIONS IN THE ENTIRE BUILDING FOR LOADING OF MATERIALS. AND IT WILL EFFECT THE EFFICIENCY AND ALSO THE MAJOR ACADEMIC FUNCTIONS WHICH IS PROVIDED IN THIS FLOOR, GET DISTURBED.

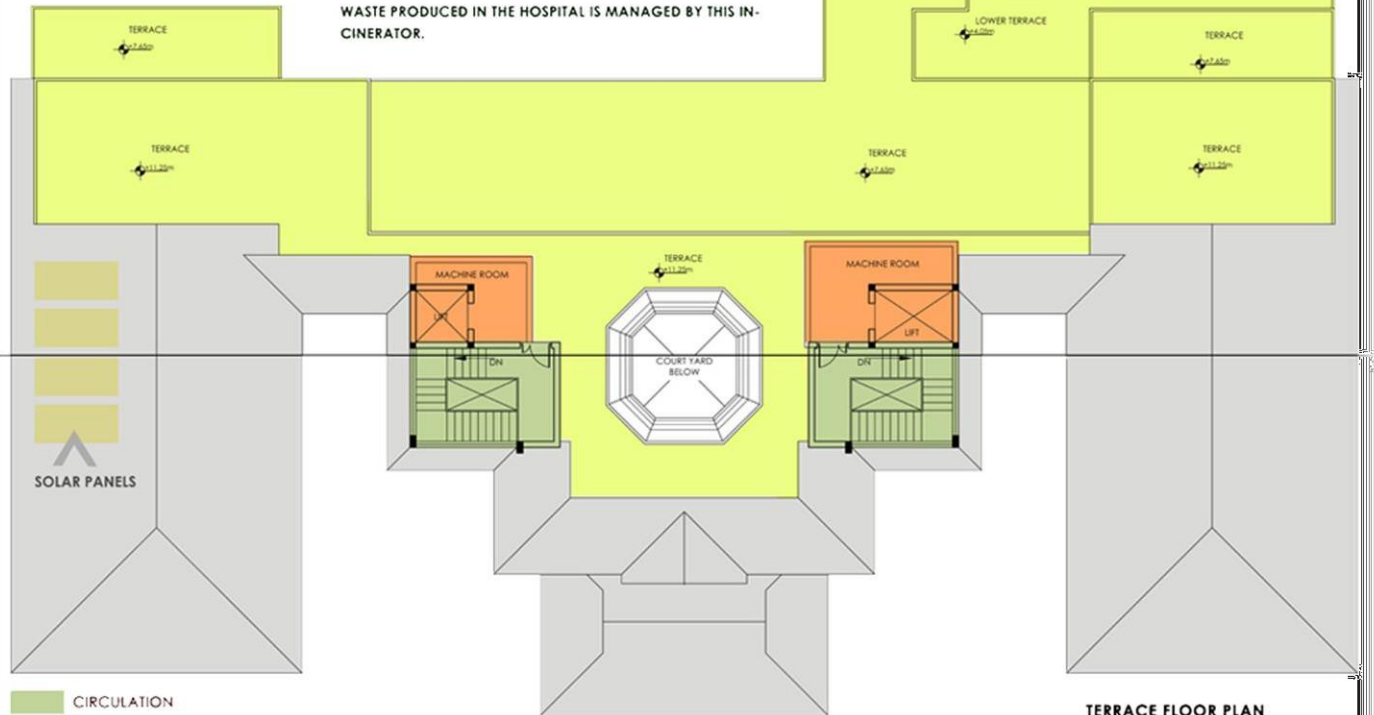
AREA DETAILS

TOTAL FLOOR AREA : 2579.15 SQ.M
SECOND FLOOR AREA: 724.51 SQ.M
CIRCULATION AREA: 207.41 SQ.M
MEDICINE PREPARATION: 54.88 SQ.M
LIBRARY + CLASS ROOM : 131.7 SQ.M
YOGA: 75.72 SQ.M



TERRACE FLOOR PLAN

TERRACE FLOOR CONSIST OF STAIR ROOMS AND MACHINE ROOMS FOR TWO LIFTS. SOLAR PANELS ARE PROVIDED IN THE TERRACE THE ENERGY PRODUCED IS USED IN THE HOSPITAL. AN INCINERATOR IS ESTABLISHED IN THE TERRACE. THE BIO WASTE PRODUCED IN THE HOSPITAL IS MANAGED BY THIS INCINERATOR.



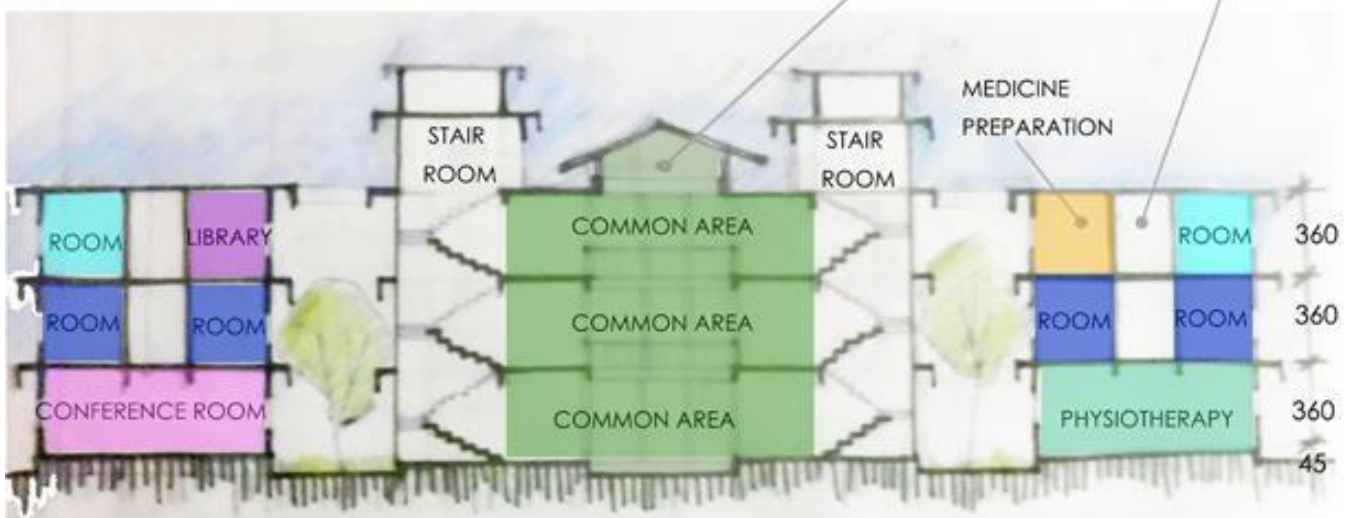
TERRACE FLOOR PLAN

SCALE 1:100

SECTION

THIS COURTYARD SPACE ACCELERATE THE AIR MOVEMENT INSIDE THE BUILDING.

THE CORRIDORS ARE DOUBLY LOADED WITH ROOMS



SECTION AA

SCALE :1:200

ALL DIMENSIONS ARE IN CM

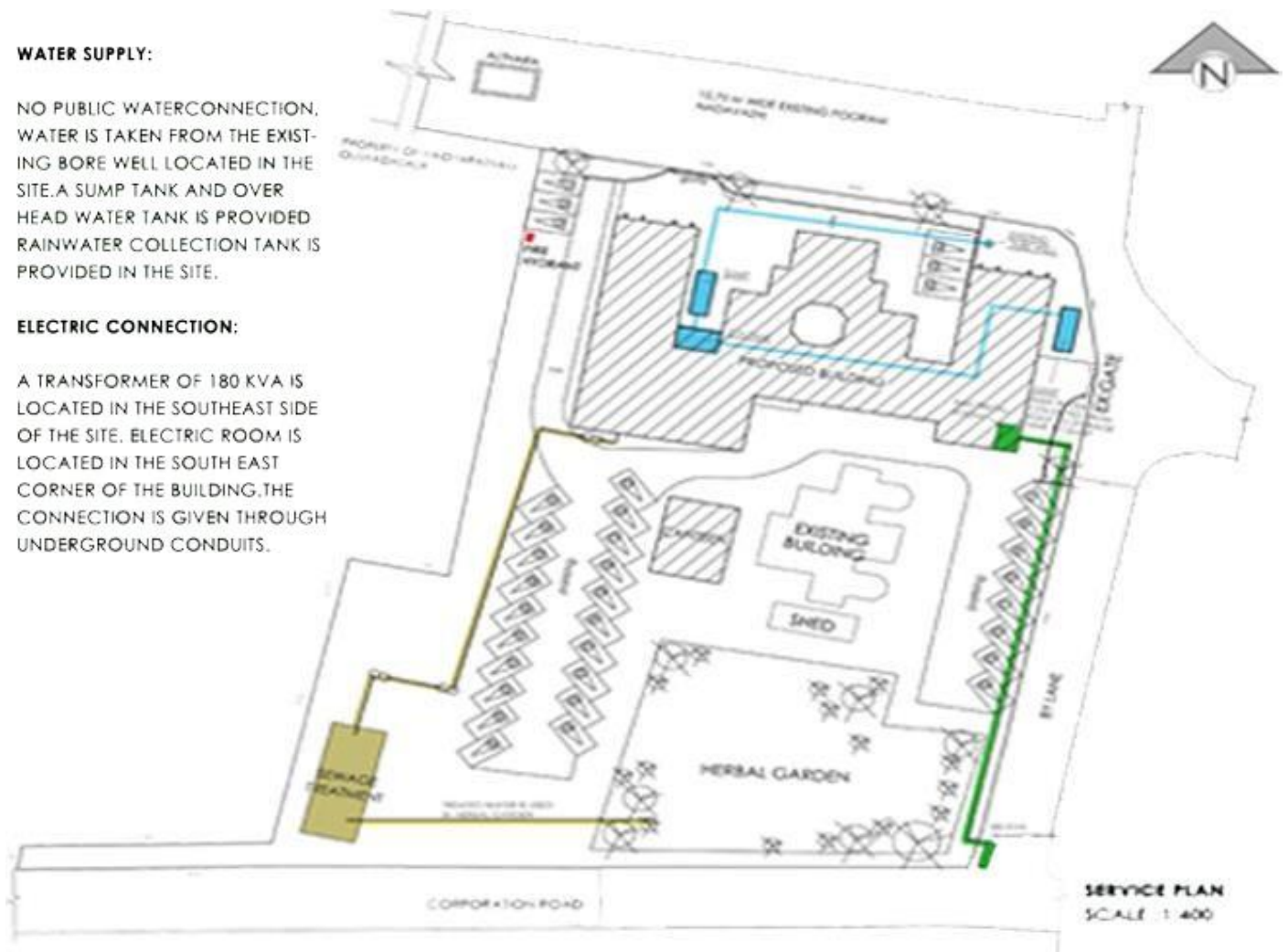


WATER SUPPLY:

NO PUBLIC WATER CONNECTION. WATER IS TAKEN FROM THE EXISTING BORE WELL LOCATED IN THE SITE. A SUMP TANK AND OVER HEAD WATER TANK IS PROVIDED. RAINWATER COLLECTION TANK IS PROVIDED IN THE SITE.

ELECTRIC CONNECTION:

A TRANSFORMER OF 180 KVA IS LOCATED IN THE SOUTHEAST SIDE OF THE SITE. ELECTRIC ROOM IS LOCATED IN THE SOUTH EAST CORNER OF THE BUILDING. THE CONNECTION IS GIVEN THROUGH UNDERGROUND CONDUITS.

**SEWAGE TREATMENT :**

A SEWAGE TREATMENT PLANT IS PROVIDED IN THE SOUTH WEST SIDE OF THE SITE .THE RECYCLED WATER IS USED FOR IRRIGATION OF THE HERBAL GARDEN.

FIRE PROTECTION:

A FIRE HYDRANT IS POSITIONED NEAR THE BUILDING IN THE NORTH WEST SIDE.



AYURVEDA MEDICAL COLLEGE CONCEPT

INTRODUCTION

The term 'Ayurveda' is composed of two words – Aayu, and Veda. In brief, it means the Veda of Aayu, i.e., the Science of Life.

This "Science of Life" originated in India over 5000 years ago, making it one of the world's oldest health care systems. It is not merely a health care system to treat ailments but a complete philosophy that encourages the pursuit of a healthy lifestyle. Ayurveda is a complete knowledge of life that teaches us how to live in tune with nature and elevate ourselves into the higher realms of happiness – the ultimate goal in life.

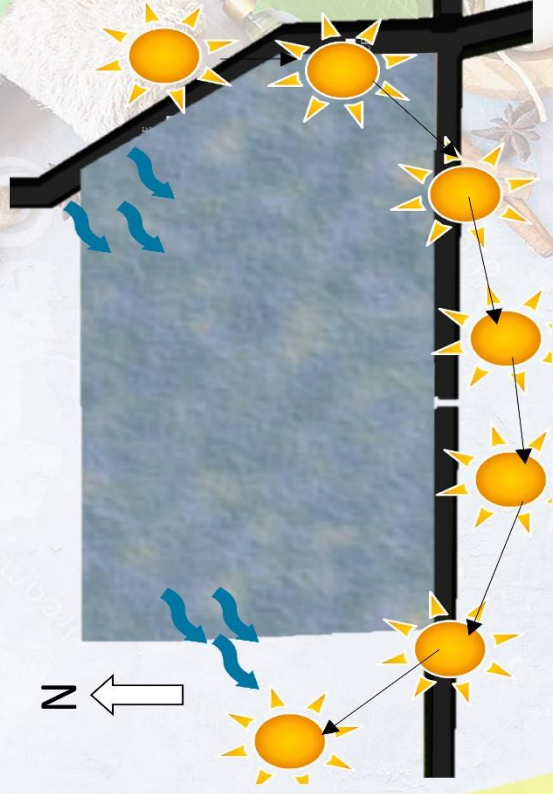
What is an ayurvedic medical college:

Ayurveda medical colleges are the colleges which pursue degree in Ayurveda and the course duration is of 5.5 years (4.5 years academics and 1 year internship).

Need of the project:

Ayurveda is as early as the civilisation and the origin of its root is in India but it is not in practice as much as allopathy even it is related to finding the root of the disease and after that means to totally eradicate it. This investigation of restorative treatment is completely mindful of the body framework and it doesn't smother the disturbing component which causes the disease. It goes for searching the origin of the disease and after that cures it. The cure is changeless. Be that as it may, in allopathic treatment the disease isn't cured for all time and it gives just instant help to the patients by destroying the disease-causing organism.

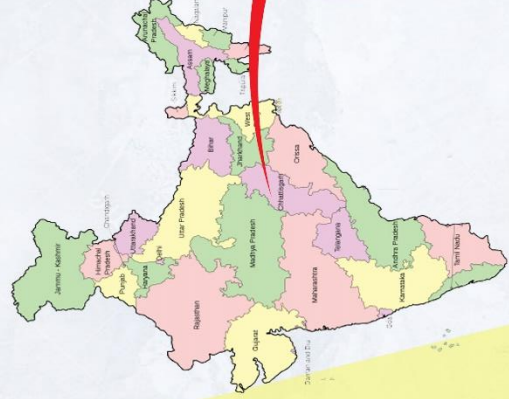
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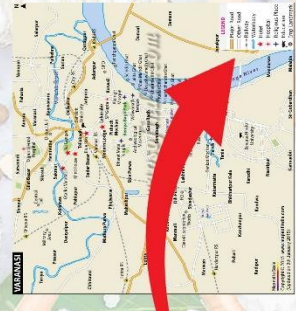
DHANWANTARI

Dhanwantari is the Hindu god of medicine and an avatar of Lord Vishnu. He was the king of Varanasi. He is mentioned in the Puranas as the god of Ayurveda. He, during the Samudramanthan arose from the Ocean of Milk with the nectar of immortality. It is a common practice in Hinduism for worshippers to pray to Dhanwantari seeking his blessings for sound health for themselves and/or others, especially on Dhanteras or Dhanwantari Trayodashi ("National Ayurveda Day")

SITE LOCATION



INDIA



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Ar. Sangeeta Sharma, Ar. Ramakant

Thesis By-

Gaurav Mishra

Roll No.-1170101012

B.Arch 5th Year 2021-22

AYURVEDA MEDICAL COLLEGE

CONCEPT

SITE ANALYSIS

SITE APPROACH

Via Bus:

Near Karan Petrol Pump: 8.5km
Near Chandpur Murena Gt. Road
near Sardar Petrol Pump: 8.9km

Via Airport:

Nearest Airport is Lal bahadur
Shashtri International
airport at Babatpur: 21.4km

Via Train

Manduadih Railway Station: 11.3km
Varanasi Cantt: 16.8km

Co ordinates:

25°17' 46"N 82°52' 14"E LANDUSE:

Agricultural

Altitude: 81 m

Site Surrounding:

- 7m wide road is on the East side of the plot.
- A pond exists on the West side of the plot.
- The road adjacent to the site connects to NH 19.
- Secondary School adjacent to the site at North.
- Mangifera Indica (Mango) is present at the site and its surrounding.
- A building in dilapidated condition is adjacent to the site in North.
- Gangapur Township is at 200m from the site.

HEALING POWER OF TREES

Trees really are magical. They are Divine wisdom keepers on Earth Like all living things, trees carry a specific energy frequency, or vibration. The vibration of trees is much slower, deeper, and more patient than most living creatures.

Trees are vessels of sacred earth energy, and they have a long history of inclusion in spirituality, healing, and sacred ceremonies for humanity.

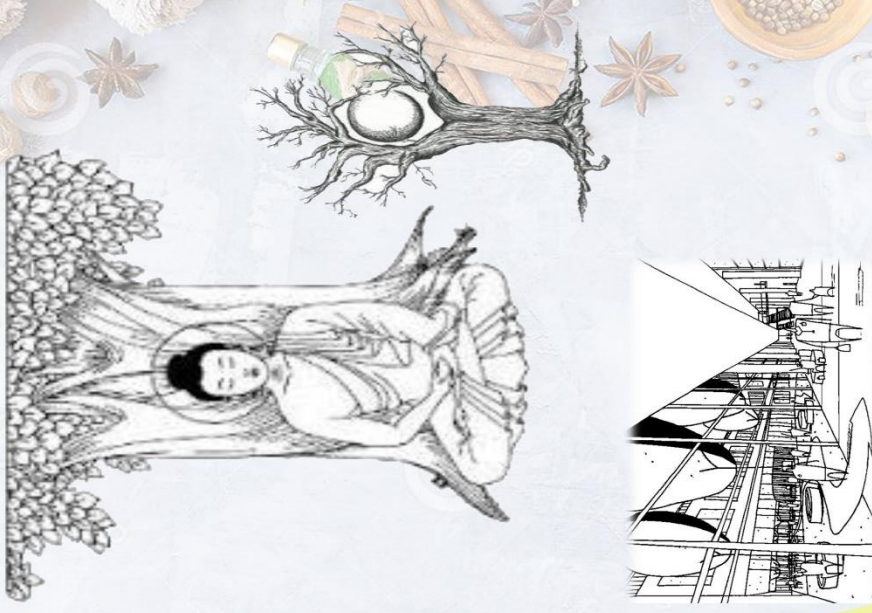
The vibration of trees resonates with a feeling of security, stability, and safety. Because trees are so firmly anchored to the Earth, they're wonderful teachers of grounding. Just walking under them, or placing your hands upon them will work wonders to help you ground and center your energy.

Ayurveda is all about nature and so our the trees who have extra ordinary properties of healing. We are conceptualizing a nature oriented design where our structure will be capable of healing the patient by the use of natural vibrations .

We will be using the power of trees in form of gardens, Diffuse light of sun through trees etc. to heal the patients.



Meditating while sitting around tree, Absorb the tree energy through the stations of the microcosmic orbit Trees are natural healing vessels.



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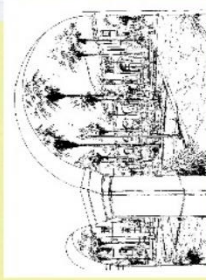
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AYURVEDA MEDICAL COLLEGE CONCEPT

THERAPEUTIC GARDENS

They are the outdoor designed to meet the physical, psychological, social and spiritual needs of the people . garden is a plant-dominated environment purposefully designed to facilitate interaction with the healing elements of nature. Interactions can be passive or active depending on the garden design and users' needs. There are many sub-types of therapeutic gardens including healing gardens, enabling gardens, rehabilitation gardens, and restorative gardens.



**Practice with the tree
absorb tree energy and then
return to the tree.**



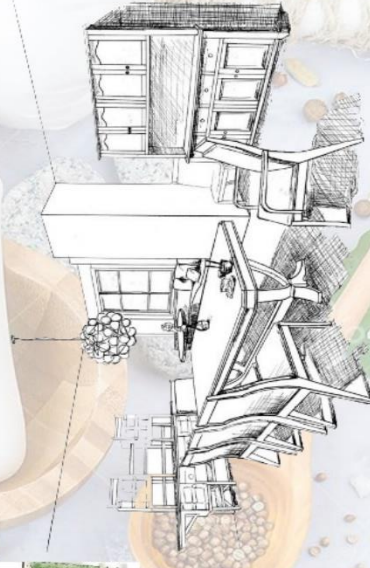
* DINING & KITCHEN ALONG

All the blocks are provided with dining and kitchen facilities, this is for proper health and to provide the patient with healthy organic food.



* SERVICES

All the services are provided in the basement.



DESIGNING FEATURES

* TERRACE GARDENS

The private rooms are provided with terrace garden. The garden will act as a natural booster and will help to cure the patients faster. The natural vibration in the vicinity of patient will energize them .

* GREEN COURTYARDS

The courtyards garden are derived from symbolic Japanese courtyards, The main reason for providing of courtyard is not only just mere aesthetic Look but it also helps to fulfill functional needs of building

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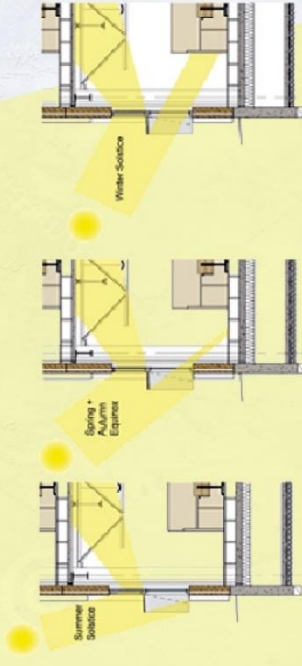
AYURVEDA MEDICAL COLLEGE CONCEPT

FUNCTIONAL REQUIREMENTS

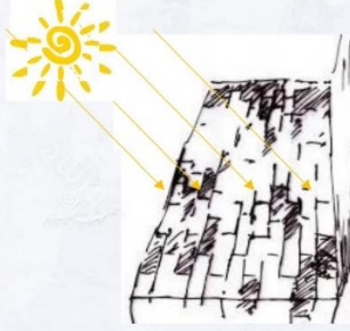
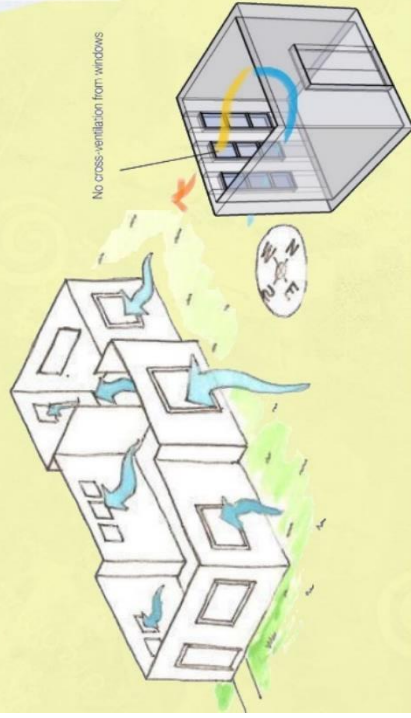
The main emphasis is laid on FUNCTIONAL requirement rather than aesthetics. The movement for diagnostic and college is kept different so to avoid disturbance .

The main moto is to provide more and more natural light and fresh air rather than artificial sources of energy.

* Natural light in college



*NATURAL AIR IN CLASSROOMS



thick walls in south, to protect gain of heat

RADIOLOGY
DIAGNOSTIC CENTRE

DIAGNOSTIC CENTRE, PATHOLOGY
WILL BE PLACED ON THE EASTERN SIDE
FOR BLOOD TO BE STORED IN COOL
AND DRY SPACE.

The wind will flow towards east during summer month,
So the pond and herbal garden will not only cool
the wind but also will increase its beneficial value.



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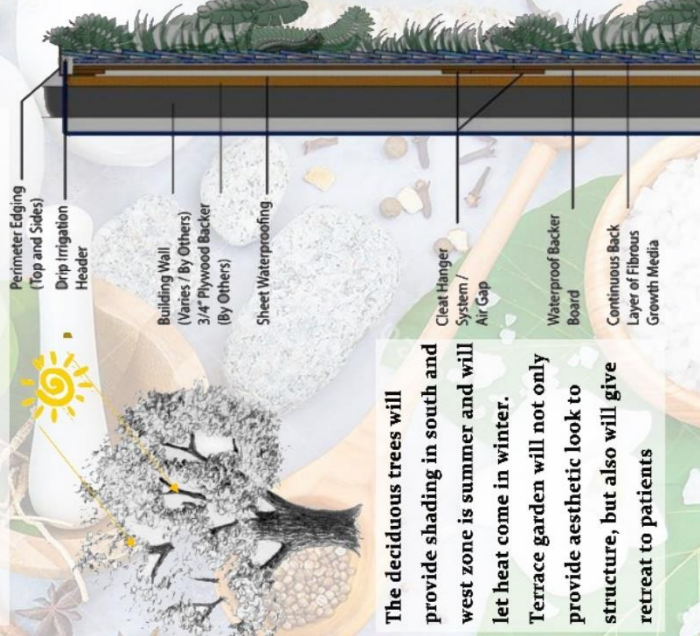
ORIENTATION OF BLOCK

The IPD (indoor patient department) block is places in the north and eastern side, This is done so that patient can be benefited from the north and eastern rays of the sun. These rays are the considered effective for healing

IPD BLOCK

Emergency block will always need artificial source of energy, The placement of it is thus done in south, where it is hard to control the heat of sun.

EMERGENCY BLOCK



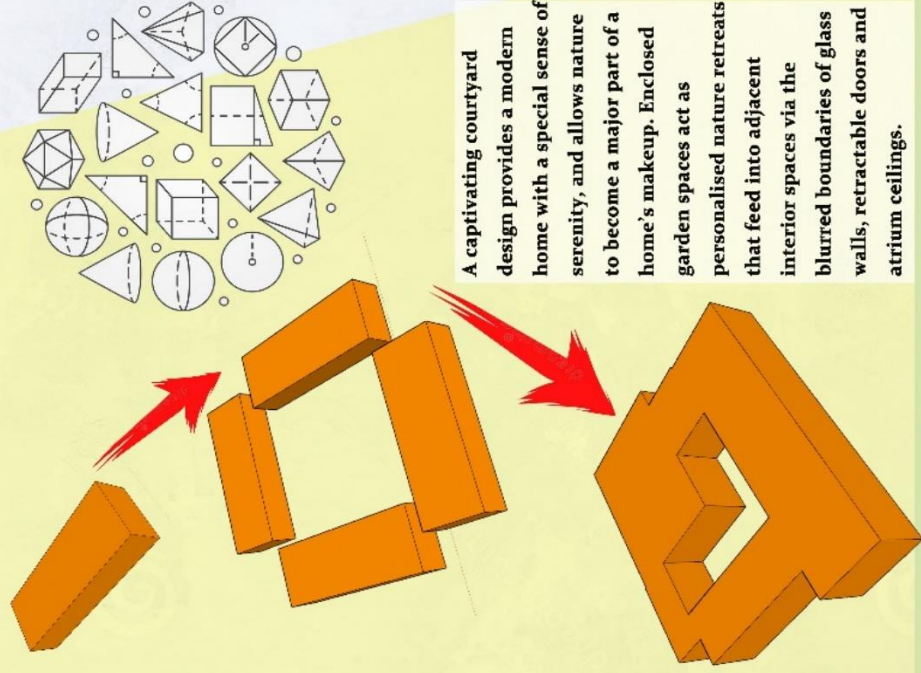
The deciduous trees will provide shading in south and west zone is summer and will let heat come in winter. Terrace garden will not only provide aesthetic look to structure, but also will give retreat to patients

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AYURVEDA MEDICAL COLLEGE CONCEPT

FORM EVOLUTION

Geometry is the fundamental science of forms and their order. Geometric figures, forms and transformations build the material of architectural design. In the history of architecture geometric rules based on the ideas of proportions and symmetries formed fixed tools for architectural design.

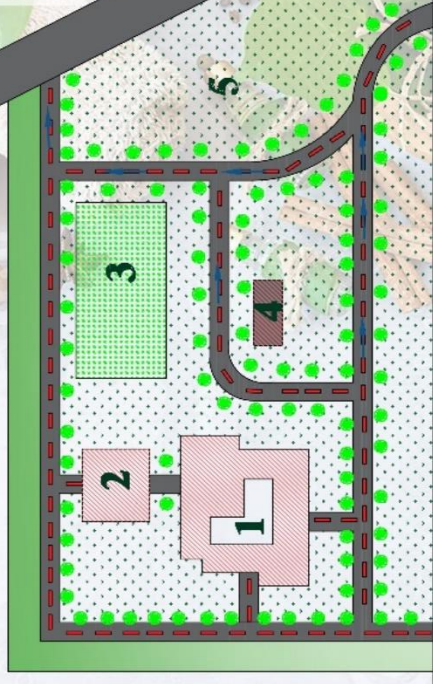


LEGENDS

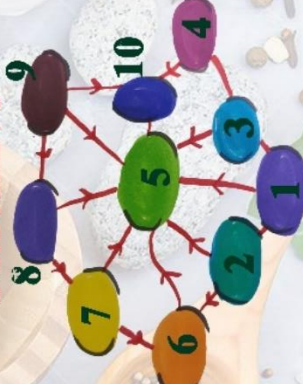
- 1 ACADEMIC BUILDING
- 2 HOSTLE BUILDING
- 3 OPEN PLAYGROUND
- 4 INTERNAL PLAY AREA
- 5 HERBAL GARDEN

LEGENDS

SITE AREA- 15 ACRES
Ground coverage - 35%
FAR - 1.5
BUILDING Ht. - 1.5 times of front roadand setback width
ROAD: Front-9m ,Sides-5m ECS- 1.5



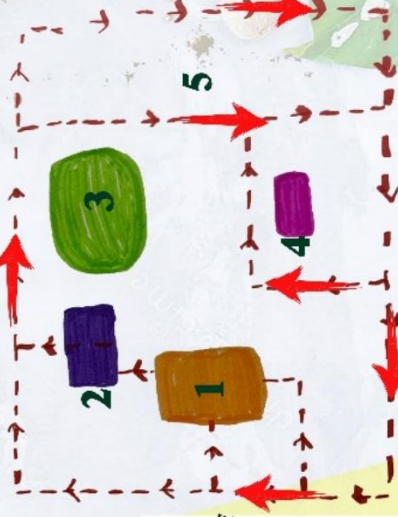
STACKING



LEGENDS

- 1 RECEPTION
- 2 IPD
- 3 OPD
- 4 RAMP
- 5 OPEN COURTYARD
- 6 SERVICES AREA
- 7 DISPENSARY
- 8 ENTRANCE
- 9 STAFF ROOM
- 10 CANTEN

SITE ZONING



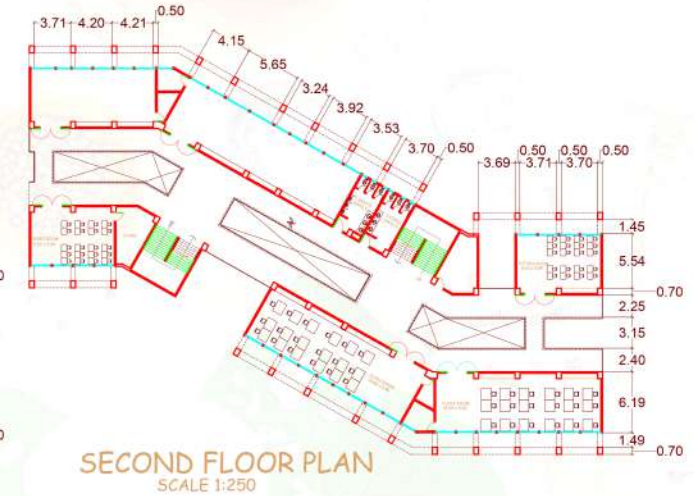
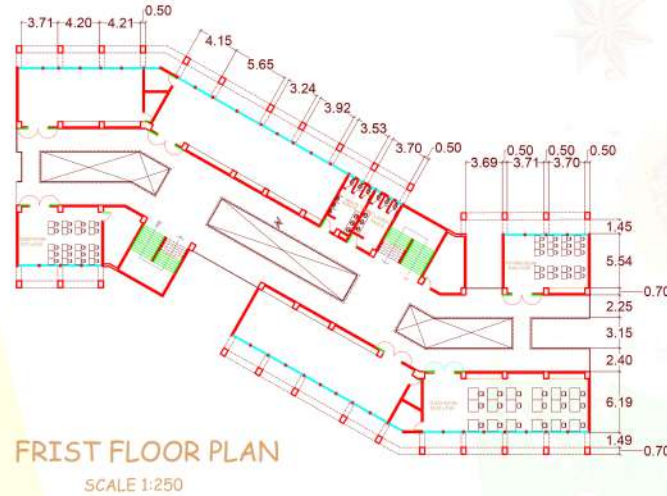
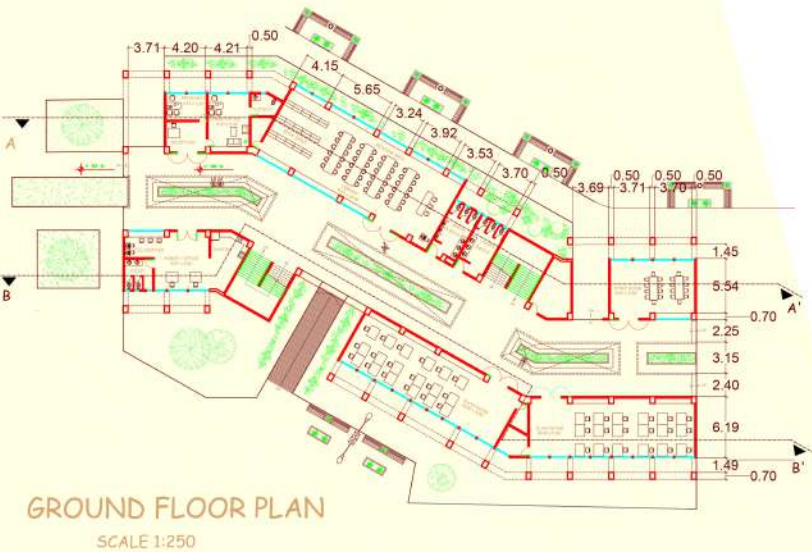
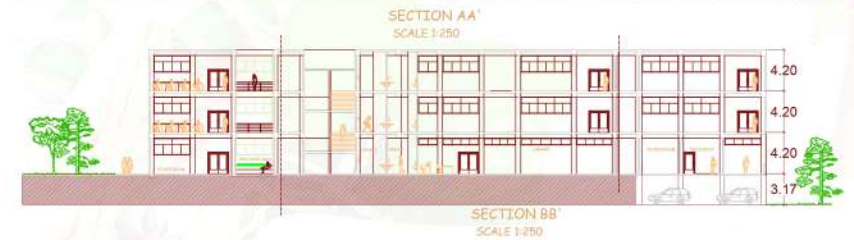
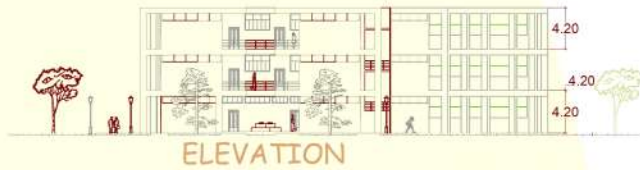
LEGENDS

- 1 ACADEMIC BUILDING
- 2 HOSTLE BUILDING
- 3 OPEN PLAYGROUND
- 4 INTERNAL PLAY AREA
- 5 HERBAL GARDEN

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Thesis By-
Gaurav Mishra

AYURVEDA MEDICAL COLLEGE

ADMIN BLOCK ELEVATION, SECTION & PLAN



SCALE 1:250

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Ar. Sangeeta Sharma, Ar. Ramakant

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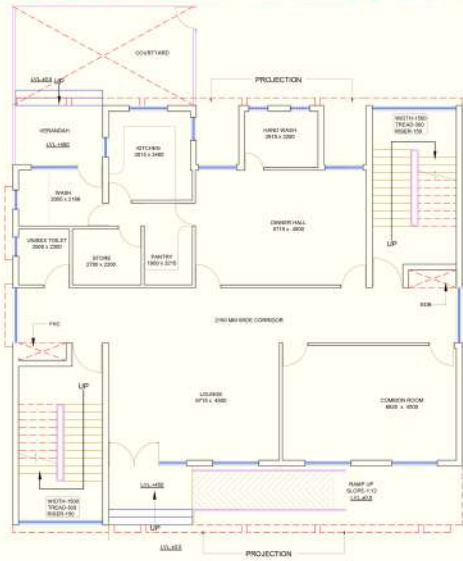
Gaurav Mishra

Roll No.-1170101012

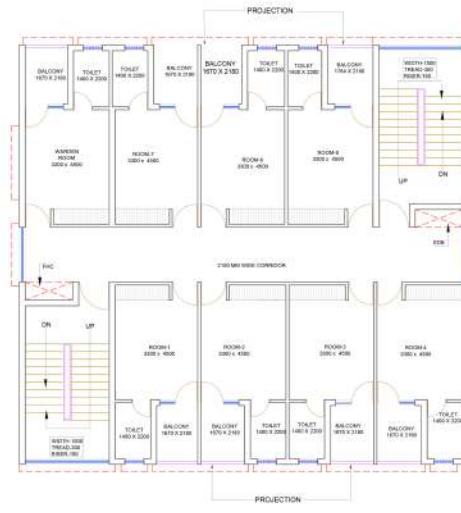
B.Arch 5th Year 2021-22

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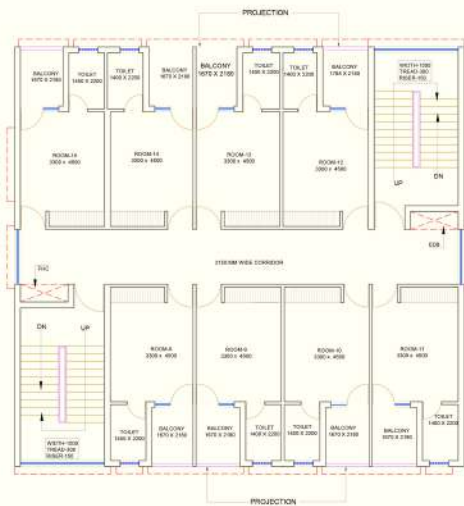
HOSTEL BLOCK PLAN



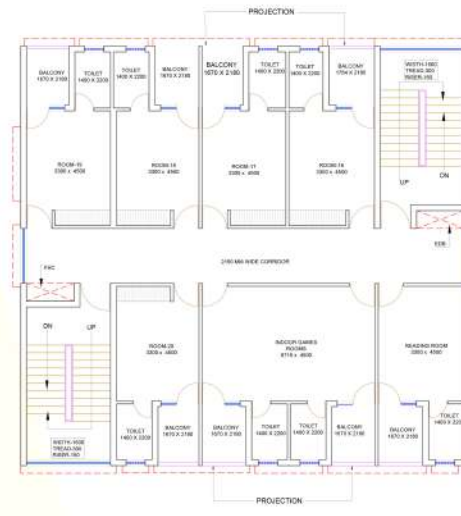
GROUND FLOOR PLAN



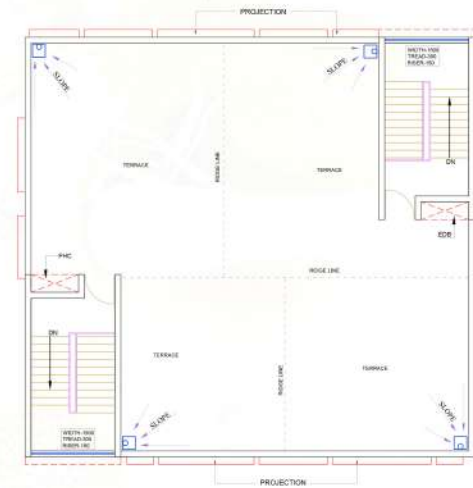
FIRST FLOOR PLAN



SECOND FLOOR PLAN



THIRD FLOOR PLAN

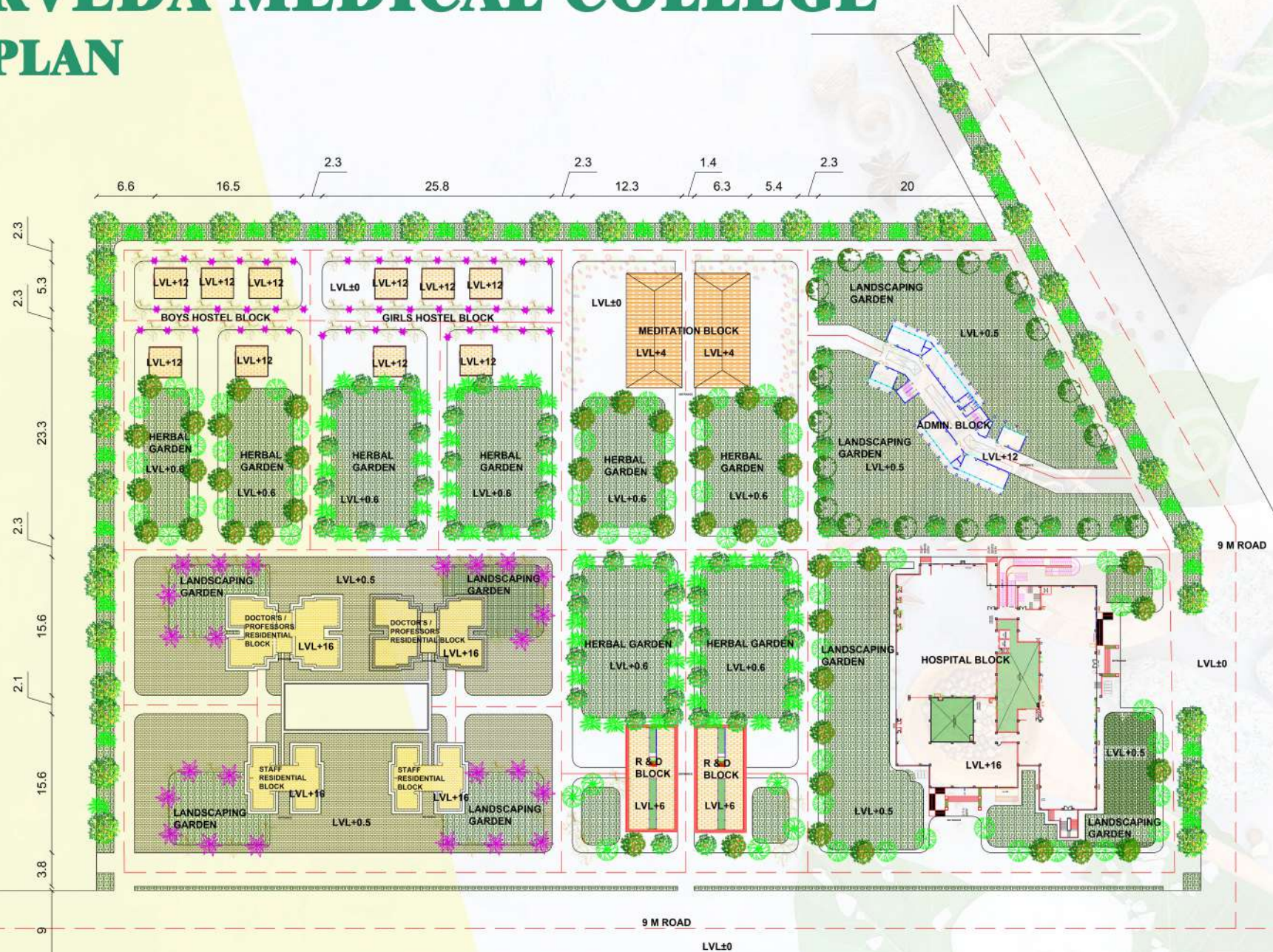


TERRACE FLOOR PLAN

SCALE 1:200

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SITE PLAN



SCALE 1:500

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Ar. Sangeeta Sharma, Ar. Ramakant

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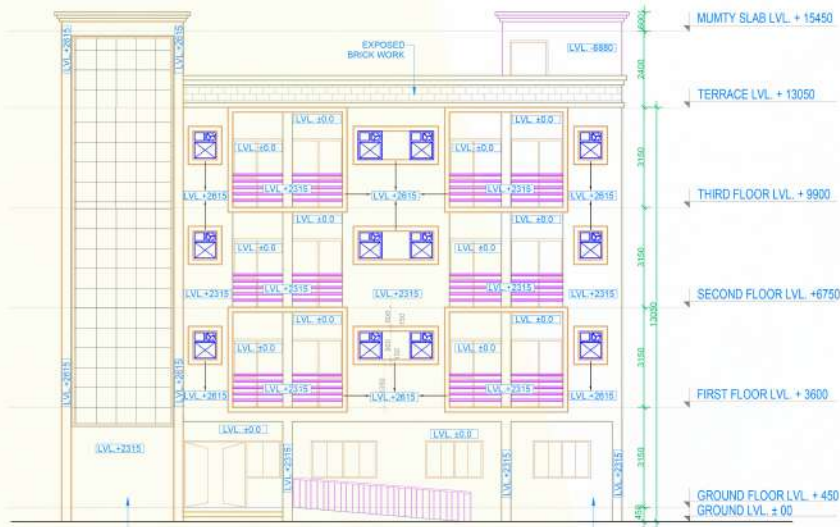
Gaurav Mishra

Roll No.-1170101012

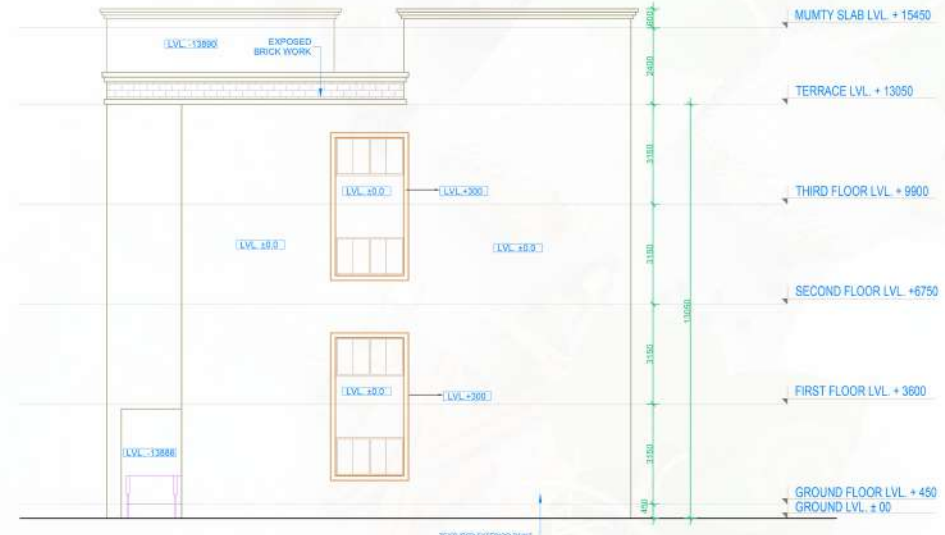
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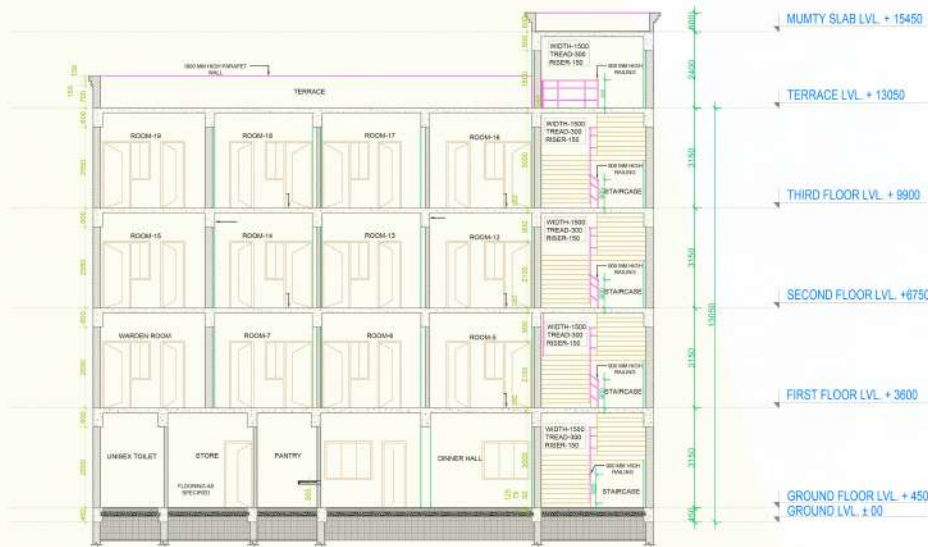
ELECTIVE (HOSTLE WORKING)



FRONT ELEVATION



RIGHT SIDE ELEVATION



SECTION AT X-X'



SECTION AT Y-Y'

Thesis Guide-

Ar. Sangeeta Sharma, Ar. Ramakant

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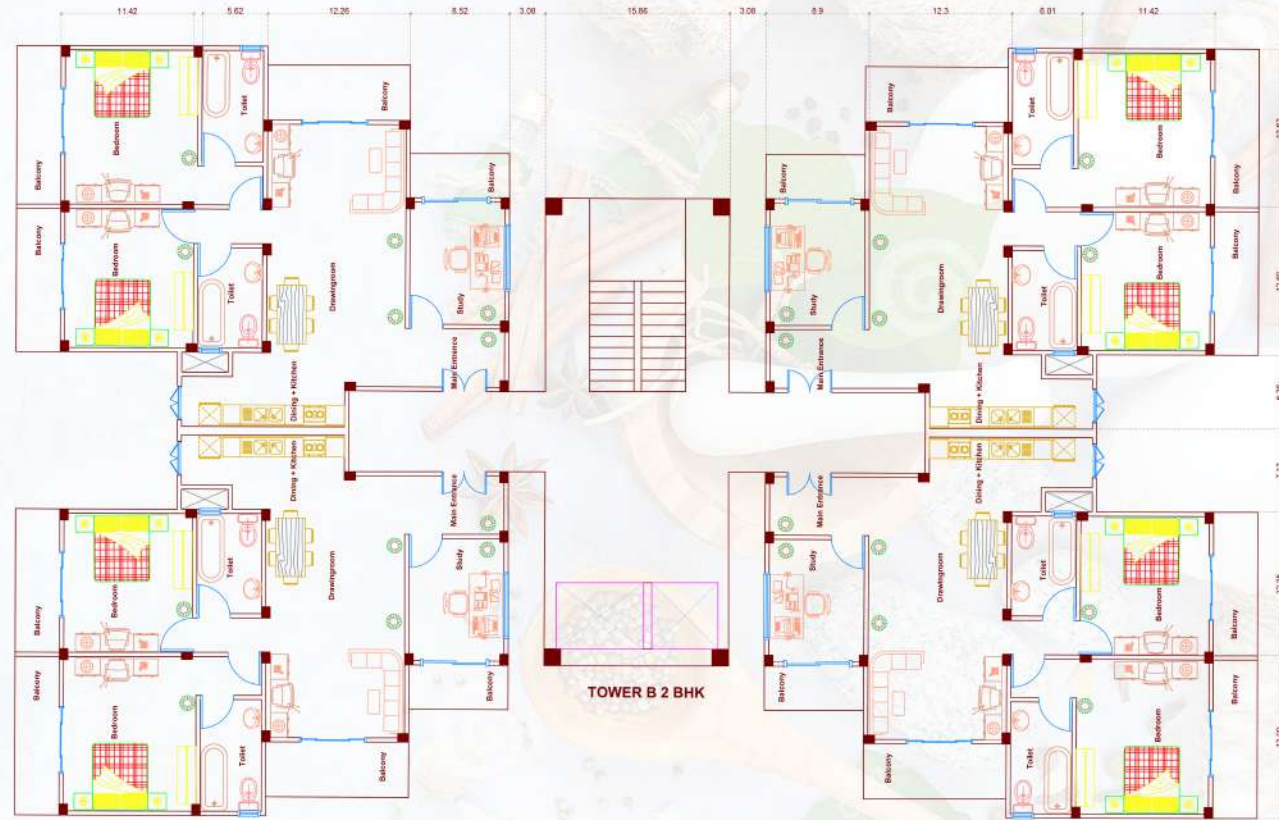
Gaurav Mishra

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RESIDENTIAL BLOCK PLANS 1BHK & 2BHK



SCALE 1:200

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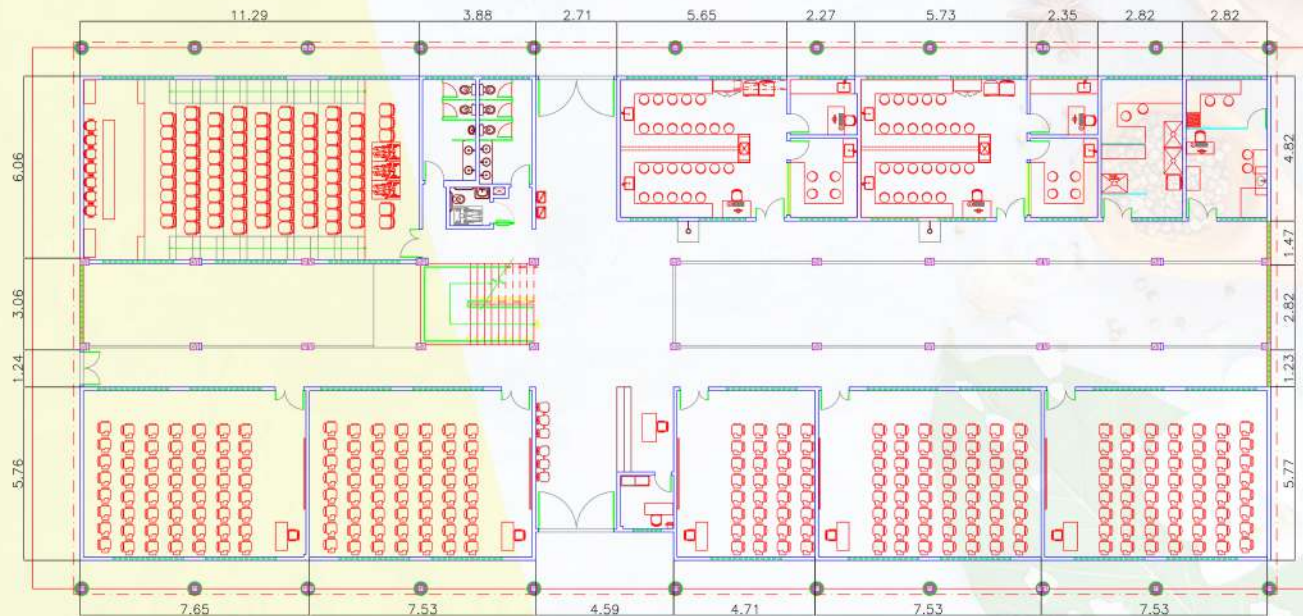
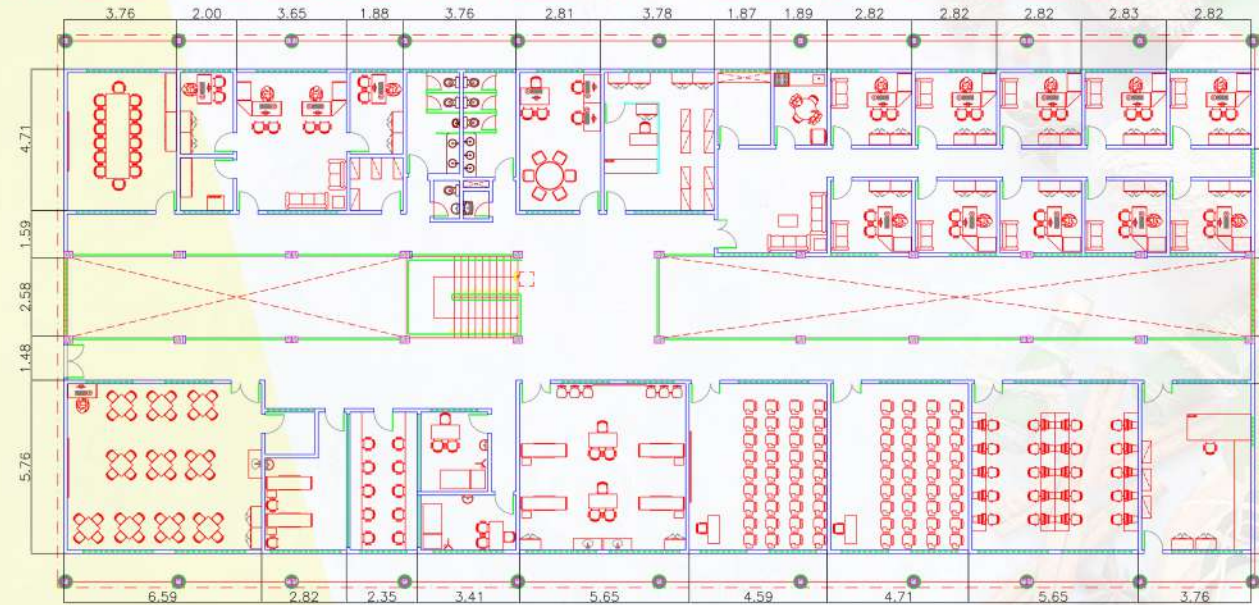
Gaurav Mishra

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RESEACH & DEVELOPEMENT BLOCK PLANS



SCALE 1:200

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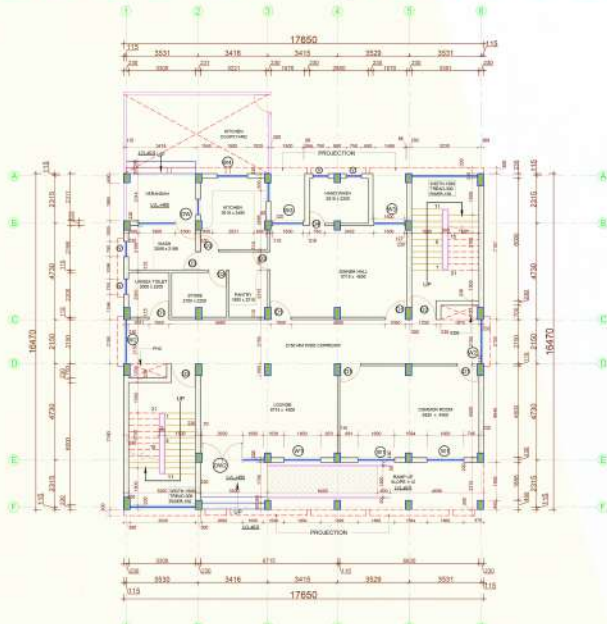
Gaurav Mishra

Roll No.-1170101012

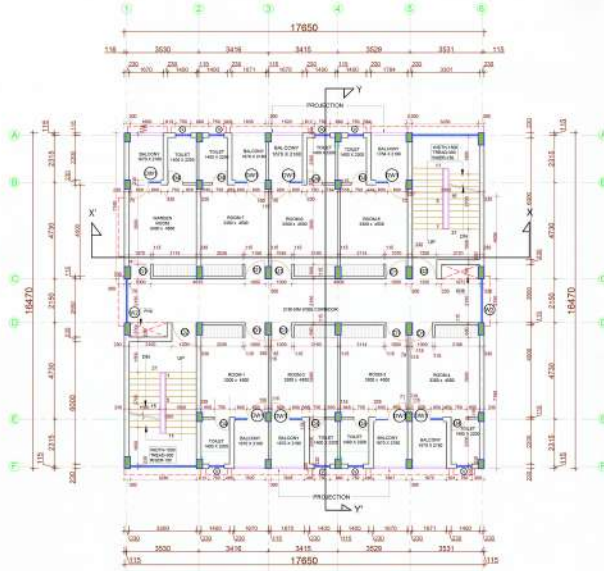
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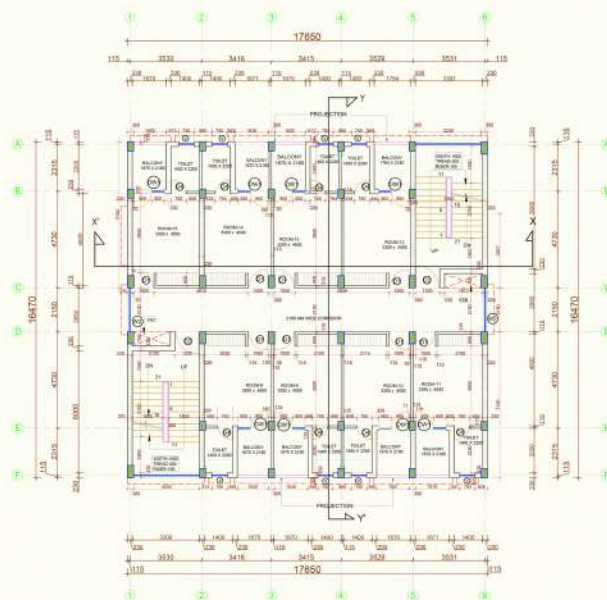
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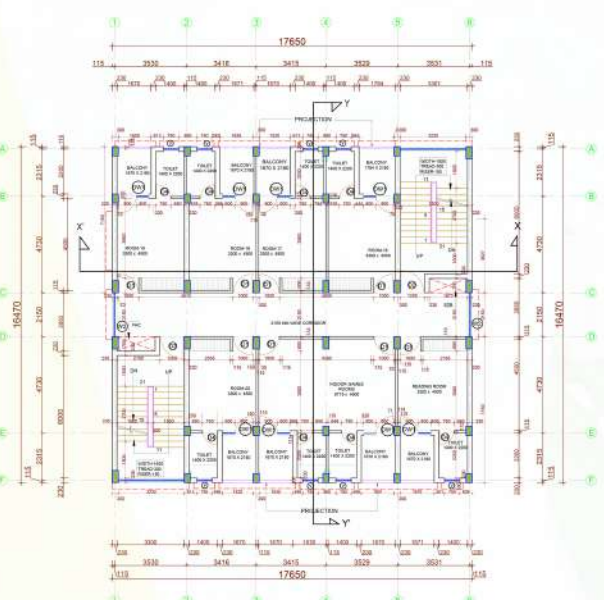
GROUND FLOOR PLAN



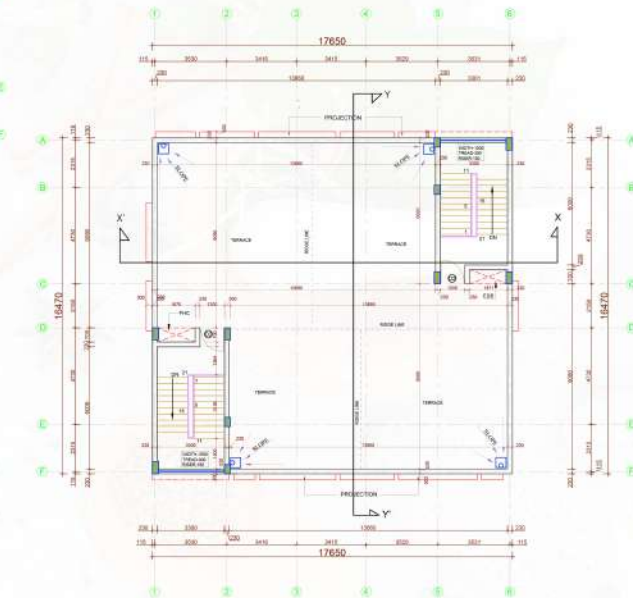
FIRST FLOOR
PLAN



SECOND FLOOR PLAN



THIRD FLOOR
PLAN



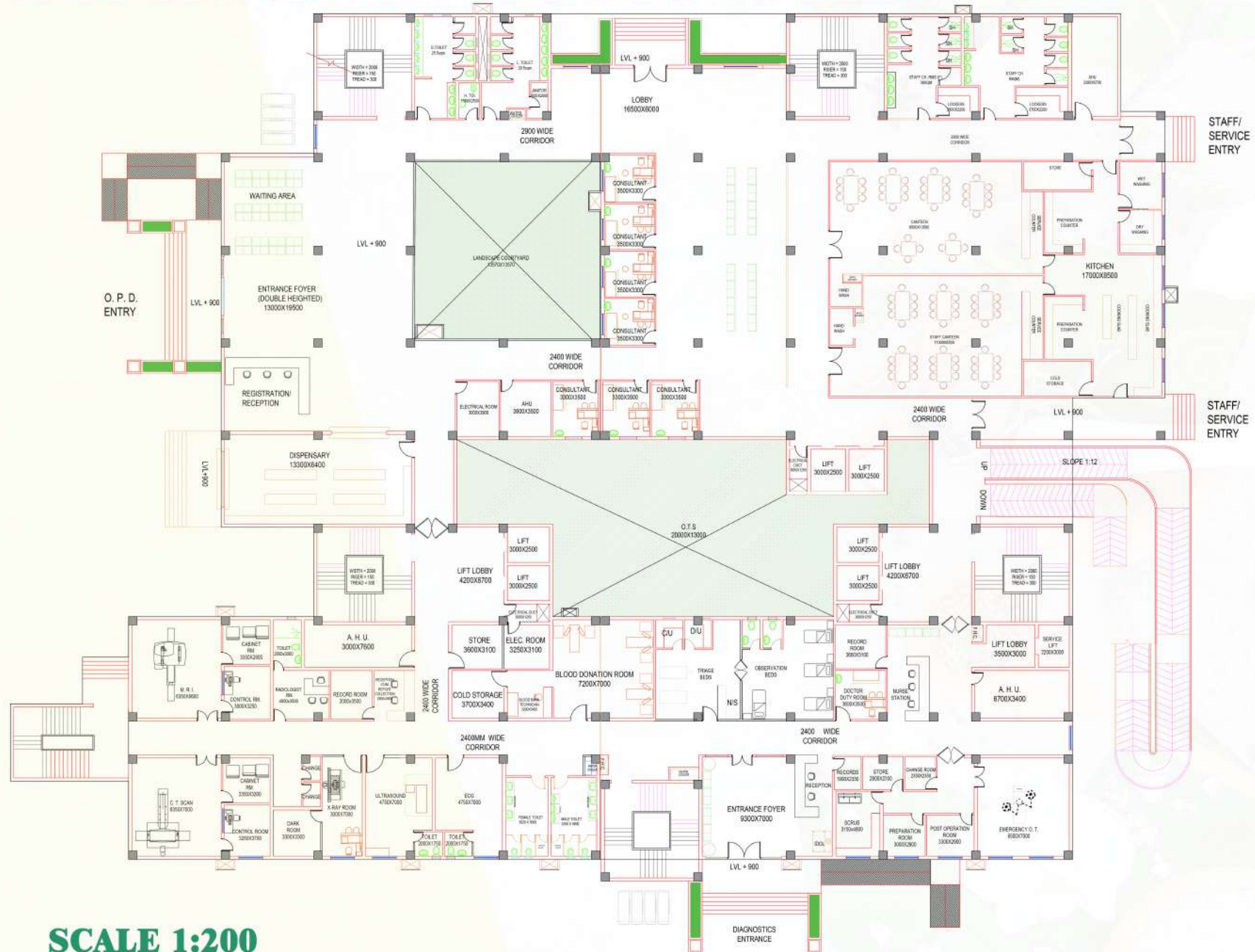
TERRACE FLOOR
PLAN

SCALE 1:200



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HOSPITAL BLOCK GROUND FLOOR PLAN



SCALE 1:200

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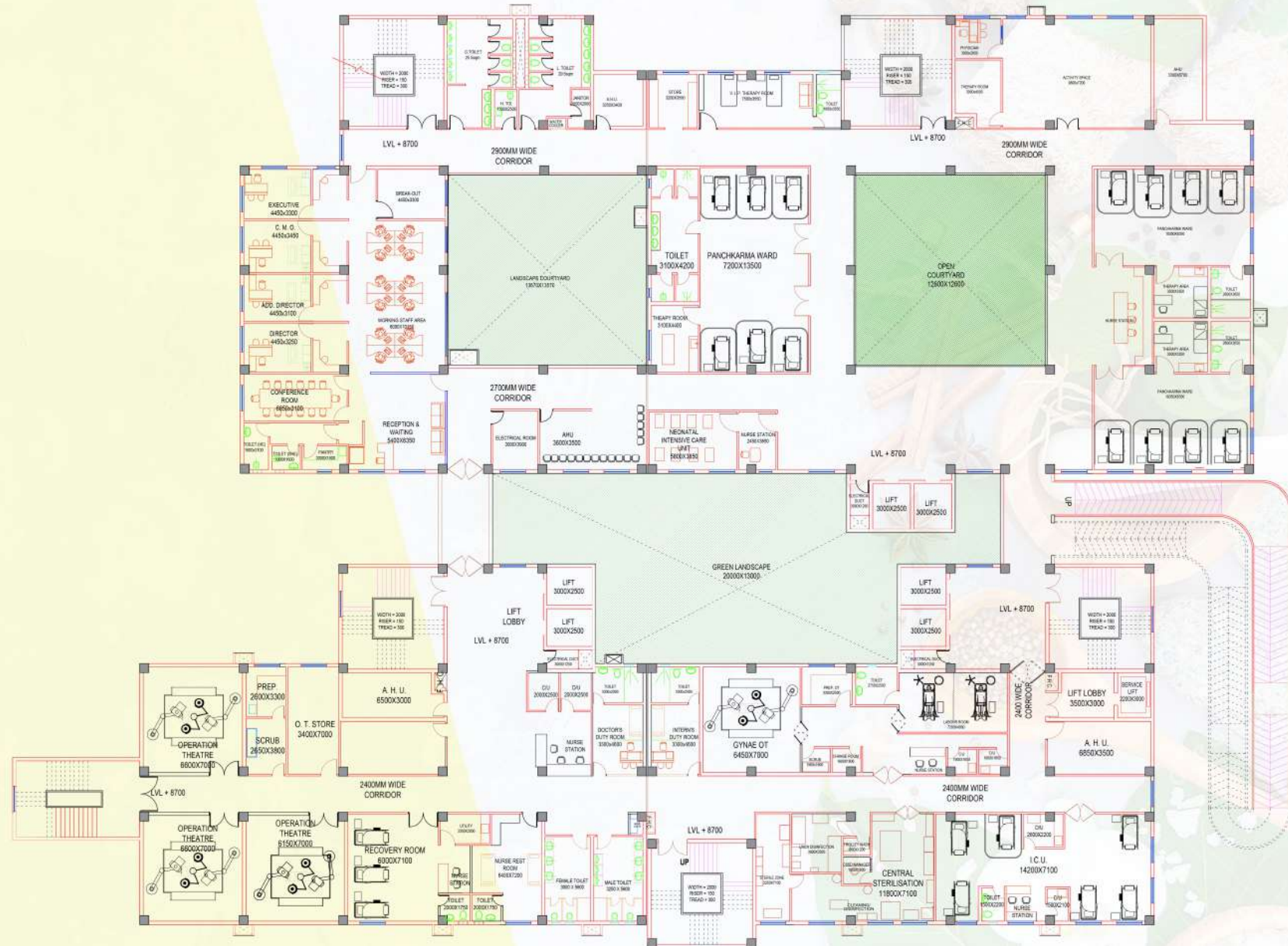
Thesis By-

Gaurav Mishra

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AYURVEDA MEDICAL COLLEGE HOSPITAL SECOND FLOOR PLAN



SCALE 1:200

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AYURVEDA MEDICAL COLLEGE

HOSPITAL THIRD FLOOR PLAN



SCALE 1:200

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