THESIS REPORT ON

“GOVERNMENT MEDICAL COLLEGE, AMARPUR, U.P.”

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF:

BACHELOR OF ARCHITECTURE

BY

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1150101002

THESIS GUIDE

PROF. SANGEETA SHARMA

AR. NAVEEN SINGH

SESSION

2019-20

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“GOVERNMENT MEDICAL COLLEGE, AMARPUR“ under the supervision of Prof. Sangeeta sharma, is the bonafide work of the
student 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 Examinar

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3. Thesis Title: GOVERNMENT MEDICAL COLLEGE, AMARPUR, U.P.

4. Degree for which the thesis is submitted: Bachelor's Degree in Architecture

5.	**Faculty of University to which the thesis is submitted:**	**Yes/No**
6.	**Thesis preparation guide was referred to preparing the thesis.**	**Yes/No**
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ACKNOWLEDGEMENT

I would like to take this opportunity to thank my beloved thesis guide **Prof. Sangeeta sharma**, who have always helped me and have give me brilliant ideas. I highly appreciate all the help they have given to me. Their concerns about the many problems involved in acquiring land for **MEDICAL COLLEGE** or for the expansion of existing ones have encouraged me to conduct this study as a means of presenting more explicitly the difficulties of **MEDICAL COLLEGE** in metropolitan areas.

I would like to thank the Dean **Prof. Mohit Kumar Aggarwal** and thesis coordinator **Ar. Urvashi tiwari** without whose help and co-ordination this thesis may not have been possible. I also want to thank all my faculty members for the guidance that helped successfully integrating the research aspects of the project throughout this thesis.

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Aayush khare

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INTRODUCTION . .

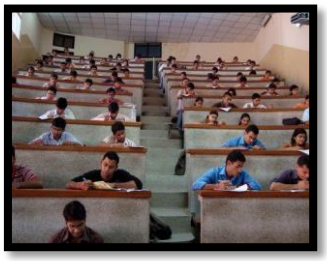
INTRODUCTION TO THE TOPIC....

- Institution define an organization , establishment , foundation , society or the like devoted to the promotion of a particular cause a program
- An institution is any persistent structure or mechanism of social order governing the behavior of a set of individuals within a given community.
- Institutions are identified with a social purpose transcending individuals and intentions by mediating the rules that govern living behavior.
- Medical institute provide tertiary level health care to its citizens and for quality medical education to the students community.
- Having achieved laurels for establishing superior standards in providing civic amenities to the denizens of local area.
- Medical institute provide quality and this has culminated in to simmer as we see today

Medicine is one of the most sort out career and rewarding career for those interested in science and dealing with sick people. As we all know that there has been a lack of medical colleges in our country as compared to number of its applicants in the state of uttar pradesh with 18 mbbs medical colleges in the state with the intake capacity of 1700 students per year which is too small as compared to the students willing to study medicine , this new medical college will contribute its hand in helping more and more students to pursue the medical studies in the state.
As this site is proposed at lalitpur district. 100 admissions in medical college will serve peoples in a pretty good manner.

HISTORY

The year 1835 has a special bearing in the history of medical education in india. Two very prestigious and respected medical colleges of india, calcutta medical college, kolkata and madras medical college, chennai admitted students for the first time in 1835. The calcutta medical college was not only the first institute to teach modern medicine in india but also in asia. In mumbai, the first medical college was named after sir robert grant, then governor of mumbai and the college started functioning in 1845. Agra medical school was established in 1854 along side thompson hospital, this is today known as sarojini naidu medical college & hospital.



DEPARTMENTS IN MBBS

1. Human anatomy
2. Human physiology
3. Biochemistry
4. Pathology
5. Microbiology
6. Pharmacology
7. Forensic medicine including toxicology
8. Community medicine
9. Medicine
10. Paediatrics
11. Psychiatry
12. dermatology, venerealogy and leprosy
13. tuberculosis and respiratory diseases

AIMS AND OBJECTIVES

1. To boost the growth of medical students in the state.
2. To provide the world class medical facilities .
3. To provide students and patients with a green and healthy environment .
4. Additional attraction can be provided by nature walk and also by developing unique bio-diversity part so that pleasant environment with adequate space for walking and strolling.
5. Lalitpur district is in jhansi division in the indian state of uttar pradesh. The town of lalitpur is the district headquarters to developing its infrastructure and providing opportunities for out coming medical talents who can bring pride to our country in different medical researches etc.
6. To make the building self-sustainable as much as possible.
7. To make it eco-friendly.

REQUIREMENTS

- Academic block
- Administrative block
- Learning hospital
- Landscape areas
- Residential block

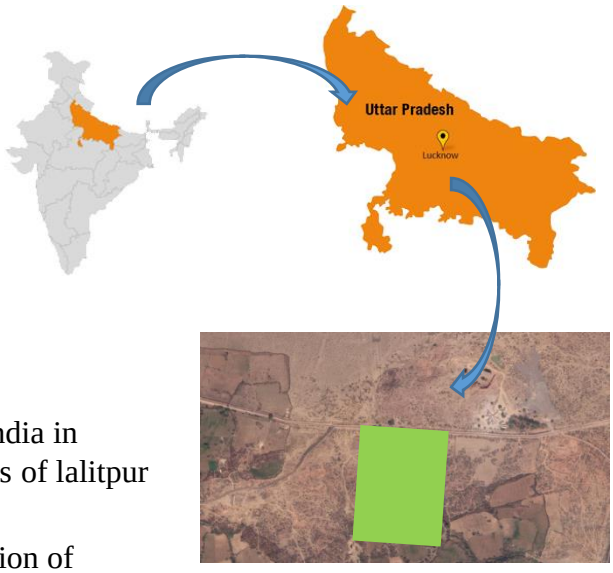
GENERAL HOSPITAL RELATIONSHIPS

Architectural scope

- To develop a circulation pattern which makes the whole experience enjoyable.
- Landscape should play an important role to enhance creativity and mental satisfaction of the people who will be part of the institute.
- Opportunity to deal with the different attitude of the different building meant for various purposes, keeping the harmony.

SITE ANLYLISIS

- Site area : 23.16 ACRE (93760sq.M)
- Location : Amarpur road NH44, lalitpur Uttar pradesh
- Longitude :24˚45’35”n 79˚29’1.5”
- Land type: flat surface land with no contours
- Access road : Is located in amarpur, lalitpur at jhansi-sagar highway NH44
- Site context : Located in the institutional area giving a calm and silent enviroment



Lalitpur is a city and a municipal board in lalitpur district, india in the indian state of uttar pradesh. It is also district headquarters of lalitpur district. The city is part of bundelkhand region.

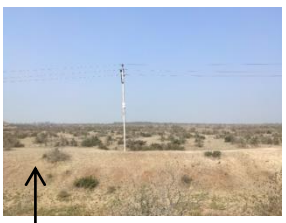
As per provisional data of 2011 census, lalitpur had a population of 133,305, out of which males were 69,529 and females were 54,062. The literacy rate is 82.39%

WAY TO REACH…

- Lalitpur airstrip 14km
- Khajuraha airport 150km
- Lalitpur junction 14km
- Lalitpur bus station 6.1km

Red soil is found in amarpur. It is a group of soil that develop in a warm, temperate, moist climate under deciduous or mixed forests and that have thin organic and organic-mineral layers overlying a yellowish-brown leached layer resting on an illuvial red layer. Red soils generally derived from crystaline rock.

Red soil is found in amarpur. It is a group of soil that develop in a warm, temperate, moist climate under deciduous or mixed forests and that have thin organic and organic-mineral layers overlying a yellowish-brown leached layer resting on an illuvial red layer. Red soils generally derived from crystaline rock.



ROAD TOWARDS AMARPUR

PROPOSED SITE

PROPOSED SITE

3M WIDE ROAD

VIEW FROM SITE

RED SOIL

ORIENTATION OF SITE:

- There is a road in front There are vacant lands beside the the site.

TRANSPORTATION ON SITE:

- The site is well connected with adequate services like
- NH44 Jhansi sagar hinghway

SLOPE ANALYSIS:

- The Project area possesses fairy plain terrain

EROSION/ SUBSIDENCE:

- Proper greening & paving of area will not cause any soil erosion problem and subsidence.

SEISMICITY:

- The area under study falls in zone – IV according to the Indian standards seismic zoning map.suitable seismic coefficients in horizontal and vertical directions respectively have to be adopted while designing the structure.

BYE LAWS:

- Permissible F.A.R. - 3
- Ground coverage - 30%
- Max. height - 16M
- Front set back - 12M
- Rear set back - 12M
- Side set back - 12m

SITE ECOLOGY:

- There are no wild life sanctuaries/ park within radius of the project.

site. Neither any rare or endangered species have been recorded in the project influence area. There is no notified natural forests area in the North West District.

- Other than the large trees and some shrubs on site.
- The ecology of the study area is not very rich in diversity.

No endangered or endemic species(as notified in IUCN red Data Book) are located within the study area.

- No migratory birds breed in the study area. No Tiger reserve/elephant reserve/turtle breeding place/ is located with in 15 km radius of the site.

SITE PARAMETERS:

- Site area : 23.16 ACRE (93760sq.M)
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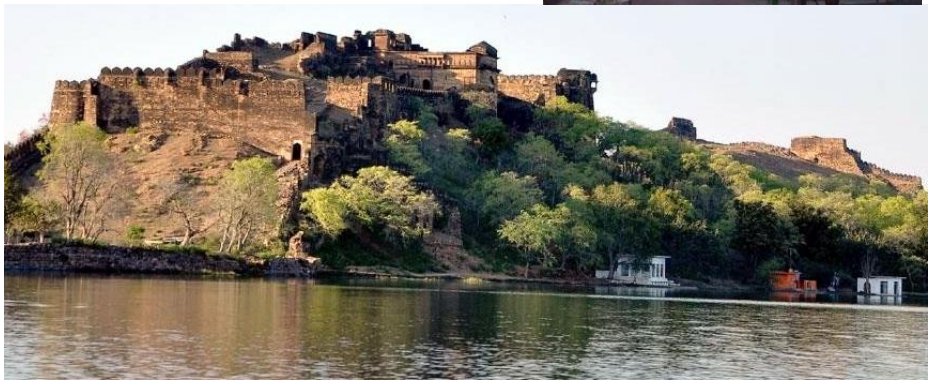
- **Parking** -1 Parking space for 30sq.m of Permissible F.A.R
- **Landscape** 1 Tree per 100sq.m of open space out of which 50% to be in category of evergreen tree.Minimum open space to be kept forlandscaping is 50% of open area.

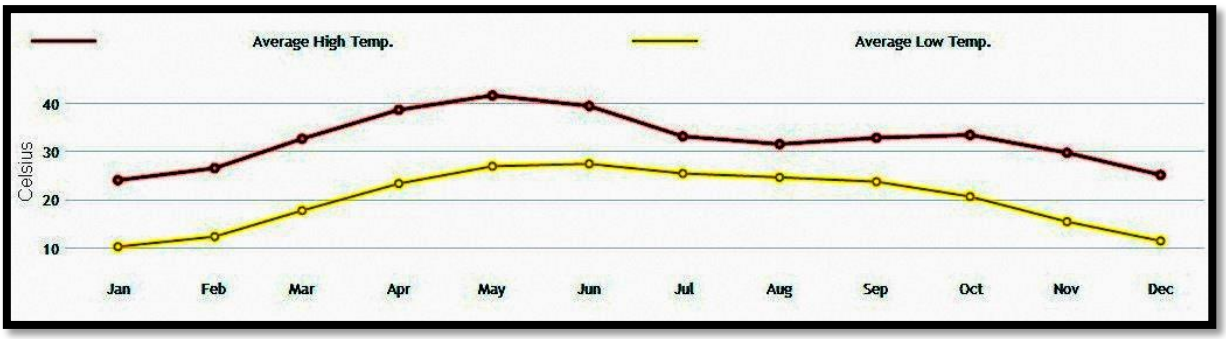


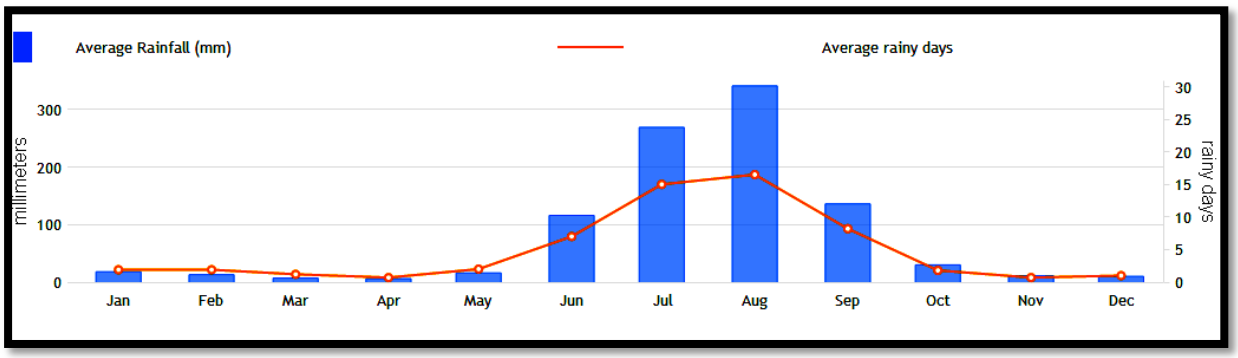
CLIMATE. . .

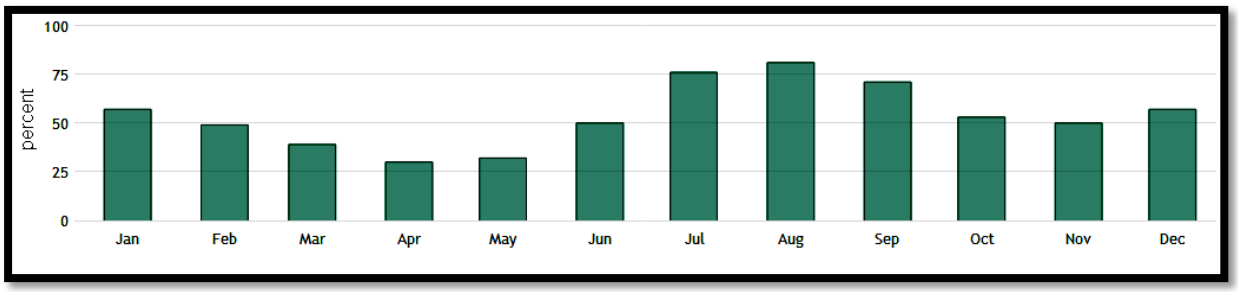
- The region has a semi- arid climate with extreme seasons ,Hot summers, and heavy rainfall in the monsoon months and very cold winters. outdoor design

The warm season last from 21 March to 15 June with an average daily high temperature above 39'c(102'F).

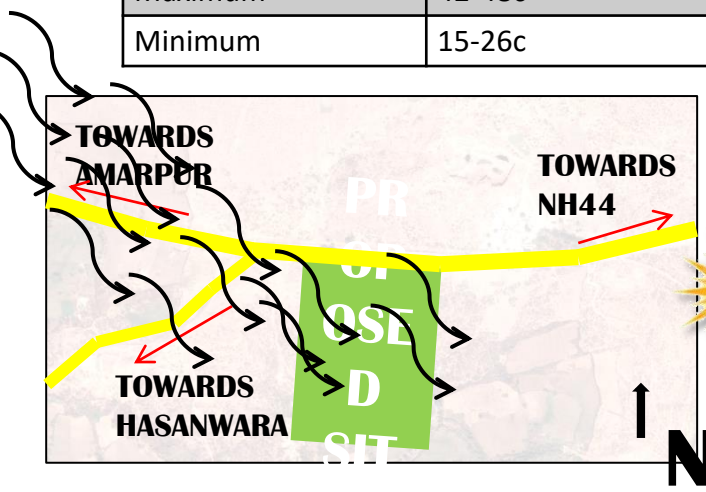
- CLIMATE OF AMARPUR IS COMPOSITE, WITH COLD WINTER AND HOT SUMMER.
- HOT-DRY(APRIL TO JUNE)
- WARM HUMID (JUNE TO SEPTEMBER)
- COLD AND DRY (NOVEMBER TO FEBRUARY)

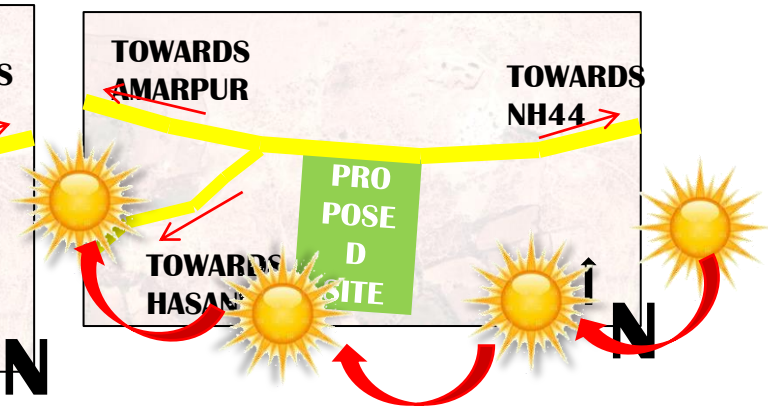




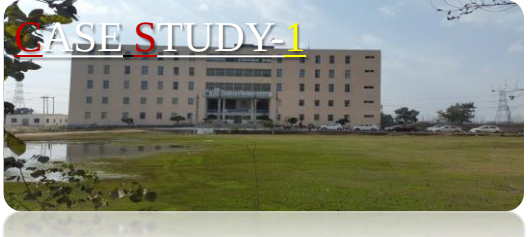


	SUMMERS	WINTERS	MONSOONS
Maximum	42-48c	23-33c	32-42c
Minimum	15-26c	2-7c	18-23c





CASE STUDY-1

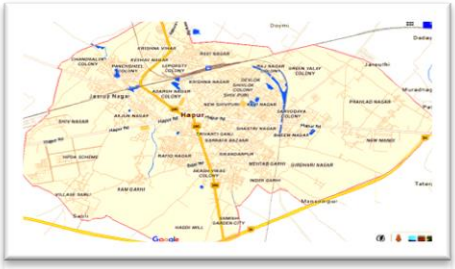


RAMA MEDICAL COLLEGE HAPUR

Rama university is spread across more than 150 acres of lush green environment, serene surroundings and all the necessary facilities available within campus, the university promises to be a perfect place for learning.
Rama medical college is established in the ncr campus of the university, with a annual intake capacity of 150 mbbs students and with a learning hospital of 650 bed capacity providing all the world class medical facilities to both students and nearby neighborhoods.

Student intake -rama college of medical sciences has a annual student intake of 150 students for mbbs course.

Architect – globe architects , hapur
Location rama medical college is located at nh-24 delhi hapur highway, pilakhua, dist.: Hapur (uttar pradesh)



HAPUR DISTRICT MAP

RAMA MEDICAL COLLEGE ON NH-24 HAPUR

SITE ANALYSIS

• SITE AREA	6,75,000 SQM
• BUILT UP AREA	2,36,250 SQM
• GROUND COVERAGE	35%
• STRUCTURE	TREBEATED STRUCTURE SYSTEM
• PARKING	PROVISION FOR ON SITE SURFACE AND BASEMENT PARKING

ENTRANCE LOBBY

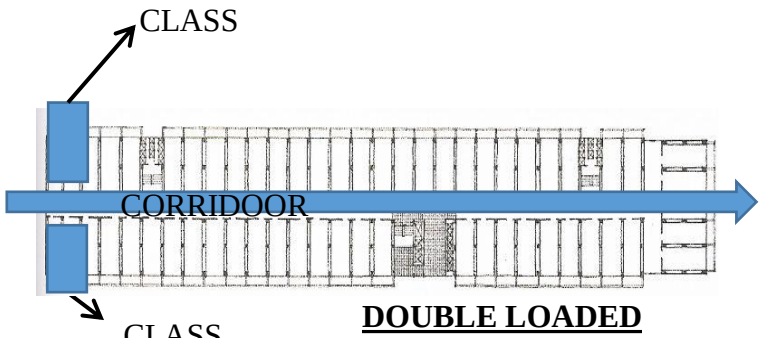
MEDICAL COLLEGE, BUILDING

DISECTION HALL

CONCEPT

The main objective for designing this campus was of creating of space amidst the city without deviating from imparting it a peaceful and calm environment free from the disturbances and fuss from the city . the double entrance in the campus has been provided for the hassle free movement,. The flow of spaces between different blocks and the indoor and outdoor spaces has a sense of ease which entitles easy, convenient and confusion less movement to the individuals in the premises.

There is preferably double connectivity between different zones of the campus enabling the hassle free movement . the campus has lots of open lush green space having shrubs, plants, grass, and a small water body. The campus has alluring greenery and beautiful landscaping that creates a pleasant feel and gives the healthy environment to its residents.



DOUBLE LOADED CORRIDOOR PLANNING

The planning of the basement is done on the concept of double loaded corridor. This concept is very ideal for planning the institutional buildings as the single corridor acts as the link . in the basement central library with capacity of 5500 books has been designed very intelligently along with it also consists of the following :-

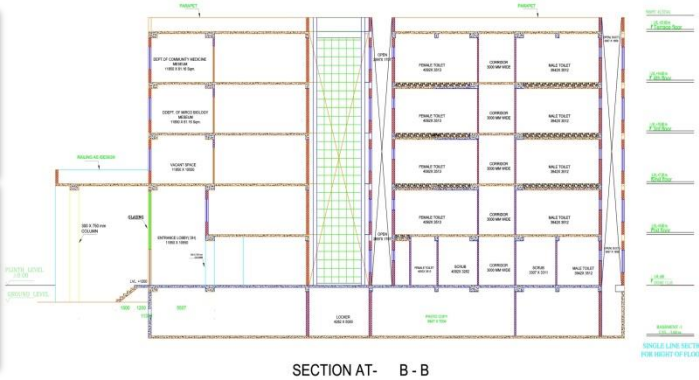
- ❑ central libarary
- ❑ Locker room
- ❑ Photocopy / binding room
- ❑ Store room
- ❑ Conference room
- ❑ Central photographic lab
- ❑ Computer lab
- ❑ Audio visual room
- ❑ Staff room
- ❑ Journal section
- ❑ P.G reading section
- ❑ Boys common room
- ❑ Girls common room
- ❑ Medical education room
- ❑ Pathology demonstration room
- ❑ Microbiology demonstration room
- ❑ Microbiology department libarary
- ❑ Prepation rooms
- ❑ Pathology department libarary

BASEMENT FLOOR PLAN OF MEDICAL COLLEGE

GROUND FLOOR PLAN OF MEDICAL COLLEGE

FIRST FLOOR PLAN OF MEDICAL COLLEGE

SECOND FLOOR PLAN OF MEDICAL COLLEGE



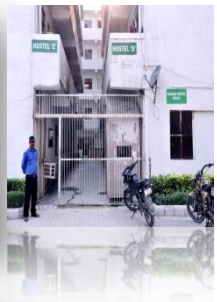
SECTION AT- B - B

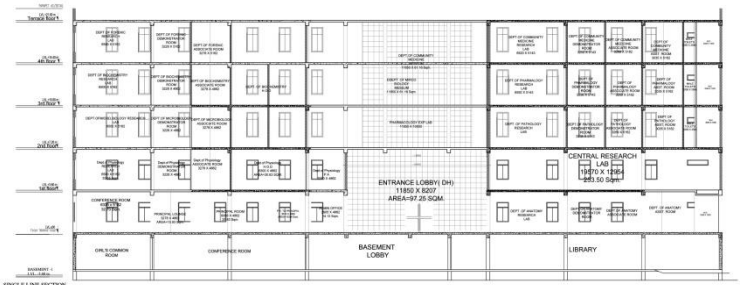
The planning floor is done on the concept of double loaded corridoor. This concept is very ideal for planning the institutional buildings as the single corridoor acts as the link . fourth floor consists of department of community medicine and department of forensic medicine with the following facilities

- ❑ Lecture theatres
- ❑ H.O.D room
- ❑ Associate professors cabins
- ❑ Museum
- ❑ Girls common room
- ❑ Dept. Of community medicine demonstration room
- ❑ Dept. Of forensic medicine demonstration room
- ❑ Dept. Of forensic medicine libarary
- ❑ Prepation rooms
- ❑ Community medicine and forensic medicine lab
- ❑ pharmacy lab
- ❑ H.O.D room
- ❑ Associate professors cabins
- ❑ Biochemistry lab
- ❑ Boys common room
- ❑ Pharmacology demonstration room
- ❑ Biochemistry demonstration room
- ❑ Biochemistry department libarary
- ❑ Prepation rooms
- ❑ Pharmacology department libarary

THIRD FLOOR PLAN OF MEDICAL COLLEGE

FOURTH FLOOR PLAN OF MEDICAL COLLEGE



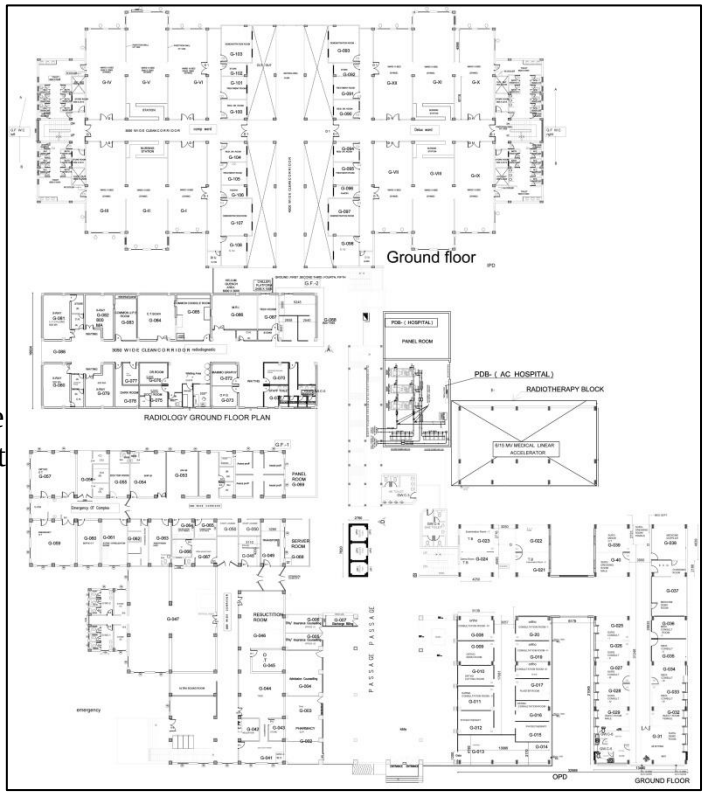


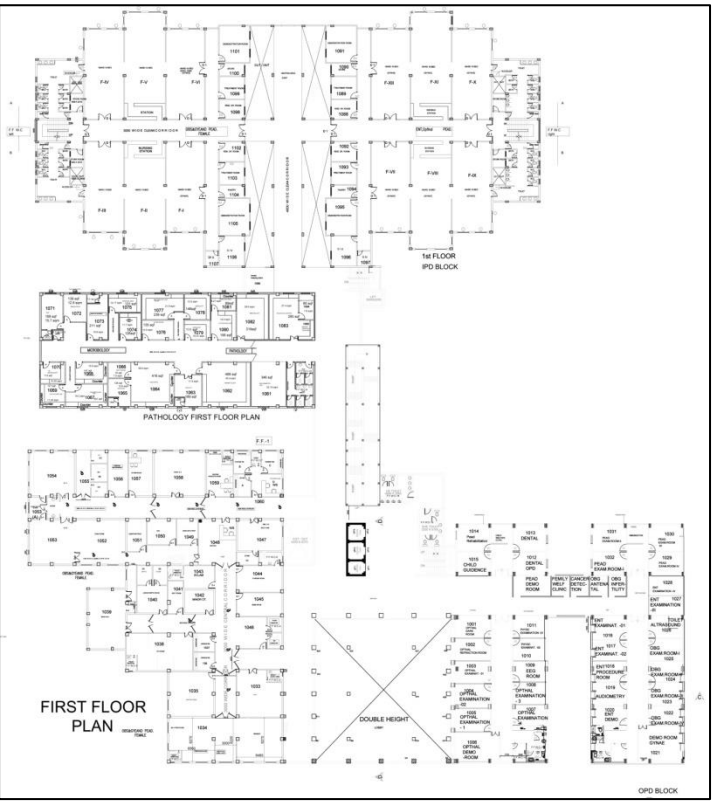
SECTION AT A-A

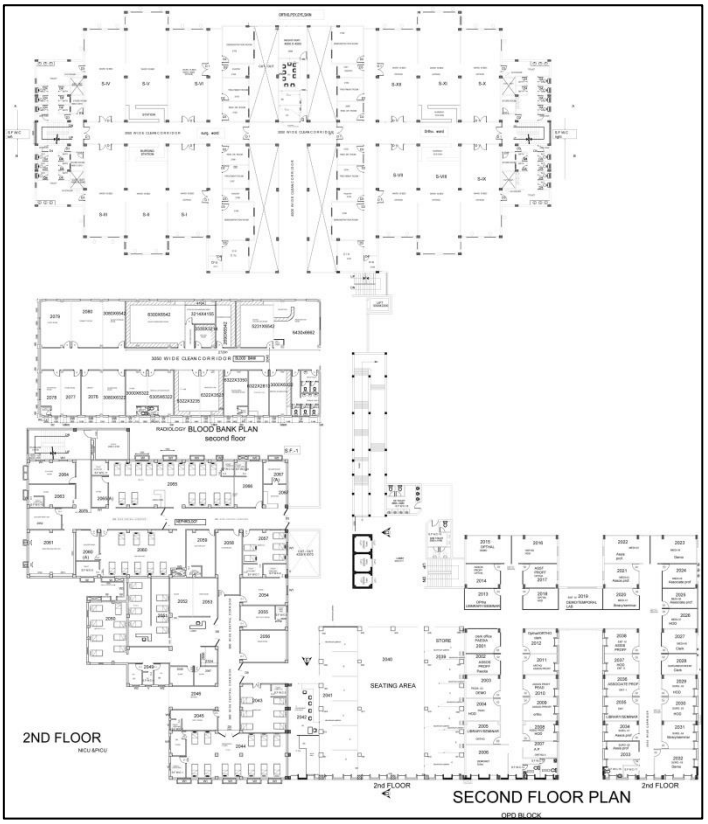
LEARNING HOSPITAL

- A hospital with 650 beds.
- State-of-the-art, multi-specialty, tertiary care.
- Hospital providing 7-star facilities hospital is broken into two blocks of different heights connected by an atrium.
- Estimated to care for the needs of almost 3 lakh people with its outpatient department and 50,000 patients through its inpatient facility annually

1. Total number of teaching beds - 650
2. Total number of beds in icu's – 42
3. Other hospital beds – 107
4. No. Of operation theaters – 10







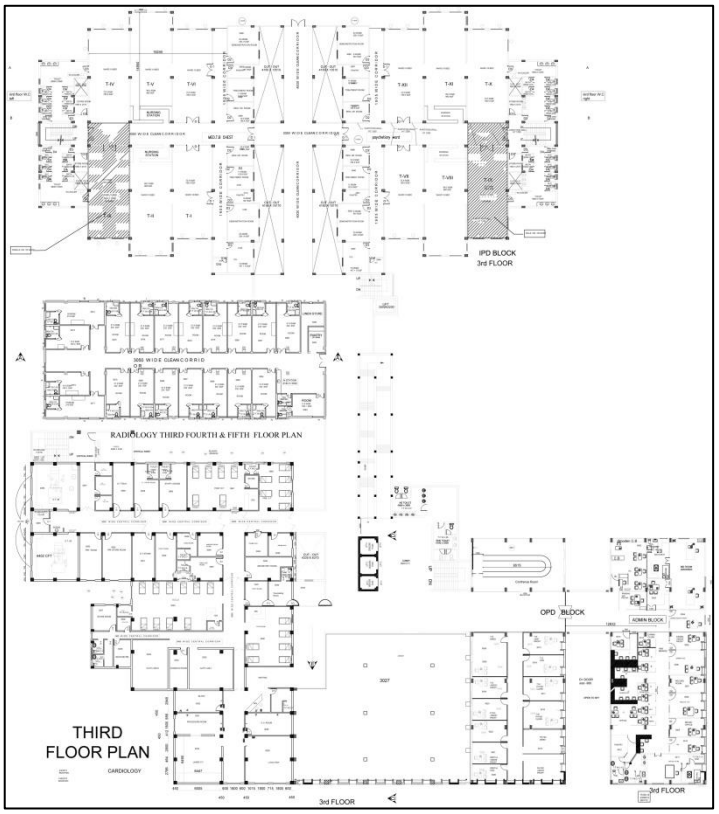
Distribution of Teaching beds in various departments is as under :

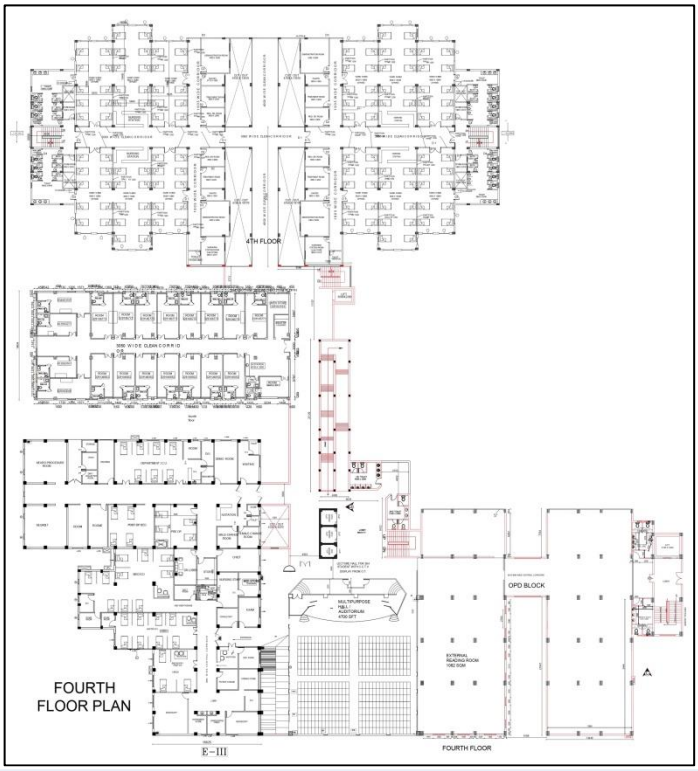
Department	Unit Nos.	Beds Required	Beds Available		
			Male	Female	Total
Gen. Medicine	5	150	75	75	150
Pediatrics	3	90	45	45	90
TB & Respiratory Medicine	1	20	10	10	20
Psychiatry	1	15	8	7	15
Dermatology	1	15	8	7	15
Gen. Surgery	5	150	75	75	150
Orthopedics	3	90	45	45	90
Ophthalmology	1	15	8	7	15
ENT	1	15	8	7	15
OB & GYN	3	90	-	90	90
Total	24	650	282	368	650

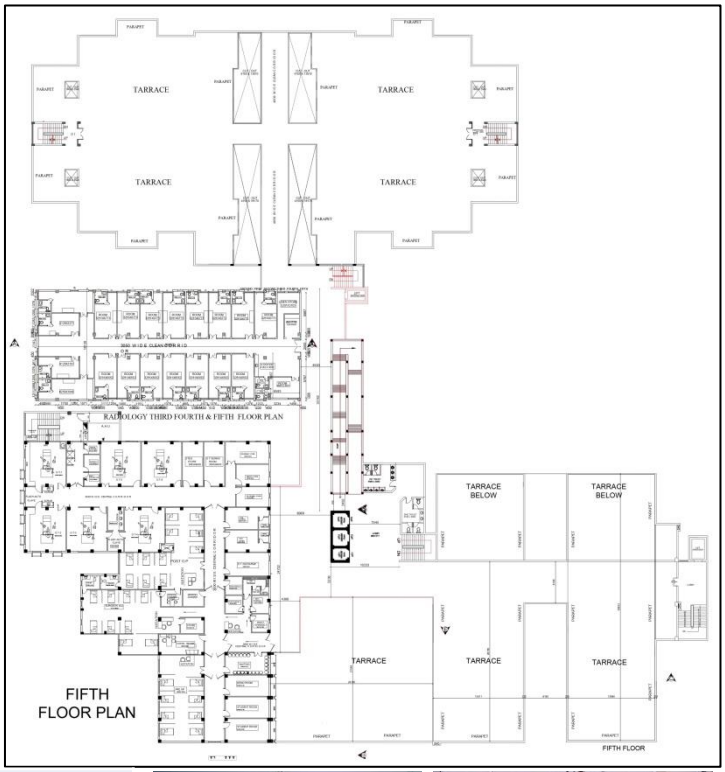
Intensive Care: Following intensive areas are available –

S. No	Type	Beds (Available)
01	ICCU	08
02	MICU	11
03	SICU	05
04	BURN UNIT	02
05	RICU	05
06	NICU	06
07	PICU	05
	TOTAL	42

- **Inferences:-**
- Adequate waiting areas in all departments.
- Atrium houses a large number of visitors and has different Accesses to different departments thereby restricted the flow of visitors to this areas only.
- Segregation of visitor, staff and service entry.
- Separate emergency entry, which has a direct and unhindered access.
- No separate service lift for food, linen, staff, visitors and patient which will help to avoid congestion.
- Flexibility for the future so that any floor could be converted from wards to rooms and vise-versa.
- Toilets are designed according to the needs of patient.
- Emergency evacuation is catered since there is no provision of a ramp.
- Lack of separate fire escapes in fire blocks.
- Plenty of natural light and ventilation in lower floors.
- No dirt disposal corridor in the o.T. Complex..







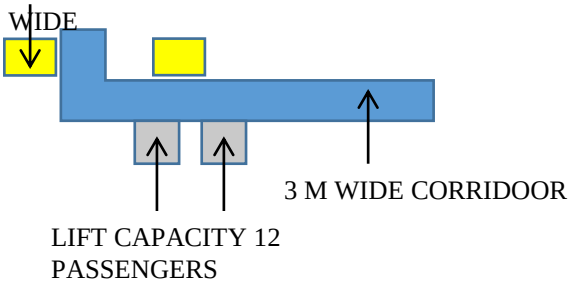
F. RADIOLOGICAL FACILITIES

S No.	Equipment	Available no.
01	Mobile X Ray 60 mA : 100 mA :	03 03
02	Static X Ray 300 mA : 600 mA :. 800 mA :IITV & Fluroscopy	02 02 02
03	USG	03
04	CT	01
05	MRI	01

CIRCULATION

Horizontal circulation :- 3m wide corridoor ha been provide for the internal circulation in the building.

Vertical circulation :- two stair case 2m wide and two lifts with capacity of 12 persons each have been provided.



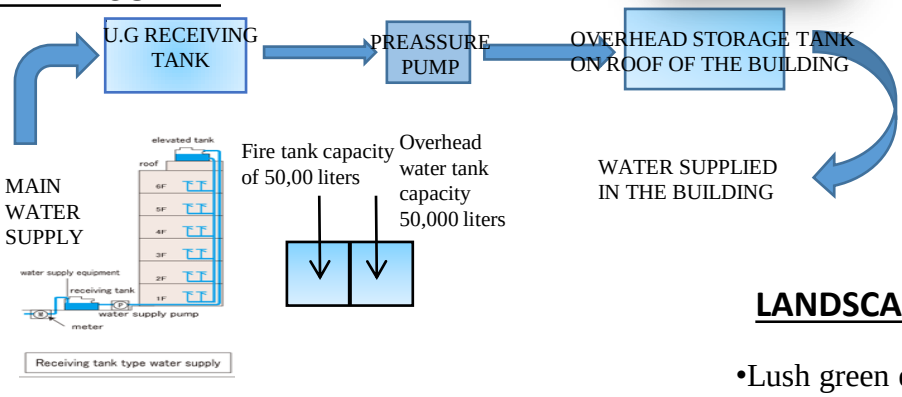
ELECTRICITY

- A power sub station has been set up site with the capacity of 3000 kw
- Provision for electricity generators has been also made for emergency use.

STRUCTURE

Simple trabeated structure system composing the grid of columns and beams have been used in the building.

WATER SUPPLY

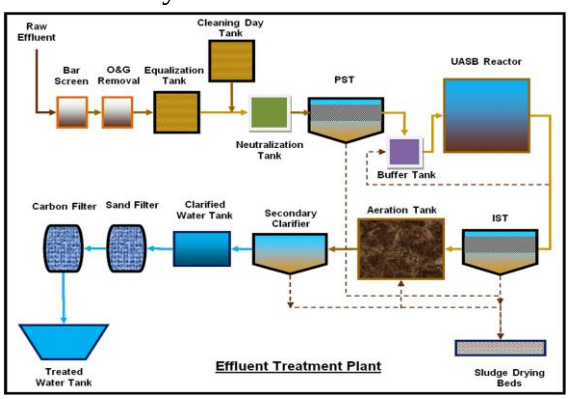


LANDSCAPE

- Lush green environment prevails in the campus.
- Beautiful landscaping all around the building blocks.
- Small hedges used to define the open passages.
- Seating space developed around and under the tree.

EFFULENT TREATMENT PLANT

- There was no plant for effulent water.
- The etp was under construction.
- **Etp** is one type of waste water treatment method which is particularly designed to purify industrial waste water for its reuse and it's aim is to release safe water to environment from the harmful effect caused by the effluent.

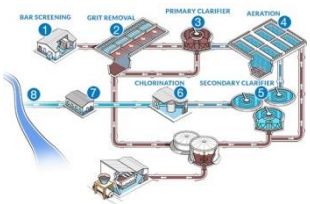


SEWAGE TREATMENT PLANT

- **Sewage treatment** is the process of removing contaminants from municipal wastewater, containing mainly household sewage plus some industrial wastewater.
- Storage tank - 2lakh litre
- Daily water treated – 1lakh litre
- Treated water is further used for irrigation and also for use in cistern

HVAC

- 3 centrifugal chiller plant
- 3 control panel
- 704 kw chiller plant power with 3000 rpm
- Secondary pump for pressure
- 270 ahu (45-50 per floor)



CASE STUDY-2

RAM MANOHAR LOHIYA MEDICAL INSTITUTE

Ram manohar lohiya medical institute, lucknow is spread across more than 25 acres of serene surroundings and all the necessary facilities available within campus, the university promises to be a perfect place for learning.

Ram manohar lohiya medical institute, is established in the lucknow, with a annual intake capacity of 100 mbbs students and with a learning hospital of 500 bed capacity providing all the world class medical facilities to both students and nearby neighborhoods.

Student intake - ram manohar lohiya medical institute, lucknow has a annual student intake of 100 students for mbbs course.

Architect – a.K. And associates

Location – ram mahnar lohia medical college combined hospital is located in vibhuti khand ,gomti nager. Access form 9.46m wide road which further joins to the 9m wide main road.

PARKING AND RESIDENTIAL AREA

ADMINISTRATION BLOCK

ACADEMIC BLOCK

EMERGENCY

LEARNING HOSPITAL

OWNER - GOVERNMENT.

LOCATION - VUBHITI KHAND, GOMTI NAGAR , LKO.

SITE AREA - 25ACRE.

GROUND COVERAGE - 20000 SQ.M.

CONFIGURATION - 500 BEDED HOSPITAL. AND 1OO STUDENT ANNUAL

FORM - IRREULAR FORM.

ARCHITECTS - SKYLINE

YEAR OF CMPLETION - 2017

CLIMTE - COMPOSITE.

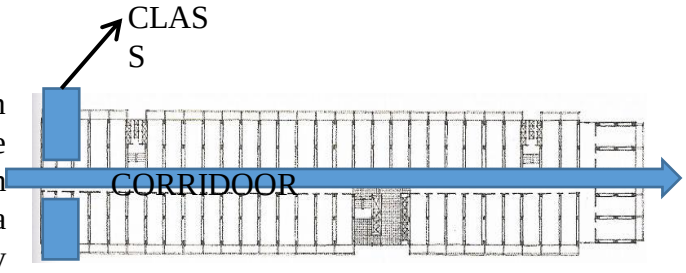
FOOT FALL – 7000-8000 PER DAY

BUS TERMINAL 14KM

INDIRA GANDHI INTERNATIONAL AIRPORT 17KM

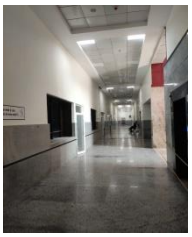
RAILWAY STATION 11KM

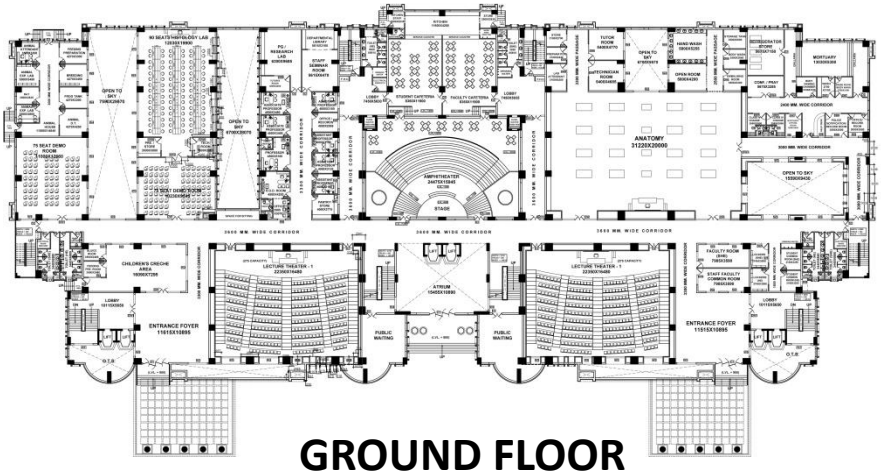
There is preferably double connectivity between different zones of the campus enabling the hassle free movement . the campus has lots of open lush green space having shrubs, plants, grass, and a small water body. The campus has alluring greenery and beautiful landscaping that creates a pleasant feel and gives the healthy environment to its residents.



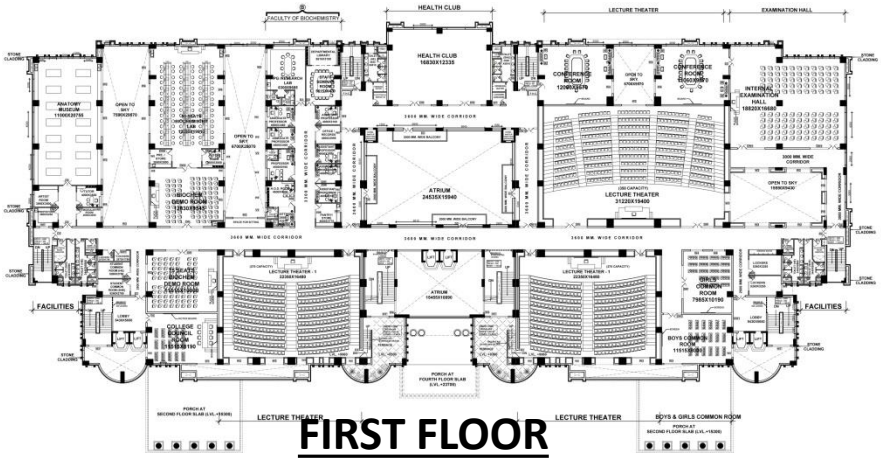
DOUBLE LOADED CORRIDOOR PLANNING

- ❑ LECTURE HALL
- ❑ AMPITHEATRE
- ❑ ANATOMY HALL
- ❑ STAIRCASE
- ❑ FIRE STAIRCASE
- ❑ LIFTS
- ❑ DUMB WAITER LIFT
- ❑ FACULTY CAFETERIA
- ❑ STUDENT CAFETERIA
- ❑ H.O.D OFFICE
- ❑ ASSISTANT PROF.
- ❑ ANIMAL HOUSE
- ❑ HISTOLOGY LAB
- ❑ MORTUARY
- ❑ DEMO ROOM
- ❑ INTERNAL
- ❑ EXAMINATION HALL
- ❑ MAMALIAN PRACTICAL LAB
- ❑ FACALITIES OF PHYSIOLOGY
- ❑ PATHOLOGY DEMO ROOMS
- ❑ CLINICAL PHYSIOLOGY
- ❑ FORENSIC MEDICINE LAB
- ❑ AMPHIBIAN LAB
- ❑ E-LIBRARY
- ❑ STACKING ROOM
- ❑ READING HALL
- ❑ LIBRARY
- ❑ HISTO-PATHOLOGY PRACTICAL LAB
- ❑PATHOLOGY
- ❑ PATHOLOGY MUSEUM
- ❑ MICROBIOLOGY LAB
- ❑ PATHOLOGY CLINICAL LAB
- ❑ PATHOLOGY SERVICE LAB
- ❑ MICRIBIOLOGY SERVICE LAB
- ❑ COMMUNITY MEDICINE ROOM

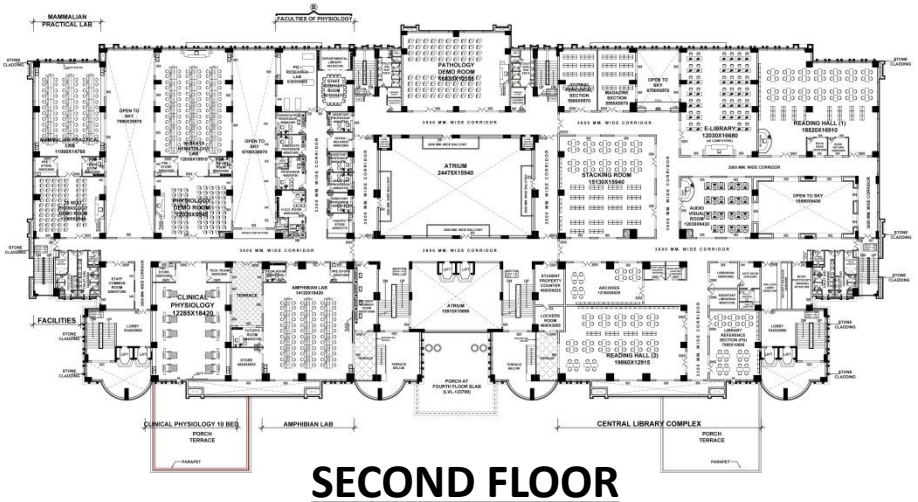




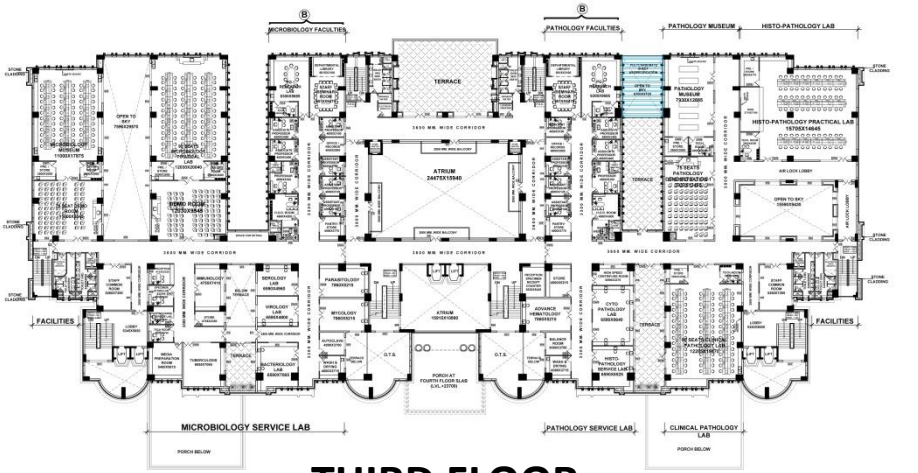
GROUND FLOOR



FIRST FLOOR

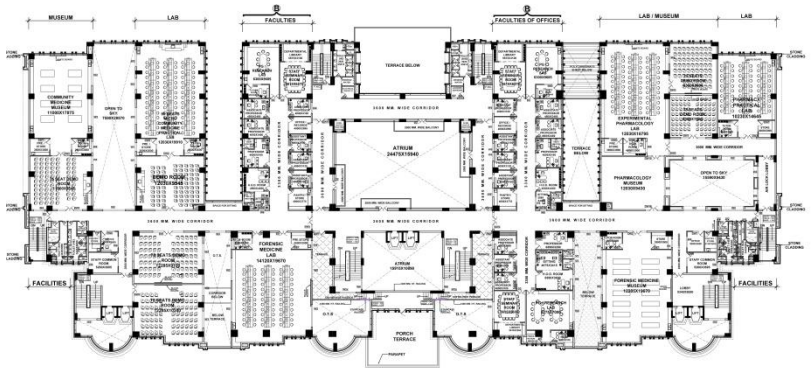


SECOND FLOOR



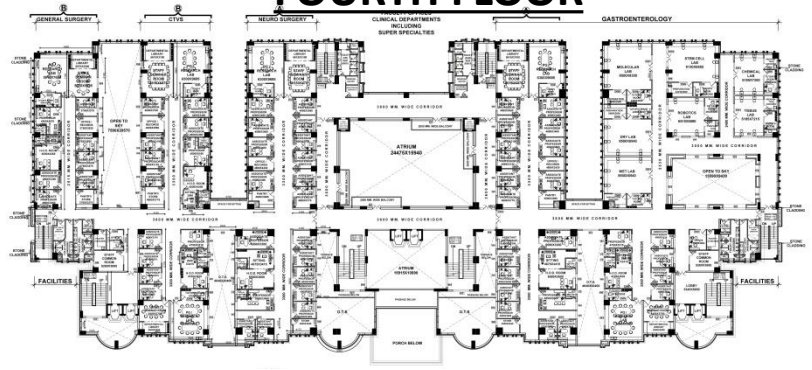
THIRD FLOOR

- ❑ MUSEUM OF CUMMUNITY MEDICINE
- ❑ LAB AND DEMO ROOM
- ❑ FACULTY ROOMS
- ❑ MICROBIOLOGY LAB
- ❑ FORENSIC MEDICINE LAB
- ❑ FORENSIC MEDICINE MUSEAM
- ❑ RESEARCH CUM FACULTY OFFICE
- ❑ COMMUNITY MEDICINE ROOM
- ❑ PHARMACOLOGY
- ❑ PHARMACY PRACTICAL LAB



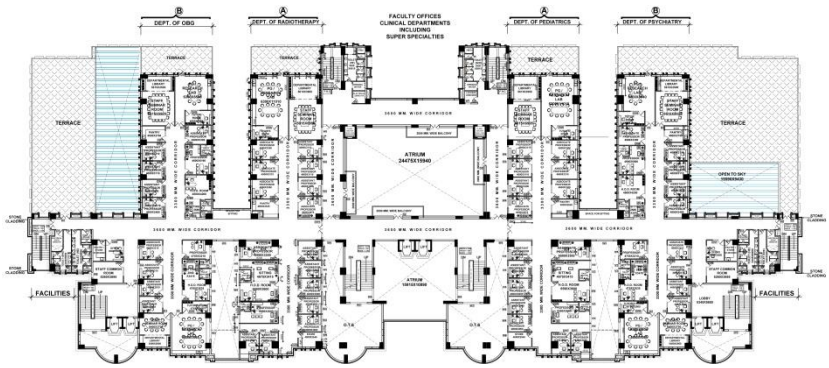
FOURTH FLOOR

- ❑ MUSEUM OF CUMMUNITY MEDICINE
- ❑ LAB AND DEMO ROOM
- ❑ FACULTY ROOMS
- ❑ MEURO SURGERY
- ❑ GENERAL SURGERY
- ❑CHEMICAL LAB
- ❑ DRY LAB
- ❑ WET LAB
- ❑ SUPERSPECIALITIES
- ❑PRACTICAL LAB

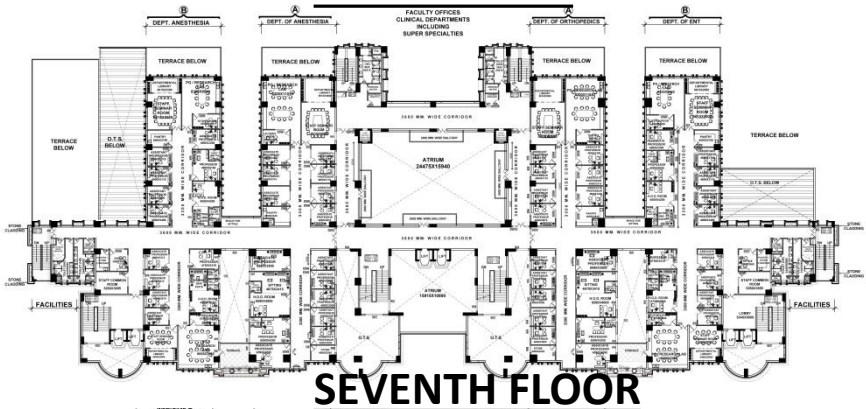


FIFTH FLOOR

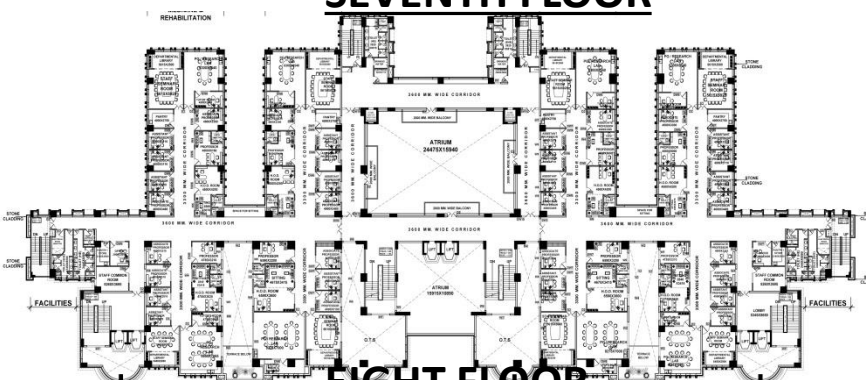
- ❑ DEPARTMENT OF NEUROLOGY
- ❑ DEPARTMENT OF CARDIALOGY
- ❑ FACULTY ROOMS
- ❑ DEPARTMENT OF DENTISTRY
- ❑ DEPARTMENTAL LIBRARY
- ❑ RESERCH LAB
- ❑ DEPARTMENT OF PHYSICAL MEDICINES
- ❑ DEPARTMENT OF REHABILATION



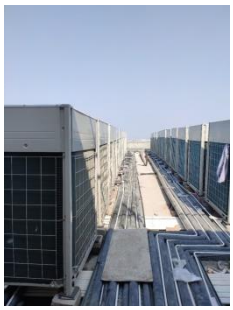
SIXTH FLOOR

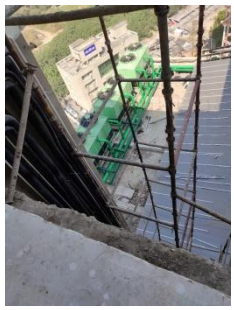


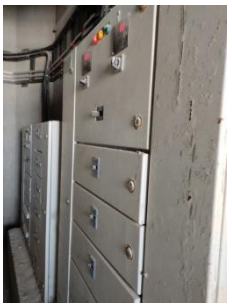
SEVENTH FLOOR



EIGHT FLOOR



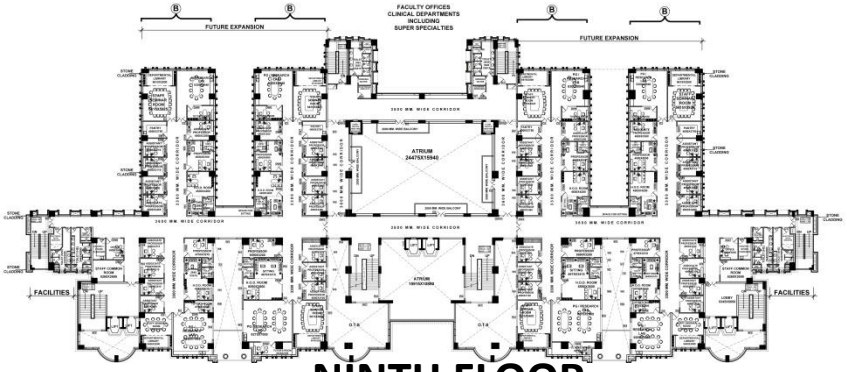




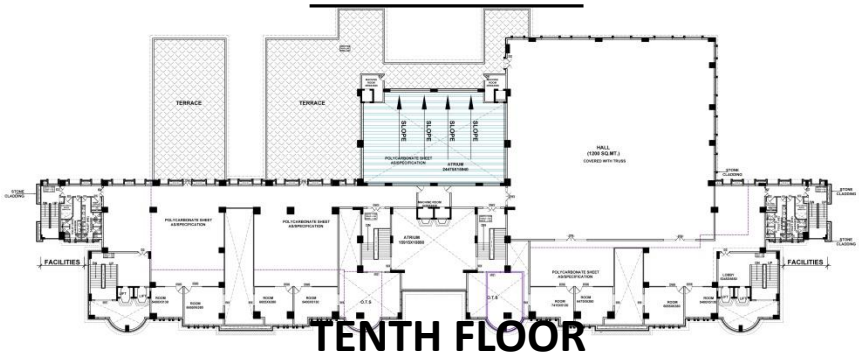
LEARNING HOSPITAL

➢ FACILITIES

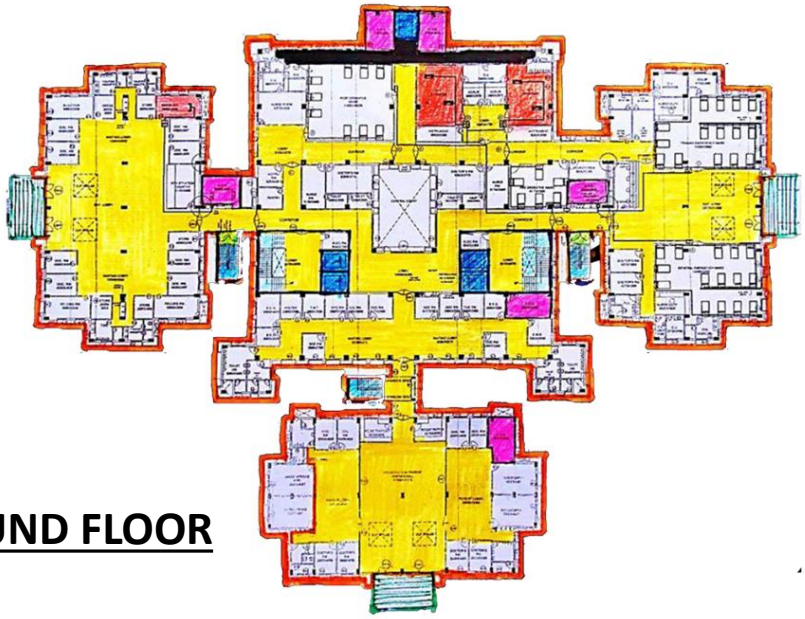
- REGISTRATION
- O.P.D.
- DAY CARE WARD
- M.S. OFFICE
- EMERGENCY MEDICINE
- SAMPLE COLLECTION
- SURGICAL ONCOLOGY
- I.C.U.
- GASTRO SURGERY
- O.P.D. PHARMACY
- CARDIOLOGY
- SURGICAL PHARMACY
- CARDIO VASCULAR AND
- THORACIC SURGERY



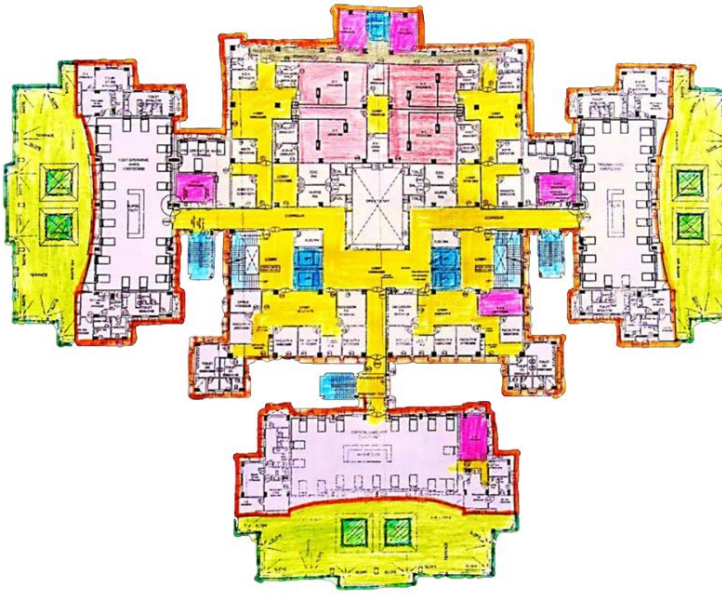
NINTH FLOOR



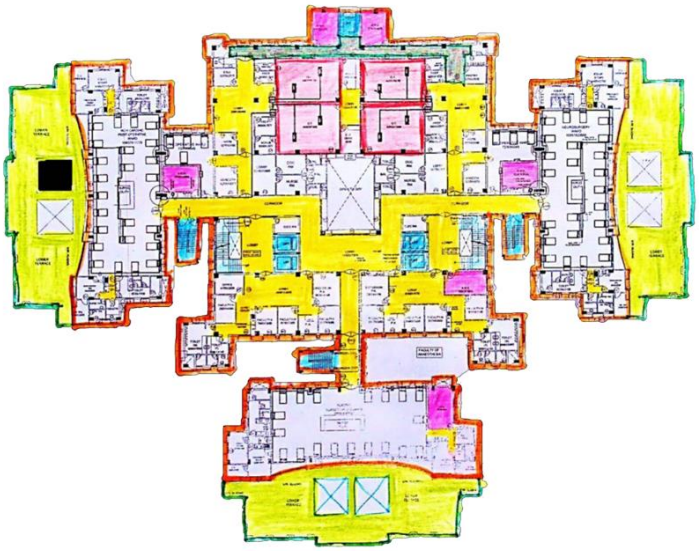
TENTH FLOOR



GROUND FLOOR



FIRST FLOOR

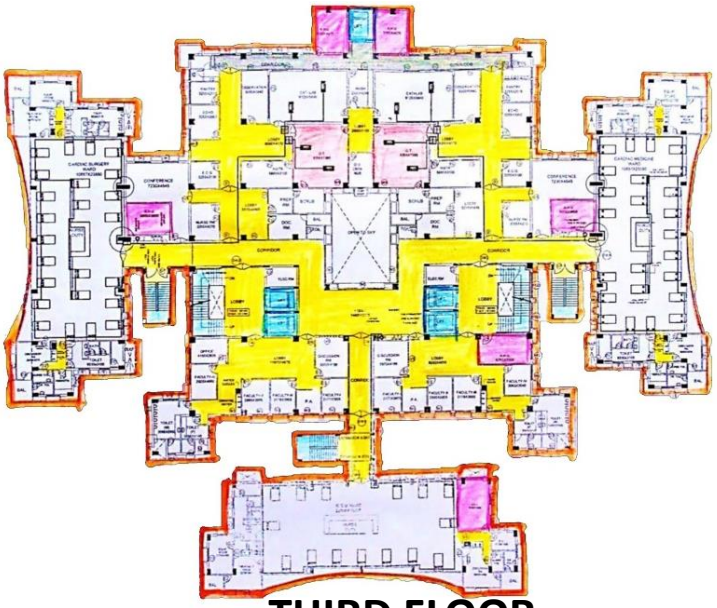


SECOND FLOOR

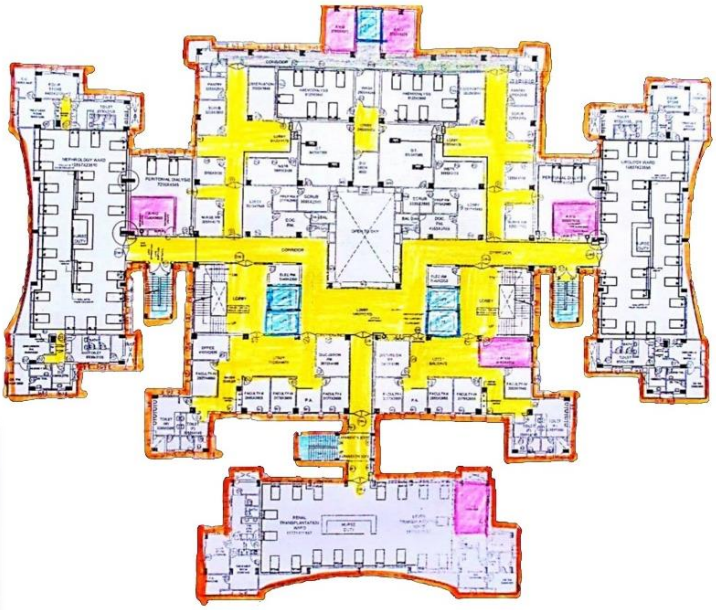
➢ LIFT

LIFT LOBBY CONSIST OF:

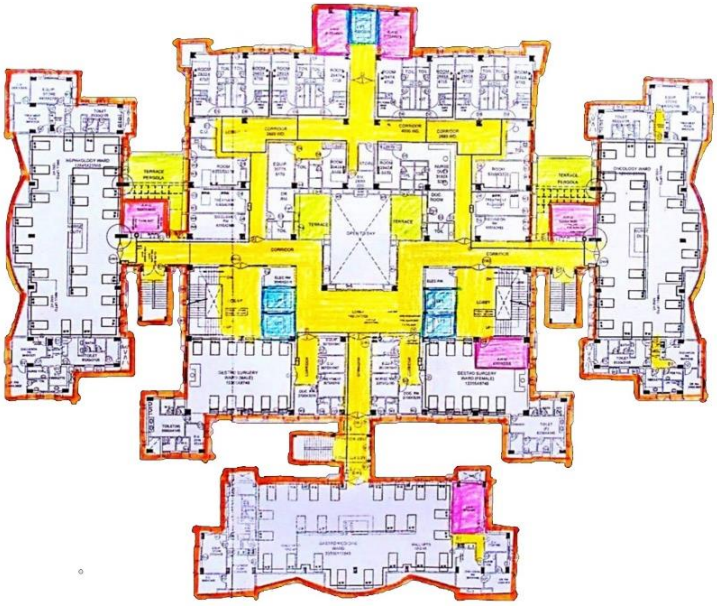
- PASSENGER LIFT
- STRETCHER LIFT
- ELECTRICAL ROOM
- A.H.U. ROOM
- PUBLIC SEATING AREA
- PUBLIC SIGNAGE
- STAIR WELL
- BLACK GRANITE STRIPS ARE USE ON LIFT ENTRANCE AND VITRIFIED TILES ON THE FLOOR. (JHONSONS)
- STEEL OF GRADE 316 ARE USED ON STAIR RAILING.



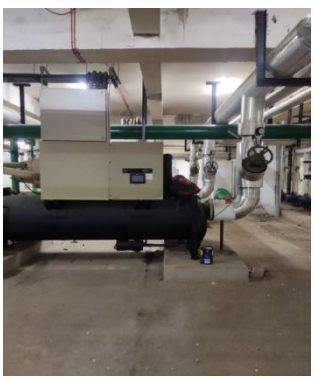
THIRD FLOOR



FOURT FLOOR



FIFTH FLOOR



WEILL CORNELL MEDICAL COLLEGE, NEW YORK

Weill cornell medical college biomedical research unit and medical school of cornell university, a private levy league university.

The medical college is located at 1300 york avenue, on the upper east side of manhattan in new york city, along with the weill cornell graduate school of medical sciences.

PPROJECT NAME - WEILL CORNELL MEDICAL COLLEGE

LOCATION - NEW YORK413 EAST 69TH STREET, , NY 10021, USA

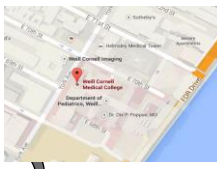
ARCHITECTS - TODD SCHLIEMANN ,ENNEAD ARCHITECTS

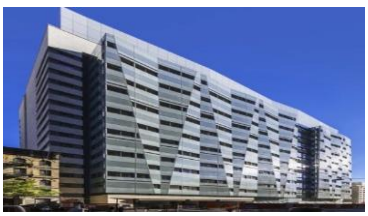
PROJECT MANAGER - LOIS MATE

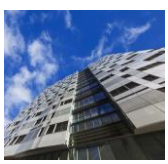
PROJECT ARCHITECT - CRAIG MCILHENNY

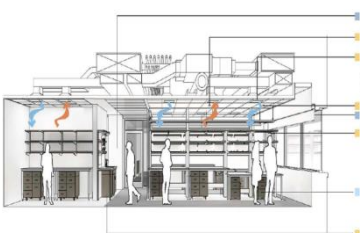
AREA - 480000.0FT2

STUDENT - 410









MAXIMIZE DAY LIGHTING WITH GLAZED INTERIOR PARTITIONS

OCCUPANCY SENSORS CONTROL LIGHTING

VENTILATED DOUBLE SKINNED GLASS CURTAIN WALL DECREASES COOLING LOADS

COMMUNICATING STAIRS BETWEEN FLOORS ENCOURAGES PHYSICAL ACTIVITY AND A HEALTHY WORK PLACE

HIGH EFFICIENCY CHILLIER & ENHANCED REFRIGERATION MANAGEMENT

AIR CHANGE RATES VARY BASED ON OCCUPANCY CONFIRMATION TO MAINTAIN HIGH INDOOR AIR QUALITY AND MINIMIZE ENERGY USE AND

WELL INSULATED WALLS AND ROOF REDUCES AIR CONDITIONING ENERGY USE

LOW FLOW FIXTURES ACHIEVE OVERALL 40% WATER SAVINGS

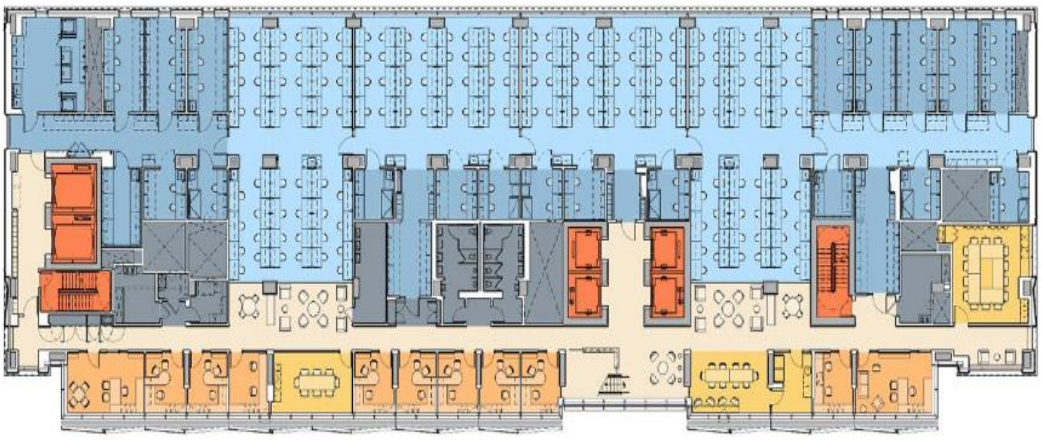
INCREASED VENTILATION RATES

BICYCLE STORAGE & SHOWER FACILITY

ZIP CAR PARKING- CAR SHARING PROGRAM

STORM WATER HARVESTING FOR TERRACE PLANTING IRRIGATION

GROUND FLOOR



FIRST FLOOR

SECOND FLOOR

SECTIONAL VIEW

Building Systems & Toilets

Vertical Circulation

Building Support

Corridors

College Program

S.N.	REQUIREMENTS	RAM MANOHAR LOHIYA INSTITUTE OF MEDICAL SCIENCE	RAMA MEDICAL COLLEGE	STANDARD AS PER MCI NORMS	REQ. AREA
1	DEPARTMENT OF ANATOMY				
	DEMONSTRATION ROOM	140 SQM	140 SQM	60 SQM (2 NOS)	60 SQM (2 NOS)
	LECTURE THEATRE	370 SQM	71 SQM	60 SQM - 100 SQM	80 SQM
	DESSECTION HALL	620 SQM	500SQM	350 SQM	350 SQM
	MUSEUM	230 SQM	198 SQM	200 SQM	215 SQM
	HISTOLOGY LAB	240 SQM	205 SQM	200 SQM	200 SQM
	DEPARTMENTAL LIBRARY	17 SQM	34 SQM	30 SQM	30 SQM
	RESEARCH LABORATORY	60 SQM	32 SQM	50 SQM	50 SQM
2	DEPARTMENT OF PHYSIOLOGY				
	DEMONSTRATION ROOM	140 SQM	196 SQM	60 SQM (2 NOS)	60 SQM (2 NOS)
	LECTURE THEATRE	370 SQM	_	60 SQM - 100 SQM	80 SQM
	AMPHIBIAN LAB	260 SQM	90 SQM	200 SQM	200 SQM
	MAMMALIAN LAB	160 SQM	90 SQM	80 SQM	80 SQM
	HAEMETALOGY LAB	240 SQM	200 SQM	200 SQM	200 SQM
	DEPARTMENTAL LIBRARY	17 SQM	36 SQM	30 SQM	30 SQM
	RESEARCH LABORATORY	60 SQM	36 SQM	50 SQM	50 SQM
	CLINICAL LAB	220 SQM	180 SQM	_	_
3	DEPARTMENT OF BIOCHEMISTRY				
	DEMONSTRATION ROOM	110 SQM	160 SQM	60 SQM (2 NOS)	60 SQM (2 NOS)
	DEPARTMENTAL LIBRARY	17 SQM	36 SQM	30 SQM	30 SQM
	RESEARCH LABORATORY	60 SQM	36 SQM	50 SQM	50 SQM
	PRACTICAL CLASS ROOM	240 SQM	200 SQM	200 SQM	200 SQM
4	DEPARTMENT OF MICROBIOLOGY				
	DEMONSTRATION ROOM	110SQM	150 SQM	60 SQM (2 NOS)	60 SQM (2 NOS)
	DEPARTMENTAL LIBRARY	17 SQM	36 SQM	30 SQM	30 SQM
	MICROBIOLOGY MUSEAM/SEPRATE SERVICE LABS	190 SQM	80 SQM	200 SQM	200 SQM
	RESEARCH LABORATORY	60 SQM	36 SQM	50 SQM	50 SQM
	PRACTICAL CLASS ROOM	240 SQM	200 SQM	200 SQM	200 SQM

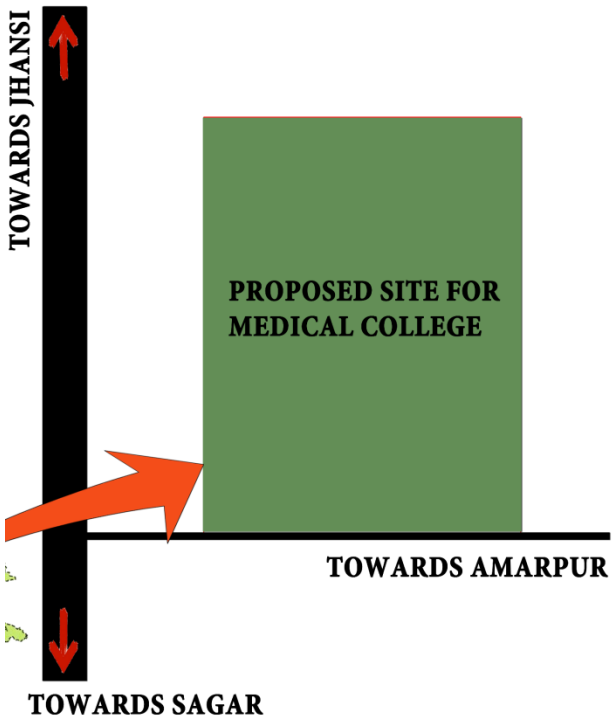
S.N.	REQUIREMENTS	RAM MANOHAR LOHIYA INSTITUTE OF MEDICAL SCIENCE	RAMA MEDICAL COLLEGE	STANDARD AS PER MCI NORMS	REQ. AREA
5	DEPARTMENT OF PATHOLOGY				
	DEMONSTRATION ROOM	100 SQM	150 SQM	60 SQM (2 NOS)	60 SQM (2 NOS)
	LECTURE THEATRE	370 SQM	_	80 SQM	80 SQM
	HISTOPATHOLOGY /CYTOPATHOLOGY LAB	230 SQM	100 SQM	200 SQM	200SQM
	CLINICAL PATHOLOGY/HAEMATOLOGY LAB	240 SQM	100 SQM	200 SQM	200 SQM
	HAEMETALOGY/HISTOPATHOLOGY/ CYTOPATHOLOGY SERVICE LAB	42 SQM	_	90 SQM	90 SQM
	MUSEUM	95 SQM	75 SQM	90 SQM	90 SQM
	AUTOPSY ROOM	_	_	400 SQM	400 SQM
	DEPARTMENTAL LIBRARY/SEMINAR	17 SQM	30 SQM	30 SQM	30 SQM
	RESEARCH LABORATORY	60 SQM	35 SQM	50 SQM	50 SQM
6	DEPARTMENT OF PHARMACOLOGY				
	DEMONSTRATION ROOM	65 SQM	196 SQM	60 SQM(2 NOS)	60 SQM(2 NOS)
	LECTURE THEATRE	370 SQM	_	80 SQM	80 SQM
	EXPERIMENTAL PHARMACOLOGY LAB	200 SQM	100 SQM	200 SQM	200 SQM
	CLINICAL PHARMACOLOGY LAB	_	100 SQM	200 SQM	200 SQM
	MUSEUM	113 SQM	135 SQM	125 SQM	125 SQM
	DEPARTMENTAL LIBRARY	17 SQM	36 SQM	30 SQM	30 SQM
	RESEARCH LABORATORY	60 SQM	36 SQM	50 SQM	50 SQM
7	DEPARTMENT OF FORENSIC MEDICINE AND TOXICOLOGY				
	DEMONSTRATION ROOM	110 SQM	60 SQM(2 NOS)	60 SQM(2 NOS)	60 SQM(2 NOS)
	MUSEUM	210 SQM	120 SQM	175 SQM	175 SQM
	FORENSIC HISTOPATHOLOGY	_	30 SQM	200 SQM	200SQM
	AUTOPSY ROOM	_	_	400 SQM	400 SQM
	DEPARTMENTAL LIBRARY	30 SQM	30 SQM	30 SQM	30 SQM
	RESEARCH LABORATORY	60 SQM	36 SQM	50 SQM	50 SQM
8	DEPARTMENT OF COMMUNITY MEDICINE				
	DEMONSTRATION ROOM	100 SQM	60 SQM(2 NOS)	60 SQM(2 NOS)	60 SQM(2 NOS)
	PRACTICAL LAB	240 SQM	_	200 SQM	200 SQM
	COMMON LECTURE THEATRE	150 SQM(2NOS)	_	350 SQM	3500 SQM
	MUSEUM	195 SQM	80 SQM	125 SQM	125 SQM
	DEPARTMENTAL LIBRARY	17 SQM	15 SQM	30 SQM	30 SQM
	RESEARCH LABORATORY	60 SQM	36 SQM	50 SQM	50 SQM

CONCEPT

The site for prorposed medical college is located at nh-44 at amarpur
In uttar pradesh and is about 23 kms from lalitpur railway station .

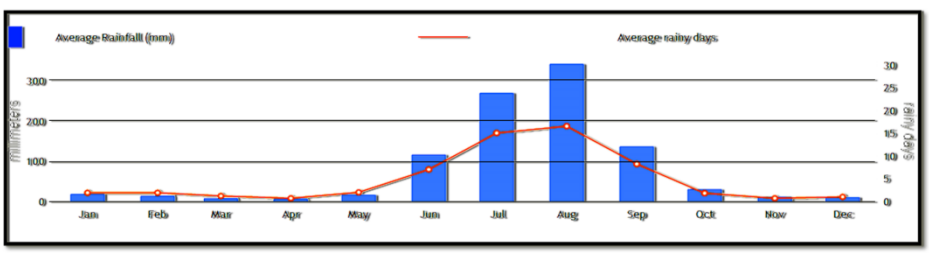
As we known that there has been a lack of medical colleges in
Our country as compared to number of its applicants in the state
Of uttar pradesh with mbbs college in the state with in take
Capacity of 1700 students per year which is too small as compared
To the student willing to study medicine

As the site is proposed in lalitpur district .100 bed capacity medical
College and 500 bed capacity bearing hospital will serve people in a
Pretty good manner

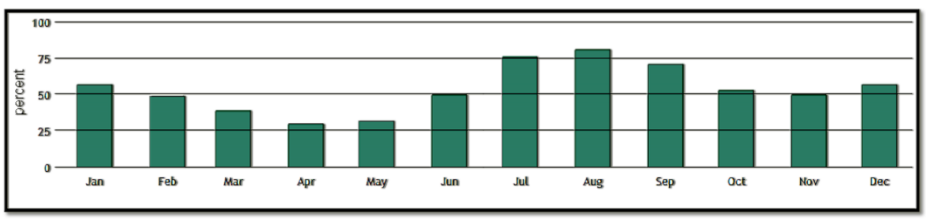


CLIMATE

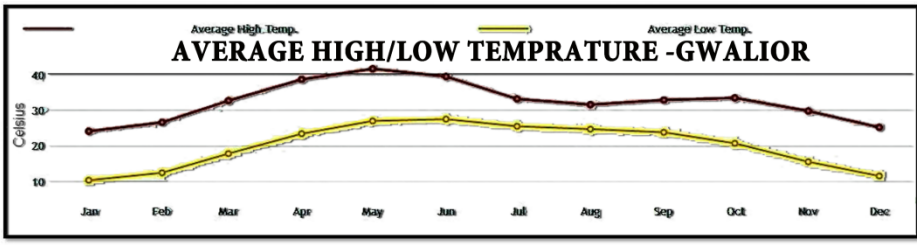
Amarpur has a composit climate with cold winter and hot summer
The climate of amarpur is genrally hot and dry from april to june
And from june to september teh climate is warm and humid.And from
November to february the weather is cold and dry.
In amarpur the average maximum temparature stays in the range of 42*c
And the minimum temprature stays in the range of 12*c to 27*c in the
Summer average maximum tempraturature in the winter is 23*c to 33*c
And minimum temprature is 2*c to 7*c .The maximum rainfall is around 350 mm
.In july to august month and the minimum rainfall is around 20mm in the
Month of november to april



AVERAGE RAINFALL -AMARPUR



AVERAGE HUMIDITY -AMARPUR



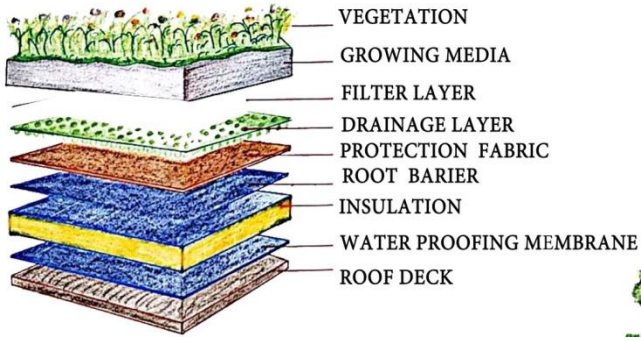
SITE DETAILS

Total site area - 23.16 acre (93760 sq mts)
Maximum ground coverage - 25%
Maximum building height -28 mts
Maximum floor area ratio- 1.0
Minimum front set back - 12 mt
Mi nimum rear set back - 9 mt
Minimum set back - 6 mt

Soil - red soil (6 ton /sq mt)
Contours - no contours (plain site)

GREEN BUILDING

IT IS THE PRACTICE OF INCREASING EFFICIENCY WITH WHICH BUILDING USE RESOURCES -ENERGY WATER AND MATERIAL WHILE REDUCING BUILDING IMPACT ON BUMAN HEALTH AND THE ENVIRONMENT



CONCEPT

THE GREEN BUILDING CONCEPTS ARE GAINING IMPORTANCE IN VARIOUS COUNTRIES INCLUDNG INDIA

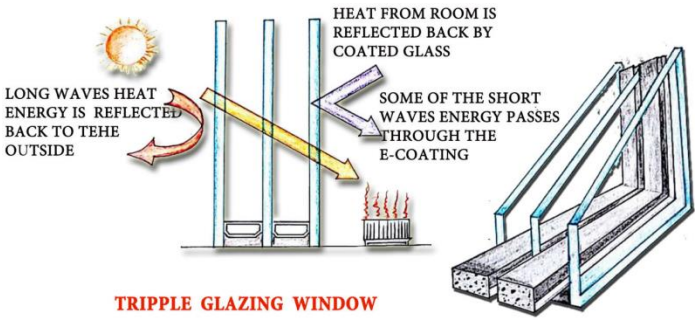
> THESE ARE THE BUILDING THAT ENSURE THAT WASTE IS MINIMISED AT EVERY STAGE DURING THE CONSTRUCTION AND OPERATION OF THE BUILDING RESULTING I N LOW COSTS ,ACCORDING TO EXPERTS IN TECHNOLOGY

HOW TO MAKE GREEN BUILDING ?

*A GREEN BUILDING IS A STRUCTURER THAT IS ENVIRONMENTALY RESPONSIBLE AN D RESOURCE EFFICIENT THROUGHOUT ITS LIFF -CYCLE

*EXPAND AND COMPLEMENT TNE CLASSIC BUILDING DESIGN CONCERNS OF ECONOMY ,UTILITY , DURABILITY AND COMFORT

TYPES OF BUILDING	AVERAGE ENERGY SAVING IN GREEN BUILDING	AVERAGE WATER SAVING IN GREEN BUILDING
CORPORATE OFFICE	47%	60%
TECH. PARKS	27%	50%
HOTELS	35%	45%
HOSPITALS	33%	35%
EDUCATIONAL	39%	40%



TRIPPLE GLAZING WINDOW

OF OUR HOMES IS FUNDAMENTAL TO OUR QUALITY OF LIFE ,COMFORT AND HOW AFFIRDABLE THEY TO RUN

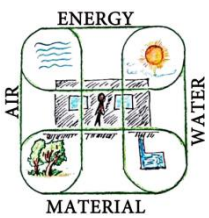
OF OUR SCHOOLS LEAVES A LIFE-LONG IMPRINT O THOSE WHO LEAN WITHIN , INFLUENCING PEOPLE CONCENTRATION AND HOW ENVIRONMENTALY AWARE THE NEXT GENERATION IS.

OF OUR HOSPITALS AFFECT PATIENT RECOVERY TIMES AND NATIONAL HEALTH SERVICE BILLS

OF OUR CITIES AND COMMUNITIES STRONGLY DETERMINES THEIR ECONOMICS AND SOCIAL DYNAMICS

BUILDING TYPES

* RESIDENTIAL BUILDINGS
*EDUCATIONAL BUILDINGS
*INSTITUTIONAL BUILDING (MEDIACL COLLEGE)
* HEALTHCARE FACILITIES (HOSPITAL)
*COMMERCIAL BUILDING



MERITS OF GREEN BUILDING

* EFFICIENT TECHNOLOGIES
*EASIER MAINTINANCE
* RETURN ON INVESTMENT
* IMPROVED INDOOR AIR QUANTITY
*ENERGY EFFICIENCY
*WATER EFFICIENCY
*WASTE WATER REDUCTION
*TEMPRATURE MODERATION
*WATER CONSERAVATION
*ECONOMICAL CONSTRUCTION FOR POORS
*HEALTHIER LIEF STYLES AND RECREATION
*IMPROVED HEALTH

DEMERITS OF GREEN BUILDING

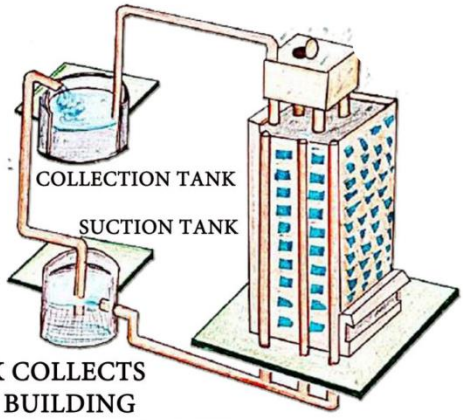
* INITIAL COST IS HIGH
*UN AVAILABILITYOF MATERIAL S
* NEED MORE TIME TO CONSTRUCT
*NEED SKILLS WORKERS

RAIN WATER HARVESTING

WHEN WE TALK ABOUT VARIOUS DESIGN FEATURES THAT MAKES THE BUILDING GREEN .IT IS NOT JUST EXPENSIVE MATERIAL THAT CONSUME LESS ENERGY OR ARE LESS ENERGY INTENSIVE.

RAIN WATER HARVESTING IS ONE SUCH DESIGN FEATURES

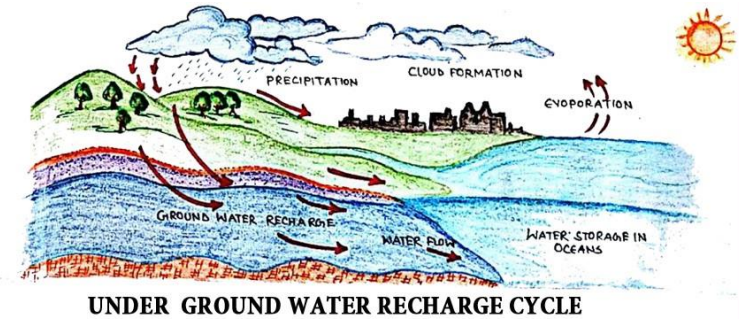
THAT TO BE INCORPORATED IN ANY KIND OF BUILDING COLLECT AND UTILIZE RAIN WATER HARVESTING IS TECHNOLOGY IN WHICH INDIVIDUAL BUILDINGS COLLECT AND UTILIZE RAIN SEASON .THIS WATER CAN BE STORED IN THE TANKS AND USED FOR ANY PURPOSE IN RAIN WATER HARVESTING SYSTEM ,A STORAGE TAMK IS REQUIRED WHUCH CAN BE A PART OF THE UNDERGROUND WATER TANK OR ATANK ON THE SURFACE THIS TANK COLLECTS WATER THAT FALLS ON THE BUILDING AND THEN IT WILL BE FLATTERED AND CAN BE USED IN ANY PURPOSE



RENEWABLE ENERGY

RENEWABLE ENERGY IS GENERALY DEFINED AS ENERGY THAT IS COLLECTED FROM RESOURCES WHICH ARE NATURALY REPLENISHED ON A HUMAN TIME SCALE SUCHAS SUNLIGHT ,WIND RAIN TIDES ,WAVES AND GEOTHERMAL HEAT

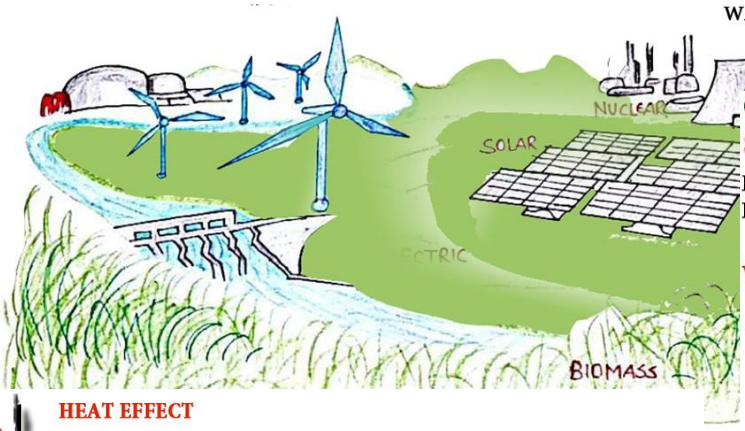
SOLAR ENERGYY :-SOLAR ENERGYY IS RADIANT LIGHT AND HEAT FROM SUN HARDNESS USE IN A RANGE OF EVERY EVOLVING TECHNOLOGIES SUCHH AS SOLAR THEWRMAL LENERGY



BIO MASS :-BIOMASS IS ORGANIC MATTER DERIVED FROM LIVING OR RECENTLY LIVING ORGANISN CAN BE USED AS A SOURCE OF OR SOURCE OF ENERGY AND IT IS MOST OFTEN REFERS TO PLANT OR PLANTS -BASED MATERIAL WHICH ARE NOT USED FOR FOOD OR FEED ,AND ARE ESPECIALLY CALLED LIGNOCEIULOSIC BIO MASS ,AS AN ENERGY SOURCE , BIO MASS CAN EITHER BE USED DIRECTLY VIA COMBUSTIBLE TO PRODUCE HEAT ,OR INDIRECTLY AFTER CONVERTING IT TO VARIOUS FORMS OF BIOFUEL

UNDER GROUND WATER RECHARGE CYCLE

GROUNDWATER RECHARGE OR DEEP DRAINAGE OR DEEP PERCOLATION IS A HYDROLOGIC PROCESS, WHERE WATER MOVES DOWNWARD FROM SURFACE WATER TO GROUNDWATER. RECHARGE IS THE PRIMARY METHOD THROUGH WHICH WATER ENTERS AN AQUIFER. THIS PROCESS USUALLY OCCURSIN THE VADOSE ZONE BELOW PLANT ROOTS AND, IS OFTEN EXPRESSED AS A FLUX TO THE WATER TABLE SURFACE. GROUNDWATER RECHARGE ALSO ENCOMPASSES WATER MOVING AWAY FROM THE WATER TABLE FARTHER INTO THE SATURATED ZONE.



GREEN BUILDING FEATURES

SUSTAINABILITY

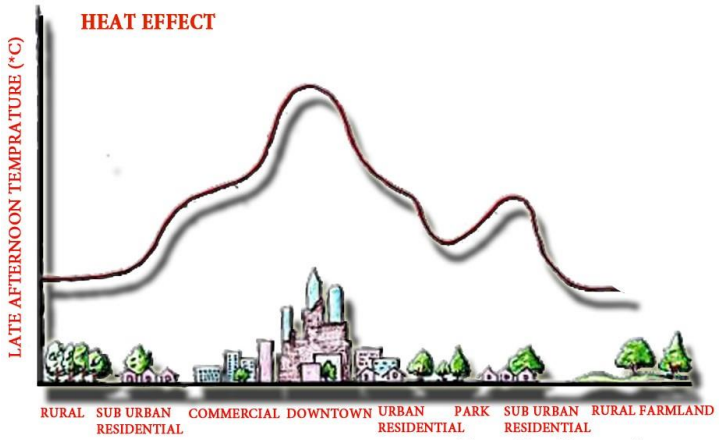
EVERYONE TALKS ABOUT SUSTAINABILITY ,BUT NO ONE KNOWS WHAT IT IS

_ DR KARL HENRIK ROBERT

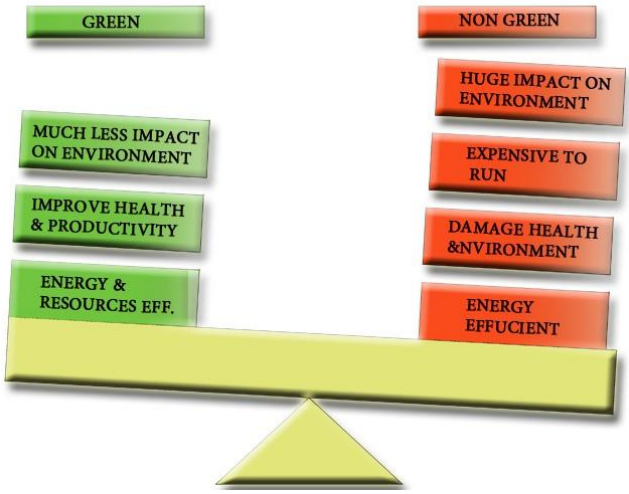
WHAT IS SUSTAINABILITY ?

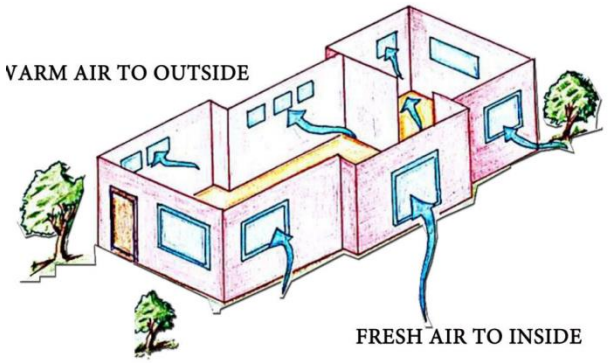
PROVIDING FOR HE NEEDS OF THE PRESENT WITHOUT DETRACTING FROM THE ABILITY TO FULFIL THE NEEDS OF THE FUTURE

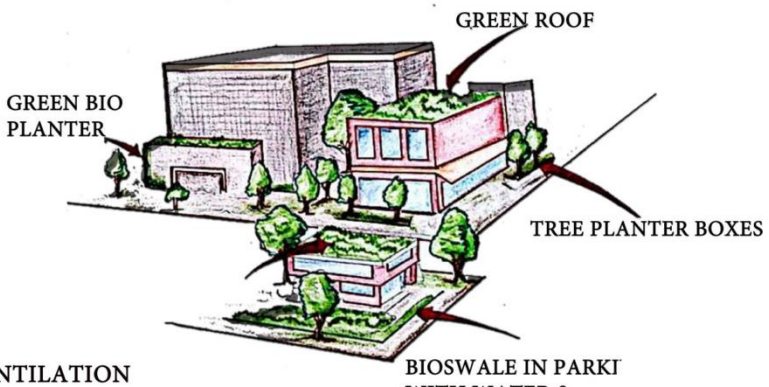
HEAT EFFECT



IN RURAL AREA WHERE WE FIND EVERY MUCH TREES THE TEMPRATURE DOES NOT INCREASING AFTERNOON BUT IN TNE DOWNTOWN OR URBAN COMMERCIAL AREAS WHERE WE FINDS VERY LESS TREES THE TEMPRATURE INCREASE VERY HIGHLY





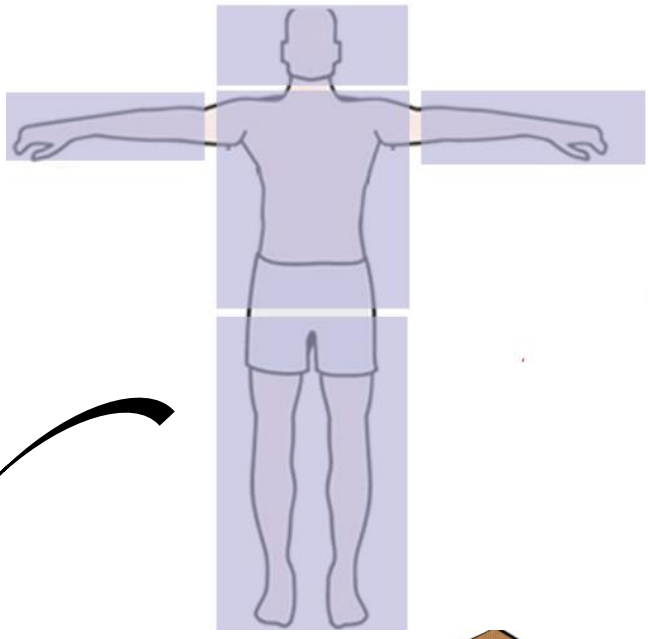


CROSS VENTILATION WITH FRESH AIR

WIND VENTILATION IS A KIND OF PASSIVE VENTILATION THAT USES THE FORCE OF WIND TO PULL AIR THROUGH THE BUILDING .IN GREEN BUILDING CONCEPT BUILDINGS WE MADE BUILDING ACCORDING TO WIND DIRECTION .FRESH WIND ENTER THROUGH BIG WINDOWS THAT STARTS FROM FLOOR AND CAME OUT FROM VENTILATORS ON UPPER PART OF HE WALL IN OTHER DIRECTION

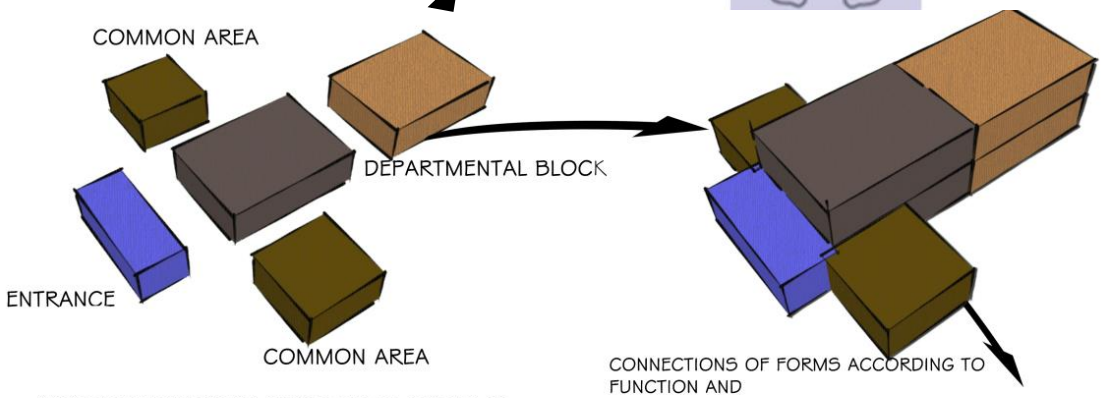
ACADEMIC BLOCK FORM EVOLUTION

When we talk about the shape of ahealth care
Category building then we thnkalways that the buildinjg
Shape has to be very simple and the connectivity
Is also very reaosonable ,but the shape
Of the has to work according to there functions

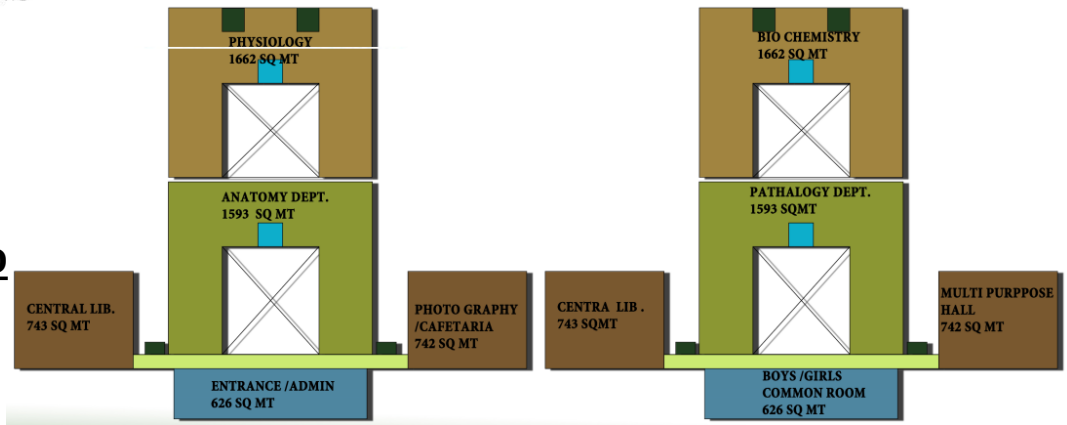


Human anatomy -using human body as basic for planning
Where head serving as admin and entrance ,hands serving
As common areas, and lower body and central body as departmental block

FORM EVOLUTION

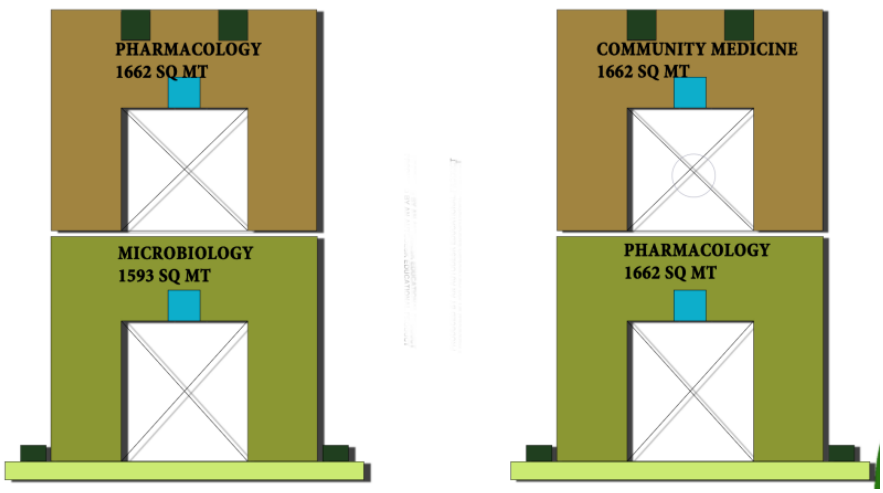


VERTICAL AND HORIZONTAL STACKING



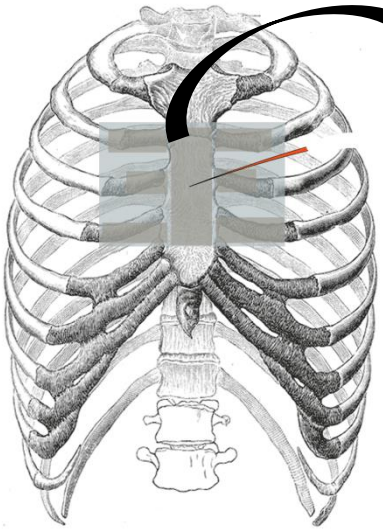
GROUND FLOOR **FIRST FLOOR**

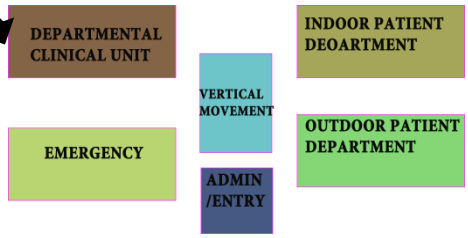
Rectangular forms are arranged in such amanner
That flow should be maintained through connections
And features of green buidings are used.....

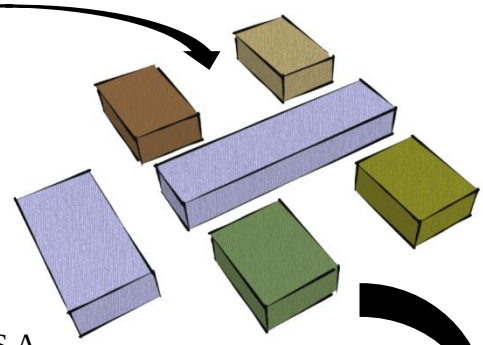


SECOND FLOOR **THIRD FLOOR**

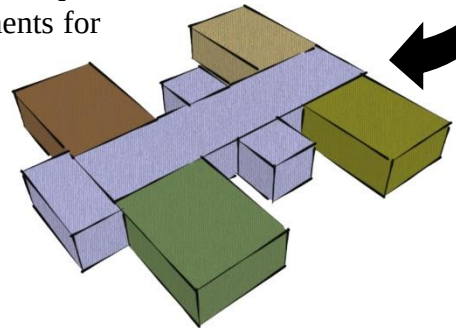
HOSPITAL BLOCK FORM EVOLUTION







RIBCAGE protects the heart and lungs AS A Hospital protects people suffering from various Disease .
Spinal cord woking as the movement unit in plan Whereas ribs acting as different departments for Various purpose.



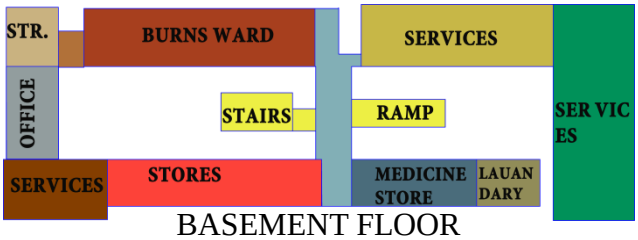
RIBCAGE

TYPES OF ZONES IN HOSPITAL

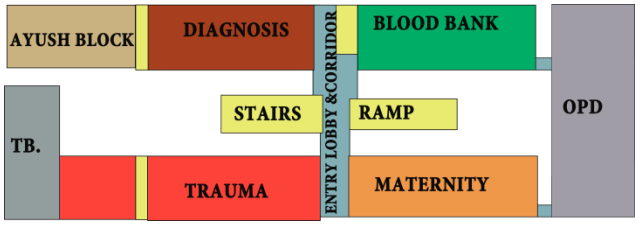
A hospital is divided into diferent zones depending uon functions.
I have tried to evolve my form by interconnecting the departments.
The resulting shape is taken as the form. Also the vernacular
Architecture features have been implmented into the design along
With features of sustainable design.

USE OF GREEN FEATURES IN HOSPITAL

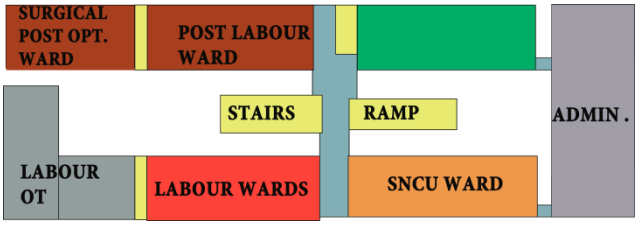
- *Solar pannels on the roof
- * Green roof
- *rain water harvesting system
- *wind tirbines on ythe roof
- that can be used to generate
- Electricity
- * triple galzed windows



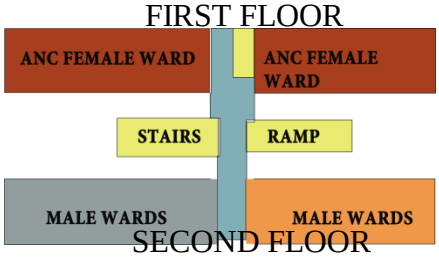
BASEMENT FLOOR



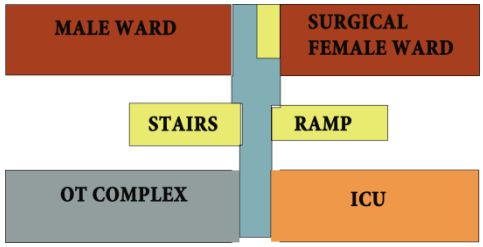
GROUND FLOOR



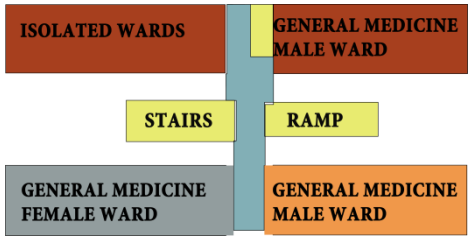
FIRST FLOOR



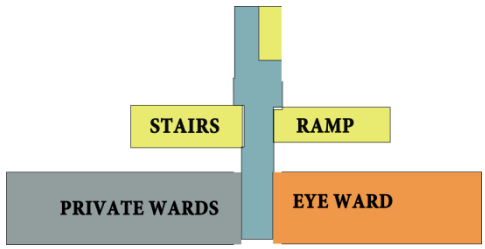
SECOND FLOOR



THIRD FLOOR



FOURTH FLOOR



FIFTH FLOOR

S.N.	REQUIREMENTS	STANDARD AS PER MCI NORMS	REQUIRED AREA
1	**DEPARTMENT OF ANATOMY**		
	DEMONSTRATION ROOM	45 SQM (2 NOS)	60 SQM (2 NOS)
	DESSECTION HALL	250 SQM	350 SQM
	HISTOLOGY LAB	150 SQM	200 SQM
	RESEARCH LABORATORY	50 SQM	50 SQM
	MUSEUM	150 SQM	200 SQM
	DEPARTMENTAL LIBRARY	30 SQM	30 SQM
	ACCOMMODATION FOR STAFF		
	Professor & Head of the Department	18 SQM	18 SQM
	Associate Professor/Reader	15 SQM(2 NOS)	15 SQM(2 NOS)
	Asstt. Professor/Lecturers room	20 SQM	20 SQM
	Tutor/Demonstrators room	15 SQM	15 SQM
	Department office cum Clerical room	12 SQM	12 SQM
	Working accommodation for non-teaching staff room	12 SQM	12 SQM
2	**DEPARTMENT OF PHYSIOLOGY**		
	DEMONSTRATION ROOM	45 SQM	60 SQM (2 NOS)
	AMPHIBIAN LAB	150 SQM	200 SQM
	MAMMALIAN LAB	60 SQM	80 SQM
	HAEMETALOGY LAB	150 SQM	200 SQM
	CLINICAL PHYSIOLOGY LAB	60 SQM	90 SQM
	DEPARTMENTAL LIBRARY	30 SQM	30 SQM

S.N.	REQUIREMENTS	STANDARD AS PER MCI NORMS	REQUIRED AREA
3	**DEPARTMENT OF BIOCHEMISTRY**		
	DEMONSTRATION ROOM	45 SQM	60 SQM (2 NOS)
	PRACTICAL CLASS ROOM	150 SQM	200 SQM
	DEPARTMENTAL LIBRARY/SEMINAR ROOM	30 SQM	30 SQM
	RESEARCH LABORATORY	50 SQM	50 SQM
	ACCOMMODATION FOR STAFF		
	Professor & Head of the Department	18 SQM	18 SQM
	Associate Professor/Reader	15 SQM(2 NOS)	15 SQM(2 NOS)
	Asstt. Professor/Lecturers room	20 SQM	20 SQM
	Tutor/Demonstrators room	15 SQM	15 SQM
	Department office cum Clerical room	12 SQM	12 SQM
	Working accommodation for non-teaching staff room	12 SQM	12 SQM
4	**DEPARTMENT OF PATHOLOGY**		
	DEMONSTRATION ROOM	45 SQM	60 SQM (2 NOS)
	HISTOPATHOLOGY/CYTOPATHOLOGY LAB	150 SQM	200SQM
	CLINICAL PATHOLOGY/HAEMATOLOGY LAB	150 SQM	200 SQM
	HISTOPATHOLOGY LAB	25 SQM	30 SQM
	CYTOPATHOLOGY LAB	25 SQM	30 SQM
	HAEMETOLOGY LAB	25 SQM	30 SQM
	MUSEUM	60 SQM	90 SQM
	AUTOPSY ROOM	400 SQM	400 SQM

S.N.	REQUIREMENTS	STANDARD AS PER MCI NORMS	REQUIRED AREA
5	**DEPARTMENT OF MICROBIOLOGY**		
	DEMONSTRATION ROOM	45 SQM	60 SQM (2 NOS)
	PRACTICAL LABS	150 SQM (2 NOS)	200 SQM (2 NOS)
	BACTERIOLOGY LAB & PARASITOLOGY LAB	30 SQM (2 NOS)	30 SQM (2 NOS)
	SEROLOGY LAB & VIRILOGY LAB	30 SQM (2 NOS)	30 SQM (2 NOS)
	MYCOLOGY LAB	30 SQM	30 SQM
	TUBERCULOSIS LAB & IMMUNOLOGY LAB	30 SQM (2 NOS)	30 SQM (2 NOS)
	MUSEUM	60 SQM	80 SQM
	DEPARTMENTAL LIBRARY	30 SQM	30 SQM
	RESEARCH LABORATORY	50 SQM	50 SQM
	ACCOMMODATION FOR STAFF		
	Professor & Head of the Department	18 SQM	18 SQM
	Associate Professor/Reader	15 SQM(2 NOS)	15 SQM (2 NOS)
	Asstt. Professor/Lecturers room	20 SQM	20 SQM
	Tutor/Demonstrators room	15 SQM	15 SQM
	Department office cum Clerical room	12 SQM	12 SQM
	Working accommodation for non-teaching staff room	12 SQM	12 SQM
6	**DEPARTMENT OF PHARMACOLOGY**		
	DEMONSTRATION ROOM	45 SQM	60 SQM (2 NOS)
	PRACTICAL LABS	150 SQM (2 NOS)	200 SQM(2 NOS)
	MUSEUM	100 SQM	125 SQM
	DEPARTMENTAL LIBRARY	30 SQM	30 SQM
	RESEARCH LABORATORY	50 SQM	50 SQM
	ACCOMMODATION FOR STAFF		
	Professor & Head of the Department	18 SQM	18 SQM
	Associate Professor/Reader	15 SQM(2 NOS)	15 SQM(2 NOS)
	Asstt. Professor/Lecturers room	20 SQM	20 SQM
	Tutor/Demonstrators room	15 SQM	15 SQM
	Department office cum Clerical room	12 SQM	12 SQM
	Working accommodation for non-teaching staff room	12 SQM	12 SQM

S.N.	REQUIREMENTS	STANDARD AS PER MCI NORMS	REQUIRED AREA
7	**DEPARTMENT OF FORENSIC MEDICAL INCLUDING TOXICOLOGY**		
	DEMONSTRATION ROOM	45 SQM	60 SQM (2 NOS)
	MUSEUM	150 SQM	175 SQM
	LAB FOR EXAMINATIONS	150 SQM	200 SQM
	AUTOPSY ROOM	30 SQM	400 SQM
	DEPARTMENTAL LIBRARY/SEMINAR ROOM	30 SQM	30 SQM
	RESEARCH LABORATORY	50 SQM	50 SQM
	ACCOMMODATION FOR STAFF		
	Professor & Head of the Department	18 SQM	18 SQM
	Associate Professor/Reader	15 SQM(2 NOS)	15 SQM(2 NOS)
	Asstt. Professor/Lecturers room	20 SQM	20 SQM
	Tutor/Demonstrators room	15 SQM	15 SQM
	Department office cum Clerical room	12 SQM	12 SQM
	Working accommodation for non-teaching staff room	12 SQM	12 SQM
8	**DEPARTMENT OF COMMUNITY MEDICINE**		
	DEMONSTRATION ROOM	45 SQM	60 SQM (2 NOS)
	PRACTICAL LAB	150 SQM	200SQM
	MUSEUM	100 SQM	125 SQM
	DEPARTMENTAL LIBRARY	30 SQM	30 SQM
	RESEARCH LABORATORY	50 SQM	50 SQM
	ACCOMMODATION FOR STAFF		
	Professor & Head of the Department	18 SQM	18 SQM
	Associate Professor/Reader	15 SQM(2 NOS)	15 SQM(2 NOS)
	Asstt. Professor/Lecturers room	20 SQM	20 SQM
	Tutor/Demonstrators room	15 SQM	15 SQM
	Department office cum Clerical room	12 SQM	12 SQM
	Working accommodation for non-teaching staff room	12 SQM	12 SQM

BUILT UP AREA REQUIREMENTS (100 ADMISSIONS)

ITEM DETAILS	NO.	AREA (Sq. M.) Each	Total (Sq. m.)	Remarks
(1)	(2)	(3)	(4)	(5)
Administrative Block				
Principal/Dean's Office		36	36	
Staff Room		54	54	
College Council Room		80	80	
Officer Superintendent's Room		10	10	
Office		150	150	
Record Room		100	100	
Examination room		300	300	
Common Room – Boys		100	100	
Girls		100	100	
Cafeteria		200	200	
Central Library		1600	1600	
Lecture Theatres	3	330	990	120 Seating Capacity
	1	660	660	250 Seating Capacity
Auditorium	1	800	800	500-700 Seating Capacity
Common Laboratories	6	170	1020	
	2	75	150	
Central Research Laboratory	1	100	100	
Department Total			**6450**	
DEPARTMENTS				
Anatomy				
Demonstration Room	2	45	90	Accommodate at least 50-60 Students
Dissection Hall	1	250	250	Accommodate at least 100 Students
Museum		150	150	Accommodate 25 students to study in the museum
Accommodation for Staff				
Professor & Head	1	18	18	
Asso. Prof./Reader	1	15	15	
Asst. Prof./Lecturer	2	20	40	
Tutor/Demonstrators	4	15	60	
Department Office/Clerical Room	1	12	12	
Non-teaching staff room	1	12	12	
Department Total			**647**	
Physiology including Bio-physics				
Demonstration Room	1	45	45	Accommodate at least 50-60 Students
Accommodation for Staff				
Professor & Head	1	18	18	
Asso. Prof./Reader	1	15	15	
Asst. Prof./Lecturer	2	20	40	
Tutor/Demonstrators	4	15	60	
Department Office/Clerical Room	1	12	12	
Non-teaching staff room	1	12	12	
Department Total			**157**	
Biochemistry				
Demonstration Room	1	45	45	Accommodate at least 50-60 Students
Accommodation for Staff				
Professor & Head	1	18	18	
Asso. Prof./Reader	1	15	15	
Asst. Prof./Lecturer	1	12	12	
Tutor/Demonstrators	4	15	60	
Department Office/Clerical Room	1	12	12	
Non-teaching staff room	1	12	12	
Department Total			**174**	
Pathology				
Demonstration Room	1	45	45	Accommodate at least 50-60 Students
Museum		150	150	
Accommodation for Staff				
Professor & Head	1	18	18	
Asso. Prof./Reader	2	15	30	
Asst. Prof./Lecturer	3	12	36	
Tutor/Demonstrators	5	15	75	
Department Office/Clerical Room	1	12	12	
Non-teaching staff room	1	12	12	
Department Total			**378**	

ITEM DETAILS	NO.	AREA (Sq. M.) Each	Total (Sq. m.)	Remarks
(1)	(2)	(3)	(4)	(5)
Block Bank (includes)		**100**	**100**	
(a) Registration & Medical Examination Room				
(b) Blood Collection Room				
(c) Room for Laboratory for Blood Group Serology				
(d) Room for Lab. For Transmissible diseases like Hepatitis, Syphilis, Malaria, HIV antibodies, etc.				
(e) Sterilisation and Washing Room				
(f) Refreshment Room				
(g) Store and Records Rooms				
Microbiology				
Service Laboratory	7	25	175	Each for Bacteriology, Serology, Virology, Parasitology, Mycology, Tuberculosis and Immunology
Museum		100	100	
Accommodation for Staff				
Professor & Head	1	18	18	
Asso. Prof./Reader	1	15	15	
Asst. Prof./Lecturer	2	12	24	
Tutor/Demonstrators	3	15	45	
Department Office/Clerical Room	1	12	12	
Non-teaching staff room	1	12	12	
Department Total			**401**	
Pharmacology				
Demonstration Room	1	45	45	Accommodate at least 50-60 Students
Museum		100	100	
Accommodation for Staff				
Professor & Head	1	18	18	
Asso. Prof./Reader	1	15	15	
Asst. Prof./Lecturer	2	12	24	
Tutor/Demonstrators	2	15	30	
Department Office/Clerical Room	1	12	12	
Non-teaching staff room	1	12	12	
Department Total			**256**	
Forensic Med. Including Toxicology				

BUILT UP AREA REQUIREMENTS (100 ADMISSIONS)

ITEM DETAILS	NO.	AREA (Sq. M.) Each	Total (Sq. m.)	Remarks
(1)	(2)	(3)	(4)	(5)
Demonstration Room	1	45	45	Accommodate at least 50-60 Students
Autopsy Block		400	400	
Museum		100	100	
Accommodation for Staff				
Professor & Head	1	18	18	
Asso. Prof./Reader	1	15	15	
Asst. Prof./Lecturer	1	12	12	
Tutor/Demonstrators	2	15	30	
Department Office/Clerical Room	1	12	12	
Non-teaching staff room	1	12	12	
Department Total			**629**	
Community Medicine				
Museum		150	150	
Primary Health Centre/Rural Health Training Centre Urban Health Training Centre				
Accommodation for Staff				
Professor & Head	1	18	18	
Asso. Prof./Reader	2	15	30	
Asst. Prof./Lecturer	2	15	30	
Statistician-cum-Lecturer	1	12	12	
Epidemiologist-cum-Lecturer	1	12	12	
Tutor/Demonstrators	1	15	15	
Department Office/Clerical Room	1	12	12	
Non-teaching staff room	1	15	15	
Department Total			**294**	
COLLEGE TOTAL			**9486**	
Teaching Hospital				
Dean's Room		36	36	
Medical Superintendent's Room		36	36	
Hospital offices for the supportive staff		150	150	
Waiting space for visitors		300	300	
Enquiry office		50	50	
Reception		300	300	
Store Rooms		500	500	
Central Medical Record Section		200	200	
Linen Rooms		500	500	
Hospital & Staff Committee Room		60	60	

BUILT UP AREA REQUIREMENTS (100 ADMISSIONS)

ITEM DETAILS	NO.	AREA (Sq. M.) Each	Total (Sq. m.)	Remarks
(1)	(2)	(3)	(4)	(5)
Clinical Departments - Outdoor		**6500**	**6500**	
Waiting/receiption space rooms for patients and attendants				
Enquiry and record room				
Examination rooms and case				
demonstration rooms for each	4			For each department
Dispensary				
Dressing room in surgery & its specialities				
Refraction rooms, dark rooms, dressing rooms in Opthalmic Deptt.				
Plaster rom, plaster cutting room etc., in Orthopaedics Deptt.				
Sound proof audiometry room, ENG Lab., speech therapy rooms in ENT Deptt.				
Child welfare, immunization room etc. in paediatrics Deptt.				
Antenatal, family welfare, sterility cancer detection clinics in OBG Deptt.				
Dental Section				
OPD TOTAL			**6500**	
HOSPITAL TOTAL			**21323**	
Residential Quarters/Hostels				
Qtrs. @20% teaching 20% of		4400	4400	
Qtrs. @ 20% Non teaching 20% of		3600	3600	
Nurses @ 20%		4500	4500	
Residents @ 100 %		3000	3000	
Interns @ 100 %		2700	2700	
Hostels for 375 students (i.e. @ 75% of 500)			3375	
TOTAL RESIDENTAIL COMPLEX			**21575**	
TOTAL			**52384**	
ADD 15 %			**7858**	
GRAND TOTAL			**60242**	

ITEM DETAILS	NO.	AREA (Sq. M.) Each	Total (Sq. m.)	Remarks
(1)	(2)	(3)	(4)	(5)
Eclampsia Room		75	75	
Laundary		10	10	
Total for Labour Room			**435**	
Radio-Diagnosis				
Room for 300mA, 500mA, 800mA		36	36	
IITV System, Fluroscopy System		15	15	
Ultrasound room		15	15	
Room for 60mA Mobile X-Ray System		15	15	
Accommodation for CT Scan System		20	20	
Store Room		25	25	
Museum		25	25	
Waiting Room		40	40	
Department Total			**176**	
Anaesthesiology				
Accommodation for the Anaesthesia Department in Operation Theatres				
Office for HOD & Heads of Units		20	20	
Accommodation for other unit staff		20	20	
Clinical Demonstration Rooms		20	20	
Department Total			**60**	
Optional Departments				
Radiotherapy				
Teletharapy Unit		100	100	
Intracavitory Treatment room		50	50	
Endocavitory surface mould therapy room		50	50	
Planning Room		50	50	
Room for metalling treatment		50	50	
Record Room		100	100	
Medical Physics Lab.		50	50	
Out patient waiting room		200	200	
Day care ward for short chemotherapy/radiotherapy		70	70	
Department Total			**720**	
Physical Medicine & rehabilitation		**1500**	**1500**	

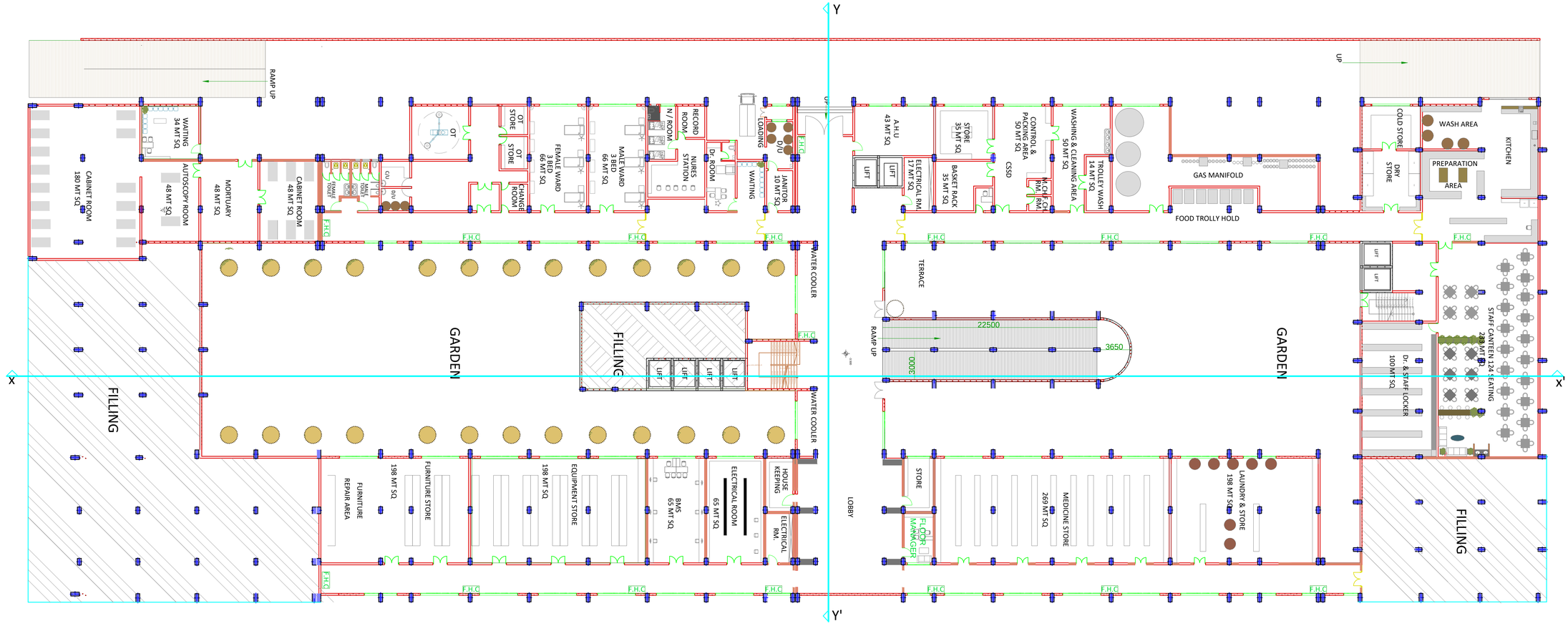
HOSPITAL BUILDING ---

GROUND FLOOR AREA -5977 SQ MT
FIRST FLOOR AREA -5977 SQ MT
SECOND FLOOR AREA -4617 SQ MT
THIRD FLOOR AREA -4617 SQ MT
FOURTH FLOOR AREA - 4617 SQ MT
FIFTH FLOOR AREA - 2136 SQ MT

TOTAL BUILT UP - 27941 SQ MT

GROUND AREA COVERED (HOSPITAL BUILDING)- 5977 SQMT
NO. OF FLOORS - 5

REQUIRED AREA ACCORDING TO NORMS AREA - 21575 SQ MT + 40 CIRCULATION AREA (30,205 SQ MT)



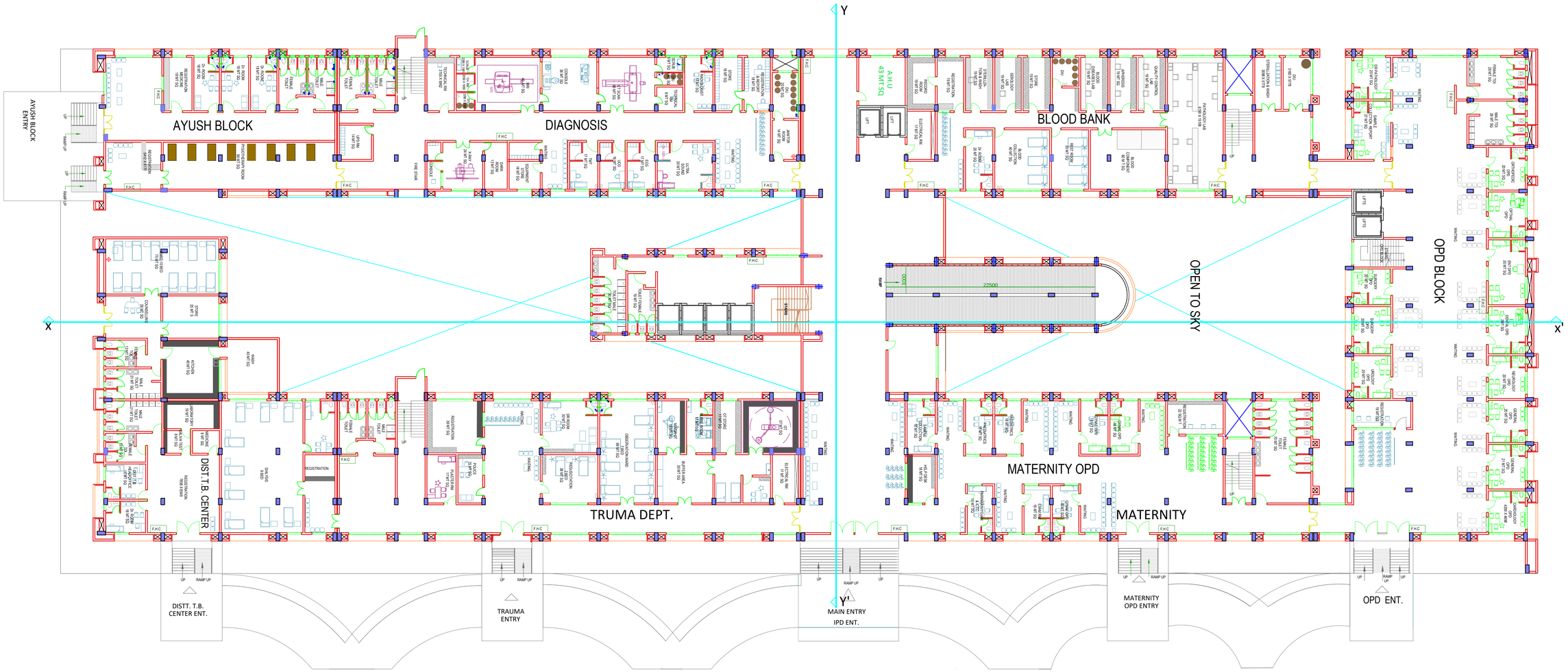
BASEMENT FLOOR

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (HOSPITAL BLOCK) (UTTAR PRADESH)

N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	



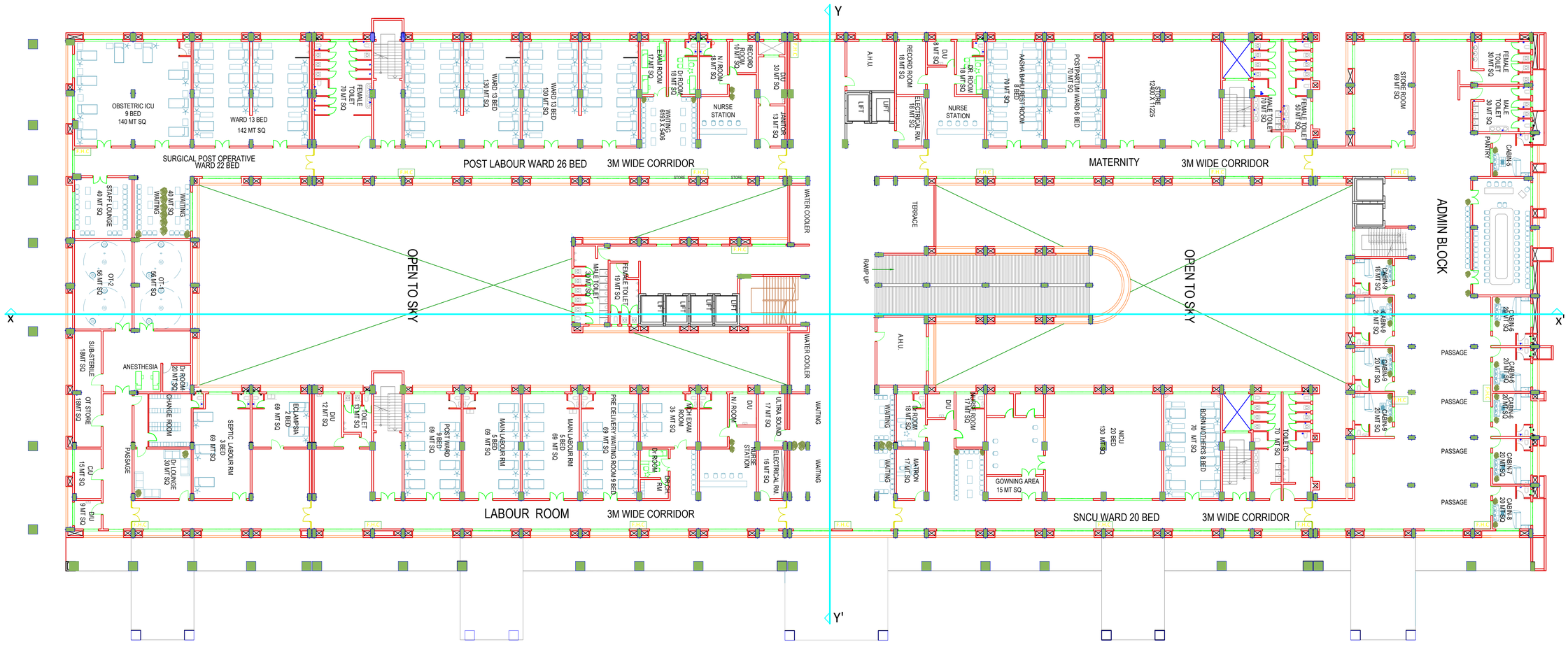
GROUND FLOOR

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (HOSPITAL BLOCK)
(UTTAR PRADESH)

N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	



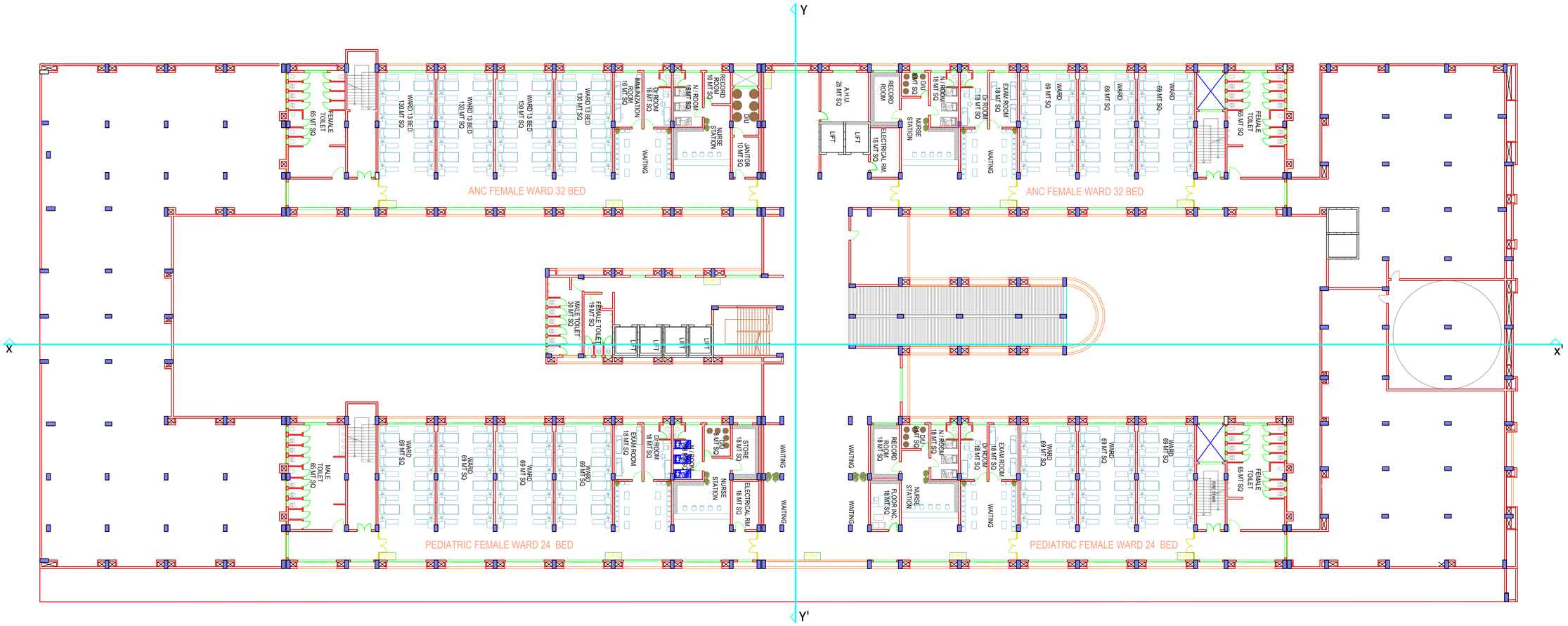
FIRST FLOOR

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (HOSPITAL BLOCK)
(UTTAR PRADESH)

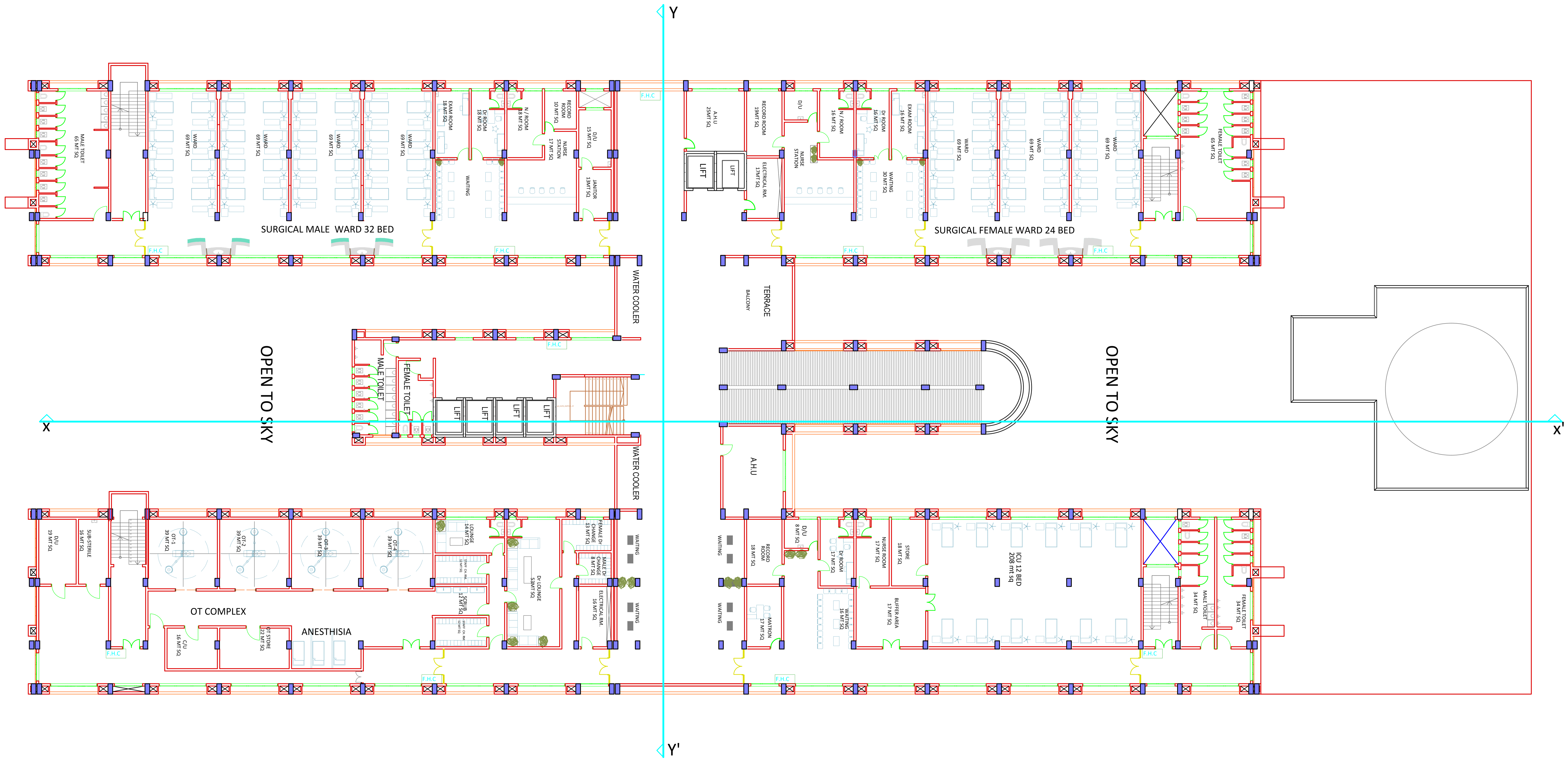
N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	



SECOND FLOOR

THESIS 2019-20 MEDICAL COLLEGE AT AMARPUR (HOSPITAL BLOCK) (UTTAR PRADESH)	N	AAYUSH KHARE B.ARCH V YEAR(X SEM) BBDU
		SIGN



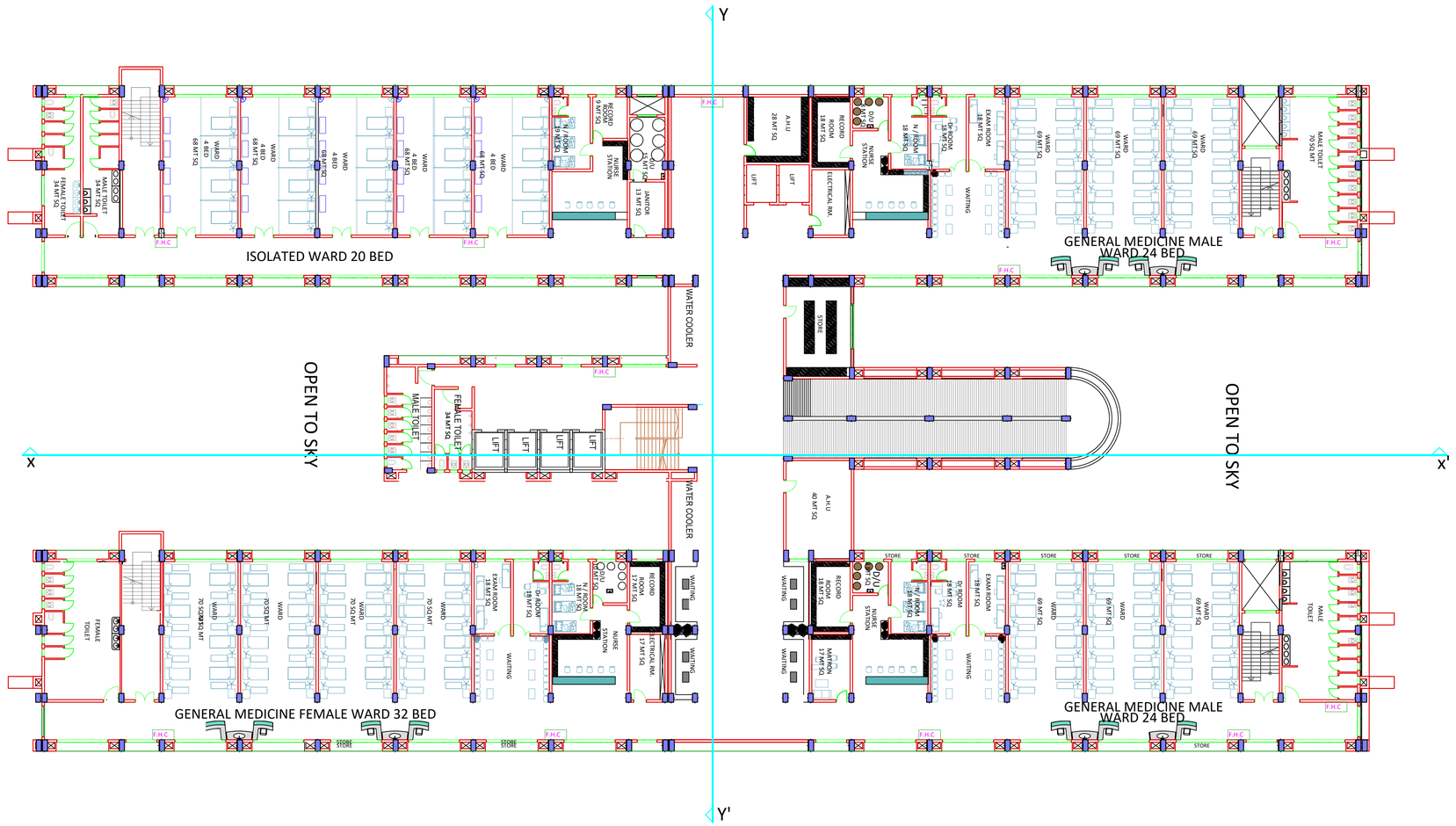
THIRD FLOOR

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR(HOSPITAL BLOCK)
(UTTAR PRADESH)

N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	



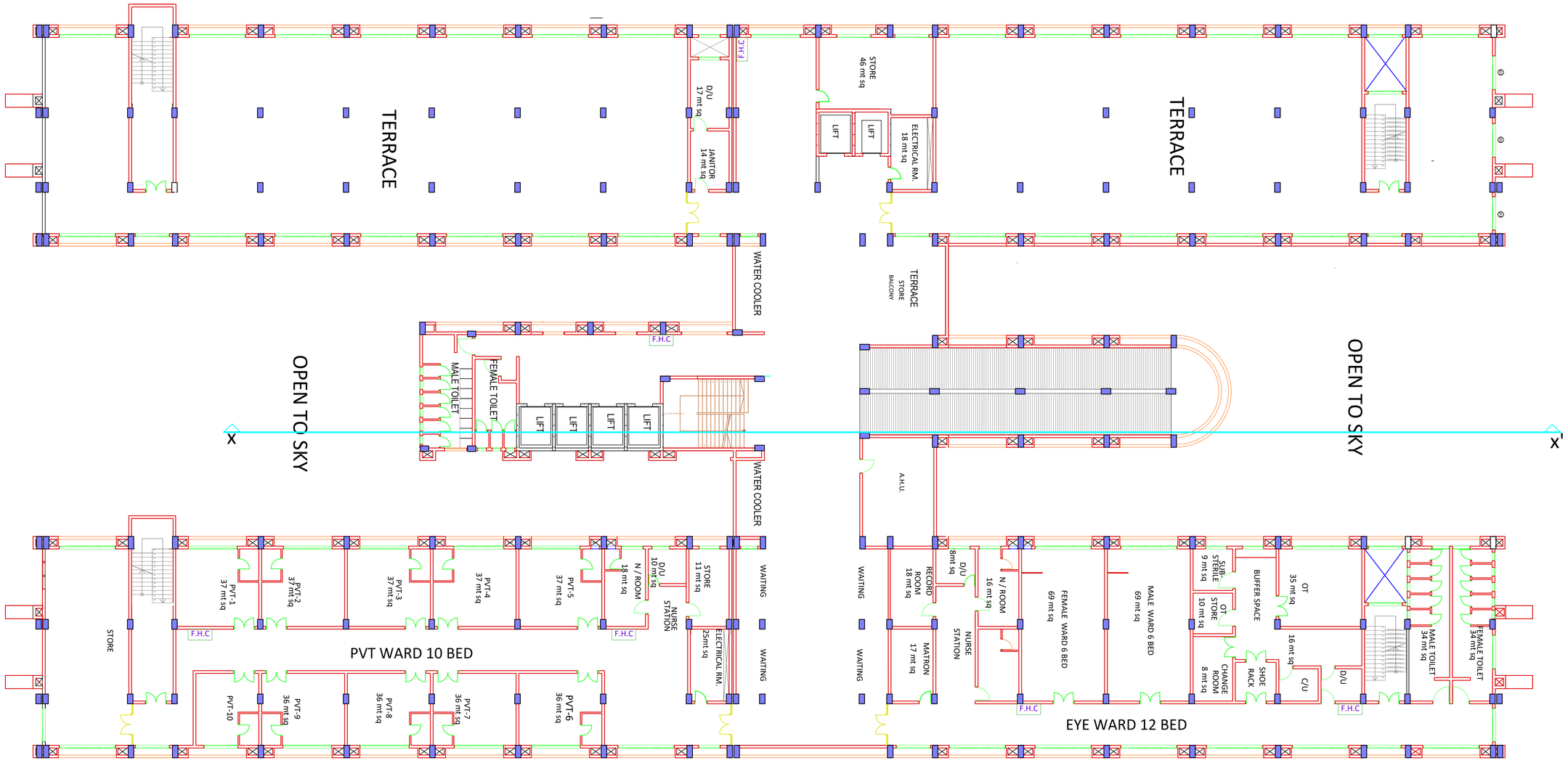
FOURTH FLOOR

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR(HOSPITAL BUILDING)
(UTTAR PRADESH)

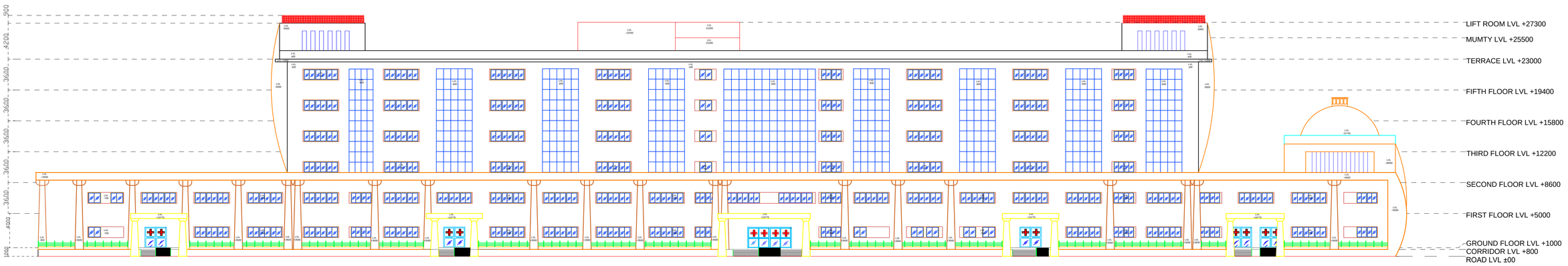
N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	

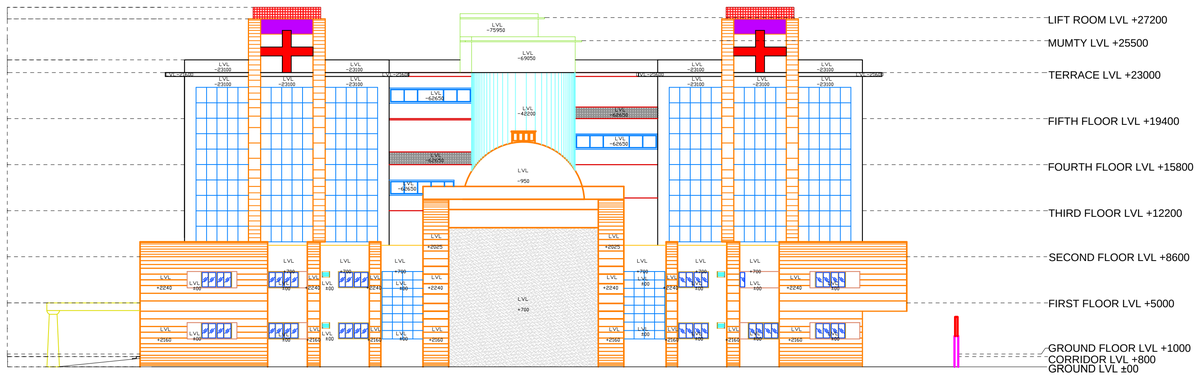


FIFTH FLOOR PLAN

THESIS 2019-20 MEDICAL COLLEGE AT AMARPUR (HOSPITAL BLOCK) (UTTAR PRADESH)	N	AAYUSH KHARE B.ARCH V YEAR(X SEM) BBDU	SIGN



RIGHT SIDE ELEVATION



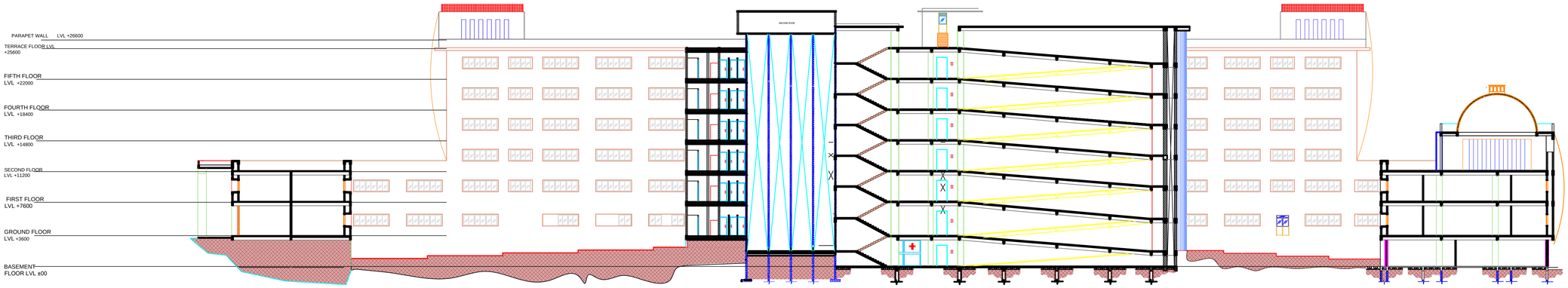
FRONT ELEVATION

THESIS 2019-20

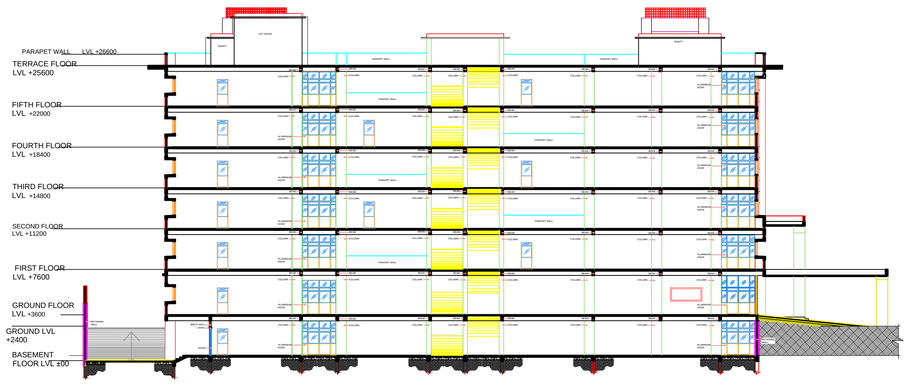
MEDICAL COLLEGE AT AMARPUR(HOSPITAL BLOCK) (UTTAR PRADESH)

N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	



SECTION XX'

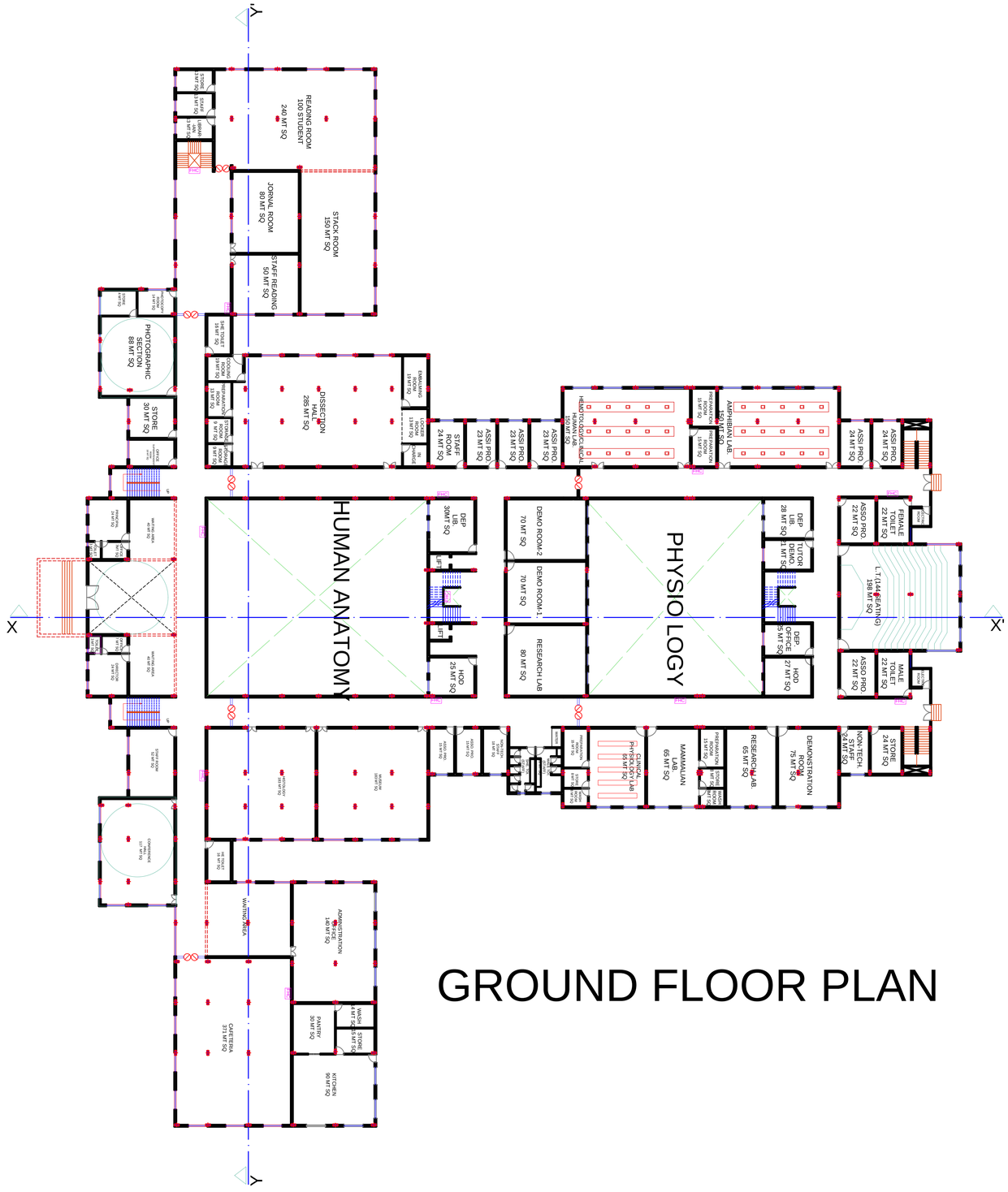


SECTION YY'

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (HOSPITAL BLOCK) (UTTAR PRADESH)

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	



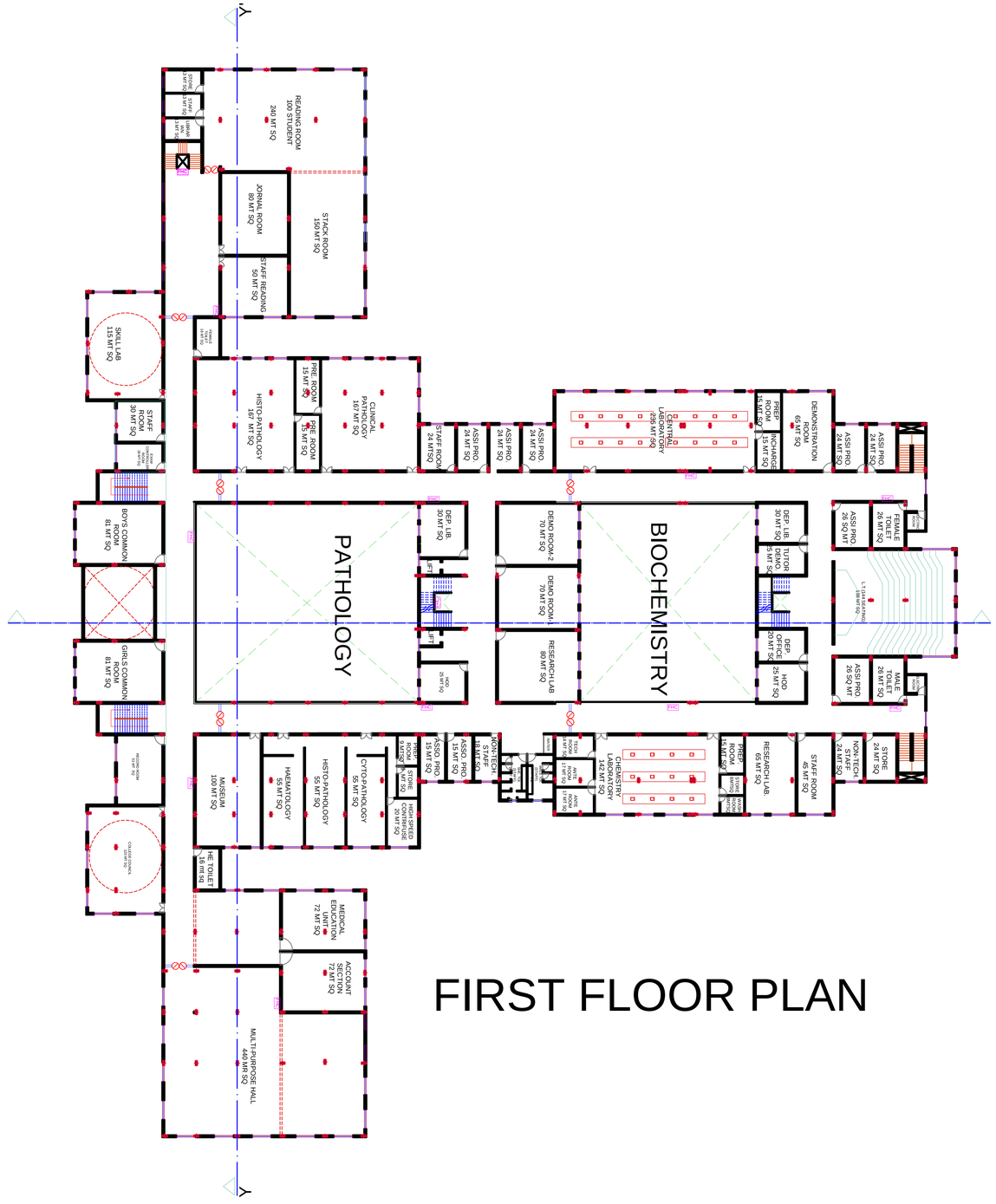
GROUND FLOOR PLAN

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (TEACHING BLOCK)
(UTTAR PRADESH)

N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	



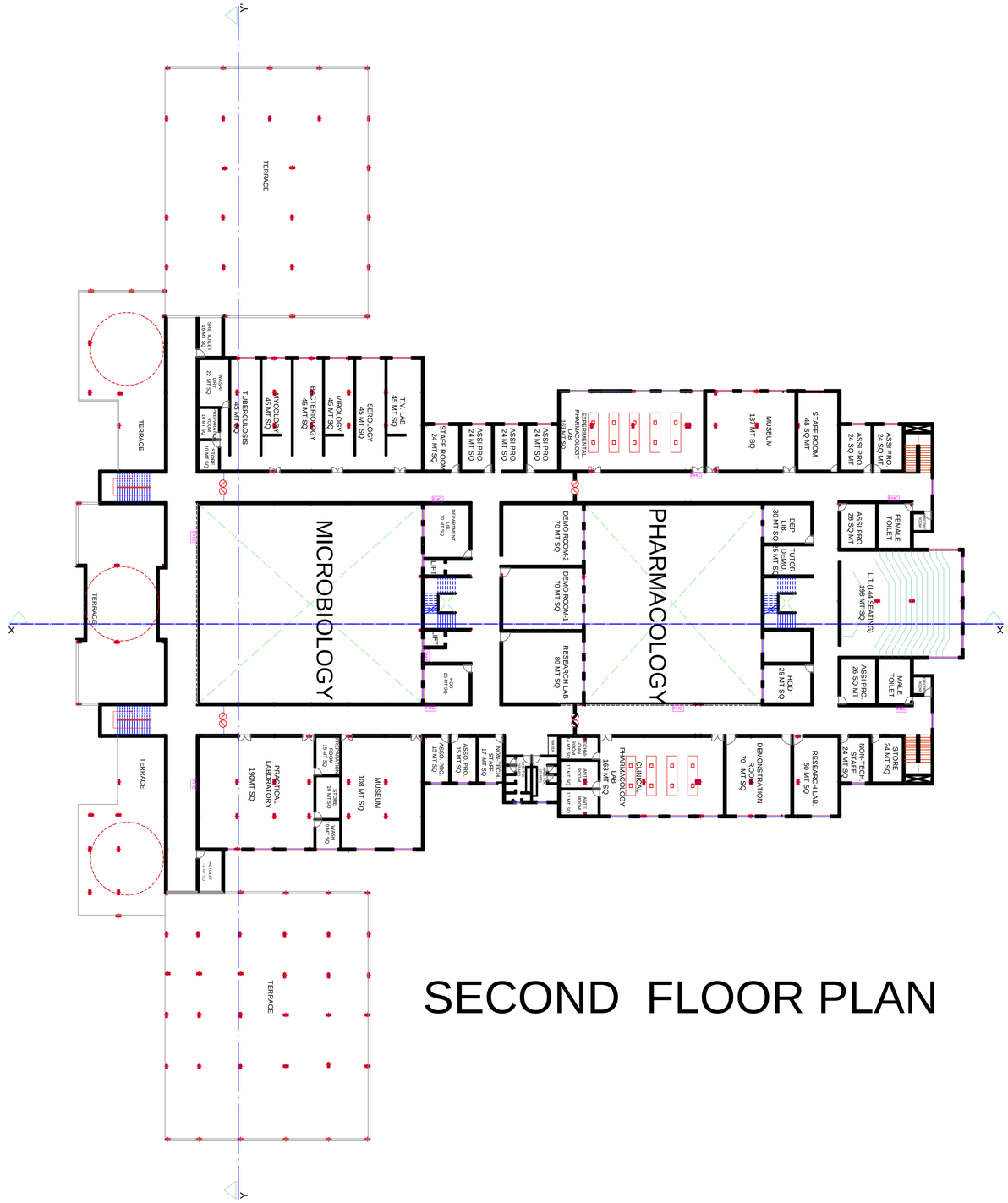
FIRST FLOOR PLAN

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (TEACHING BLOCK)
(UTTAR PRADESH)

N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU	



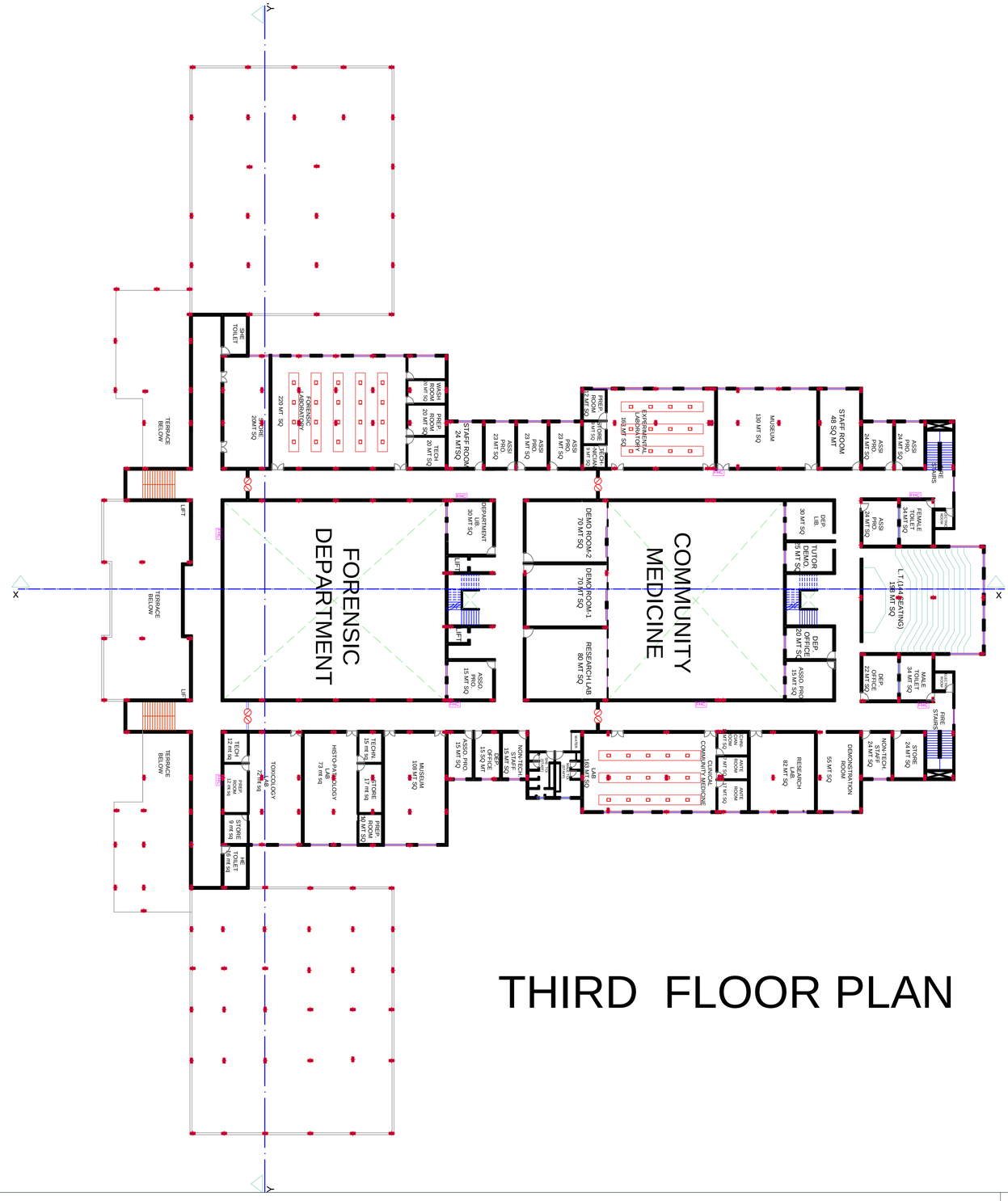
SECOND FLOOR PLAN

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (TEACHING BLOCK) (UTTAR PRADESH)

N

AAYUSH KHARE	SIGN
B.ARCH V YEAR(X SEM)	
BBDU	



THIRD FLOOR PLAN

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (TEACHING BLOCK) (UTTAR PRADESH)

N

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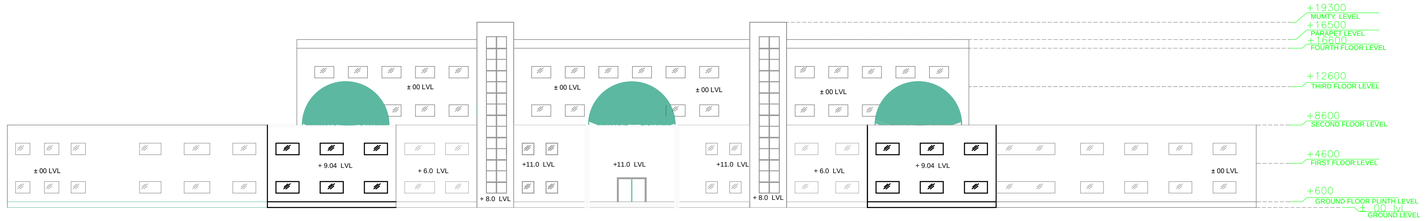
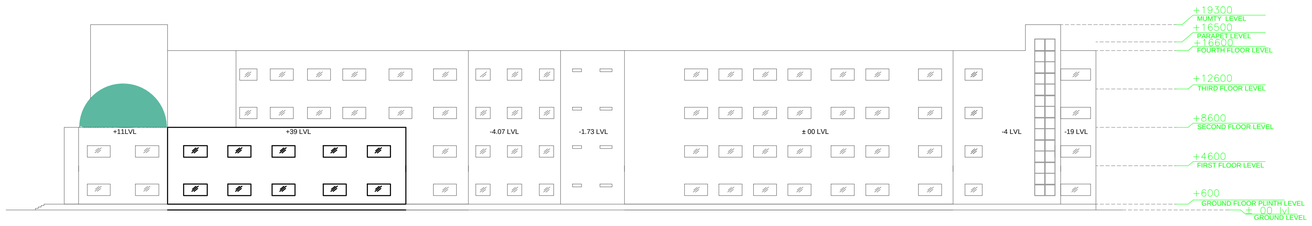
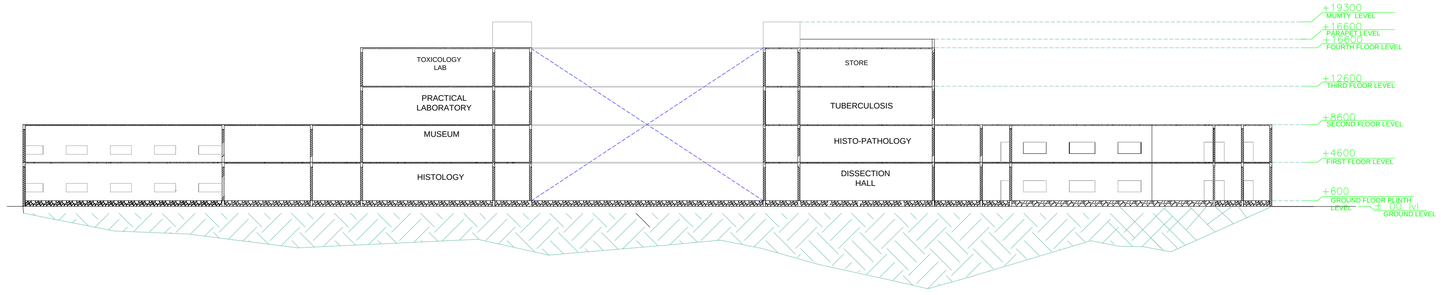
B.ARCH V YEAR(X SEM)	
BBDU	



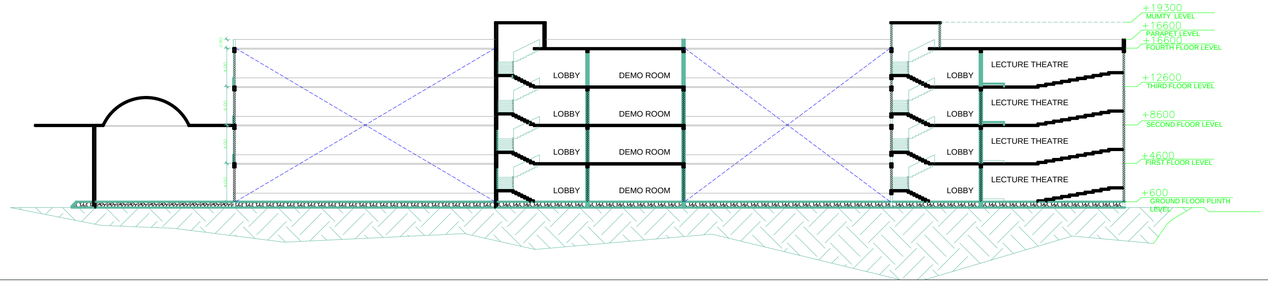
FRONT ELEVATION



SIDE ELEVATION



SECTION YY'

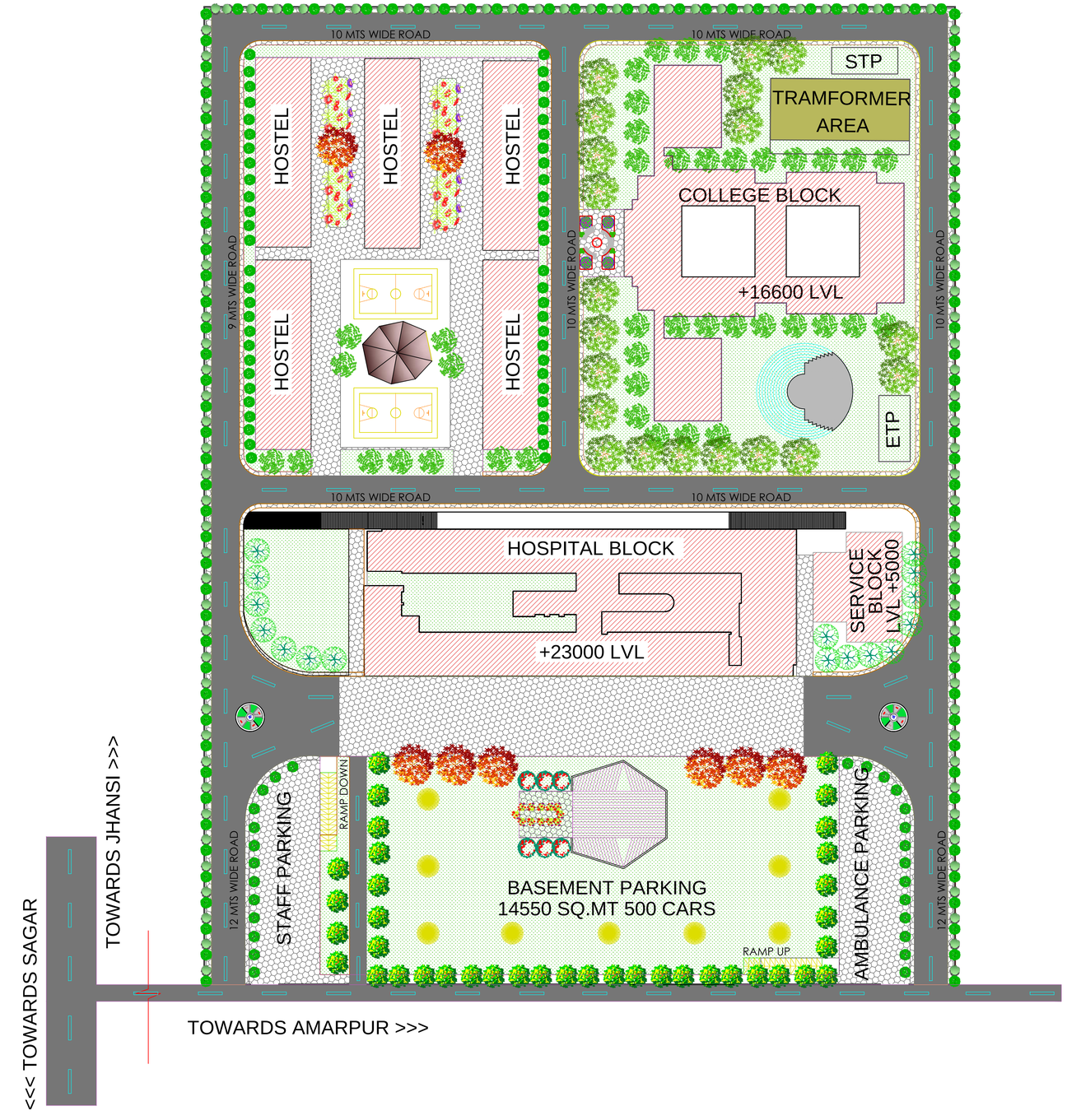


THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (TEACHING BLOCK) (UTTAR PRADESH)

N

AAYUSH KHARE	SIGN
B.ARCH V YEAR(X SEM)	
BBDU	



TOTAL SITE AREA -23.16 ACRES (93725 SQ MT)
PERMISIBLE GROUND COVERAGE -30%
PERMISIBLE F.A.R. -2.5
ACHIEVED F.A.R. -2.3

AREA OF HOSPITAL BLOCK(GROUND FLOOR) -6122 SQ.M
AREA OF HOSPITAL BLOCK(FIRST FLOOR) -6122 SQ.M
AREA OF HOSPITAL BLOCK(SECOND FLOOR) -3702 SQ.M
AREA OF HOSPITAL BLOCK(THIRD FLOOR) -3702 SQ.M
AREA OF HOSPITAL BLOCK(FOURTH FLOOR) -3702 SQ.M
AREA OF HOSPITAL BLOCK(FIFTH FLOOR) -3702 SQ.M

AREA OF ACADEMIC BLOCK -4844 SQ.M.
AREA OF ACADEMIC BLOCK -4844 SQ.M.
AREA OF ACADEMIC BLOCK -3410 SQ.M
AREA OF ACADEMIC BLOCK -3410 SQ.M

TOTAL COVERED AREA - 43,560 SQ.M

GREEN AREA-32560 SQ.M(32%)

BASEMENT PARKING AREA -14550 SQ.M

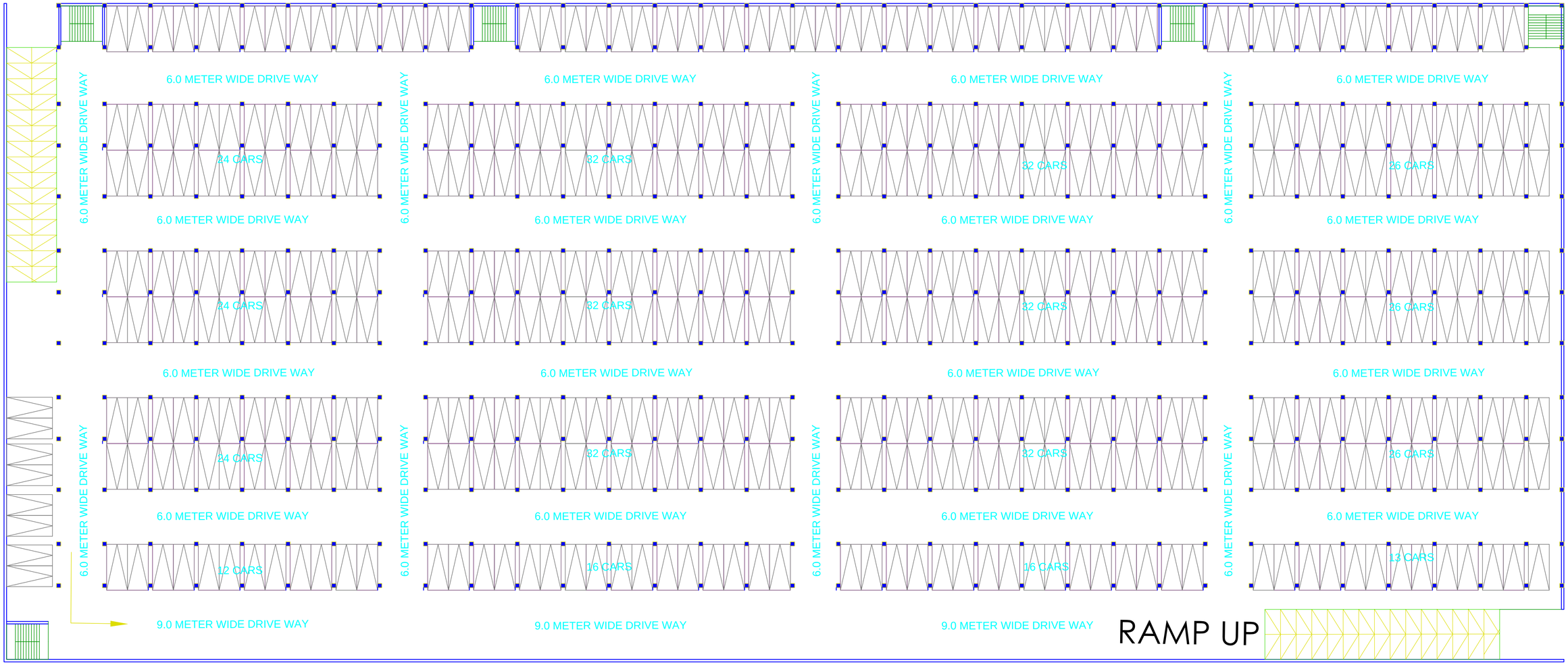
THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR(UTTAR PRADESH)
SITE PLAN

N

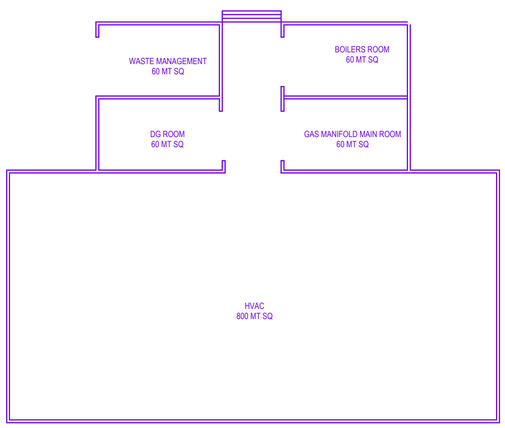
AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU LKO	

79002



187063

BASEMENT PLAN



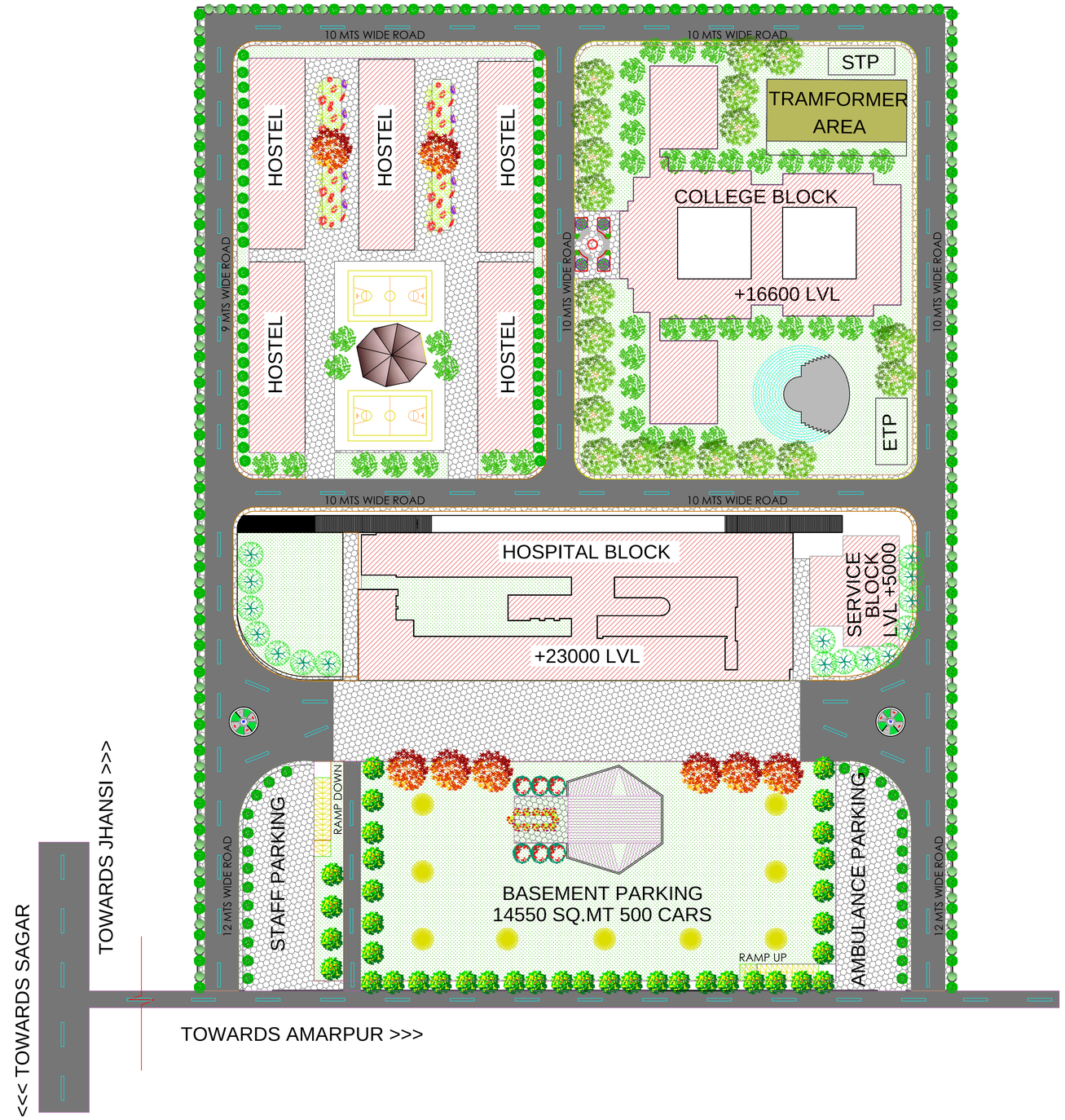
SERVICE BLOCK

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR (UTTAR PRADESH)

BASEMENT (PARKING)

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU LKO	



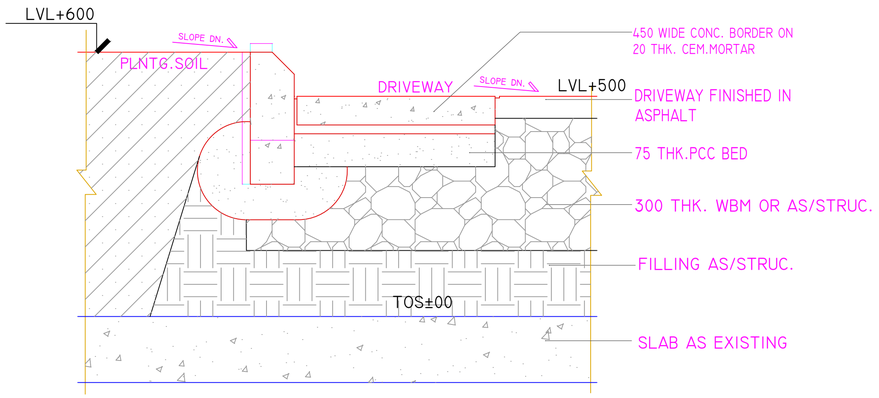
LEGEND	LEGEND	LEGEND
	AZATIRATITA INDICA	NEEM TREE
	AZATIRATITA INDICA	NEEM
	DELONIX REGIA	GULMOHAR
	DELONIX REGIA	BANYAN TREE
	BUTEAMONOSPERMA FRINDOSA	PALAS
	SETCREASEA PURPUREA	PURPLE HEART
	CASSIA FISTULA	AMALTAS

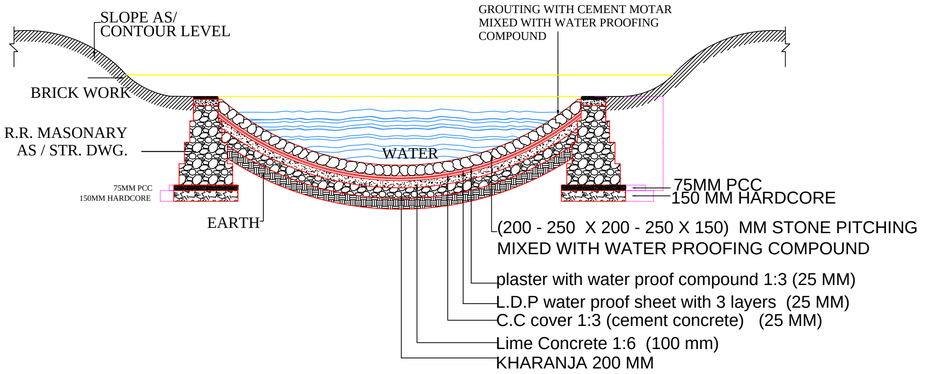
THESIS 2019-20

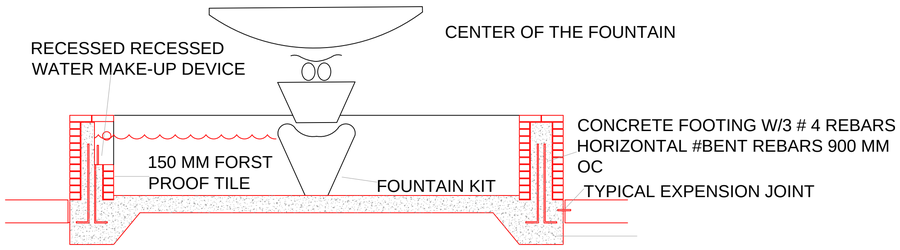
MEDICAL COLLEGE AT AMARPUR(UTTAR PRADESH)
ELECTIVE 1 (LANDSCAPE)

N

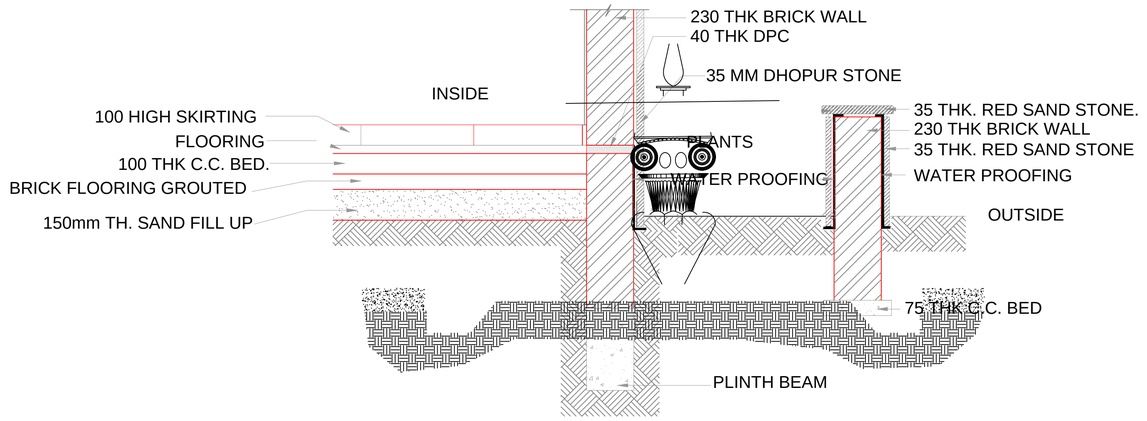
AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU LKO	



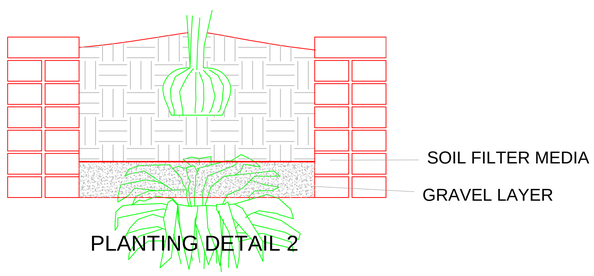




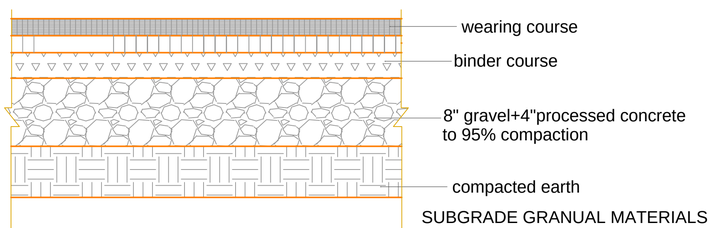
PAISED BRICK FOUNTAIN



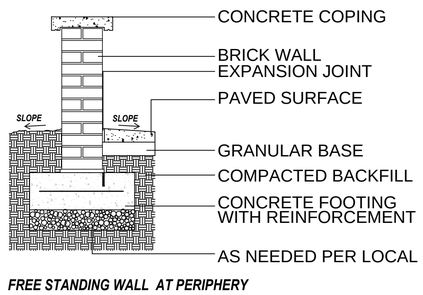
PLANTING DEATIL 1



PLANTING DETAIL 2



ROAD DETAIL



FREE STANDING WALL AT PERIPHERY

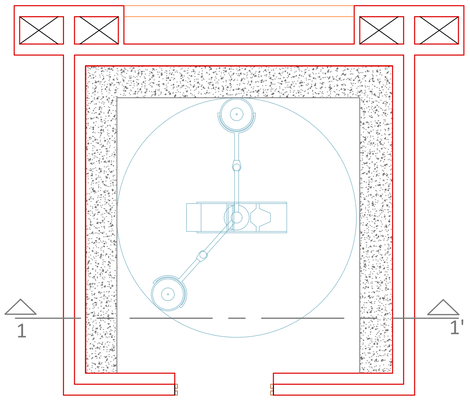
THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR(UTTAR PRADESH)

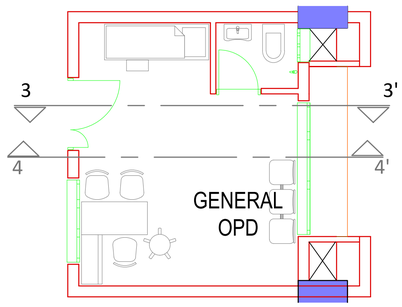
ELECTIVE 1 (LANDSCAPE)

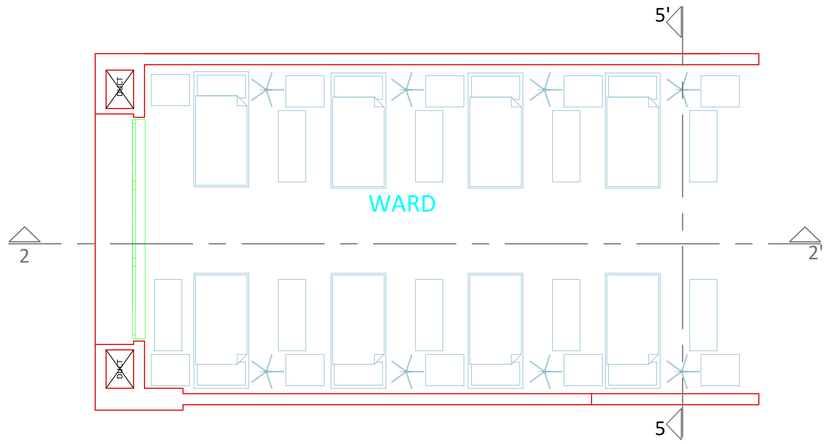
N

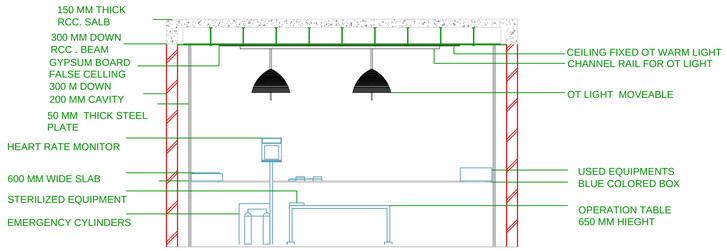
AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU LKO	



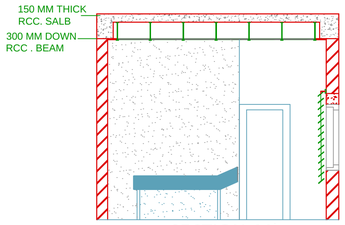
OPERATION THEATER



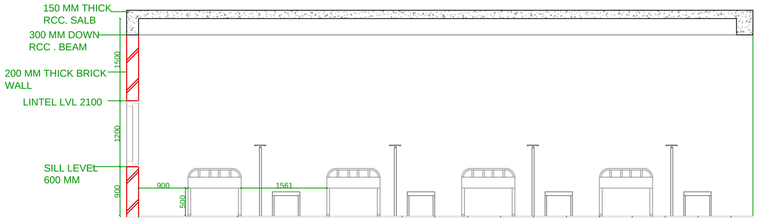




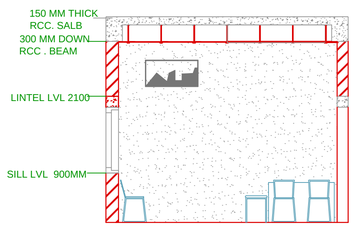
SECTION 11'



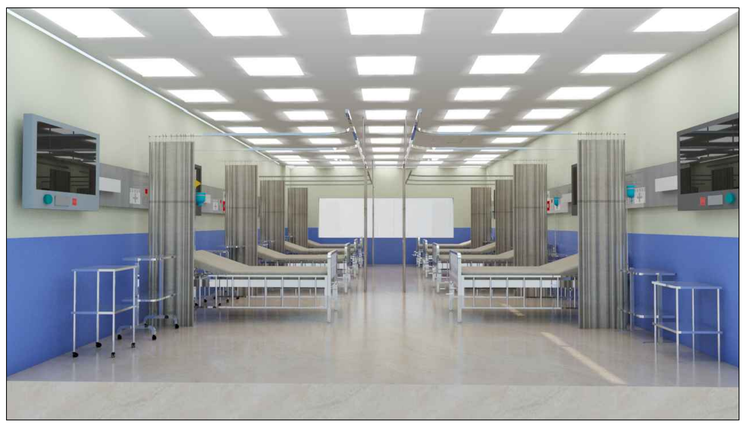
SECTION 44'

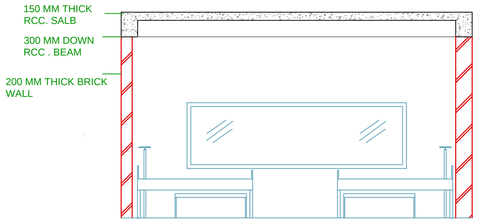


SECTION 22'



SECTION 33'





SECTION 55'

THESIS 2019-20

MEDICAL COLLEGE AT AMARPUR(UTTAR PRADESH)

ELECTIVE 2(INTERIOR DESIGN)

N

AAYUSH KHARE	SIGN
B.ARCH	
V YEAR(X SEM)	
BBDU LKO	

HOSPITAL BLOCK FRONT VIEW

HOSPITAL BLOCK ISOMETRIC VIEW

ACADEMIC BLOCK FRONT VIEW

ACADEMIC BLOCK ISOMETRIC VIEW