



THESIS REPORT ON
GYANJYOTI COLLEGE OF ARCHITECTURE
RAJIV GANDHI EDUCATION CITY, SONIPAT

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

BACHELOR OF ARCHITECTURE
BY

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THESIS GUIDE

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SESSION

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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 “ **Gyanjyoti College Of Architecture, Rajiv Gandhi Education City, Sonipat**” 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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Not Accepted

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Certificate of thesis submission for evaluation

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5. Faculty of University to which the thesis is submitted: Yes / No
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It would not have been possible without my My friend- IQRA KHAN and AHFAD KHAN .Though words hardly express the true emotions, still I would like to thank all my near and dear ones who helped and guided me.

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SYNOPSIS

INTRODUCTION

▪ **Architecture** is both the process and the product of planning, designing, and constructing buildings and other physical structures. Architectural works, in the material form of buildings, are often perceived as cultural symbols and as works of art. Historical civilizations are often identified with their surviving architectural achievements

▪ Architecture can mean the art and science of designing and erecting buildings and other physical structure.

▪ Architecture is the study of how to design and create buildings and other structures. Due

to change in social life of people, need of the society with regards to built environment is changing significantly. As a result we require more houses, public buildings, hospitals, institutions etc. This change demanded more skilled personnel, particularly architects to design optimally and help implementing the facilities

▪ An architectural college is an institute where student can learn that how to perform better in terms of art , building spaces with each other and share their experience through interaction of students and through the experienced teachers.

▪ An architect is a person who have an ability to build spaces and enhance the society and a bad architect or a failure architect destroy the society , so an architectural college is collective spaces where teachers / professors / instructor can teach the student to create good architect who can lead the teams of various technical persons i.e. civil engineers, electrical engineers. public health services etc, to build creative environments.

▪ A good institutional building should provide area where student may congregate informally for discussions and rest or where they can gather in large number to watch or participate in sports and other physical activities.

▪ It encourages all kind of interactions in student activity centers. It furnishes place literary, artistic, musical and dramatic occasions to culturally enrich the university community as a whole.

▪ An architectural college is a collective of unorganized/ organized spaces where people can learning of interaction with the nature.

▪ It should ideally be a quiet, comfortable oasis apart from the normally busy, noisy congested world, more like a residential suburb or park rather than a city.

HISTORY AND BACKGROUND

A college is an educational institution or a constituent part of one. A college may be a degree-awarding tertiary educational institution, a part of a collegiate or federal university, an institution offering vocational education, or a secondary school

An architecture school (also known as a school of architecture or college of architecture), is an institution specializing in architectural education.

- Universities have been around for hundreds of years. The 10 oldest universities were established before the end of the 13th century. Though some of the world's oldest universities have split into different colleges or have become incorporated into a different institution altogether
- The University of Notre Dame was founded in 1842 by Father Edward Sorin, C.S.C., on land that had been donated by Bishop John Baptist Purcell of the Diocese of Cincinnati, Ohio. The school was established as an all-male institution and became a university in 1844. Today, it has more than 16,000 students and is one of the top Catholic universities in the world.
- Sir J.J College of Architecture is an **affiliated institution** of Mumbai University and is situated in Mumbai itself. This was the **first architecture college in Asia** and has catered to several well-known architects such as Arundhuti Roy, Achyut Kanvinde and many more.



WHAT IS THE NEED & SCOPE ?

- People are not fully aware of what architecture is and also there are very few architecture college in India and in every college there are limited seats. India is a developing country and is developing at a faster rate.
- Today in India the scale of development project demand team work and expertise from various fields architects urban designer, planner and relate professional compelled to acknowledge the need to think about not only in quality in service and also bring improvement within the organization of their professional.
- The need of an architect further strengthened with emergence of varied building complex set in a scheduled time frame and financial and space limits.
- An Architect is a sort of an inventor. Like an inventor who goes about making and designing new gadgets, you go around designing new buildings. Architecture is a very satisfying profession You'll get a tremendous sense of delight after your concepts on paper transform into real buildings. You'll know the joy of creation in this field of Architecture

AIM & THE OBJECTIVE OF ARCHITECTURE COLLEGE

AIM:

To analyze and understand the essential architectural design qualities of space in a college of architecture and to design the college of architecture.

OBJECTIVES

- To develop a campus in Which the focus will be on the following:
 - ENVIRONMENT
- To build an architecture school building should be act as the model or the inspiration for the students making them aware what the right kind of approach to design could produce and kind of impact it has on the inhabitant.
- My objective by the end of this series would be to try and make a beginning for those who didn't buy the green, climate change and global warming bit as it is being sold to the world.

SCOPE AND LIMITATION

- The scope to study college of architecture would be limited to the study of various departments of architecture and planning department at undergraduate as well as post graduate level.
- It would include the curriculum of planning for the degree of B.Arch.
- It would include the curriculum for master in architecture for a degree of M.Arch. In various department

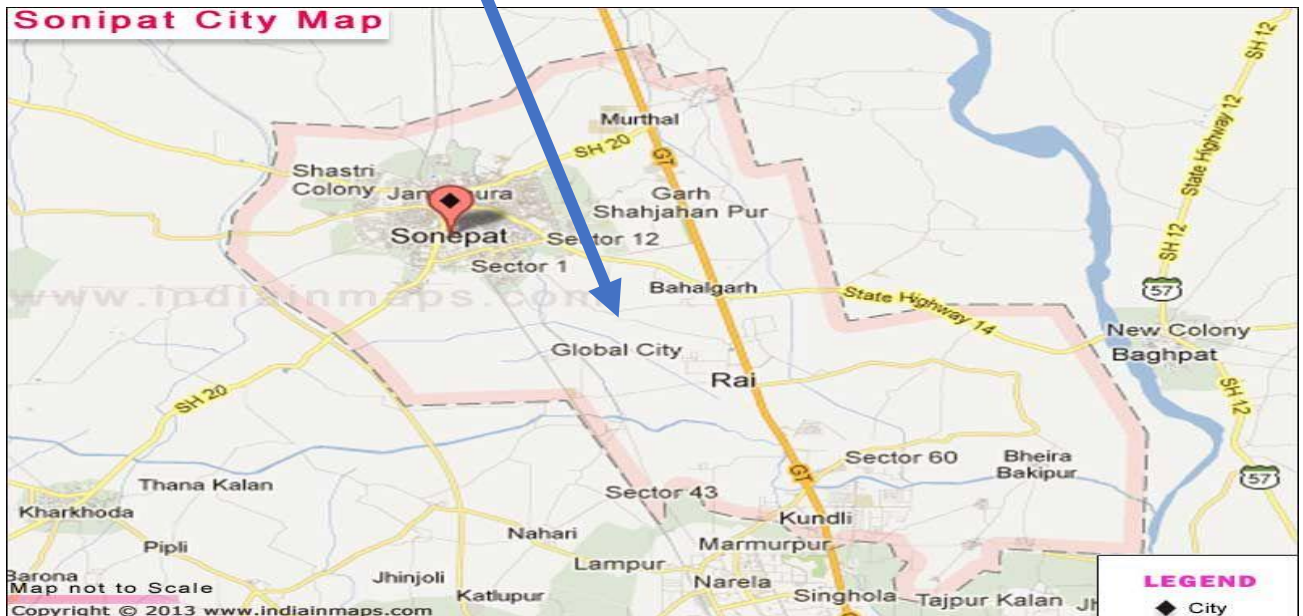
METHODOLOGY

- SITE ANALYSIS
- SITE & SURROUNDINGS
- SITE CLIMATE
- CASE STUDY
- LITERATURE STUDY
- REQUIREMENT SHEET
- AREA ANALYSIS
- STANDARD SHEET
- CONCEPT SHEET
- DESIGN
- ELECTIVE
- VIEW

SITE DETAILS (AREA AND LOCATION OF THE PROJECT)



PROPOSED SITE FOR ARCHITECTURE COLLEGE



CLIENT NAME-The Sonapat Hindu Educational and Charitable Society

SITE ANALYSIS

SITE LOCATION

THE SITE IS LOCATED IN RAJIV GANDHI EDUCATION CITY, RAJ, SONIPAT (HARYANA).

It is surrounded by commercial, industrial, residential and public and semi public spaces, which are all proposed for future expansion. One of the major advantages of this site is that it is located in the outskirts of sonipat. Rajiv gandhi education city situated in opposite of the ethnic india & industrial area hsiidc

The site has 60m wide way front side, with a service road for its entrance.

SITE LOCATION = RAJIV GANDHI EDUCATION CITY

RAI, SONIPAT (HARYANA)

NEAR NH 44, PANDIT JI MARG

CLIENT =HINDU CHARITABLE SOCIETY.

SITE AREA = 7.9 ACRES.

PERMISSIBLE GROUND COVERAGE 25 %

- FRONT SETBACK 30 MT.
- SIDE SETBACK 15 MT.
- REAR SETBACK 15 MT.

SITE Area = 7.9 acres.

SITE Area = 208 X 188 m=

39104 sq.m Perm.

FAR=1.5

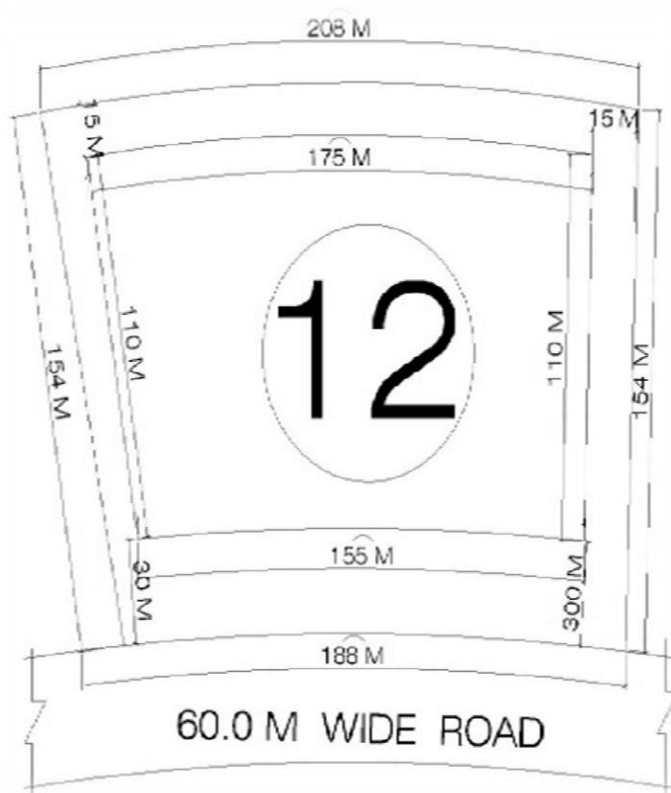
(39104x1.5)

Permissible total built up area =58656

Perm.

Gro. Cove.= 25% = 58656/25 = 2346.2

sq.m(25254.2 sq.ft)



LOCATION



SONIPAT



RAJEEV GANDHI EDUCATION CITY

Rajiv Gandhi Education City

The Rajiv Gandhi Education City, Sonapat (RGE) at Kundli is an ambitious project by the government of Haryana to develop a hub of higher education institutes. The Indian Institute of Technology Delhi has already taken possession of 50 acres of land offered for the extension of its Delhi campus. Many universities have started their projects to establish their campus.

Rajiv Gandhi Education City

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UNIVERSITIES IN R.G.E.C

- DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE AND TECHNOLOGY
- O.P. JINDAL GLOBAL UNIVERSITY
- BHAGAT PHOOL SINGH MANILA VISHWAVIDYALAYA
- NATIONAL INSTITUTE OF FOOD TECHNOLOGY ENTREPRENEURSHIP AND MANAGEMENT
- SRM UNIVERSITY

SITE FEATURES:

- Sonapat has always been an education for Haryana and even north India with students from all across the India coming to sonapat for basic as well as higher education.
- The government of Haryana is setting up the Rajiv Gandhi education city at with the vision to make Haryana an education hub.
- The education city that spreads on 2000 acres land will house the campuses of institutes of higher education across the fields of management, architecture, engineering, law, telecom, medical, insurance and biotechnology, amongst others.

GEOGRAPHY & TOPOGRAPHY:

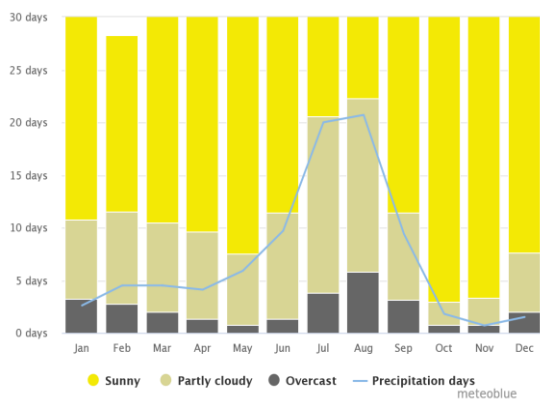
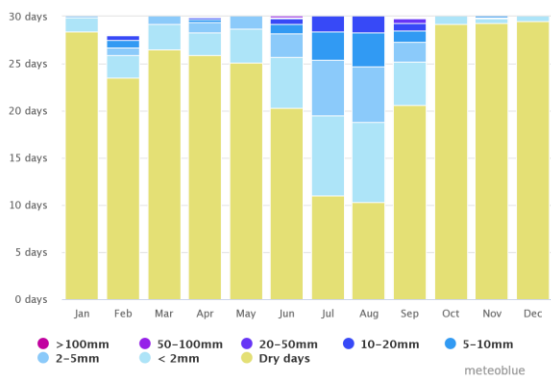
- Sonapat is located at 28.98°n 77.02°e.
- It has an average elevation of 224.15 meters above sea level (735.4 feet). Sonipat borders Delhi, the national capital, to the south, panipat district to the north, Uttar Pradesh state to the east and rohtak district to the west
- The total area of sonipat district is 2,260 km².
- Topographically, sonipat district is divided into three regions, the khaddar, and upland plain and sandy region

- Sonipat city lies on the upland plains, which are covered with old alluvium, which, if properly irrigated, is highly productive.
- Broadly speaking, the district is a continuous part of the Haryana-Punjab Plain, but the area is not level in some parts

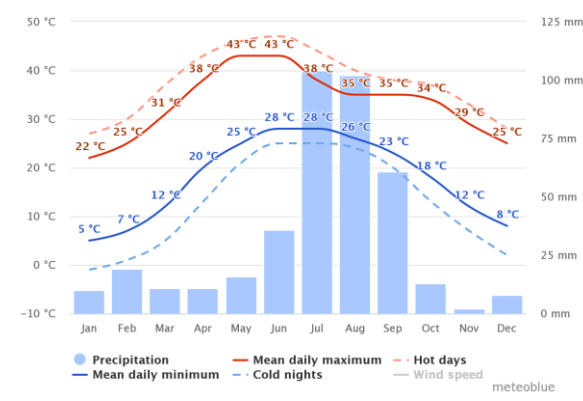
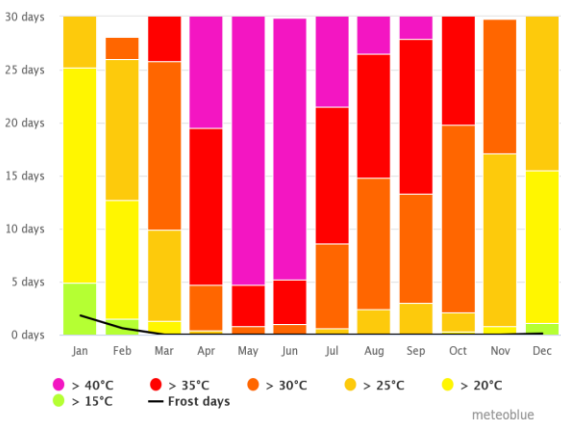
CLIMATE:

The climate of Sonipat is dry with a hot summer and a cold winter. The weather becomes milder during the monsoon period (July to September). The post-monsoon months of October and November constitute a transition period prior to the onset of winter. The winter starts in December when day and night temperatures fall rapidly. January is the coldest month when the mean daily minimum temperature is 6 to 7 °C. During the summer months of May and June, the maximum temperature sometimes reaches 47 °C. However, the maximum rainfall is experienced during the monsoon season, which reaches its peak in the month of July.

CLIMATE GRAPH

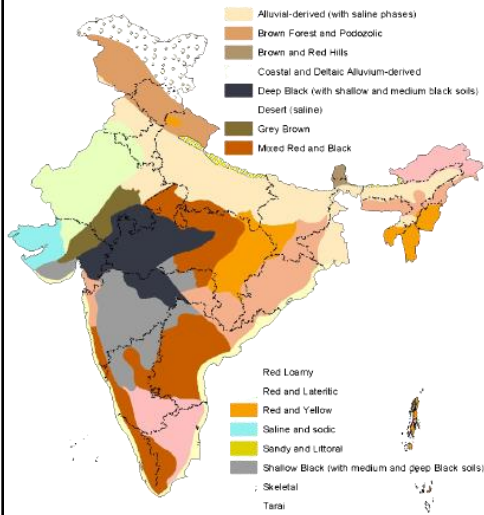


Precipitation is the lowest in April, with an average of 4 mm. The greatest amount of precipitation occurs in August, with an average of 221 mm.



Between the driest and wettest months, the difference in precipitation is 217 mm. The variation in temperatures throughout the year is 19.8 °C

SOIL

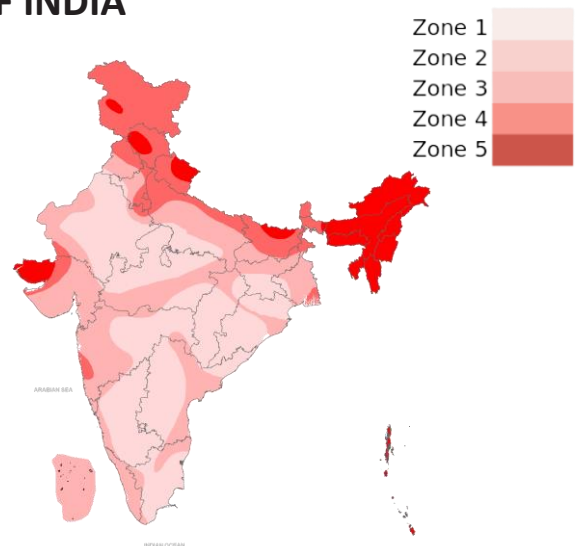


Alluvial soil have been deposited by the indus, the ganges, and the brahmaputra rivers. The entire northern plains chandigarh, delhi (almost entirely), haryana, himachal pradesh, jammu and kashmir, madhya pradesh, punjab, rajasthan, uttarakhand,uttarpradesh, and west bengal) are made of alluvial soil.

The commonly used foundation system in alluvial deposits in the indian scenario are raft foundation . loads are transferredto the ground through a raft slab covering the whole footprint of the building.

SEISMIC ZONE OF INDIA

The seismic zoning map of india (is1893-2002)marksafairlylarge region including haryana to be in zone iv. Earthquakes are low probability events but with very high levels of risk to society

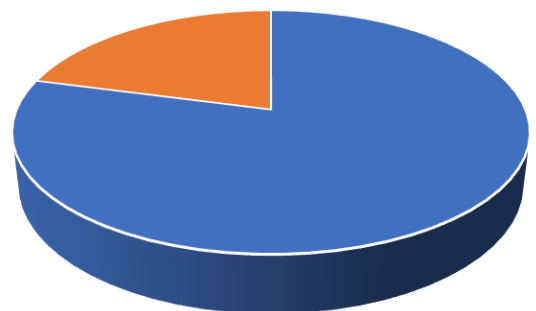


Population Density - Sonipat district

The total area of Sonipat district is 2,122 km². Thus the density of Sonipat district is 683 people per square kilometer. As per the initial provisional data of Census 2011, around 82 sq. km. area is under urban region while 2,040 sq. km. is under rural region.

The total literacy rate of Sonipat district is 79.12%. The male literacy rate is 75.5% and the female literacy rate is 61.08% in Sonipat district.

LITERACY RATE



■ literate ■ Non -literate

Topography:the ground is overall flat with natural drain and gentle slope towards north –east .Due to flat terrain the site is used as temporary playfield by the youth and children.

Vegetation:there are no trees present on the site only dry bushes and grass present

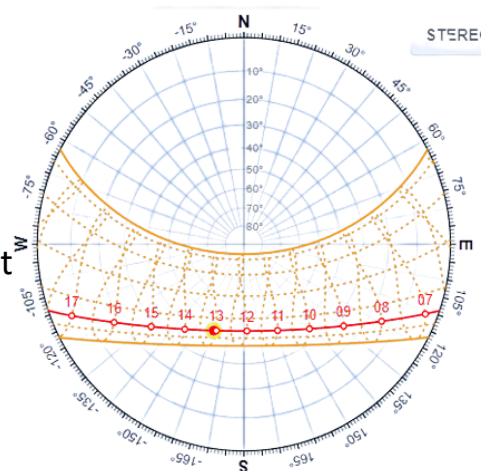
Electricity: provided by power station hvpnl 220 kv power house rai .66kv transformer is placed 0.5 km away from site.Electric poles run along the roadwith street lights.Nearest sub-station is located at the distance of 3 km.

Water supply: the water is supplied through phed haryana .Nearest phed office is situated at levan.

Sewage: waste disposal plant is situated at main road, rajeev ghandhi education city. This waste disposal plant is situated at a distance of 3.8 km from the site.Sewer pipes runs along the site.

SUN PATH DIAGRAM

Sonipat is 224.15 m above sea level. The prevailing climate in sonipat is composite climate . sonipat lies in the landlocked northern plains of the indian subcontinent.Its climate is greatly influenced by its proximity to the himalayas and the thar desert, causing it to experience both weather extremes.Two important occurrences influencing sonipath's climate are western disturbance and south-west winds.



DESIGN CONSIDERATION

Building orientation should be such that to minimize the impact of direct sun,simultaneously providing winter heat.

Shading device to be provided from directs unlight on south-west facade of building such as-louvers, cantilevers, jaali work.

Trees with big foliage can be used on the warmer facade to prevent from direct sunlight.

Temperature at the interior level can be maintained by the proper designing of ventilation and utilisation of air movement at increased velocity, which takes the advantage of reduction in heat and compresses the humidity level.



LITERATURE STUDY

BACHELOR OF ARCHITECTURE

ADMINISTRATION

Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Director’s office.	Min. 30sq.m as per Neufert	1	30
Director’s Asst.	Min. 30sq.m as per Neufert	1	30
Clerk’s Office	Min 30sq.m as per Neufert	1	30
Conference Room	Min. 60sq.m as per Neufert	1	60
Record Room	Min. 30sq.m as per Neufert	1	30
Reception	As per design/Requirement		
Waiting Lounge	As per Requirement	1	30
Toilets	As per Requirement	3	85
Admin. office	150sq.m(as per case studies)	1	150
Maintenance office	50sq.m(as per case studies)	1	50
Store	20sq.m	1	20
Total			515sq.m

OFFICE FOR ACADEMIC AREA

Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Principal	Min. 30sq.m as per Neufert	1	30
Professors	Min. 15 sq.m as per Neufert	10	150
Lecturers	Min. 15 sq.m as per Neufert	10	150
Assistants	Min. 15 sq.m as per Neufert	4	60
Academic Coordinator	Min. 25 sq.m as per Neufert	1	25
Printing/ Xerox	Min. 25 sq.m as per Neufert	1	25
Toilets	As per Requirement	2	75
Total			515sq.m

MASTER OF ARCHITECTURE

Master of Architecture in Urban Design
Master of Architecture in Building Design

Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Design Studio	Area per student=2.5sq.m No. of Students= 25 Circulation area=1sq.m per st. Area=2.5x25+25=87.5sq.m Round off= 100sq.m	4 Studios 4x100	400
Lecture Room	Area per student= 1.5sq.m No. of students=25 Circulation area=1sq.m per st. Area=1.5x25+25=62.5sq.m Round off=70sq.m	4 Lecture Halls 4x70	280
Adequate Toilets	As per design	-	-
Total for all three majors			680sq.m

HOSTELS

Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Boys Hostel	Each room min. 28sq.m as per Norms. Toilet+Bath+Kitchen 8sq.m=36sq.m per unit No. of Students in one room=3 No. of units=60	48 48x36	1728
Girl's Hostel	Each room min. 28sq.m as per Norms. Toilet+Bath+Kitchen 8sq.m=36sq.m per unit No. of Students in one room=3 No. of units=	32 32x36	1152
Kitchen/Dinning	As per design min. 600sq.m	1	600
Guest Room	20 sq.m	6	120
Warden office	20 sq.m	2	40
Total			3640sq.m

STAFF RESIDENCE

Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Faculty units	As per design min. 30sq.m	12	780
Staff units	As per design min. 30sq.m	12	780
Total			1560sq.m

STUDENT ACTIVITIES ZONE			
Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Students Activity	1	100	300
Lounge	-	1	20
Consoling Room	-	1	25
First Aid Room	-	1	20
Table Tennis	-	1	100
Gym	-	1	100
Swimming pool	-	1	350
Indoor Football	-	1	350
Total			1265 Sq.m

MAINTENANCE			
Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Electrical Transformer	25sq.m	1	25
Generator Room	10sq.m	1	10
Stationary Shop	20sq.m	1	60
Store	25sq.m	1	25
Total			125Sq.m

DETAILING OF INFRASTRUCTURE REQUIREMENTS BASED ON MINIMUM STANDARDS

A: SPACE

Sr. No.	Year of Operation →	1 st Year			2 nd Year			3 rd Year			4 th Year			5 th Year			Remarks
	Sanctioned Intake →	40	80	120	40	80	120	40	80	120	40	80	120	40	80	120	
	Activity Spaces (Carpet Area)																
1.	Studio - 120 sq. m each	1	2	3	2	4	6	3	6	9	4	8	10	4	8	10	Flexibility in terms of studio spaces can be based on local conditions, provided that area of 3 Sq. M. per student of sanctioned intake is made available. In case of e-studios, the requirement of the space for such studios may be reduced by 20%
2.	Class room - 60* sq. m each	1	2	3	2	4	6	3	6	8	3	6	9	3	6	8	* - Maximum 2 class rooms can be combined together to cater to theory class of maximum 80 students i.e. 120 sq. m. Provided with digital projection facilities and sound amplifier system.
3.	Labs and Workshops - 60 sq. m each	2	2	2	2	3	4	3	4	5	3	4	5	3	4	5	
4.	Computer Centre - 60 sq. m	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	
5.	Art court	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	80 to 100 Sqm of Semi open /covered area for Display/ working of Painting & Sculpture related activities
6.	Multipurpose Hall 400 sq. m 600 sq.m										1	-		1	-		
7.	Resource Centre - 60 sq. m	-	-	-	-	-	-	-	1	1	-	1	1	1	1	1	Documentation included.
8.	Library - 120 sq. m 150 sq.m 200 sq. m							-	-	-	1	-	-	1	-	-	Desirable: 0.5 sq. m per student of sanctioned strength upto 3 rd Year even when not mentioned.
9.	Submission & Exam Room 30 sq. m 60 sq. m 90 sq. m				1	-	-	1	-	-	1	-	-	1	-	-	
10.	Students' Centre 30 sq. m 60 sq. m 90 sq. m							1	-	-	1	-	-	1	-	-	
11.	Girls' Common Room 30 sq. m 60 sq. m				1	-	-	1	-	-	1	-	-	1	-	-	With attached toilets and rest room
12.	Boys' Common Room 30 sq. m 60 sq. m				1	-	-	1	-	-	1	-	-	1	-	-	With attached toilets and rest room
13.	Staff Rooms / Cabins - Professor- 12 sq. m each Associate Professor- 8 sq. m each Assistant Professor- 6 sq. m each																As per the COA faculty norms in the yearly progressive fashion
14.	Staff Lounge 30 sq. m 60 sq.m				1	-	-	1	-	-	1	-	-	1	-	-	For Visiting Faculty
15.	Principal's Cabin - 30 sq.m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	with waiting lobby
16.	Administrative Office - 30 sq. m 60 sq.m	1	-	-	1	-	-	1	-	-	1	-	-	1	-	-	
17.	Toilets, Corridors, Lobbies, Store, Parking etc.	-	1	1	-	1	1	-	1	1	-	1	1	-	1	1	As per building standards
18.	Construction Yard - 200 sq. m																Open space activity from second year onwards

DESIRABLE ACTIVITY SPACES

1. Canteen
2. Tuck shop / Stationary Shop
3. Reprography Section
4. Open air theatre with stage
5. Permanent Exhibition space
6. Provision for outdoor sports facility

RECOMMENDED LABS:

1. Climatology/ Environment
2. Surveying
3. Materials Testing
4. Electrical
5. Plumbing and Sanitation
6. Lighting/ Illumination
7. Acoustics

RECOMMENDED WORKSHOPS

1. Model making
2. Carpentry
3. Metal craft

EQUIPMENT AND FURNITURE

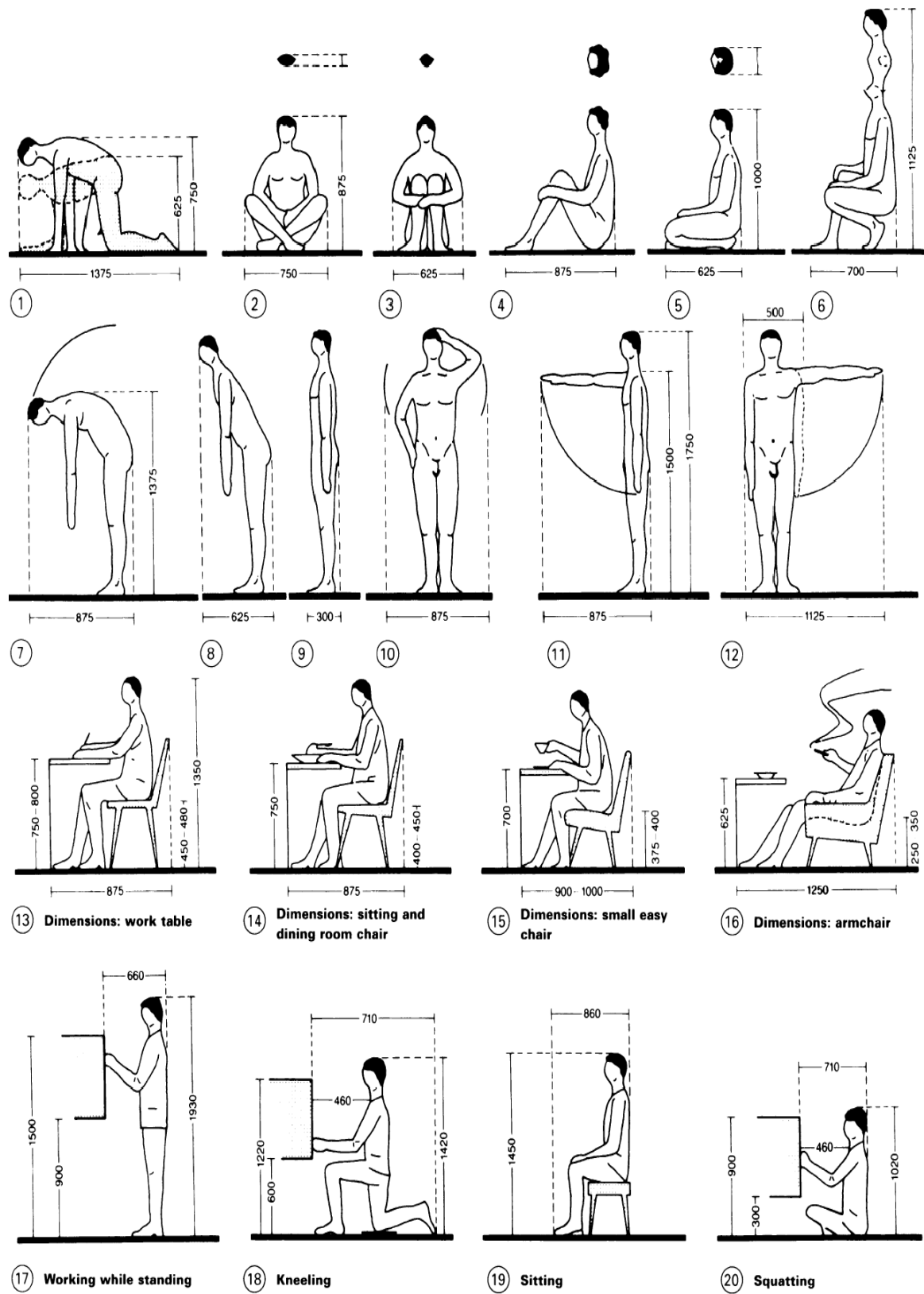
1. Every School should have adequate Furniture in terms of Drafting Tables and Stools, Bench Desks, Chairs Tables , Storage facilities, etc. based on the sanctioned Intake
2. **AUDIO VISUAL EQUIPMENT** and Digital aids should be adequate in number so as to meet the contemporary needs.
3. **THE LABORATORY EQUIPMENT** shall be as per the requirement of Curriculum .
4. **SUGGESTED EQUIPMENT FOR LABS SURVEYING:** Measuring tapes, Dumpy level, Theodolite , Ranging rods, etc. OR Total station
5. **CLIMATE:** Thermometers, Rain gauge, Wind cock, Sun orbittable , etc .
6. **MATERIAL TESTING:** Universal testing machine, Concrete block moulds, etc .
7. **WORKSHOP:** Tables with vice, Carpentry tools, Mason's stools , etc.

LIBRARY FACILITIES

1. Minimum 300 books on subjects of Architecture shall be available in the library for the intake of 40(including minimum 100 titles
2. Add 150 books on subjects of Architecture (including inimum 50 titles) for every additional intake of 40.
3. From second year onwards, minimum 150 books onsubjects of Architecture (including minimum 50titles) for every year per intake of 40.

BASIC HUMAN DIMINTIONS

Dimensions And Space Requirements In Accordance With Normal Measurements And Energy Consumption.



THE LECTURE HALLS

Major factors to be considered in designing a lecture room are the following:

- Seating and writing surfaces
- Space and furnishings for the lecturer
- The use of wall space, including chalkboards, screens, size and location of windows, etc.
- Facilities for projection and television
- Coat racks, storage, and other conveniences
- Acoustics and lighting
- Heating and air conditioning
- Aesthetic considerations
- Space for keeping drafting materials.
- Space for Keeping Bags.
- Space for Circulation.

SPACE REQUIREMENT

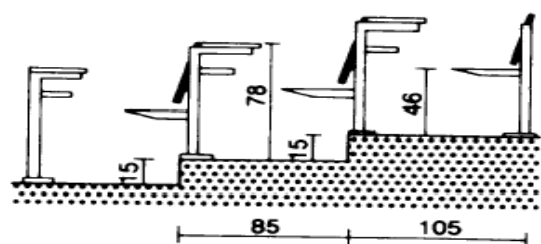
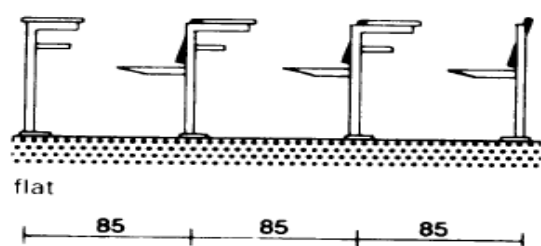
As we have different subjects for teaching their spaces and requirements for that is also different. Such as theoretical and practical subject with their workshops are may be separate or joined or they are bigger than the actual size of classrooms for theoretical subjects

BRIEF ON LAYOUT OF COLLEGES

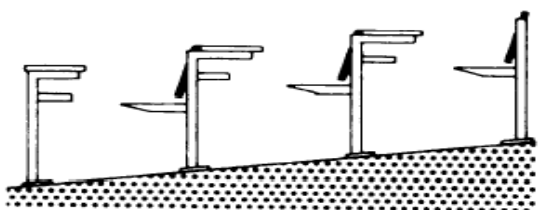
- Main lecture theatre, ceremonial hall, administration, dean's office, students' union building. Also libraries, refectories, sports facilities, halls of residence, parking.
- Technical facilities for central services supply.
- Boiler room, services supply.
- Subject-specific teaching and research facilities.
- Basic facilities for all subjects:
- Lecture theatres for basic and special lectures, seminar and group rooms (some with PC workstations) for in-depth work. Departmental libraries, study rooms for academic staff, meeting rooms, exam rooms, etc.
- Subject-specific room requirements:
- Technical/artistic subjects, e.g. architecture, art, music, etc.: rooms for drawing, studios, workshops, rehearsal and assembly rooms of all kinds.

SEATING ARRANGEMENTS

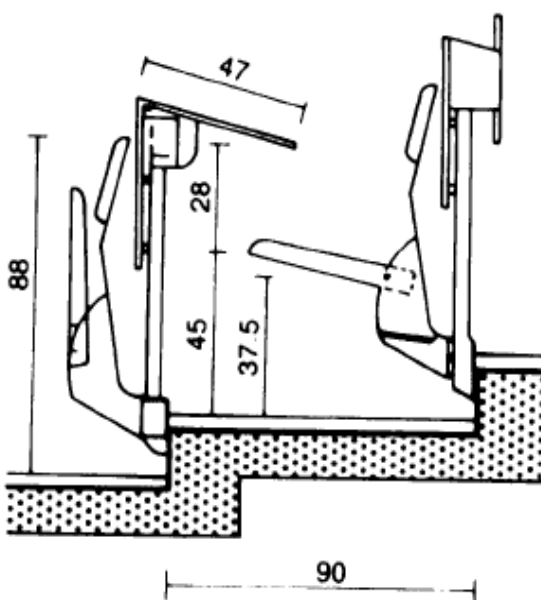
- Seating in lecture theatres can be combined units of tip-up or swing seats, backrest and writing ledge (with shelf or hook for folders), usually fixed. (1) & (3)
- Seating arrangement depending on subject, number of students and teaching method: slide lectures, electro- acoustic systems on a gentle rake; surgery, internal medicine, physics on a steep rake. View curve calculated using graphic or analytic methods.(4)- (5).



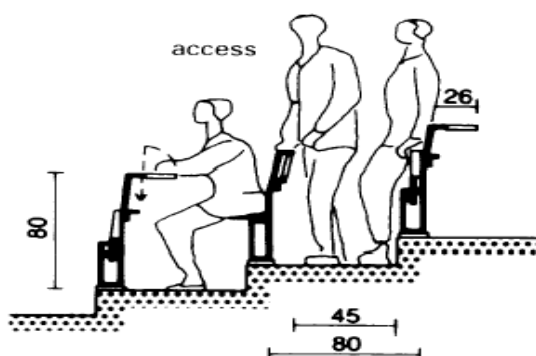
on 15cm steps



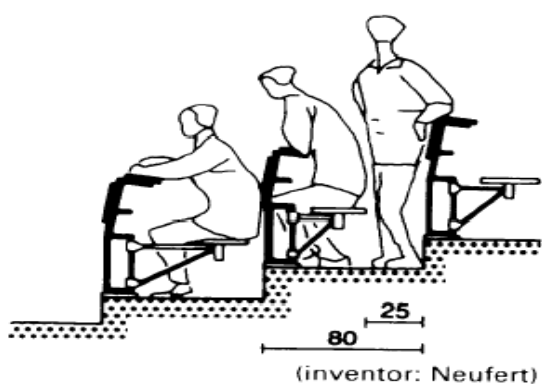
① **Seating for lecture theatre**



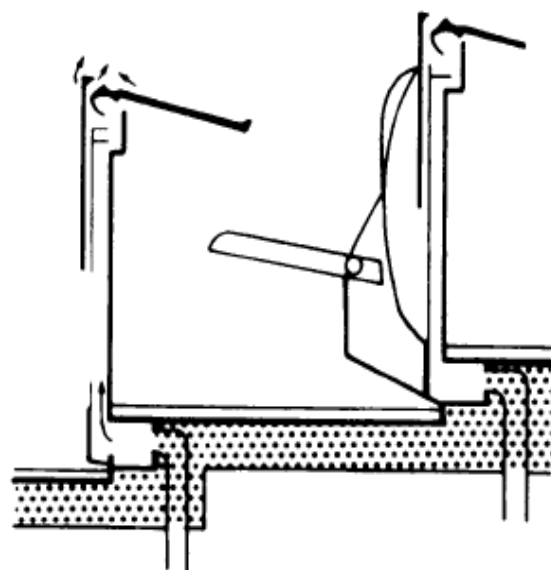
④ **Lecture theatre seating**



② **Seating arrangement with tip-up seats and writing shelves**



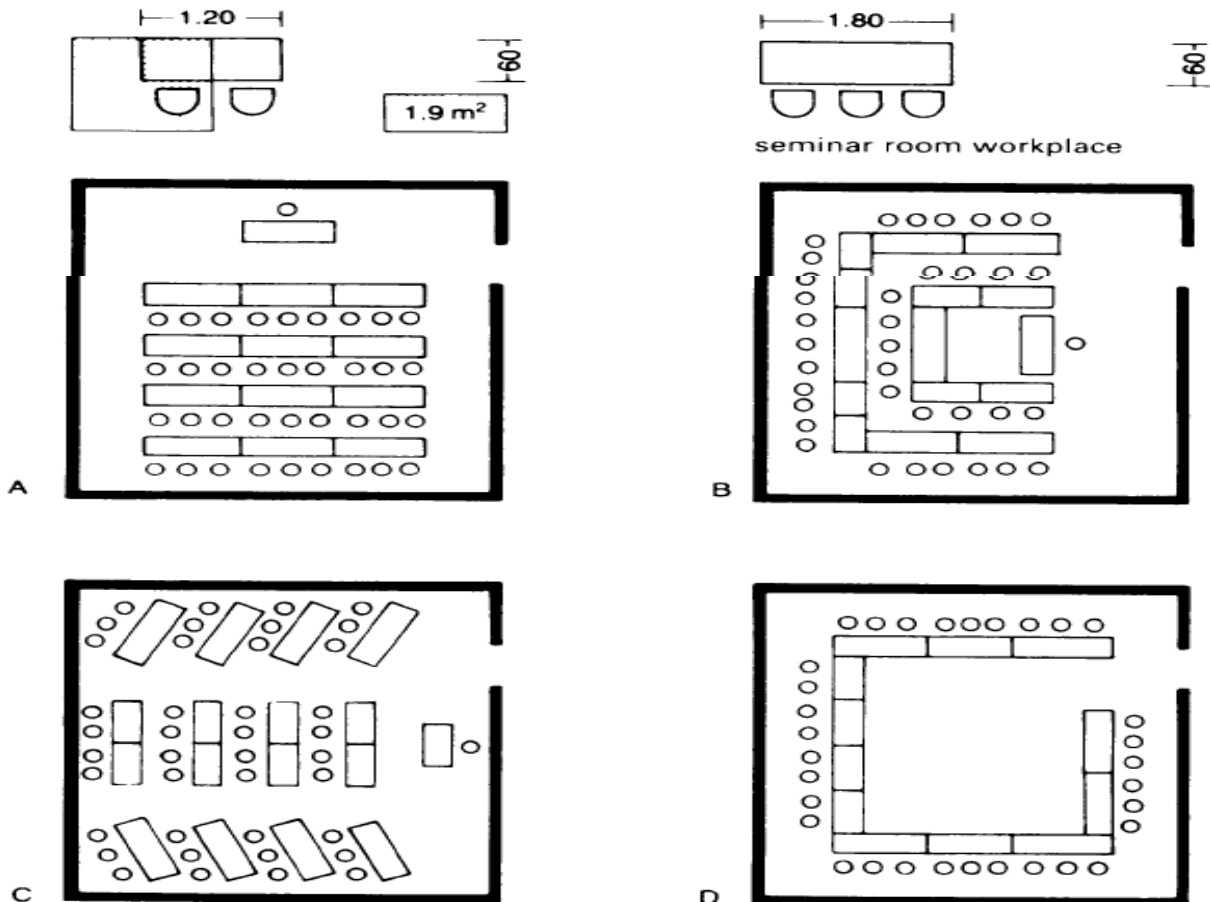
③ **Arrangement with fixed writing shelves and swing seats**



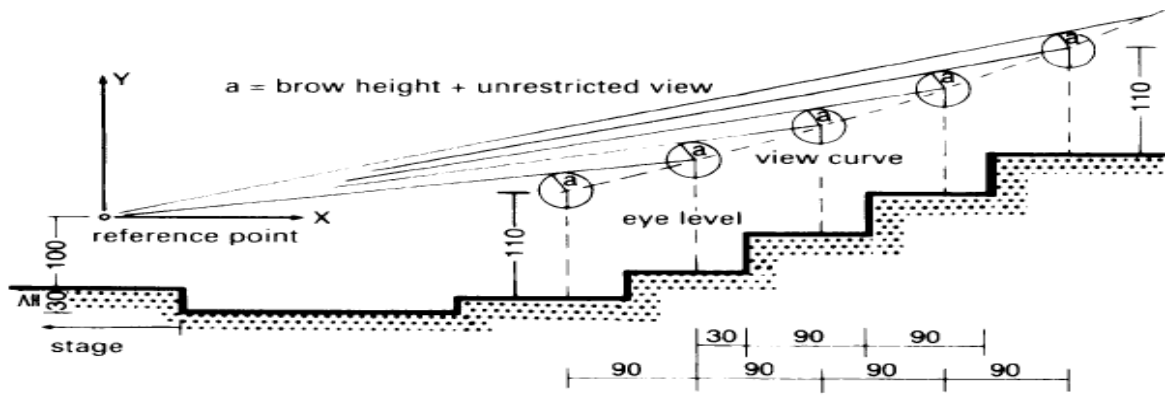
⑤ **Ventilation via desks/air circulation**

LECTURE HALL'S OBJECTIVES

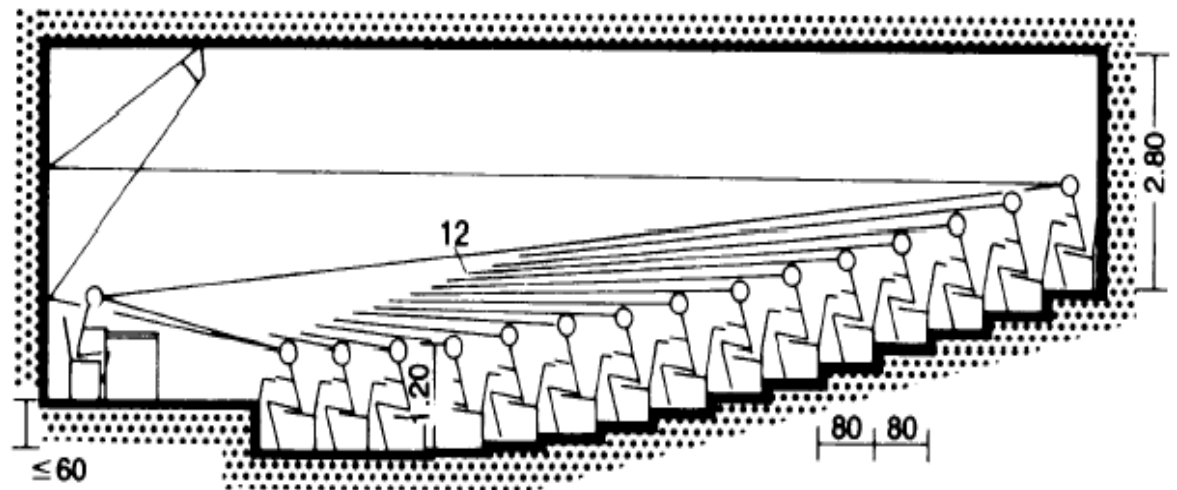
- Lecture halls are places of social and personal interaction, where learning takes place and where creative thinking is encouraged. The primary objective of the design team is to achieve the best possible arrangement of architectural elements and teaching facilities so that both teaching and learning is maximized. Design of lecture theatres and teaching spaces requires a balanced relationship bet. architectural/Construction skills and teaching/AV disciplines. The objective of the design team should be to optimize the 'function' of space, by clearly identifying all performance requirements and allowing for these needs in the design stage. Ancillary support spaces (i.e. lobbies, lecture halls) should be serviced by the primary telecommunication distribution system/infrastructure in the building. Lecture halls require the greatest design input and in which is usually found the greatest complement of audiovisual facilities. Lecture halls are generally single function spaces with fixed seating and writing furniture on a tiered or sloping floor surface. Each seat should have a clear unobstructed view to the lecturer and all boards and screens located on the presentation wall. Natural lighting is not desirable in lecture halls.



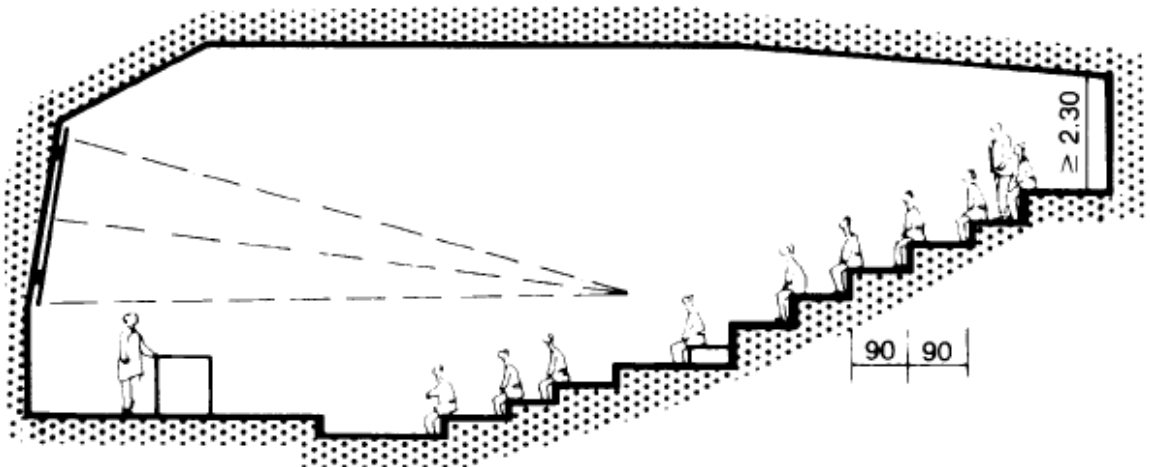
① Seminar rooms, variable seating arrangements



② **Drawing for calculating view curve**



④ **Standard lecture theatre shape**



⑤ **More steeply raked lecture theatre**

DRAWING STUDIO

Various space requirements for technical subjects including Architecture and Art Academics.

Basic Requirements:

Drawing table of dimensions suitable for A0 size(92cm x 127cm) fixed or adjustable board. Drawing cabinet for storing drawings flat of the same height as drawing table, surface can also be used to put things on. A small cupboard on castors for drawing materials, possibly with filling cabinet is desirable. Adjustable height swivel chair on castors, drawing tables, upright board, adjustable height or usable as flat boards when folded down. Each workplace should have a locker.

Each space requires 3.5-4.5 sq.m, depending on the size of drawing table.

Natural light is preferable and so a north tight facing studio is best to receive even daylight. For right handed people it is best if illumination comes from the left.

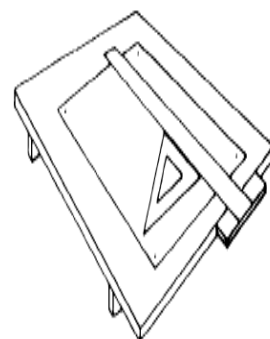
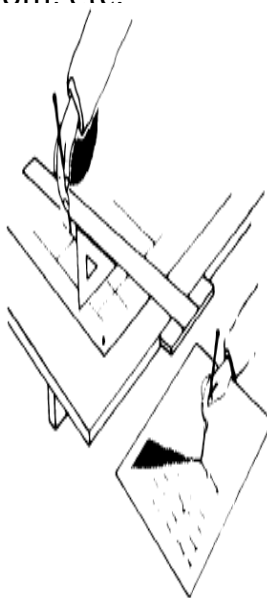
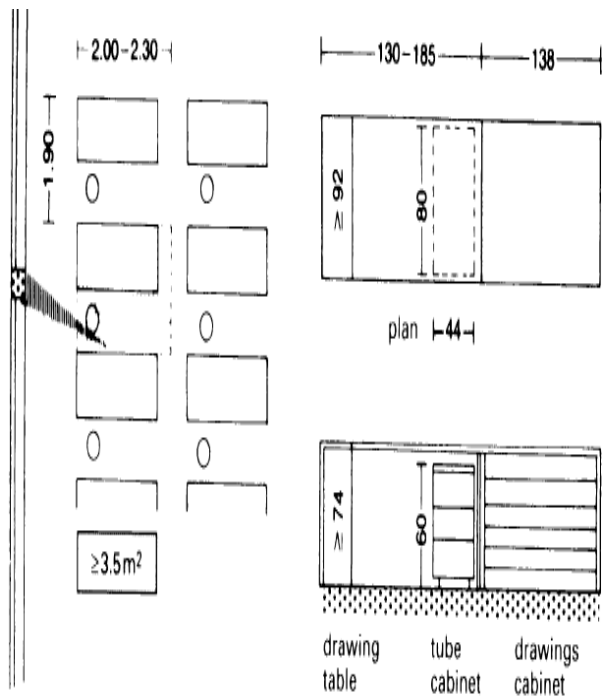
Artificial light should be at 500lx , with 1000lx(from mounted drawing lamps hung in variable positions above the long axis of the table) at the drawing surface.

Rooms for life drawing , painting and modeling:

accommodated if possible in the attic facing north with large windows and, additional top lights.

Rooms for Sculptors and potters:

Large space for technical equipment such as potters' wheels, kilns and pieces of work, also storeroom, plaster room, damp room. etc.



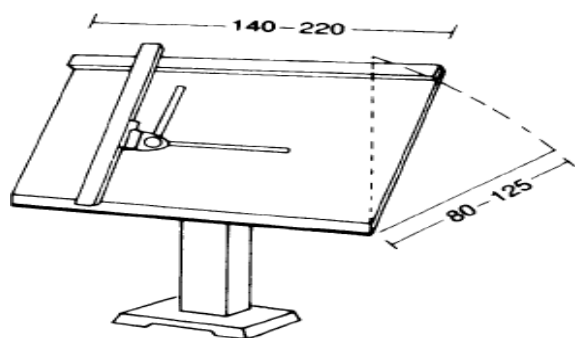
A0 92 × 127
A1 65 × 90
A2 47 × 63
A3 37 × 44

③ Light for writing coming from behind left, and for drawing from the front left

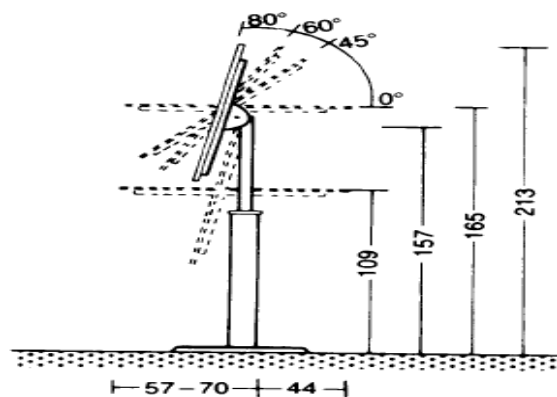
④ Drawing board sizes

① Workplace in drawing room

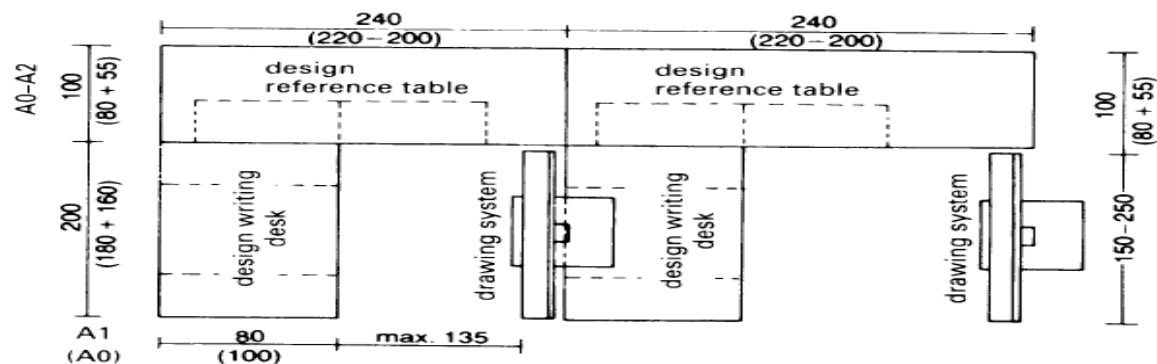
② **Work surface**



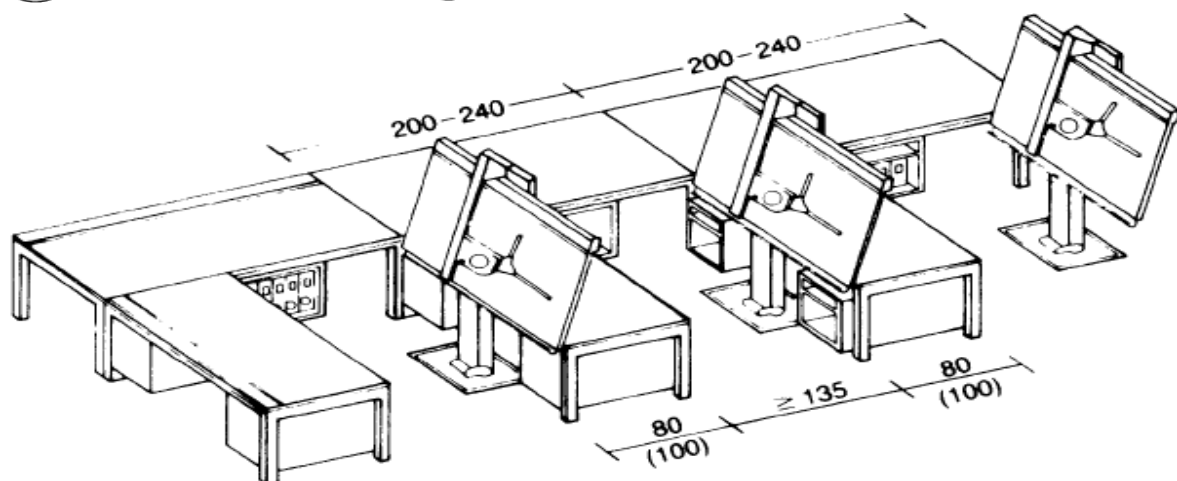
⑤ Adjustable drawing table



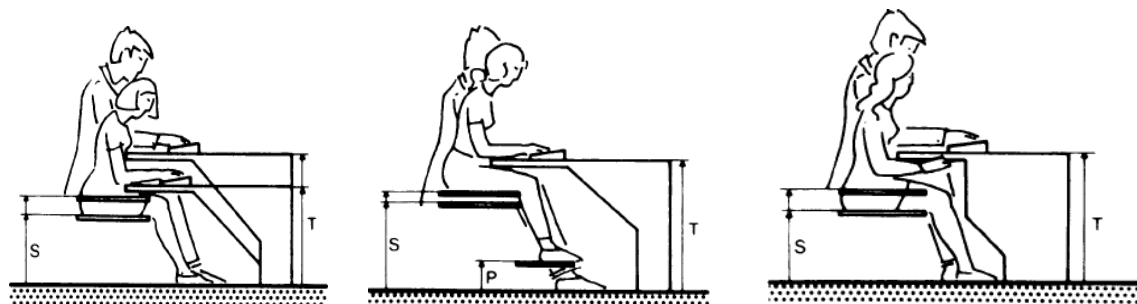
⑥ Section → ⑤

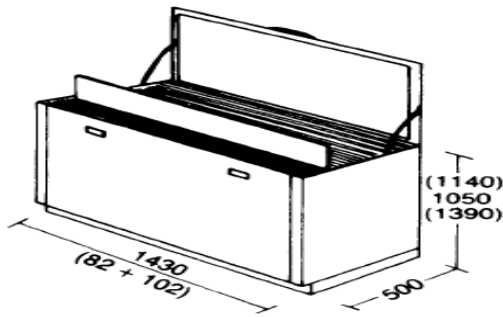


⑦ Work space plan → ⑧

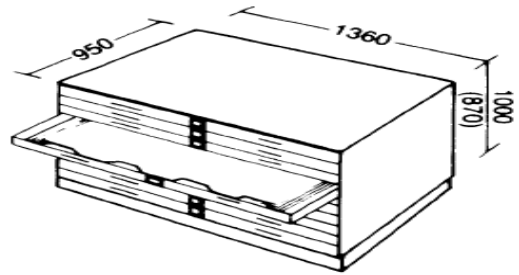


⑧ Drawing office

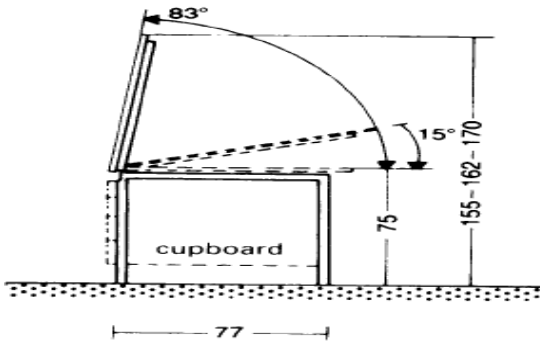




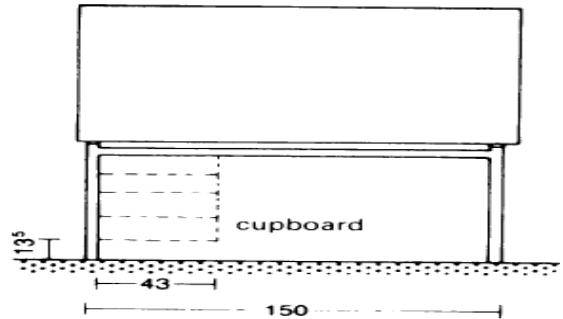
⑨ Drawings stored upright



⑩ Sheet steel drawings cabinet



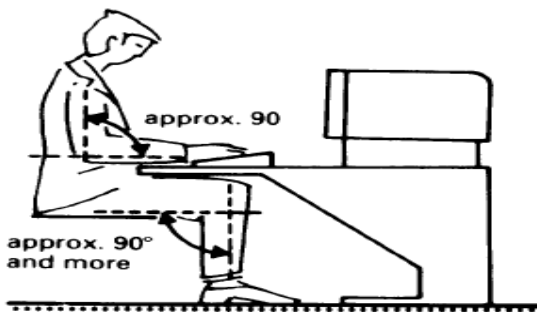
⑪ Section → ⑫



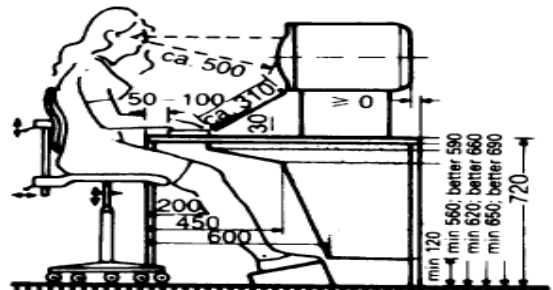
⑫ Adjustable angle desk and drawing table

DIMENSIONS FOR COMPUTER LAB.

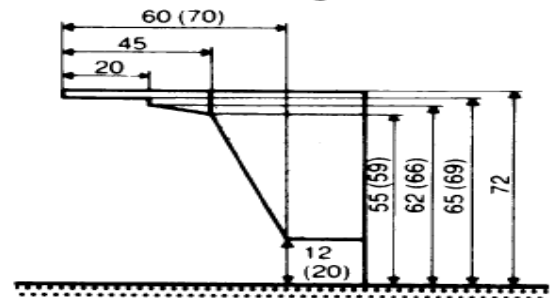
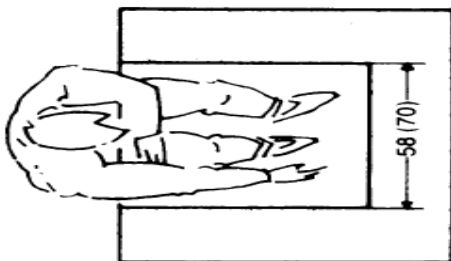
Sizes for the desk and chairs in computer lab. The eye distance from computer to human eye and other necessary precautions during drafting and designing.



④ Correct ergonomic position



⑤ Ergonomic VDU workstation with fixed-height table

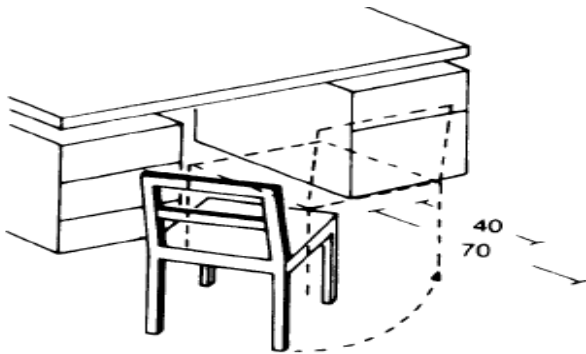


OFFICE SPACES

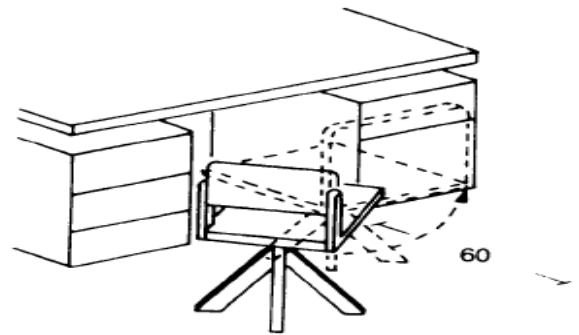
Thumb Rules for Planning the Office Spaces:

width of the primary Circulation path within the space must not be less than 2M, the secondary and tertiary paths must not be less than 1.5M and 0.75M respectively.

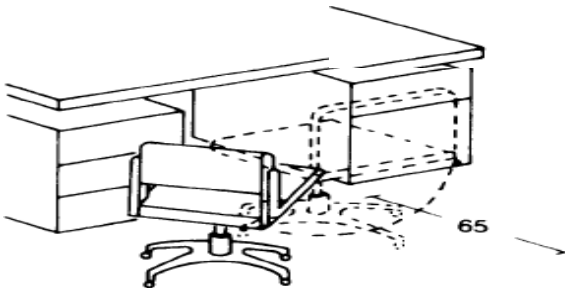
The planning and the layout must satisfy a particular functional need, such as screening, divisions (partitions) stacking or storage etc. . Furniture arrangement must be such that the people at their work station must have clear visibility and adequate space around their desk.



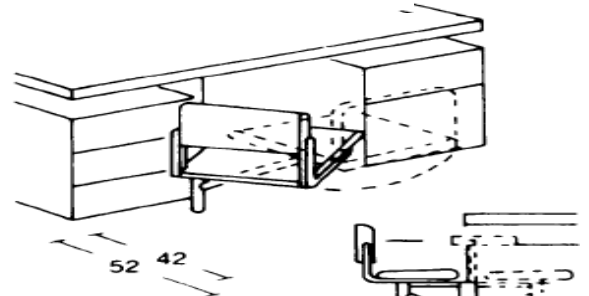
① Traditional chair



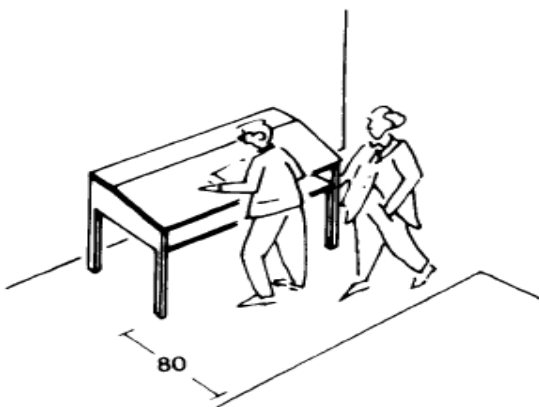
② Swivel chair



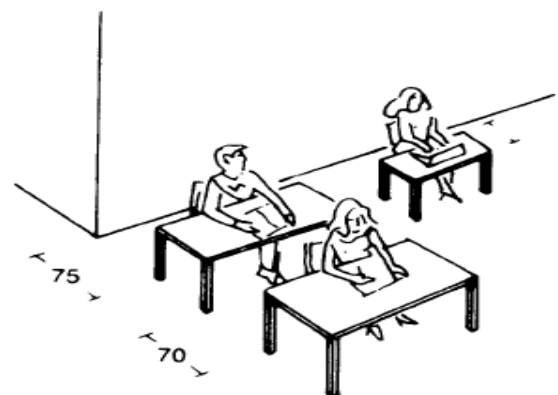
③ Swivel chair on casters



④ Pivoting chair



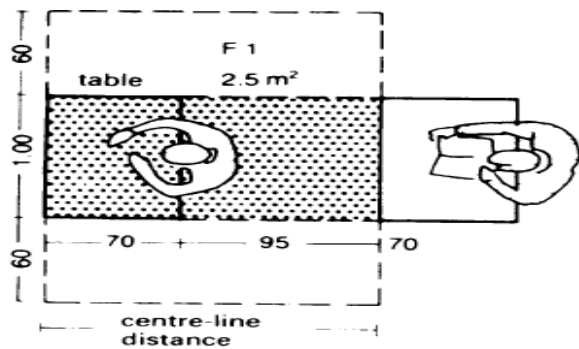
⑤ High desk



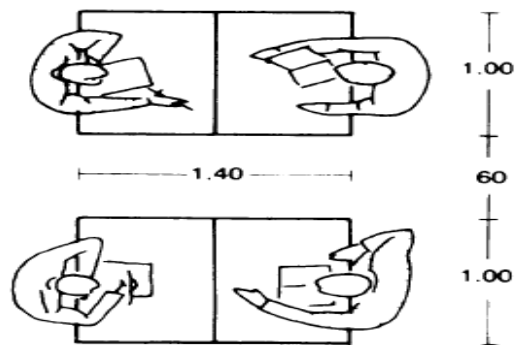
⑥ Individual tables

LIBRARY DETAIL

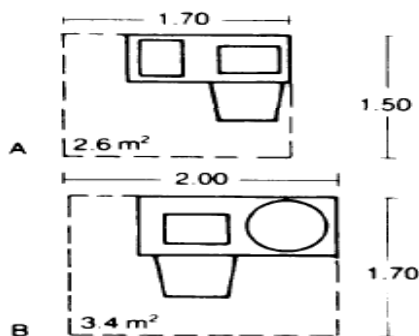
Libraries perform a range of functions in society. Academic libraries, for example, obtain, collect and store literature for education and research purposes, and are usually open to the general public. Public libraries provide communities with a wide choice of more general literature and other information media, with as much as possible displayed on open shelves. The functions of academic and public libraries are often combined in a single library in larger towns.



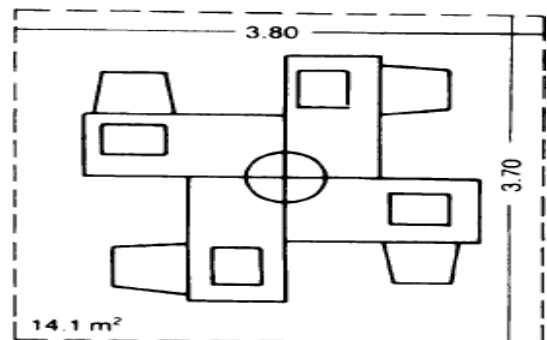
1 Floor area for an individual workstation



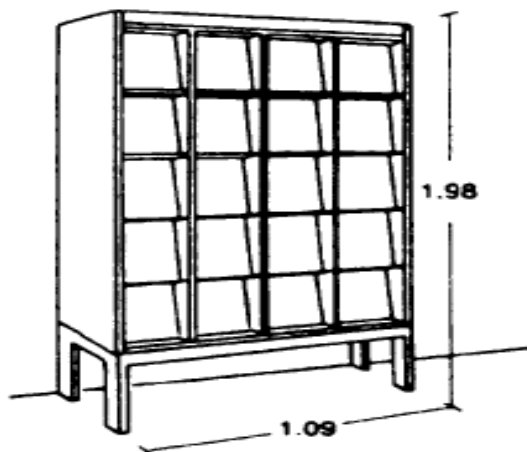
2 Minimum distances between tables



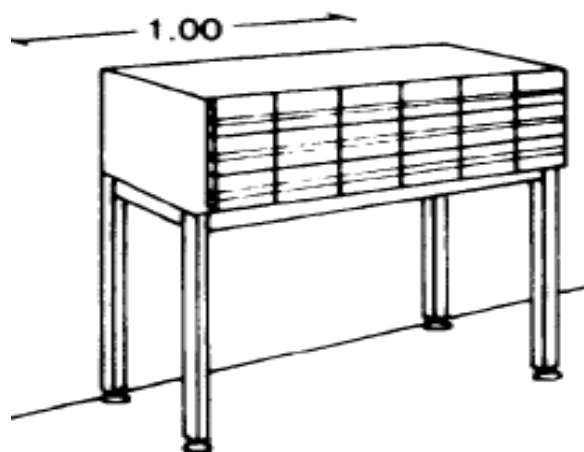
4 Microfiche reading workstation



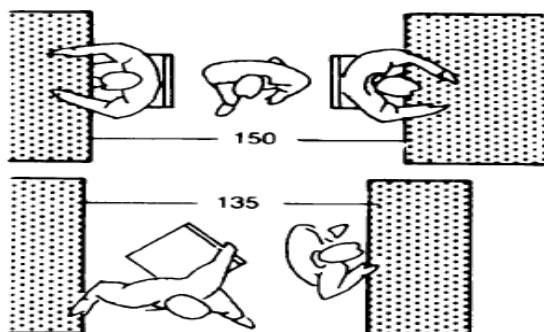
5 Four-seat microfiche station



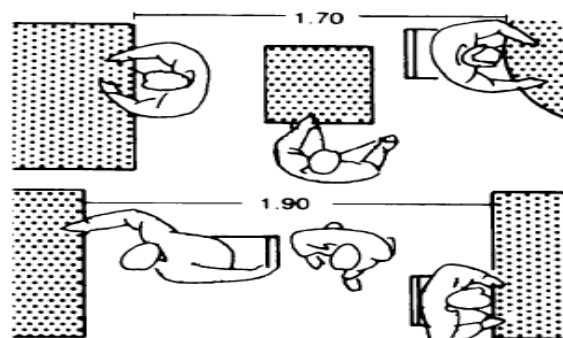
Periodical rack



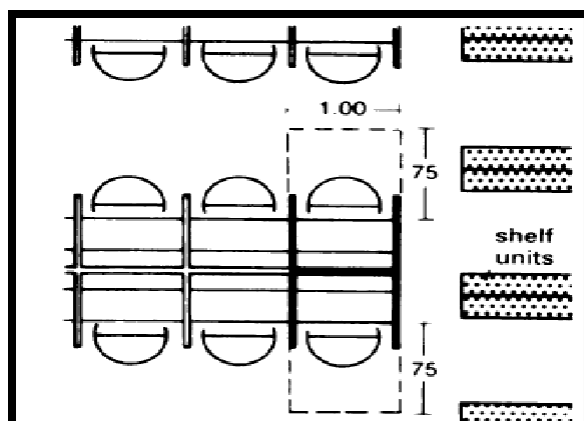
Traditional card index



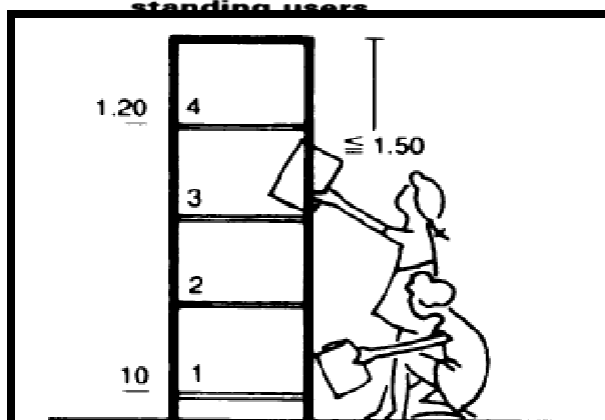
⑧ Minimum free space in reading area → ⑨



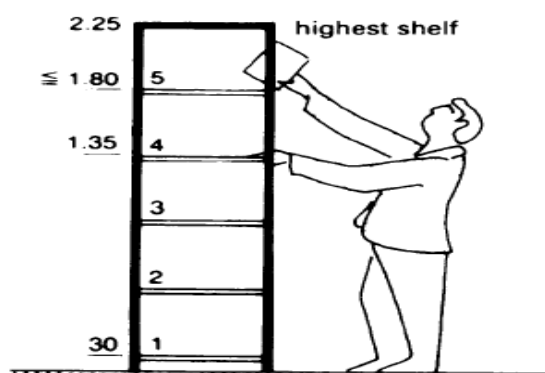
⑨ When books are moved between seated and standing users



⑦ Individual study booths



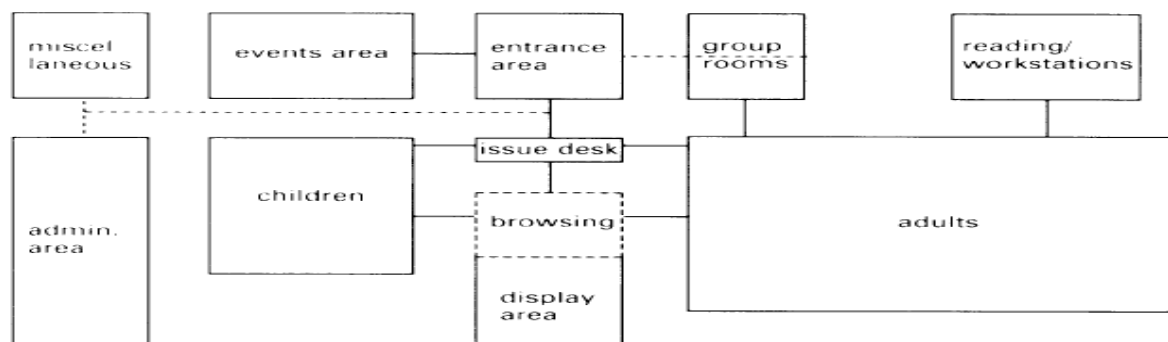
⑫ Height of four-shelf unit for



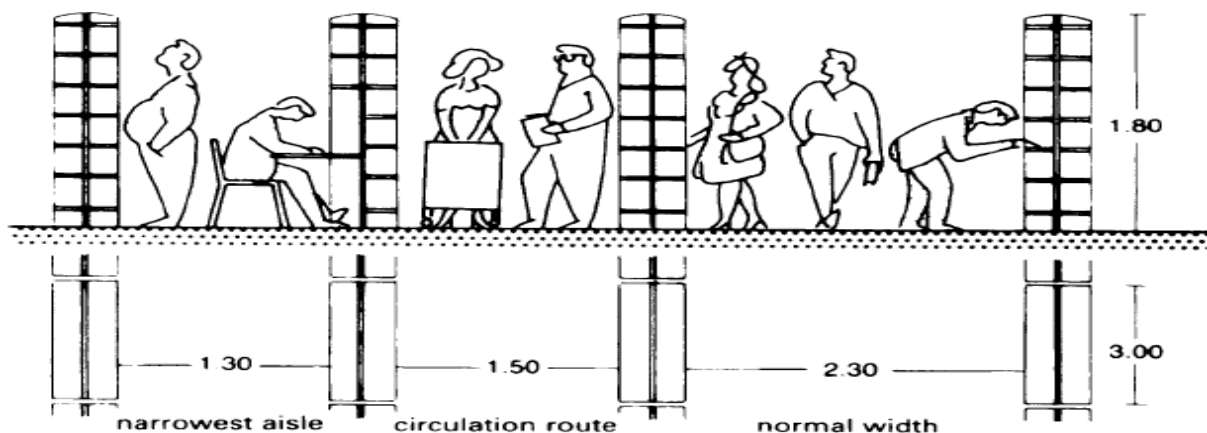
⑩ Height of five-shelf unit



⑪ Bookshelf for schoolchildren



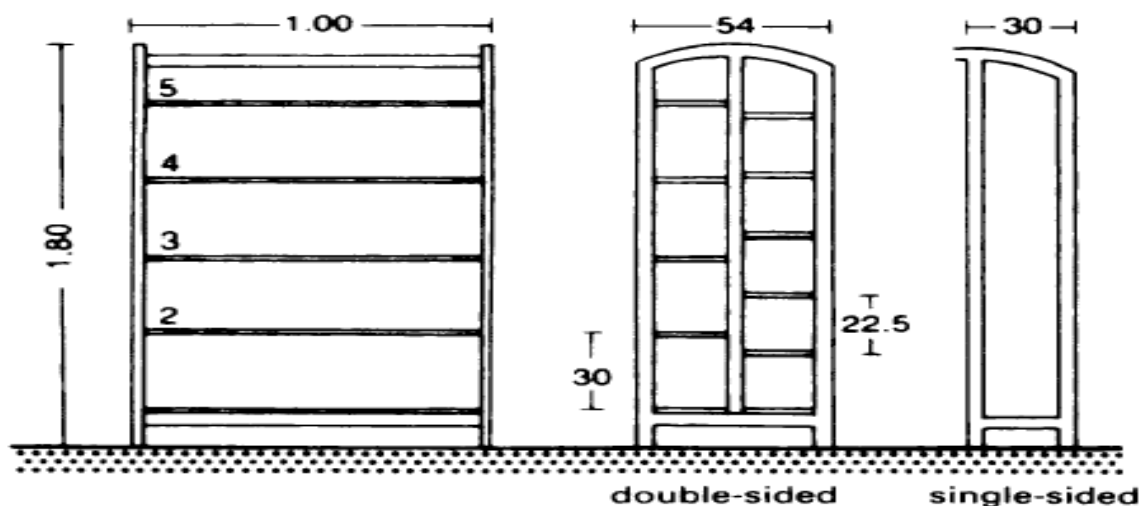
① Functional diagram of medium-sized library



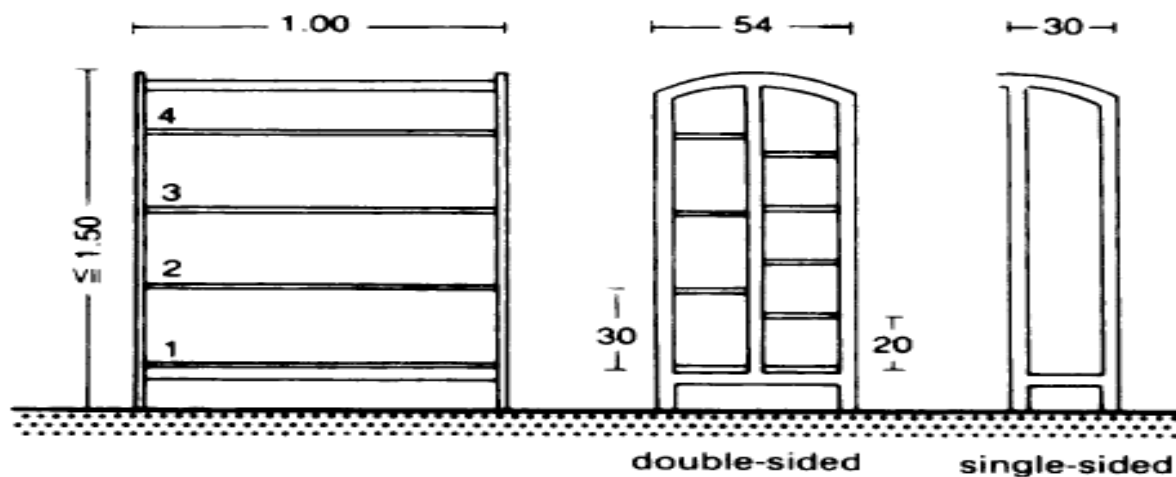
③ Minimum distances

LIBRARY SHELVES

The shelves for elders and children are different due to the height of the person who uses the shelves and also shelves units are less for small children.



⑭ Shelf units: for adults, 5--6 shelves; for children



shelves → ⑫

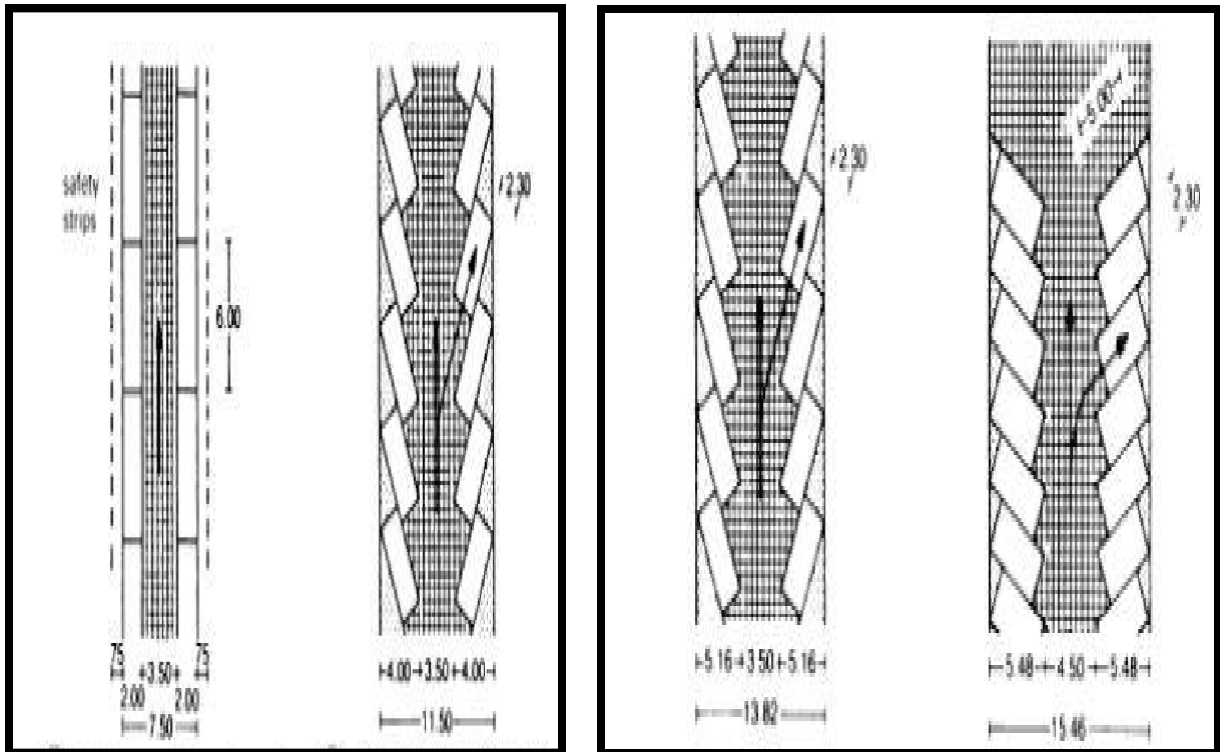
DIMENSIONS FOR PARKING

Parking is the act of stopping and disengaging a vehicle and leaving it unoccupied. Parking on one or both sides of a road is often permitted, though sometimes with restrictions. Parking facilities are constructed in combination with some buildings, to facilitate the coming and going of the buildings' users.

Parking ramp Car park

Parking structure (Parking garage Parking building Carport

Cycle park



1. Parking paralleled to the road
2. 30° oblique space Entry and exit, but For use only with One way traffic
3. 45° oblique Parking One way traffic only
4. 60° oblique parking One way traffic only

DEAD CASEE STUDY

CENTRE FOR ENVIRONMENTAL PLANNING AND
TECHNOLOGY UNIVERSITY (CEPT UNIVERSITY)
AHMEDABAD

CENTRE FOR ENVIRONMENTAL PLANNING AND TECHNOLOGY UNIVERSITY (CEPT UNIVERSITY) AHMEDABAD

INTRODUCTION

- School of architecture was established in 1962 for teaching undergraduate Programs by professor b.V. Doshi.
- Thoughts came to develop a campus for offering programs related to planning, Building and construction technology, interior design, landscape Architecture, and environmental issues.
- School of planning was established in 1972 and offering programs related to Urban, regional planning & environmental planning.
- School of building science and technology was developed in 1982.
- School of interior design in 1991.
- Programs such as urban design, landscape architecture, construction, project Management, and structural design according to the need were added to the Schedule.
- Cept (center for environmental planning and technology) was established by Ahmadabad education and it was registered in 1994 as a separate public Charitable trust.

HISTORY

- The ahmedabad education society (aes), a premier educational body started in 1962 with the starting of school of architecture. The school of planning was established in 1972 with financial support from the governments of india (mhrd) and gujarat and ford foundation. The school of building science and technology and school of interior design were established in 1982 and 1991 respectively with grant-in-aid from the government of gujarat. The state government also supports the school of architecture through grant-in-aid. Initially cept was established and run by ahmadabad education society. In 1994, a separate trust and a society — cept society — was formed. Cept is registered as a society and public charitable trust.



- Since inception cept operated as an autonomous academic institution free to develop its academic programmes and award its own diplomas at the end of programmes of study recognized by the state of gujarat and the all india council of technical education (aicte). From 2002 to 2005, cept had been affiliated to the hemachandracharya north gujarat university at patan. Consequently, the students completing programmes at cept were awarded bachelor's and master's degree. Cept became a university by the gujarat state legislature act of 2005 with effect from april 12, 2005. It has been recognized by the university grants commission under section 2(f) of the ugc act, 1956 in february 2007. The university is recognized as scientific and industrial research organization by the department of scientific and industrial research

LOCATION



GUJRAT



AHMEDABAD



CEPT UNIVERSITY

- Location: ahmadabad
- Year of construction: 1961
- Building type: educational institute
- Construction type: exposed brick and concrete
- Climate: tropical, hot and dry in summer



ज्ञानं विज्ञानं महितम्

INTERACTIVE STUDIES

- Cept university has a fortunate variety of offerings concerning human habitation and its
- Environment. This has led to a great variety of human resources, with different areas of
- Specialization, and equally committed students desirous of pursuing professional disciplines.
- Search for a methodology that will address the issues of compartmentalized knowledge,
- Values orientation and social relevance led the school to a unique experiment recently in

CLIMATE ANALYSIS

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature °C (°F)	20.4 °C (68.7) °F	22.8 °C (73.1) °F	27.2 °C (81) °F	31.2 °C (88.2) °F	33 °C (91.4) °F	31.9 °C (89.4) °F	28.5 °C (83.4) °F	27.5 °C (81.4) °F	28 °C (82.3) °F	27.9 °C (82.3) °F	25 °C (77.1) °F	21.5 °C (70.6) °F
Min. Temperature °C (°F)	13.9 °C (57) °F	15.7 °C (60.3) °F	19.6 °C (67.2) °F	23.5 °C (74.3) °F	26.4 °C (79.5) °F	27.6 °C (81.7) °F	26 °C (78.7) °F	25 °C (77.1) °F	24.5 °C (76.1) °F	22.1 °C (71.7) °F	18.9 °C (66) °F	15.2 °C (59.4) °F
Max. Temperature °C (°F)	27.6 °C (81.6) °F	30.2 °C (86.4) °F	34.8 °C (94.7) °F	38.8 °C (101.9) °F	40.2 °C (104.3) °F	37.1 °C (98.7) °F	31.7 °C (89.1) °F	30.4 °C (86.8) °F	31.9 °C (89.4) °F	34.2 °C (93.6) °F	32 °C (89.5) °F	28.7 °C (83.6) °F
Precipitation/ Rainfall mm (in)	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)	73 (2)	307 (12)	242 (9)	109 (4)	17 (0)	3 (0)	1 (0)
Humidity(%)	43%	39%	31%	31%	42%	58%	76%	80%	74%	52%	44%	46%
Rainy days (d)	0	0	0	0	0	5	14	15	7	2	1	0
avg. Sun hours (hours)	9.7	10.2	10.8	11.4	11.3	9.5	7.1	6.2	8.0	10.1	9.9	9.6



MAXIMUM TEMPERATURE 35 C.

MAXIMUM DURING MAY



MINIMUM TEMPERATURE 20 C.

MINIMUM DURING JAN



190.9MM AVERAGE RAINFALL



51.3% AVERAGE HUMIDITY

THE APPROACH FOR THE WORKSHOP IS AS UNDER

- A common theme of societal importance is chosen.
- Lead faculty from every faculty proposes a studio based on such a theme,
- Preferably having common or related sites of study.
- Multidisciplinary faculty teams are formed to conduct each of the studios.
- While the studios are conducted by cept faculty members, invited guest faculty
- Make special contributions.
- A programme of relevant lectures is evolved.
- A shared final presentation is arranged at the end.
- Documentation and publication of the work comes out as a cept publication.

DESIGN FEATURES

- No restriction on exchange of ideas and thoughts through informal environment
- Provision for flexible spaces which can be used in a multifunctional manner
- Strong connectivity between spaces making the school as an open space with no doors at all
- Providing working environment which ease for faculty and student to teach, learn, and interact



CENTERS OF STUDIES

- Centre for sustainable environment & energy
- Centre for excellence in urban transport
- Centre for industrial area planning & management
- Centre for urban equity
- Centre for communication & holistic development
- Centre for training & development
- Climate change adaptation & resource centre
- Centre for conservation studies
- Design innovation and craft resource centre (dicrc)
- Centre for research, development and consultancy

SCHOOLS IN CEPT

- School of planning
- School of architecture
- School of building science and technology
- School of interior design

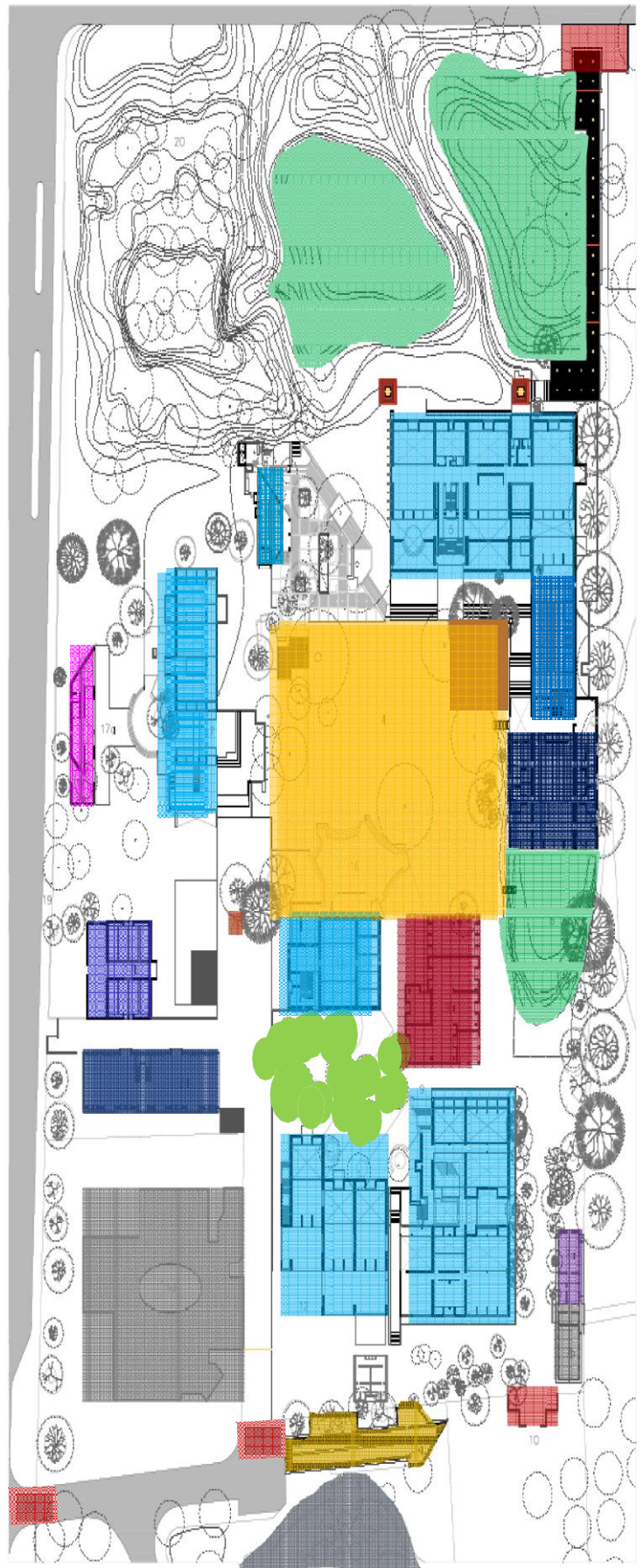
VARIOUS FUNCTIONAL DEPARTMENTS AT CEPT

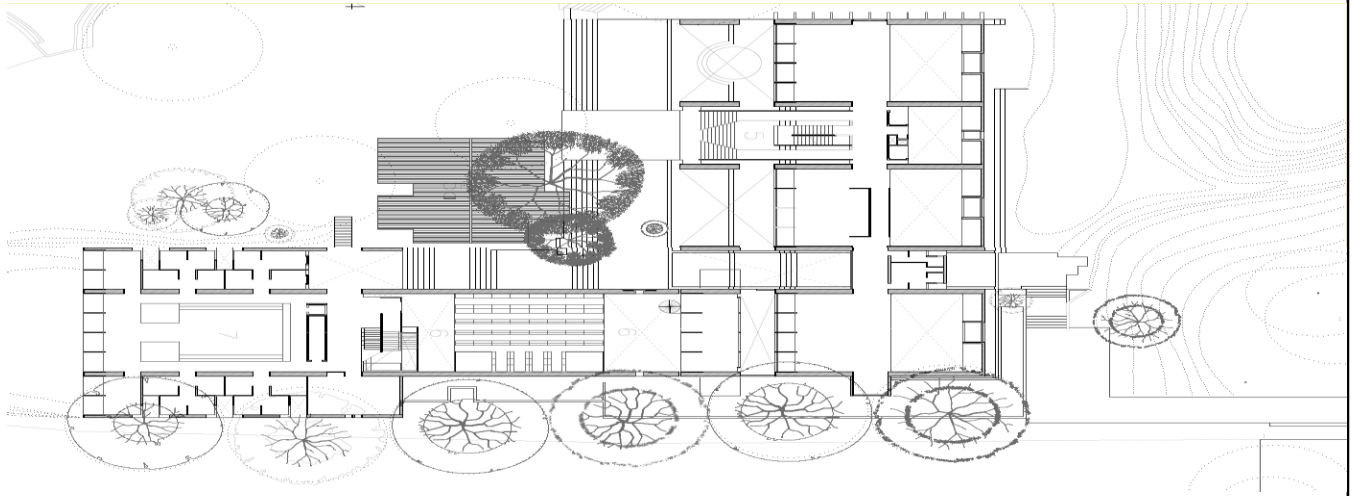
- Faculty of architecture
- Faculty of technology
- Faculty of technology management
- Faculty of design
- Faculty of arts and humanities
- Faculty of planning and public policy
- Faculty of geometrics and space applications
- Faculty of applied management
- Faculty of infrastructure systems
- Faculty of sustainable environment
- Faculty of doctoral studies
- Faculty of landscape studies

DESIGN FEATURES

- All buildings are oriented in the north-south direction.
- Open spaces on the north & south side respectively allow fresh air to ventilate the built structure.
- The open spaces and the shaded once merge with the undulating landscape
- The open spaces is linked to the office and library area , workshop and canteen.
- These areas are very lively and dynamic.

-  **North Entrance**
-  **Ent. Walkway**
-  **North Lawns**
-  **Central Courtyard**
-  **School of Architecture and School of Planning**
-  **Wood Workshop and Students' Council Room**
-  **Library and Reading room**
-  **Administration offices and Faculty Rooms**
-  **Campus Development office**
-  **Stationary Store**
-  **Copy Shop and Telecom**
-  **South Lawn**
-  **School of Building Science and Technology**
-  **Material Testing Lab**
-  **South Entrance**
-  **Hussain Doshi Gufa**
-  **Herwitz Gallery**
-  **School of Interior Design**
-  **Textile Workshop**
-  **Community Science Center**
-  **DIS Plaza**
-  **Kanoria-Center for Art Painting & Print Making**
-  **K.C.A. Administrative Office**
-  **Sculpture Studio**
-  **Canteen**





**OPERABLE WINDOWS FOR
CLASSROOMS**



**FULL HEIGHT WINDOW
OPENINGS**



**OPENINGS FOR NATURAL
LIGHT AND VENTILATION**



**CENTRAL COURTYARD FOR PLAYING
CRICKET AND OTHER SPORTS**

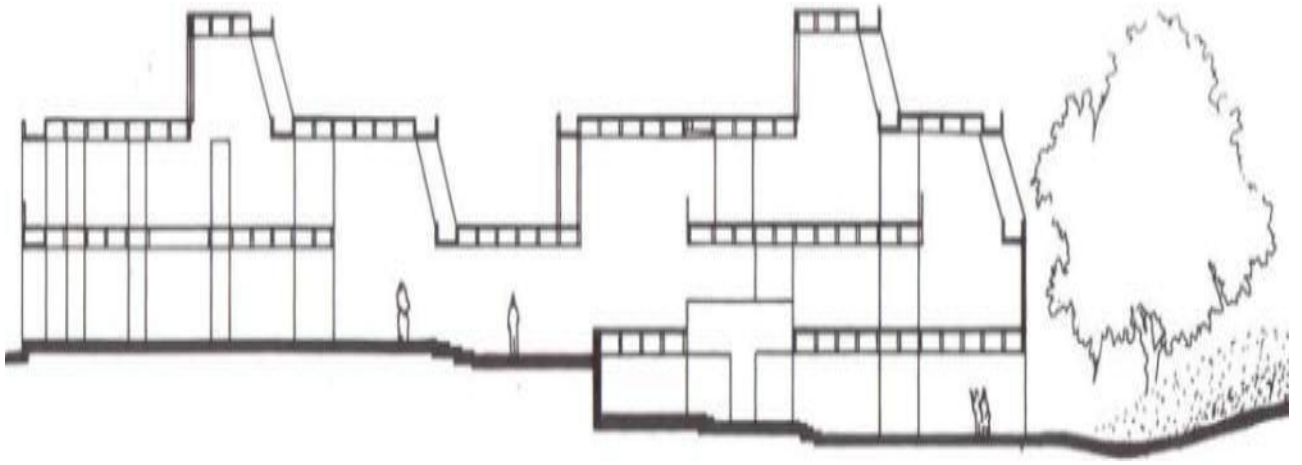


**DOUBLE HEIGHTED
CLASSROOMS**

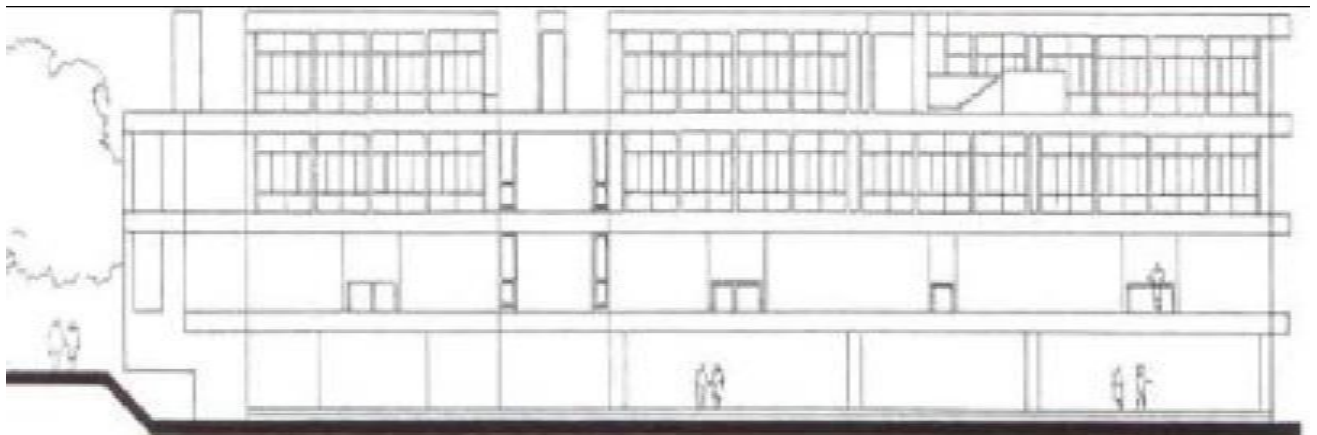


**INTERESTED OPEN SPACES AS
LANDSCAPE FOR CAMPUS**

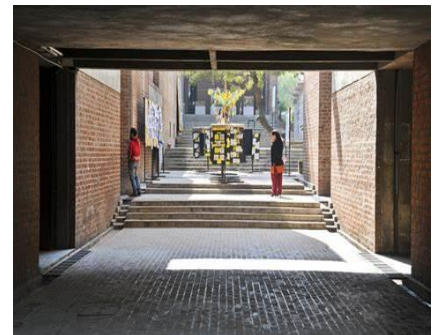




DESIGN OF THE OPENINGS TO GAIN THE MAX. SUN SHINE AND VENTILATION



CLASS ROOMS ELEVATION



DEAD CASE STUDY

STATE INSTITUTE OF PLANNING AND ARCHITECTURE

STATE INSTITUTE OF PLANNING AND ARCHITECTURE

LOCATION

- Rohtak is located 70 km northwest of new delhi and 210 km south of the state capital chandigarh at the NH 10.
- Rohtak is a part of national capital region ii.
- This city is well connected by railways as well as roadways.
- It is connected to 7 cities by three national highways (nh10, nh71, and nh71a) and
- Two state highways (SH16 and SH18).
- Haryana roadways provides very frequent bus service to the city of rohtak from different places in haryana, delhi & chandigarh.
- Airports near rohtak indira gandhi international airport, new delhi, distance 75 km. Chandigarh airport (ixc),chandigarh, distance 200 km



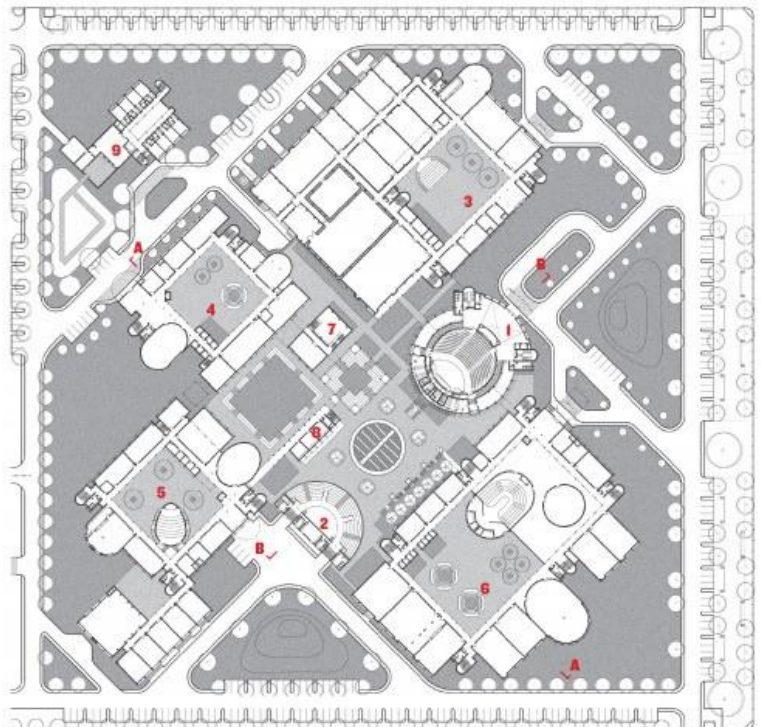
HARYANA



ROHTAK

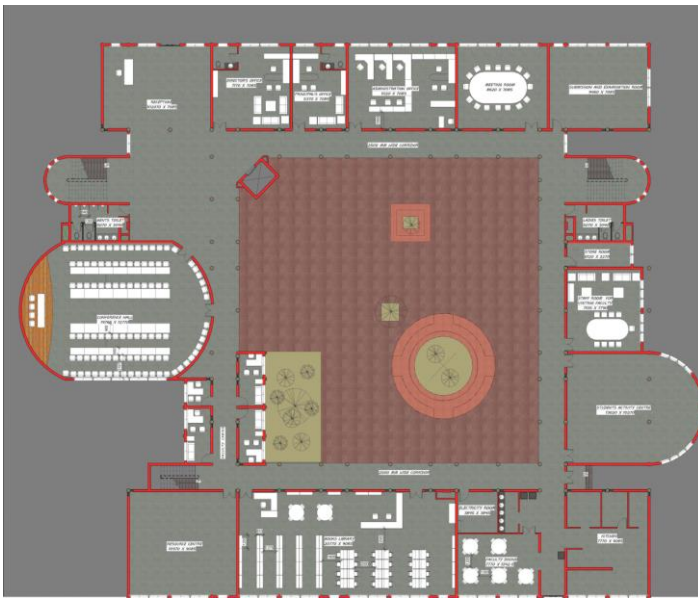
MAIN FEATURES OF THE CAMPUS

- Total land area: 22 acres
- Total Built up area: 7 lac sq. ft.
- Expected student intake: 4,000
- 300 cr to build the campus
- In pipeline – Residential campus
- Land allotted: 10 acres
- Estimated cost: 100 crore
- Time frame: 3 years
- 270 students per year

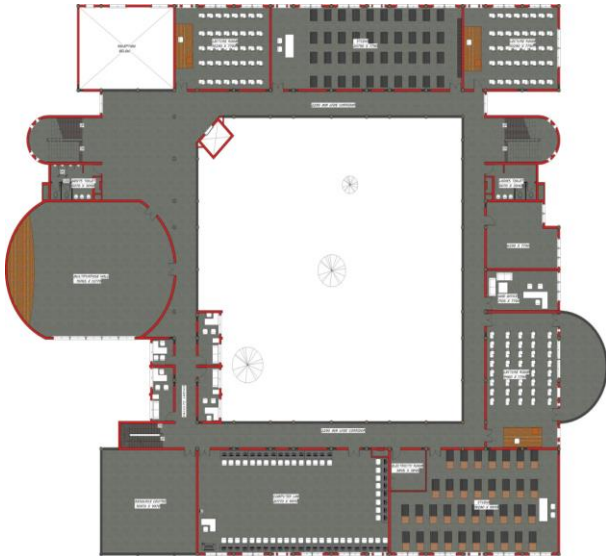


NINE INDEPENDENT BUILDING BLOCKS

- STATE INSTITUTE OF FINE ARTS
- STATE INSTITUTE OF FILM AND TELEVISION
- STATE INSTITUTE OF DESIGN
- STATE INSTITUTE OF URBAN PLANNING AND ARCHITECTURE
- CENTRAL BLOCK :-
- AUDITORIUM AND LIBRARY
- ADMINISTRATION
- CAFETERIA
- GUEST HOUSE UTILITY.



GROUND FLOOR PLAN



FIRST FLOOR PLAN



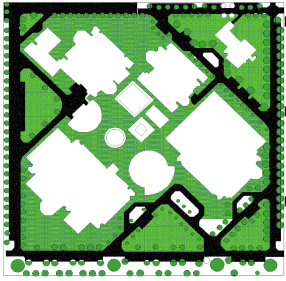
SECOND FLOOR PLAN

PRINTING FACILITY

- Printing facility is provided inside the college.
- Timings for print out from morning 9 to evening 7. Prices are not too much expensive.
- Photocopy facility is also available.
- Every size of printing facility available in the architecture block.



ROAD



- Width of the road is 15'.
- Road is constructed of concrete.
- Road is single way inside the campus.

LIFT FACILITY



- Building directory is fitted on the side of the lift wall So as to know the different rooms on each floor.
- Lift facility is there on the entrance .

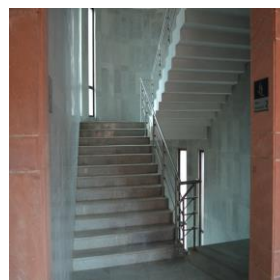
WATER COOLER



- Water cooler facility is also there on each floor.
- Water is purified from the R.O.

- Dimension of water cooler:-
- Length :- 2'
- Width :- 2.6'
- Height :- 4.6'
- It is place on the corer of the floor.

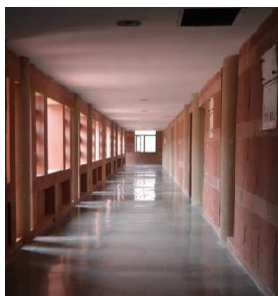
STAIRS



- Stair case is there in each and every floor .
- Stairs dimension:-
Tread:- 1'

- Riser :- 6"
- Width :- 6'
- There is 3 stair case on each floor
- 2 is normal 1 is fire exit

CORRIDOR



- Width of the corridor is 7'
- Height of the corridor is 10'
- In the left side of every corridor there is a balcony

- Right side of corridor there is a rooms.
- After 10' of height till the lenter there is area for wire crossing.



- Design pattern of jali on each floor is different.
- The diameter of the every column which shown in the figure is 4'. Due to different pattern of jail on every floor it gave us a unique look.

Rewal's concept for Rohtak is based on a sequence of four distinct that give identity to the each of the different disciplines through programmes, spaces, patterns and materials. CREATION OF GEAOMETRIC systems and responding visual imageries are apparent in RAJ REWAL'S architectural works.

There is a sequence of open spaces.



ARCHITECT VIEW

- Raj rewal apply a more traditional narrative of scale, space and materials through chapters of an education programme requiring the four distinct institutes of creative arts. The low-rise, high-density configurations punctuated with photovoltaic panels to generate electricity for the campus and individual with the whole, built spaces with the open landscape, forms with light, craftsmanship with state-of-the art – revealing layers of linked experiences that work as much on their own as together.
- Raj rewal has sought to add urban design and large integrated complex that fuses architecture, urbanism and landscape .

OUR POINT OF VIEW AFTER ANALYSIS

- Western expression of strong forms in concrete and brick.
- Architectural block is not designed as per architectural field . this block is for students of mass communication.
- No waiting area in architectural block .
- Buildings are oriented on a north-west/south-east direction with a green buffer along the site.
- Courtyards create microclimates free from heat and dust while introducing diffused natural light and ventilation.
- The reinforced-concrete frame structure weaves in exposed columns with external expressions of sandstone.



LIVE CASE STUDY

MBS COLLEGE OF ARCHITECTURE

MBS COLLEGE OF ARCHITECTURE

INTRODUCTION

- MBS School of Planning and Architecture has been established in 2009 by the ACME educational trust to impart architectural education to meet the ever changing future needs of architecture...
- ARCHITECT- MR. SM MEHTA

SITE LOCATION

- Located in sub-city dwarka, sector-9, psp area, well connected with
- different regions of Delhi-NCR through road, public transport and metro system.
- LATITUDE- 28°34'43.50"N
- LONGITUDE- 77°03'36.99"E



DELHI



DWARKA



MBS COLLEGE

CONCEPT

MIND

Intellect education through facilities like library, computer lab, well furnished studios, creativity

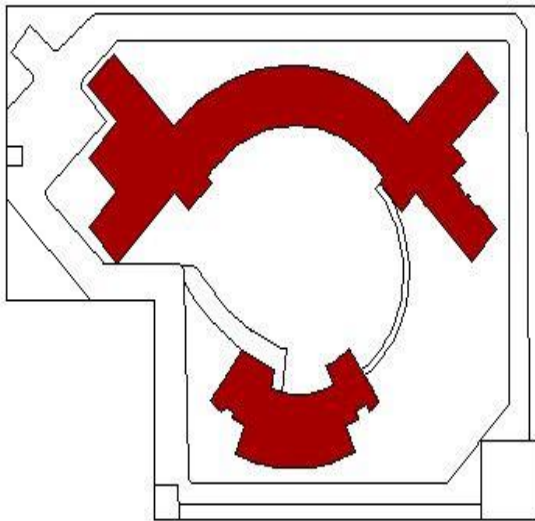
BODY

Physical development in the form of an open recreation centre, cricket field, table, music room.

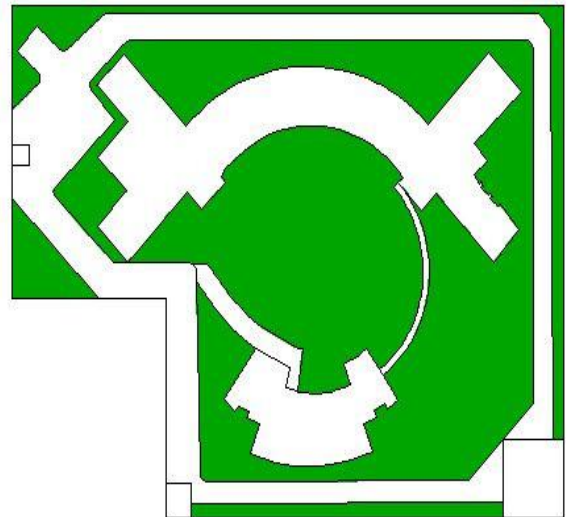
SOUL

Aesthetics common room, extra curricular activities, friendly environment character development

RELATIONSHIP BETWEEN OPEN AND BUILD UP AREA

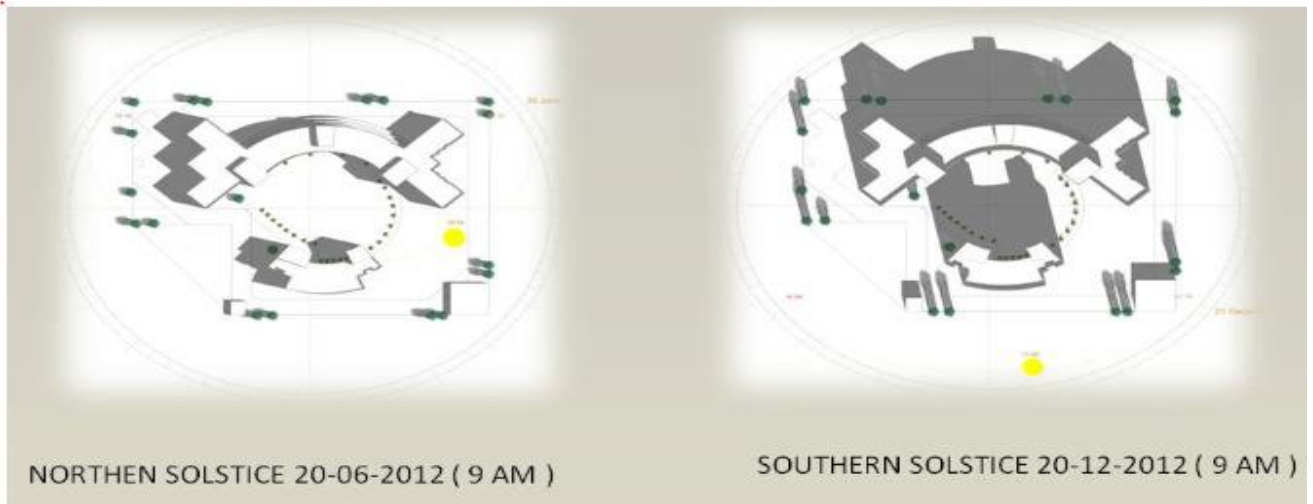


BUILD UP AREA:40000SQ FEET



OPEN SPACE:50000 SQ FEET

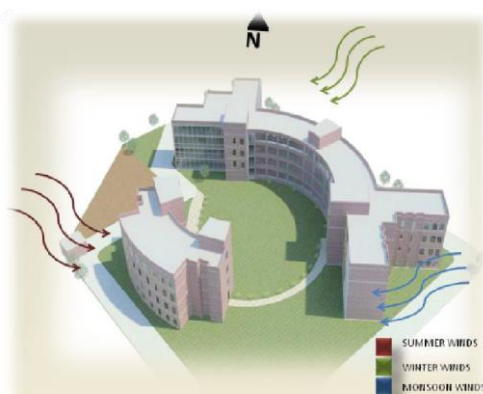
SITE PLAN



CLIMATE

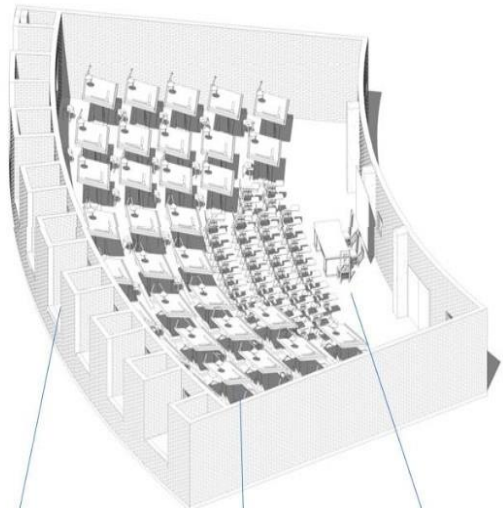
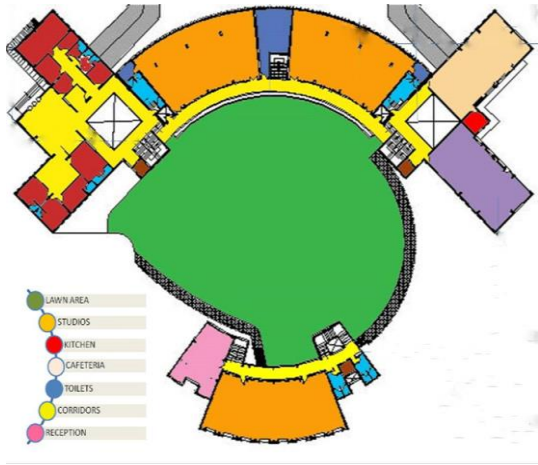
- Hot weather is observed in the summers whereas winters are very cold.
- The temperature ranges from 45 degrees in summers to 4 degrees in winters.

WIND DIRECTION



- In the summer season, the predominant wind directions are from west in the morning and either west or northwest in the evening.
- In the monsoons, the predominant wind directions are from the southeast, east or west in the morning and from east (in july and august) or northwest (in september) in the evenings.
- winds are frequent

GROUND FLOOR



consist of:

- 3 studios
- Administration
- Canteen
- Stationery shop
- Workshop
- Corridor
- AREA: 200 sq m
- Studios are provided with proper facilities like:
 - Projector, 40 drafting table, 40 chairs and stool, boards, 8 large recessed windows, 6 fixed windows, sill level 900mm, lintel level 2400mm.
 - Lecture room and studio is provided in the same room.
 - Use of negative spaces.
 - Lockers provided under the windows.



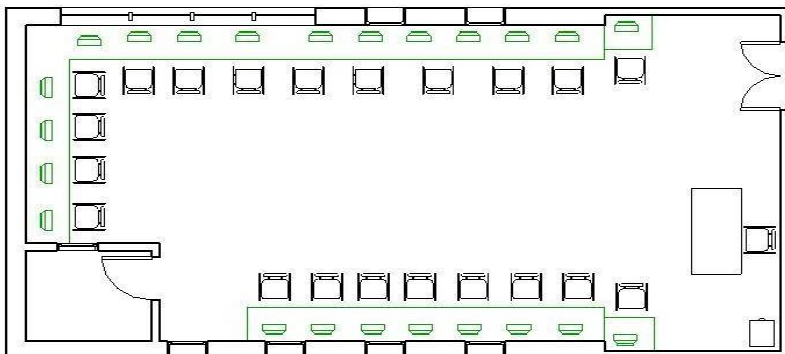
CANTEEN



STUDIO

AREA: 138 sq m .Can easily accommodate 40 students.

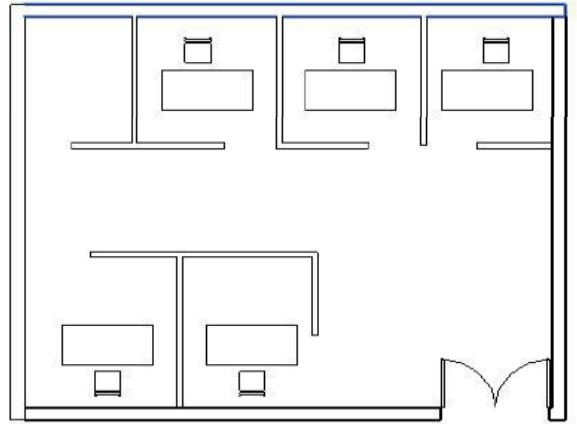
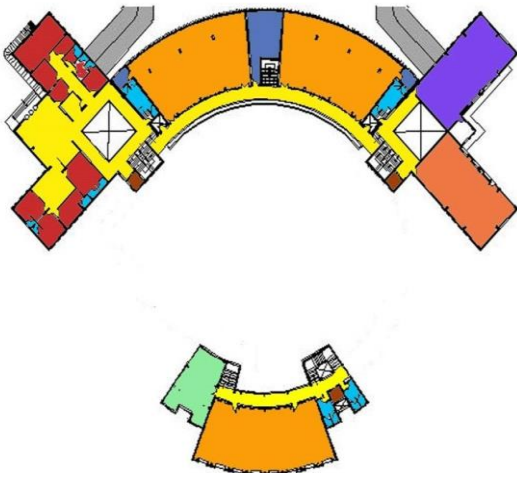
COMPUTER LAB



- AREA: 138 sqm
- Accommodations: 40. It is also used as a data test centre.



TYPICAL FIRST SECOND AND THIRD FLOOR PLAN



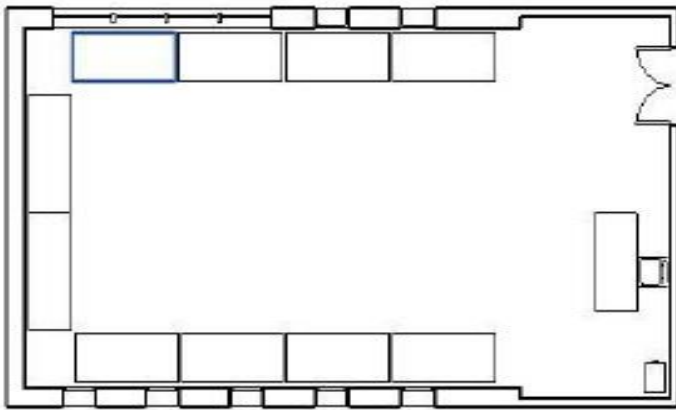
FACULTY ROOM

- AREA: 21 sq m
- Accomodation:6
- Provided with table,
- lockers and computer.



WORKSHOP

- AREA: 138 sq m
- Tools were provided
- Machines are also provided for making models.



- EXTERIOR GLAZING
 - Used for elevation purpose
 - Toughened glass (6mm)
- TERRACOTTA tiles brick style Matt finish
 - Used at the exterior facades in order to provide an
 - institutional ambience to the building.

Used pebble stones in pathways to differentiate the soft pavement and hard pavement



PARKING

- Parking for 10 cars.
- No parking facility was provided.
- Only parking for faculty.



SET BACK

- Side setback 6m
- Not fully constructed
- Sitting area is also provided.



PLANTS :- FOR LANDSCAPPING



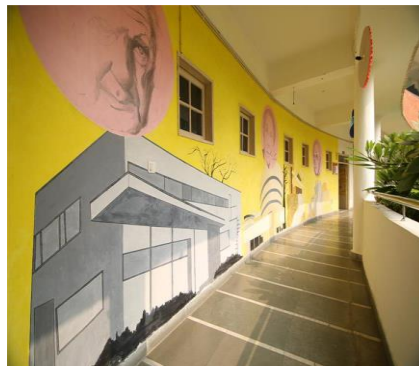
CASSIA FISTULA (AMALTAS)
DECIDUOUS TREE



FICUS (BENGHALENSIS)
FIGS TREE



SARACAASOCA
(ASHOKA) EVERGREEN TREE



LIVE CASE STUDY

GATEWAY COLLEGE OF ARCHITECTURE AND DESIGN

GATEWAY COLLEGE OF ARCHITECTURE AND DESIGN

INTRODUCTION

- Gateway College of Architecture and Design was initiated in 2008 by an architect Mr. Rakesh Aggarwal and his business partner Mr. H.P. Mangla. They were already well established in the field of education as they were running an international school in Sonipat and had been associated with both school and higher education earlier.

IT CONSIST OF FOUR BLOCKS.

1. ARCHITECTURE AND MANAGEMENT
2. ENGINEERING AND TECHNOLOGY
3. INTERNATIONAL SCHOOL
4. OBC BANK

ARCHITECTURE COLLEGE

- ESTABLISHMENT: THE COLLEGE WAS INITIATED IN 2008 BY AR RAKESH AGGARWA HIS BUSINESS PARTNER H.P MANGLA.
- COURSES: B.ARCH(DESIGN AND INTERIOR BOTH), 5YR.
- M.ARCH, 2YR
- NASA: THE COLLEGE HOSTED 55TH ANNUAL CONVENTION NASA FROM 25-29TH JANUARY 2013.
- PROPER HOSTEL FACILTY ARE PROVIDED FOR THE STUDENTS AND FACULTIES BOTH.



HARYANA

SONIPAT



FAZILPUR VILLAGE



OUTSIDE SPACE-

- SITTING SPACES ARE PROVIDED
- ENHANCED WITH BEAUTIFUL BUILDING FACADES AND STUDENTS WORK.



FRONT FAÇADE WITH GRID PATTERN

GENERAL INFORMATION OF ARCHITECTURAL COLLEGE

CONSTITUENTS:

- TOTAL STUDIOS –6
- TOTAL LECTURE HALLS-12
- A COMPUTER LAB
- AN AUDIOVISUAL ROOM
- A STATIONARY
- A MODEL MAKNG ROOM

BASIC FACILITIES:



WELL ORGANIZED LECTURE HALLS.



A COMPUTER LAB .



WELL EQUIPPED STUDIOS. BIG AUDIOVISUAL ROOM.

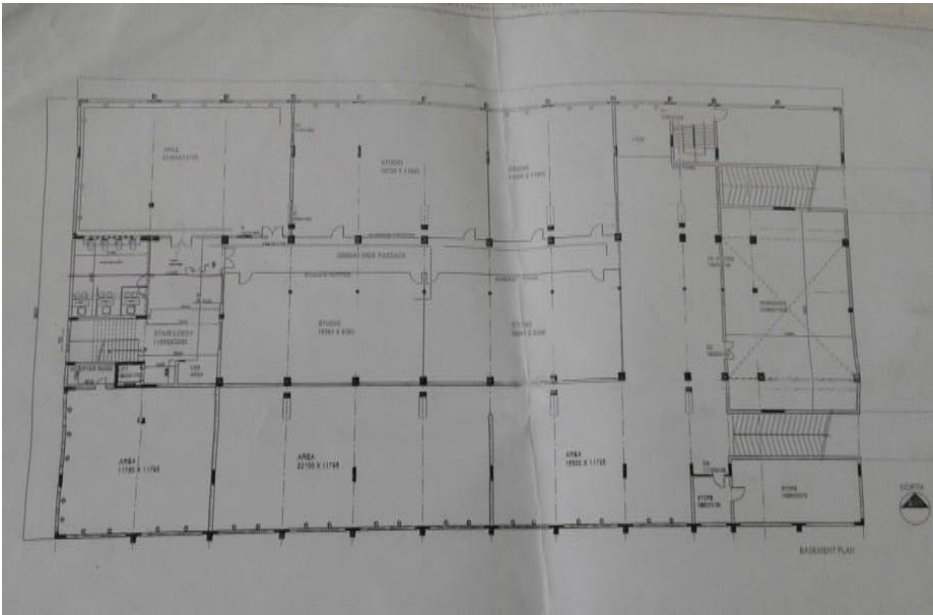


STATIONARY



MODEL MAKING WORKSHOP WITH STOREGE

BASEMENT PLAN-



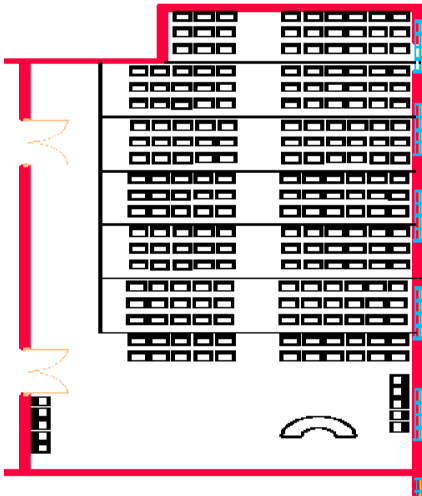
- STUDIO-4
- MATERIAL ROOM
- MODEAL MAKING WORKSHOP
- AUDITORIM

DRAWING STUDIOS

- INTAKE OF STUDENTS:50
- AREA:1402
- INTAKE: 30 STUDENTS
- PROVIDED AC:5
- PROVIDED FANS:6
- PROJECTOR:1
- INCANDSCENT LIGHTS:8
- LARGE WINDOWS
- LIGHTNING: NATURAL AND
- ARTIFICIAL



SITTING



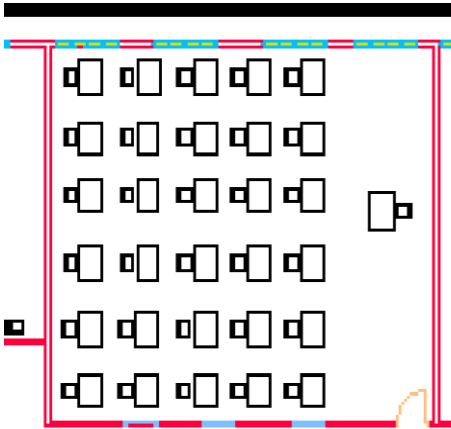
PLAN

IT CONSIST OF AUDITORIUM

- AREA:1402
- SITTING:250 PERSONS
- PROVIDED AC:6
- PROVIDED FANS:6
- PROJECTOR:1
- INCANDSCENT LIGHTS:8
- VENTILATION THROUGH
- VENTILATION
- LIGHTING:-
- NATURAL AND
- ARTIFICIAL(BOTH)

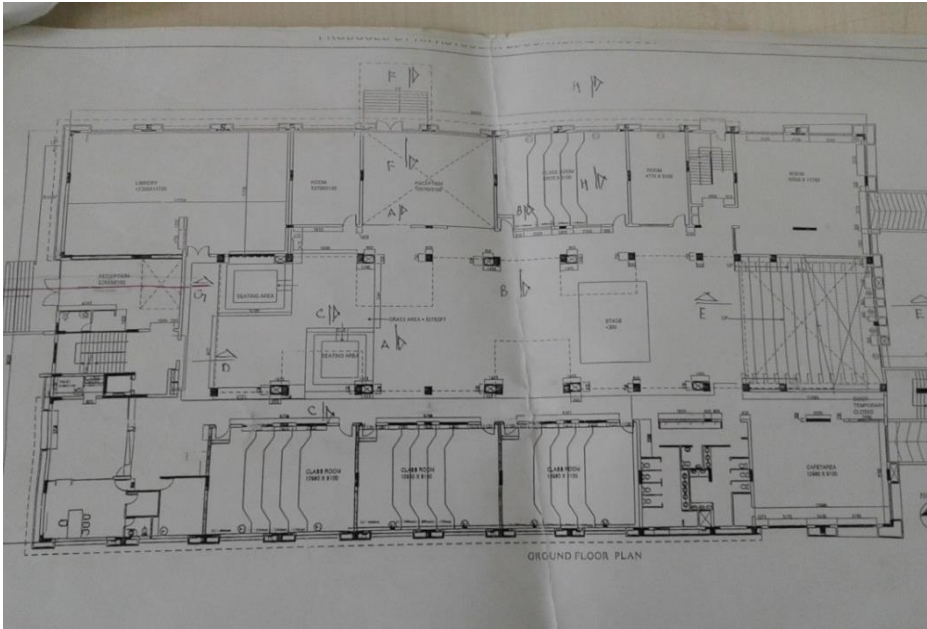


FIXED GLASS PANELS USED IN STUDIO



PLAN

GROUND FLOOR



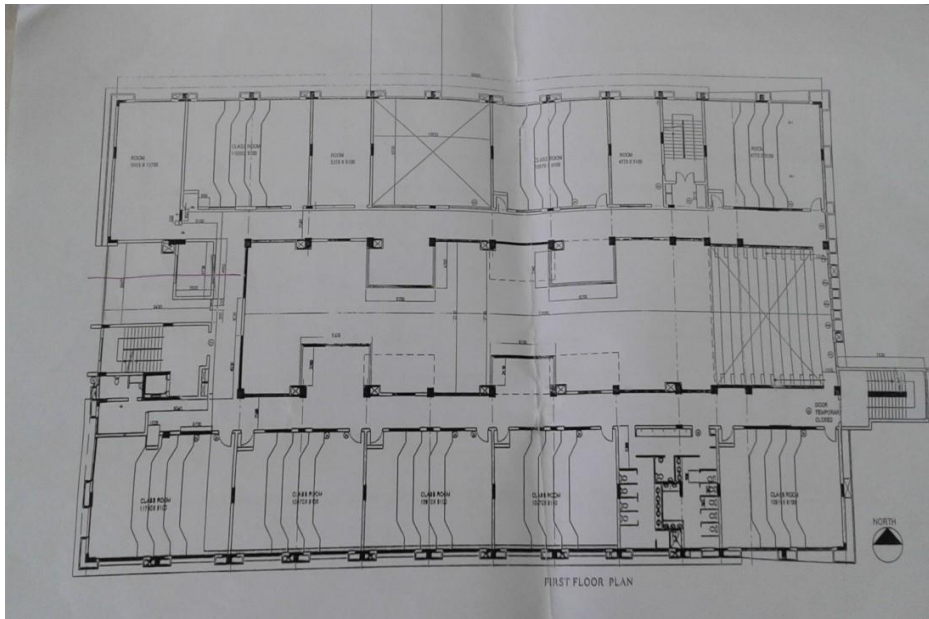
- IT CONSIST OF-
- RECEPTION WITH WAITING AREA
- LECTURE HALLS
- LIBRARY
- OPEN SPACES
- ADMIN AREA
- STUDIO
- DIRECTORS
- ROOM WITH
- RECEPTION&
- CONFERENCE
- ROOM

LECTURE HALLS

- AREA:24M2
- SITTING:56 STUDENTS

LIBRARY

- AREA:204M2
- SITTING:56 STUDENTS



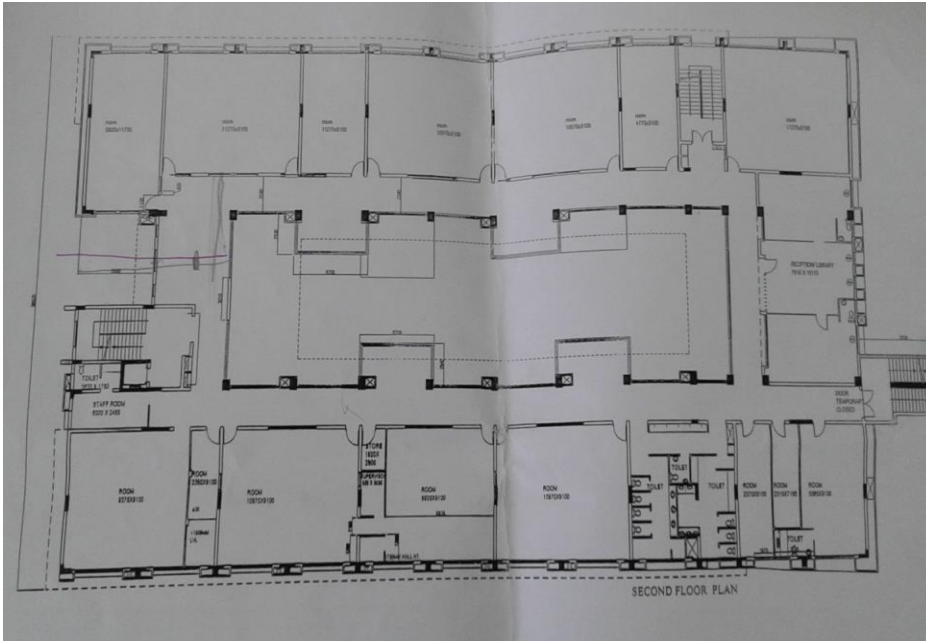
FIRST FLOOR

- IT CONSIST OF-
- NASA CENTRE
- LECTURE HALLS
- STATIONRY
- STUDIO
- WASHROOMS



TOILET AND DRINKING WATER TAP

SECOND FLOOR



IT CONSIST OF-

- COMPUTER LAB
- LECTURE HALL
- STUDIO
- MODEL ROOM
- LOCKERS
- FACULTY ROOM
- PENTRY
- WASHROOM
- GUEST ROOM

- AREA:91M2
- SITTING:250 PERSONS
- PROVIDED AC:6
- PROVIDED FANS:6
- PROJECTOR:1
- INCANDSCENT LIGHTS:8
- VENTILATION THROUGH VANTILATER
- LIGHTING: NATURAL AND ARTIFICIAL



PARKING FOR SCHOOL

PARKING FOR ARCHITECTURE MANAGEEMENT
AND TECHNOLOGY BLOCK

OUTSIDE SPACE-

- SITTING SPACES ARE PROVIDED.
- ENHANCED WITH BEAUTIFUL
- BUILDING FACADES AND STUDENTS WORK.



COMPERATIVE ANALYSIS

TOPIC	CEPT, AHMEDABAD	GATEWAY COLLEGE	MBS COLLEGE	CONCLUTION
Location	Ahmedabad, Gujarat, India	Sonepat Haryana India	Dwarka, Delhi, India	
Classrooms	Open classrooms with visual contact between two classrooms.	Large size classrooms with visual contact	Large size classroom with lecture hall	Classrooms to be designed in accordance with the open spaces to allow visual
Site Planning	Semi formal planning	Semi Formal Planning	Formal Planning	Planning can be formal, semi-formal or informal.
Site Zoning	Buildings evolved around a central open space with smaller courtyards.	Open spaces away from the building blocks	Buildings evolved Around a Central open Space with smaller courtyards.	Buildings evolved Around a Central open Space with smaller courtyards.
Parking	Vehicular segregation at the main entrances in North and South.pedestrian campus.	Parking for 2 wheeler and 4 wheeler are together with one entrance way	Vehicular parking inside and outside campus is Provided for two and four wheelers.	Vehicular parking can be either outside or inside of the campus premises.
Staircase & Circulation Core	Articulate cantilevered open staircase but inadequate sunlight.	staircase are provided with ample natural light.	staircase are provided with ample natural light.	Staircase to be made interesting and well lit to make circulation lively in the building.
66				

TOPIC	CEPT, AHMEDABAD	GATEWAY COLLEGE	MBS COLLEGE	CONCLUSION
Entrance	Paved pathways shaded by trees with lawns on both sides. No direct entry. Secured entrance.	Paved walkways and pathways with landscaped on both sides. Secured entrance from the front.	Paved pathways for circulation in campus and more landscape. Secured entrance from the front.	Formal entrance with landscaping to merge with the surrounding. Secured entrance.
Open spaces	Planned Formal courts	Planned informal open spaces and sit-out.	Informal open spaces for gathering and sit-out.	Open spaces could bring pleasure for gathering and study in campus premises.
Structural System	Load bearing brick walls with R.C.C framework and coffered R.C.C slab. G+2 Structure.	Load bearing brick walls with R.C.C framework and coffered R.C.C slab. G+4 Structure.	Load bearing brick walls with R.C.C framework and coffered R.C.Cslab. G+3 Structure.	RCC framework structure with finishing exterior walls and Use of wooden louvers for windows.
Library	Central library building but lack of natural light.	Library with ample Natural light coming inside.	Library with ample Natural light coming inside.	Library to be designed efficiently to encourage self-Learning.

AREA ANALYSIS

B.ARCH. ACADMIC BLOCK

Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq. m)
Design Studio	Area per student=2.5sq.m No. of Students= 40 Circulation area=1sq.m per st. Area=2.5x40+40=140 sq.m Round =150	5 Studios 5x150	750
Lecture Room	Area per student= 1.5sq.m No. of students=40 Circulation area=1sq.m per st. Area=1.5x40+40=100 sq.m	5 Lecture Halls 5x100	500
Exhibition Area	350sq.m	1	350
Computer Center	1.5x40 tables=60sq.m	1	60
Common Workshops	Assuming 20 students using workshop at a time 100sq.m as per Norms+50sq.m storage	200+50	250
Common Library	As per design/Requirement	1	300
First Aid Room	30sq.m-	1	30
Total			2240sq.m

M.ARCH. ACADMIC BLOCK			
Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Design Studio	Area per student=2.5sq.m No. of Students= 40 Circulation area=1sq.m per st. Area=2.5x40+40=140sq.m Round off-150sq m	4 Studios 4x150	600
Lecture Room	Area per student= 1.5sq.m No. of students=40 Circulation area=1sq.m per st. Area=1.5x40+40=75sq.m	4 Lecture Halls 4x100	400
Toilets	40 Sq.m	4	80
Total			1080sq.m
HOSTEL			
Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Boys Hostel	Each room min. 28sq.m as per Norms. Toilet+Bath=8sq.m=36sq.m per unit No. of Students in one room=3	40= 40x36	2520
Girl's Hostel	Each room min. 28sq.m as per Norms. Toilet+Bath 8sq.m=36sq.m per unit No. of Students in one room=3 No. of units=	30 30x36	1440
Kitchen/ Dinning	Min. 600sq.m	1	600
Warden office	20 sq.m	2	40
Gym	100	2	200
First Aid Room	20 sq..m	1	20
Total			4820sq.m ⁷¹

MAINTENANCE			
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Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Electrical Transformer	25sq.m	1	25
Generator Room	10sq.m	1	10
Stationary Shop	20sq.m	1	60
Store	25sq.m	1	25
Total			125Sq.m

STUDENT ACTIVITIES ZONE			
-------------------------	--	--	--

Room Type	Area Derivation(sq.m)	No. of Rooms	Total(sq.m)
Table Tennis	-	1	100
Gym	-	1	100
Indoor Football	-	1	350



CONCEPT

CONCEPT

FORM FOLLOW FUNCTION

- FORM FOLLOWS FUNCTION IS A PRINCIPLE OF DESIGN ASSOCIATED WITH LATE 19TH AND EARLY 20TH CENTURY ARCHITECTURE AND INDUSTRIAL DESIGN IN GENERAL, WHICH STATES THAT THE SHAPE OF A BUILDING OR OBJECT SHOULD PRIMARILY RELATE TO ITS INTENDED FUNCTION OR PURPOSE.

F O R M



THE DESIGN OF THE
OBJECT OR BUILDING

F O L L O W



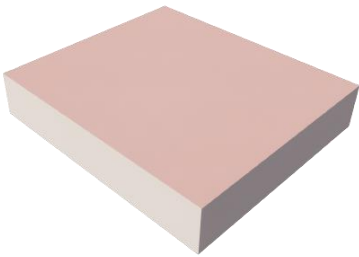
FORM COMES BEFORE
FUNCTION

F U N C T I O N

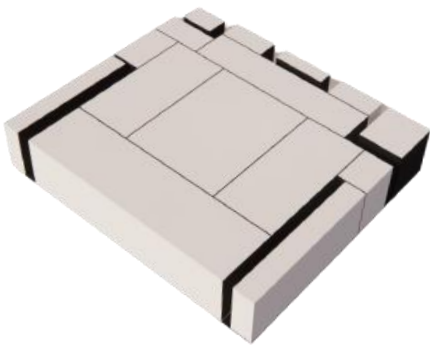


THE USE OF THE
OBJECTS

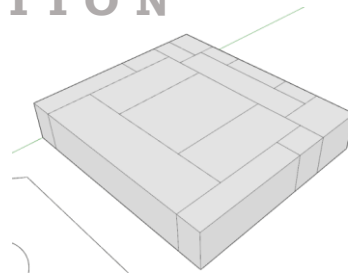
FORM EVOLUTION



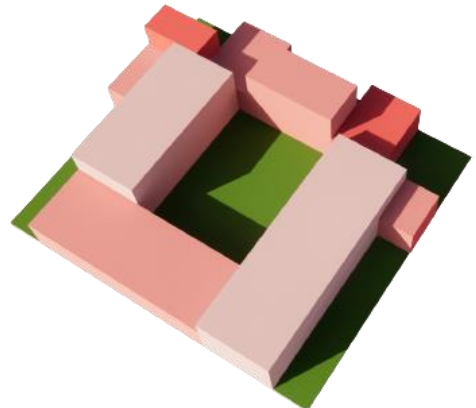
ALL THE AREA PROVIDED ARE LAID OUT ON THE
BUILDING SITE



THEN THESE BLOCKS ARE ARRANGED
ACCORDING TO THE PROXIMITY AND
INTERDEPARTMENTAL RELATIONSHIPS
BETWEEN THEM.



THE BUILDING IS THEN DIVIDED
ACCORDING TO DIFFERENT FUNCTIONS AND
THE BLOCKS ARE THEN SIZED ACCORDING
TO THE AREA REQUIREMENT OF EACH
DEPARTMENT



VARIOUS INTERNAL AND EXTERNAL COURTYARDS
ARE THEN CREATED WHICH CREATES
CONDITIONS FOR BETTER LIGHT, CLEAR VIEW
AND VARIOUS SPACES FOR PERSONAL AND
SOCIAL INTERACTIONS, WHICH ALTOGETHER
HELPS IN HEALING THE PERSON THROUGH
ARCHITECTURE.

WHAT IS BIOPHILIA?

BIOPHILIA, A CONCEPT FIRST POPULARIZED BY EDWARD O. WILSON IN 1984, DESCRIBES THE INNATE RELATIONSHIP BETWEEN HUMANS AND NATURE, AND CONCERNS THE NEED WE HAVE TO BE CONTINUALLY CONNECTED TO NATURE. PLENTY OF RESEARCH CONFIRMS THIS HUMAN PREFERENCE FOR THE NATURAL, RATHER THAN BUILT ENVIRONMENT.



THE TERM "BIOPHILIA" MEANS LOVE OF LIFE OR LIVING SYSTEMS." IT WAS FIRST USED BY ERICH FROMM TO DESCRIBE A PSYCHOLOGICAL ORIENTATION OF BEING ATTRACTED TO ALL THAT IS ALIVE AND VITAL.

Biophilic design

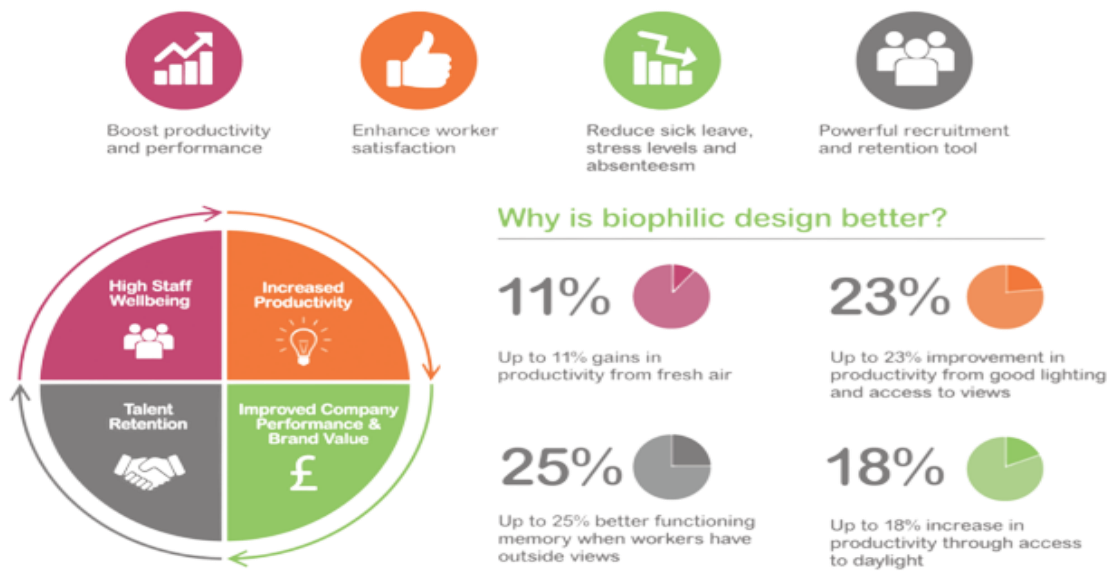
IN ARCHITECTURE, BIOPHILIC DESIGN IS A SUSTAINABLE DESIGN STRATEGY THAT INCORPORATES RECONNECTING PEOPLE WITH THE NATURAL ENVIRONMENT. IT MAY BE SEEN AS A NECESSARY COMPLEMENT TO GREEN ARCHITECTURE, WHICH DECREASES THE ENVIRONMENTAL IMPACT OF THE BUILT WORLD BUT DOES NOT ADDRESS HUMAN RECONNECTION WITH THE NATURAL WORLD.

WHY BIOPHILIC DESIGN?

THE ARCHITECTURE OF MODERN UNIVERSITIES HAS LESSENED STUDENTS MULTISENSORY FOCUS AND ENGAGEMENT WITH NATURE.

- THE BIOPHILIC DESIGN CONCEPT HAS CONTINUED TO DEVELOP OVER THE PAST DECADE TO EMPLOY THE CONDITIONS AND ELEMENTS OF NATURE, AND HAS BEEN IMPLEMENTED TO PROMOTE PHYSICAL, SOCIAL, INTELLECTUAL AND PSYCHOLOGICAL WELLBEING.
- IT SIGNIFICANTLY INFORMS THE DESIGN OF TODAY'S ACADEMIC BUILDINGS TO LEVERAGE THE POTENTIAL OF CREATIVITY, PRODUCTIVITY, SELF-ESTEEM AND WELLBEING FOR KNOWLEDGE SEEKERS.
- IT ALSO HELPS LOWER THE NEGATIVE ECOLOGICAL IMPACT AND INCREASES THE OPERATIONAL EFFICIENCY OF AN INSTITUTIONAL CAMPUS REGARDING ENERGY, RESOURCE CONSUMPTION AND WASTE CONTROL.

The mission of architects and urban planners has become more complex As disciplines such as psychology, physiology, sociology and Anthropology provide vital information about how people perceive Space, behave within that space and develop preferences.Multidisciplinary studies have demonstrated the links between exposure to nature and improved performance of academic, intellectual and cognitive tasks in the workplace and other educational spaces.



Benefits of Biophilic Architecture

BIOPHILIC ARCHITECTURE GIVES BUILDINGS A UNIQUE APPEARANCE AND PROVIDES US WITH VARIOUS BENEFITS, INCLUDING:

1 | IMPROVED CREATIVITY AND PRODUCTIVITY

People who work in ‘lean’ workspaces devoid of natural features do not meet their potential for productivity . exeter university did multiple studies that showed that adding several houseplants to a ‘lean’ workspace could increase employees’ productivity by 15%. Employees surrounded by plants are more efficient and are better at creative thought.



2 | STRESS RELIEF

The environment can create a lot of tension in students because of the constant demand for productivity. People are often locked in a “fight or flight” state that produces many stress hormones in their bodies. However, biophilic design lowers their stress hormones, heart rate, and blood pressure when people can access nature regularly.

3 | PLANTS IMPROVE AIR QUALITY

Buildings frequently suffer from poor air quality because of pollution and lack of humidity. Bringing plants into the workplace reduces carbon dioxide and harmful gasses while balancing the moisture level.



Golden Pothos



Peace Lily Plant

4 | A COLOUR SCHEME BASED ON NATURE TO RELAX STUDENTS

Being surrounded by earthy greens and browns or the calm blues of a lake, one of the key benefits of being outdoors, is that it calms down the mind. Some scientists believe that the colour green lowers stress levels because the body associates it with vegetation, even when there are no trees or plants present.



5 | NATURAL SHAPES AND TEXTURES TO INCREASE PROSOCIAL BEHAVIOUR

In order to create an environment that feels natural, biophilic designers use natural forms and textures (e.g., leaves, curves, lush grass, geometric patterns found in nature).

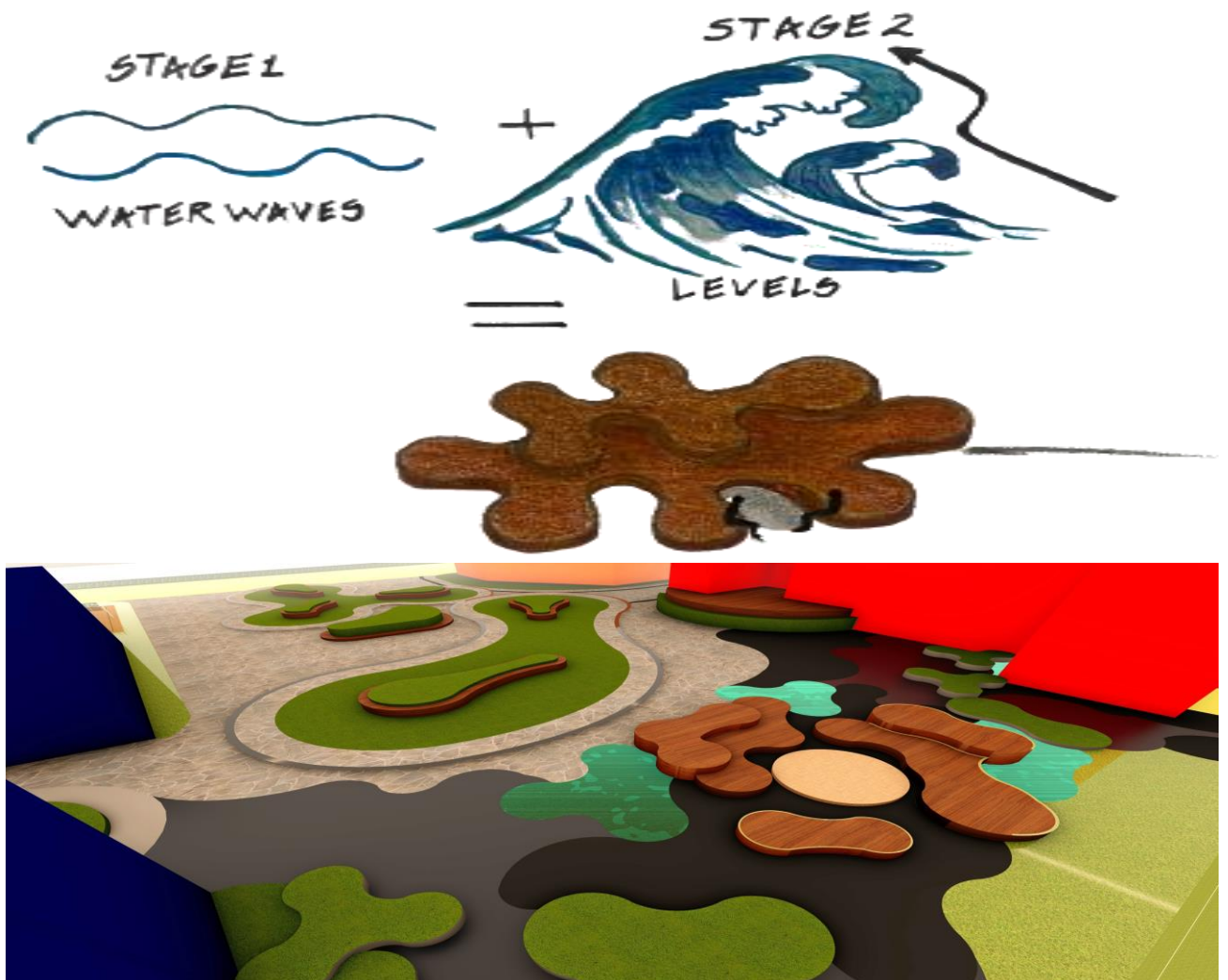


BIOPHILIC PATTERNS WE ARE USING

1. VISUAL CONNECTION WITH NATURE
2. NON-VISUAL CONNECTION WITH NATURE
3. THERMAL AND AIR-FLOW VARIABILITY
4. PRESENCE OF WATER
5. DYNAMIC AND DIFFUSED LIGHT
6. BIOMORPHIC FORMS AND PATTERNS
7. MATERIAL CONNECTION WITH NATURE
8. PROSPECT
9. REFUGE

OAT / RECREATIONAL AREA

THE OAT AND PATH OFFERS SOCIAL EXPERIENCES AND POINTS OF COMMUNITY CONNECTION. THE PROMENADE CONSISTS OF A NETWORK OF PLANTERS, RAIN GARDENS AND MULTI-DIRECTIONAL SOCIAL SEATING. 'THE WATER CARPET' IS DESIGNED TO ALLOW FOR VISUAL CONNECTIVITY WHILST CREATING A SENSE OF ARRIVAL AND TRANSITION. THE COMBINATION OF SHALLOW WATER, PLAYFUL EDGES, LIGHTING DISPLAYS, TEXTURAL CONTRAST AND PLANTING POCKETS OFFER A VISUAL AND PHYSICAL THEATRICAL EXPERIENCE AND JOURNEY, BETWEEN THE URBAN PROMENADE AND THE BLOCKS



NOW A DAYS THE DESIGN IS A SERIES OF DERELICT SPACES WHICH OFFERED NO SOCIAL OR ENVIRONMENTAL VALUE TO THE COMMUNITY. BORDERING A UNIVERSITY CAMPUS, THE SITE'S PERIMETER WALLS RESULTED IN THE STUDENT ACCOMMODATION BEING PHYSICALLY AND SOCIALLY DISCONNECTED, WITH ONLY A SMALL NUMBER OF NARROW DEGRADED ALLEYWAYS ALLOWING ACCESS. RESPONDING TO THE UNIQUE CHARACTERISTICS OF THE STUDENTS, THE DESIGN OFFERS CONNECTION IN EVERY DIRECTION, CREATING A BARRIER-FREE SKYPARK AND PEDESTRIAN NETWORK WHICH STRETCHES OVER THE SITE.

MORPHOGENESIS and SUSTAINABLE DEVELOPMENT

The recreational area is formed by geometric curves, indicating the main direction of transit through the yard and enveloping the functional accents. It also divides a quiet and efficient part with landscaping and benches.

Island-shape zones are oases of landscaping. The green islands of the quiet part of the path are surrounded by smooth concrete curved benches covered with the strongest Ukrainian wood - acacia. Benches have an increase in the height of seats and a decrease in the place where there are no seats. Inside bushes, there are colourful accents. These are liquidambar trees [literally liquid amber], which turn yellow in five shades in autumn.

Maple Tree

The project is defined with a signature tree, one that is native (indigenous) and held strong meaning and relation to the natural environment. Maple Tree, scientifically known as *Acer*, is a genus of trees and shrubs with about 132 species which are primarily found in Asia.

It's an amazing and unique species with a beautiful evergreen canopy, so ideal to use in close proximity to the water bodies with its limited leaf litter. With the potential to grow up to 30m in height it creates a dense shade at ground level for people to gather and rest from the strong summer temperatures. maple trees, particularly the red maple, are one of the trees that produce the most oxygen. In fact, in a year, a mature maple tree can produce oxygen for two people and absorb 48 pounds (21.77 kg) of carbon dioxide!



RHAPIS EXCELSA – LADY PALM

Lady Palm is also called bamboo palm because of its likeness to bamboo.

Lady Palm makes an excellent and elegant plant that grows best and like to heavy shade. And because of the denseness of it, it also makes a great privacy barrier. As part of NASA's air plant study, Lady Palm has also been outed for its excellent natural air purification.

Pollutants removed

- Formaldehyde
- Xylene
- Ammonia

ANTHURIUM ANDRAEANUM –FLAMINGO LILY

Flamingo Lily or flower is also known as painters palette. It's striking beauty is its calling card. It's red pointed leaves almost look like they have been painted with nail polish.

But beauty isn't everything and flamingo flowers have another allure.

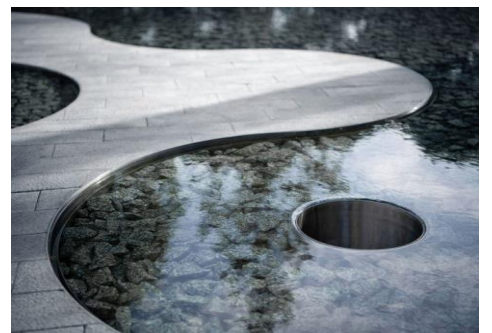
They are one of nature's top air purifiers.

Pollutants removed

- Toluene
- Formaldehyde
- Xylene
- Ammonia

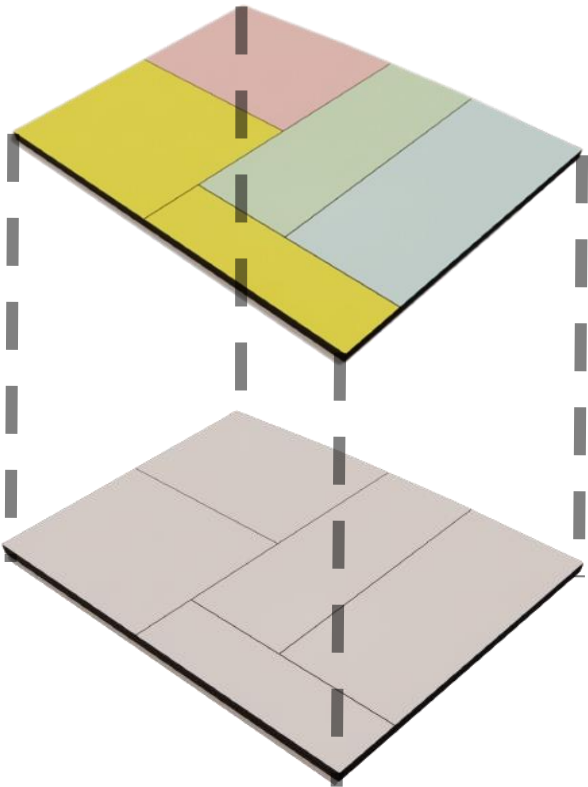






The "Water Carpet", is designed to allow for visual connectivity whilst creating an interactive & mesmerizing sense of arrival. The combination of shallow water, playful edges, lighting displays, textural contrast and planting offer a visual and physical theatrical experience



ZONING





SITE ZONING



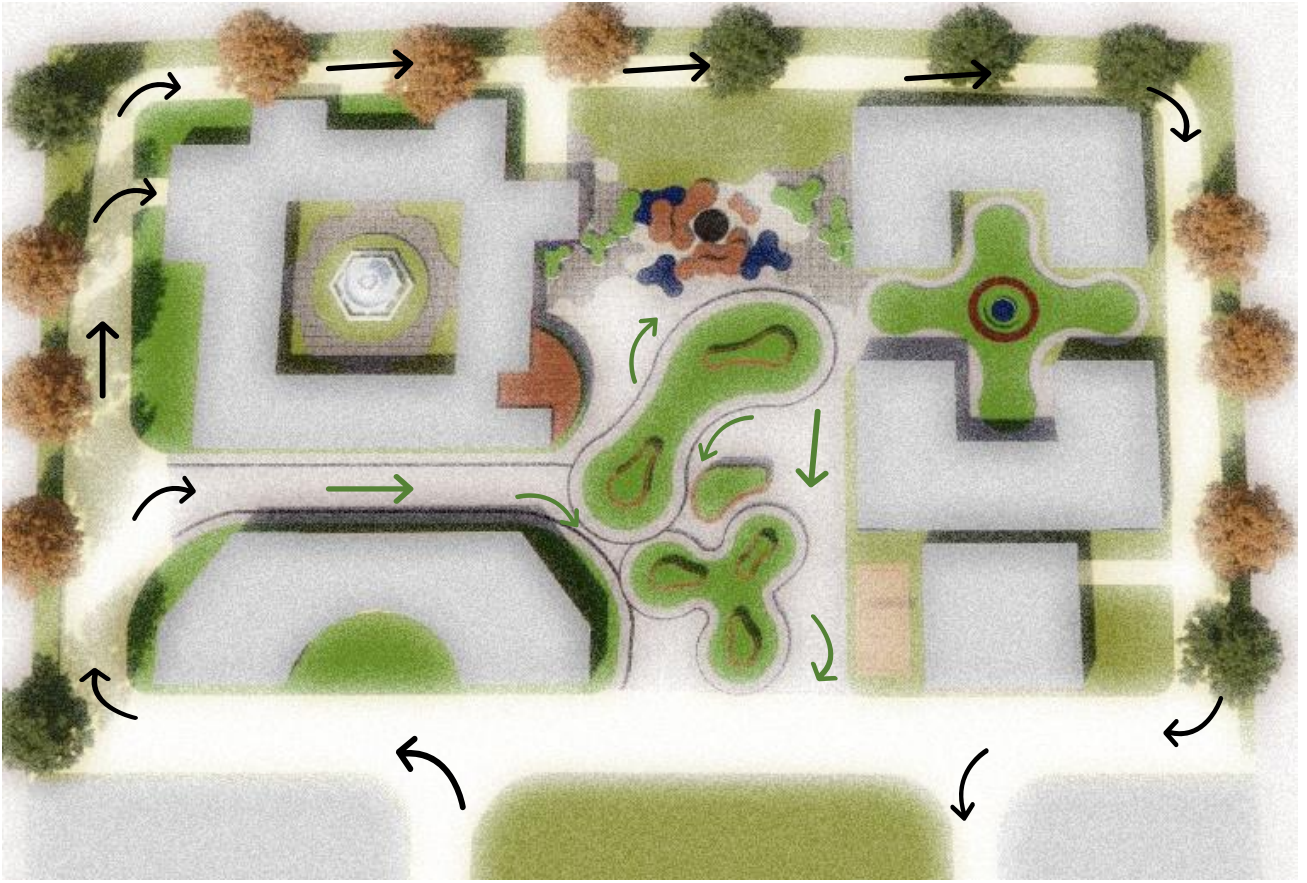
-  PUBLIC ZONE (OFFICES , ADMINISTRATION , ETC.)
-  SEMI PRIVATE ZONE (ACADEMIC)
-  PRIVATE ZONE (HOSTEL)
-  RECREATIONAL

THE RELATIONSHIP OF EACH ZONE IS ESTABLISHED BY STUDYING THE MOVEMENT OF PEOPLE BETWEEN THEM,AND CONSIDERING THE FREQUENCY OF TRAVEL. THIS HELPS IN ESTABLISHING THE LOCATION OF THE ZONES RESPECT TO EACH OTHER AND CREATING THE MOVEMENT NETWORK OF THE SITE.



-  PATHWAY
-  SEMI PRIVATE ZONE (ACADEMIC)
-  PRIVATE ZONE (HOSTEL)
-  PARKING
-  COURTS
-  MESS
-  RECREATIONAL

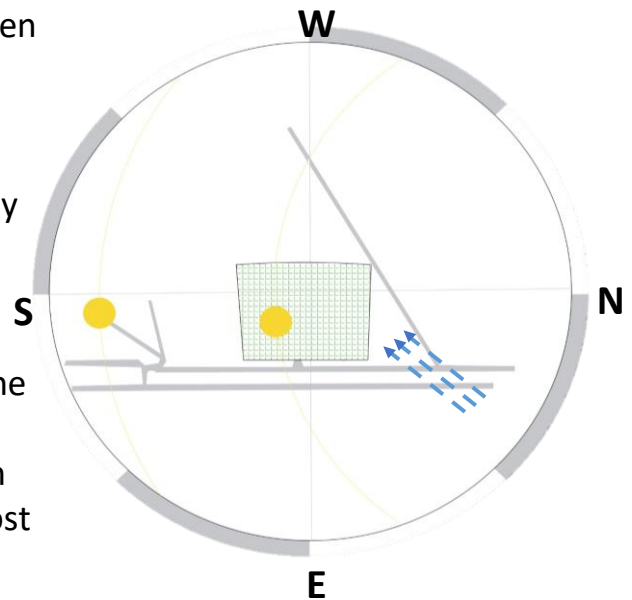
CIRCULATION



SUNPATH

The frequency of pedestrian movement between the hostels and the academic block is highest suggesting to place academic block in close proximity to hostel blocks but also close to the main entrance. The administrative block is rarely to be visited by the students, hence locating it nearest to the main entrance.

The residential zone consisting of hostels fall under the private zone and are kept towards the interior of the site. This helps in providing privacy and security in the zone. The pedestrian movement and wind direction on site were most considered to create building forms and their location.



SITE ZONING WAS CONSIDERED AFTER THROUGH STUDY OF SOLAR CONDITIONS FOR SUMMER AND WINTER SUN PATTERNS AND WIND DIRECTIONS

SECOND FLOOR

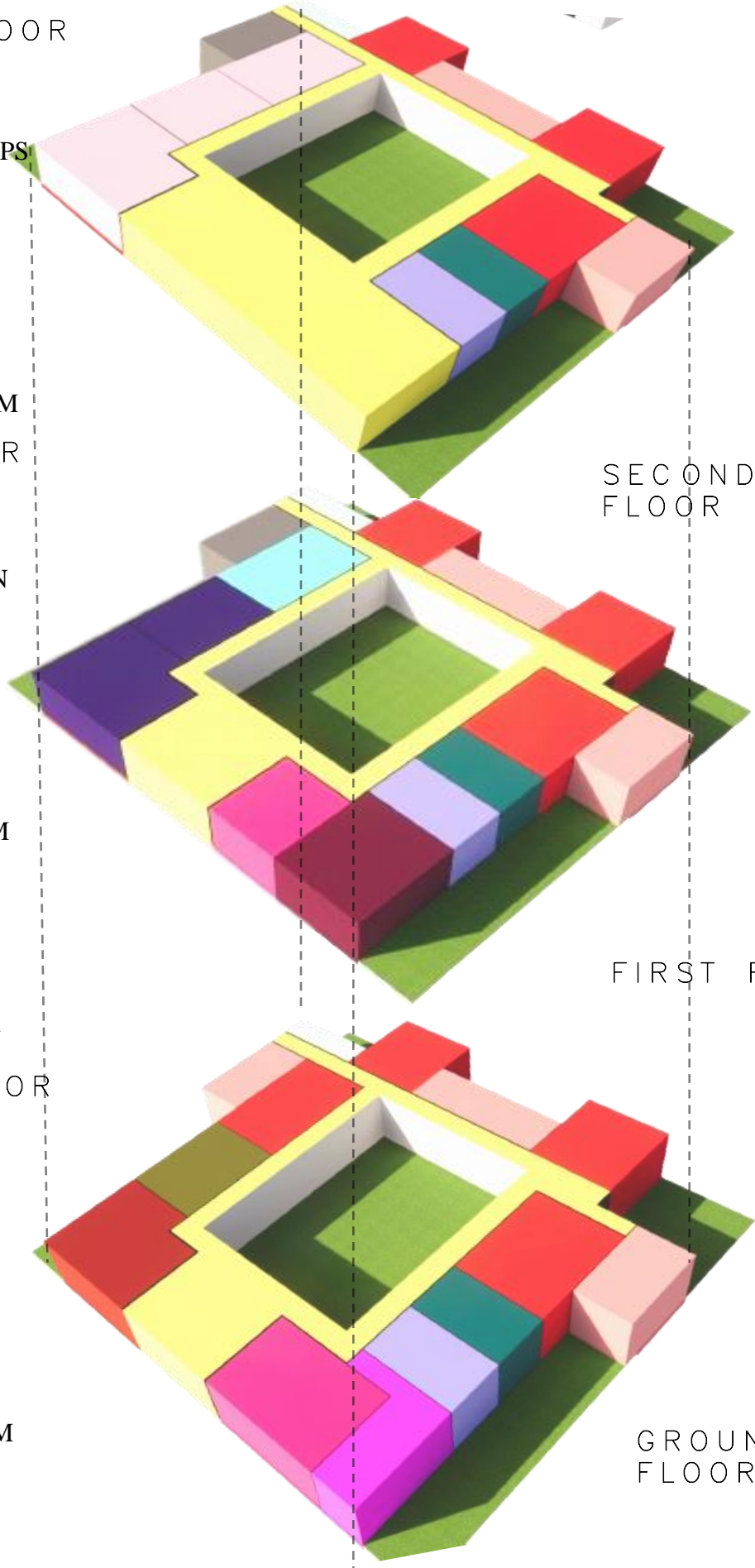
- PASSAGE
- WORKSHOPS
- STUDIOS
- LECTURE ROOMS
- SERVICES
- WASHROOM

FIRST FLOOR

- PASSAGE
- EXHIBITION AREA
- STUDIOS
- LECTURE ROOMS
- SERVICES
- WASHROOM
- FACULTY ROOM
- LIBRARY
- COMPUTER ROOM

GROUND FLOOR

- PASSAGE
- MATERIAL ROOM
- STUDIOS
- LECTURE ROOMS
- SERVICES
- WASHROOM
- FACULTY ROOM
- ROOM CANTEN
- AMENITIES





PLANS

SECTIONS/ELEVATION

ELECTIVE

LANDSCAPING



ELECTIVE

INTERIOR

DESIGN STUDIO



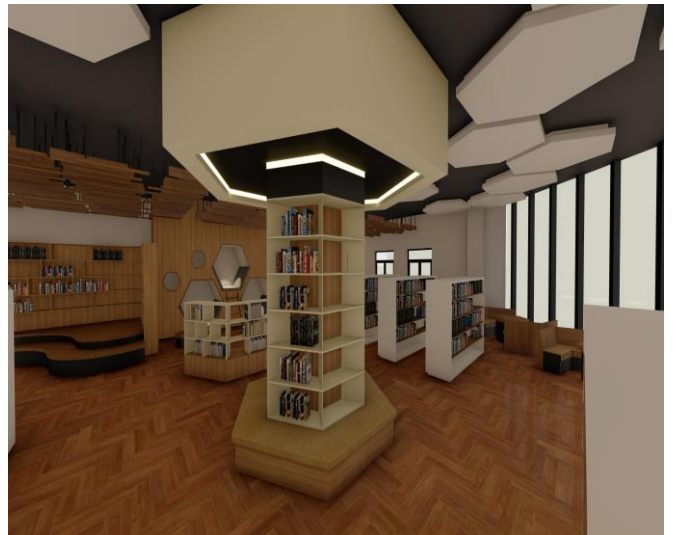
LECTURE ROOM



COMPUTER LAB



LIBRARY



CONFERENCE ROOM



CHANCELLOR'S ROOM



PA ROOM



HELP - CENTER



WAITING/RECEPTION AREA



3D VIEWS



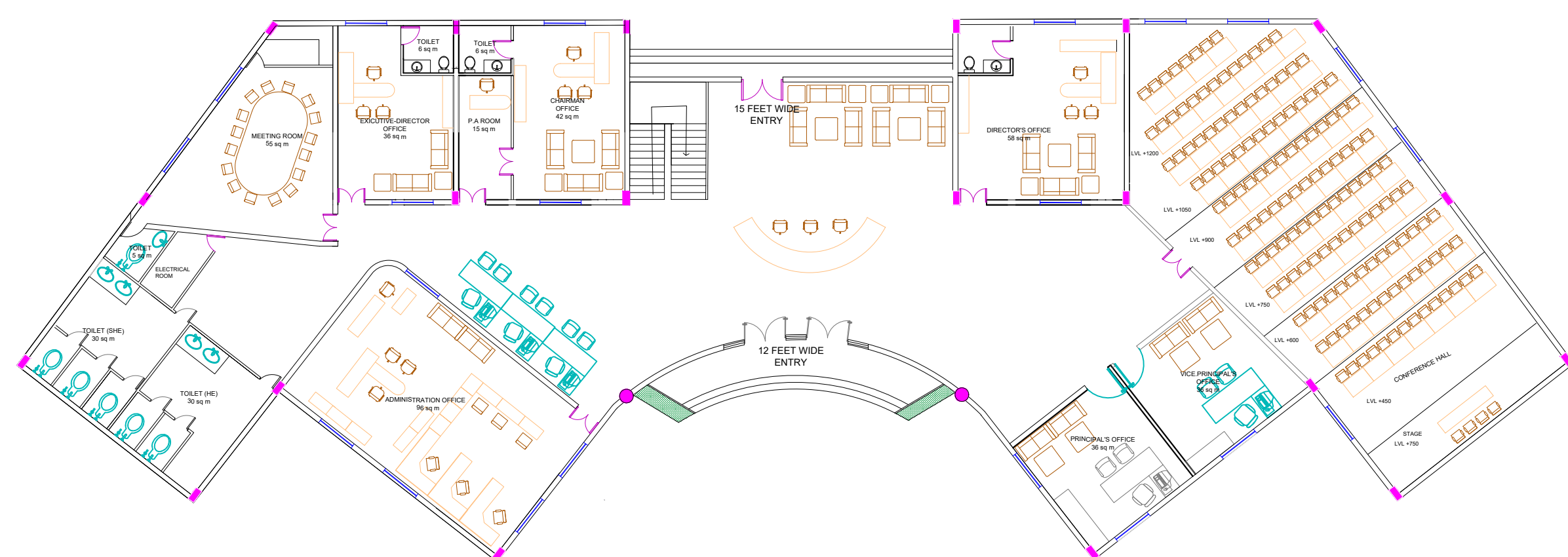
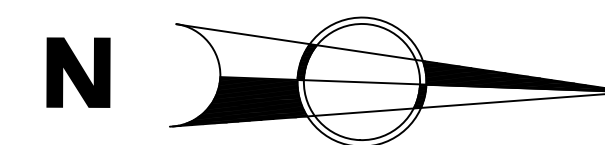




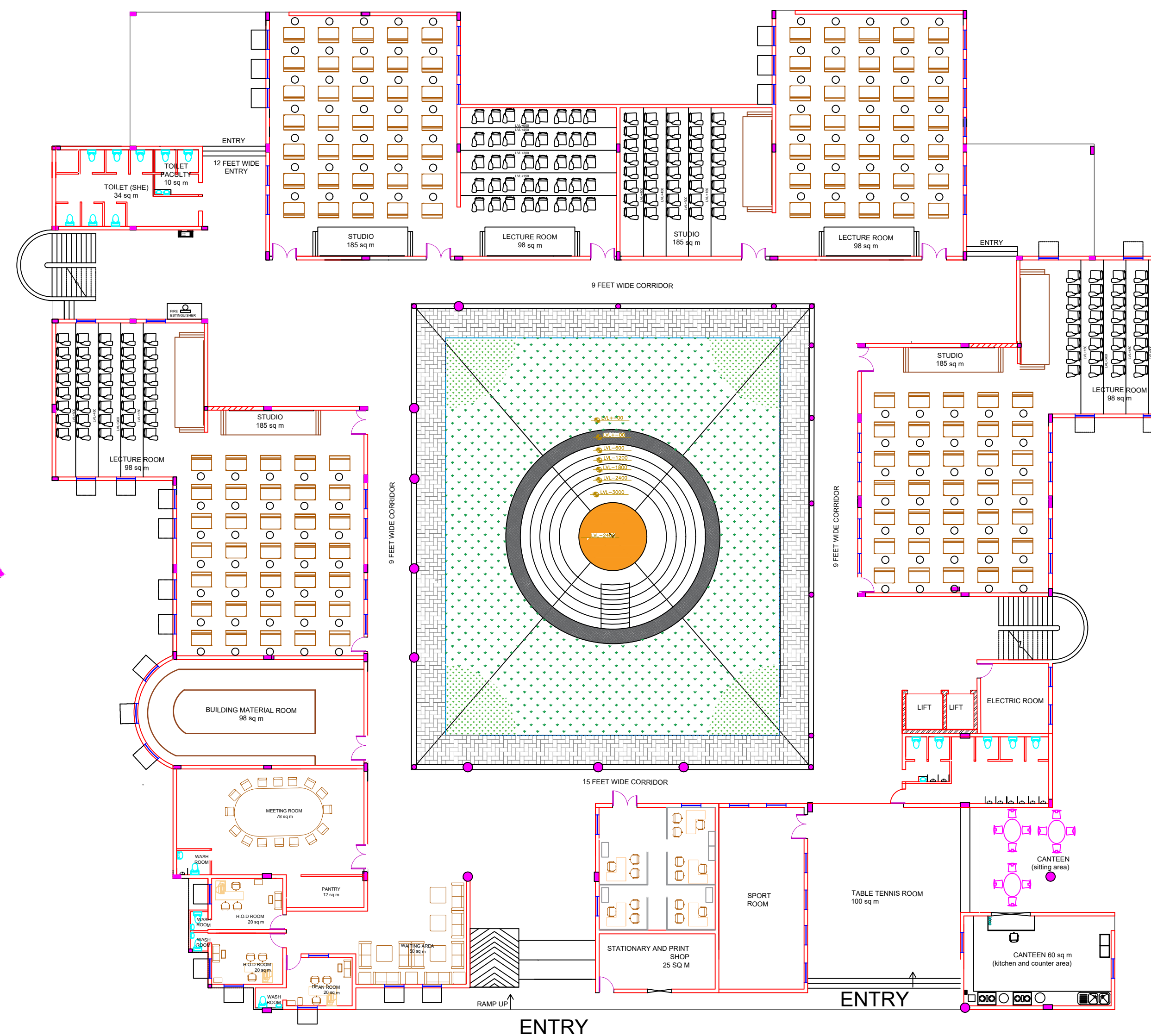
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- HUDA MASTER PLAN
- TIME SAVER STANDARDS
- CEPT WEBSITE
- WWW.GOOGLE.COM
- WWW.NID.EDU
- WWW.WIKIPEDIA.COM

ORIENTATION



ADMINISTRATION
FLOOR PLAN




GROUND FLOOR

TITLE :-
FLOOR PLAN

SHEET NO:-

SCALE :-
1:100

SUBMITTED BY-
MOHD HASNAIN
1180101028
5th YEAR

N 



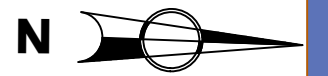
SECOND FLOOR

SHEET NO:-

SCALE :-
1:100

SUBMITTED BY-
MOHD HASNAIN
1180101028
5th YEAR

ORIENTATION



AREA STATEMENT

NO.OF ROOM 24
NO.OF STUDENT
EACH ROOM-3
AREA 28 SQ.M
DIM.6000X4800
CORRIDOR - 2400 WIDE
BALCONY - 900 WIDE

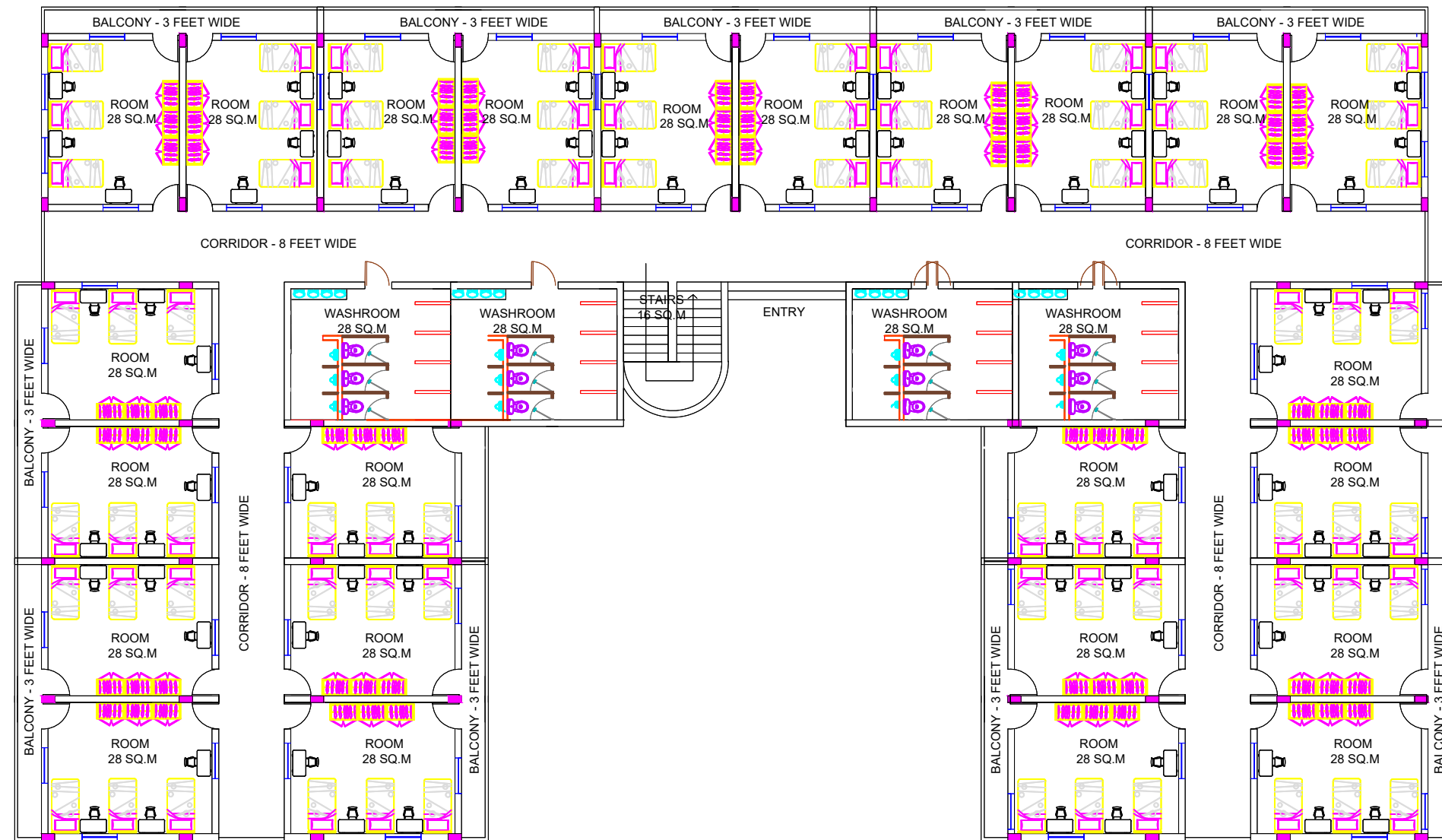
BOYS AND GIRL
HOSTELS LAYOUT
ARE SAME
BUT TOILETS ARE
DIFFERENT
ACCORDENLY

TITLE :-
HOSTEL PLAN

SHEET NO:-

SCALE :-

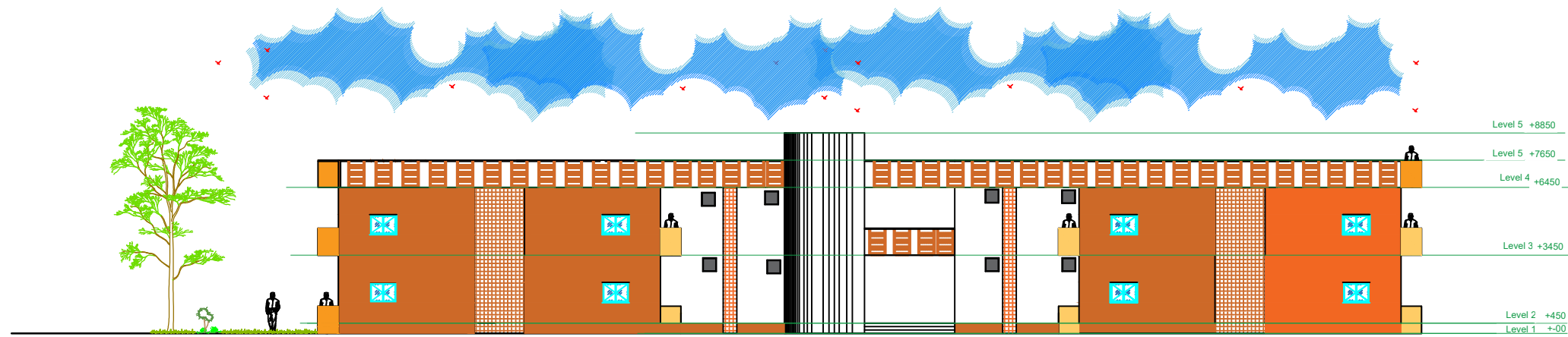
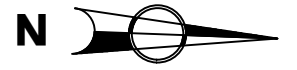
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5th YEAR



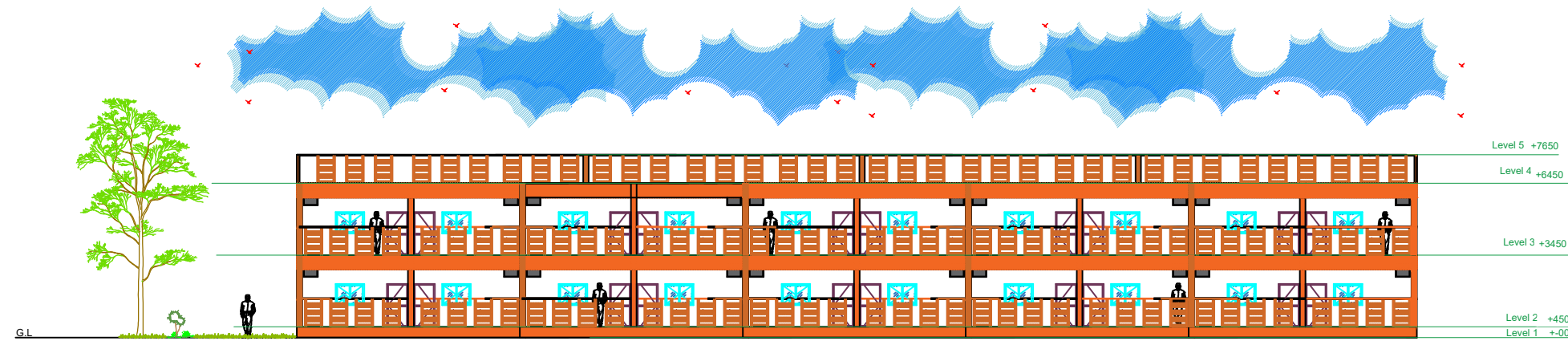
GROUND FLOOR & FIRST FLOOR

GYANJYOTI COLLEGE OF ARCHITECTURE

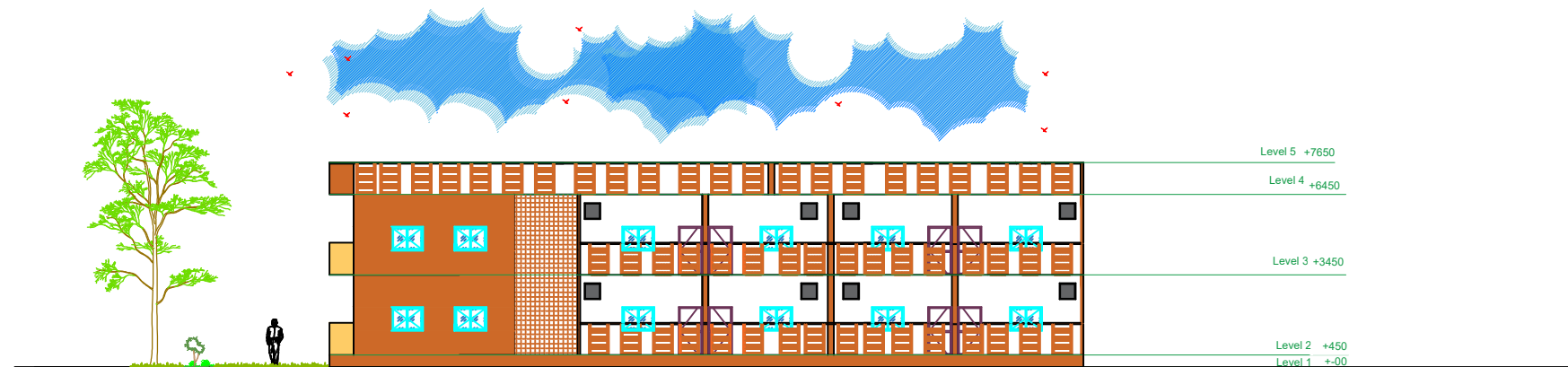
ORIENTATION



WEST ELEVATION



EAST ELEVATION



NORTH ELEVATION

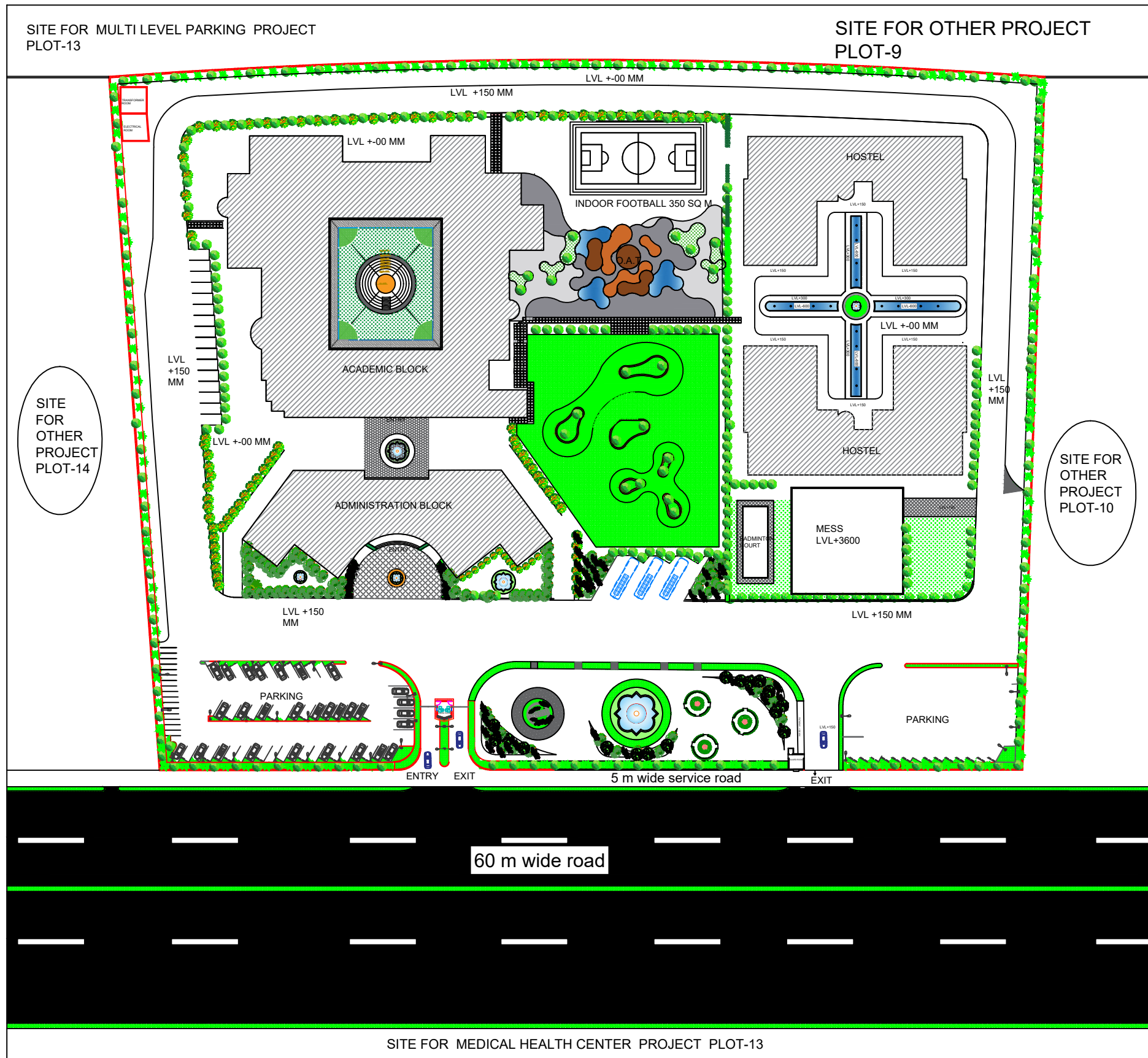
TITLE :-
ELEVATION

SHEET NO:-

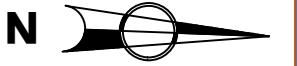
SCALE :-

SUBMITTED BY-
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1180101028
5th YEAR

GYANJYOTI COLLEGE OF ARCHITECTURE



ORIENTATION



TITLE :-
SITE PLAN

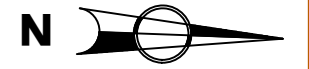
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GYANJYOTI COLLEGE OF ARCHITECTURE

ORIENTATION

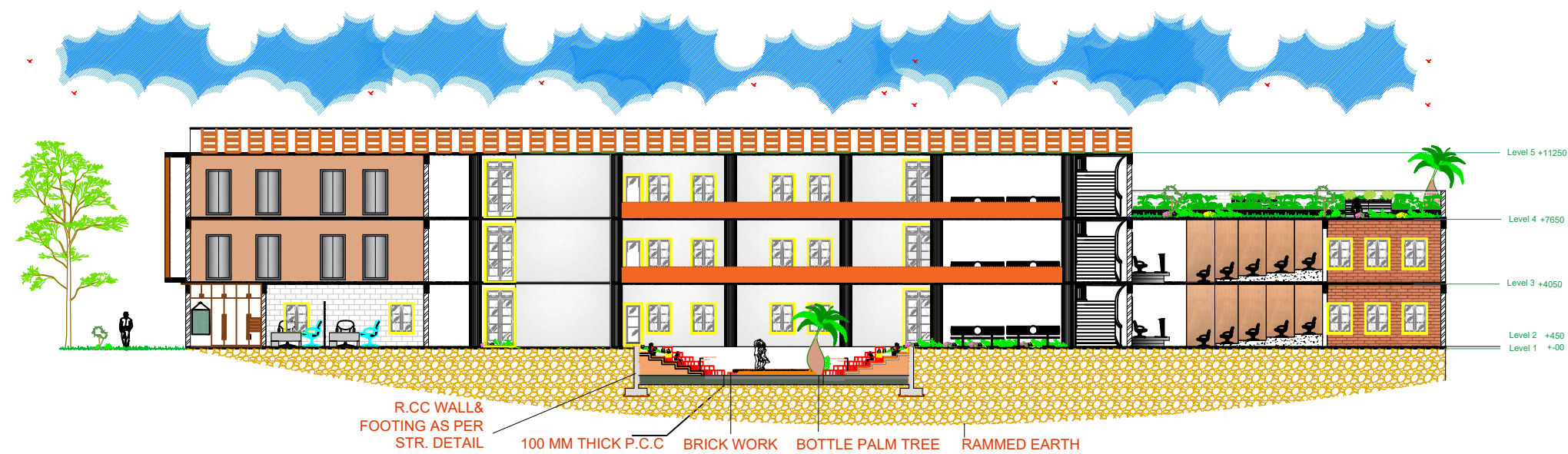


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SECTION

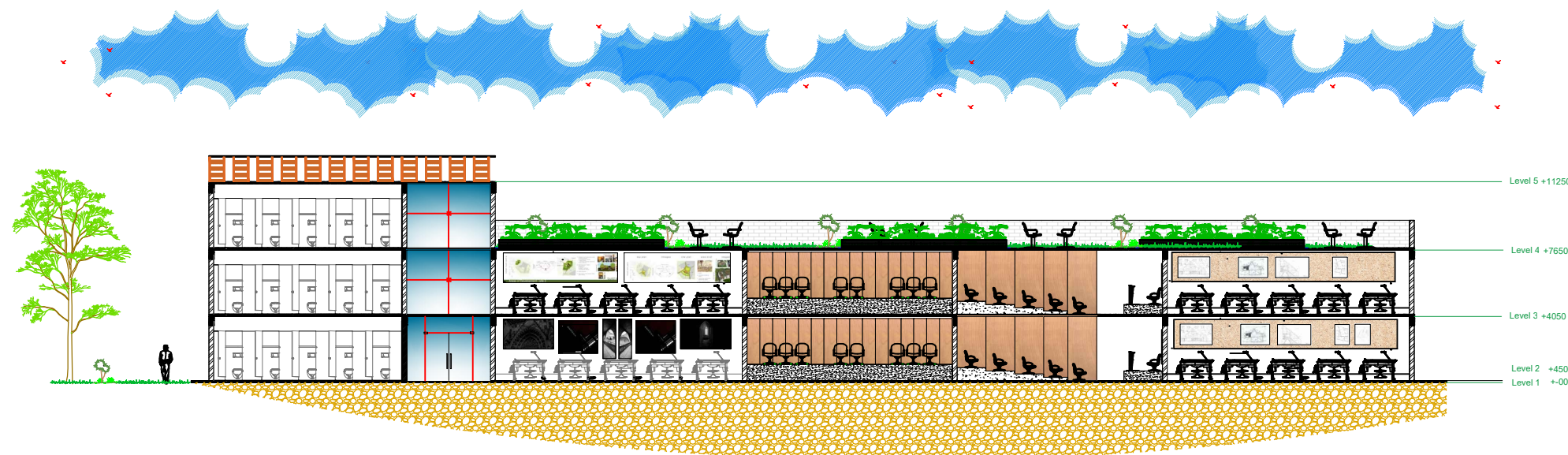
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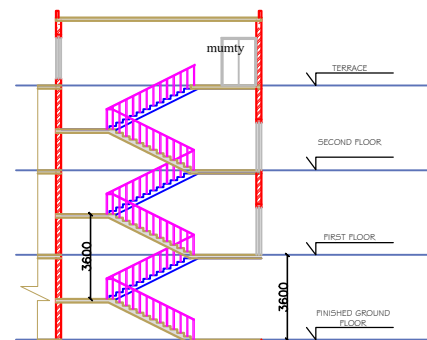
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5th YEAR



SECTION A-A'



SECTION B-B'



SECTION OF STAIRS



SECTIONAL DETAIL

The Façade:

The building is protected from the environment by a double skin façade, which is derived from a traditional building element called the 'Jaali' that can be found in abundance in traditional Rajasthani architecture. The double skin acts as a thermal buffer between the building and the surroundings. The density of the perforated outer skin has been derived using computational shadow analysis based on orientation of the façades. The outer skin sits 4 feet away from the building and reduces the direct heat gain through fenestrations, yet allowing for diffused daylight. The jaali thus, serves the function of 3 filters- air, light, and privacy.

GYANJYOTI COLLEGE OF ARCHITECTURE

ORIENTATION



TITLE :-
ELEVATION

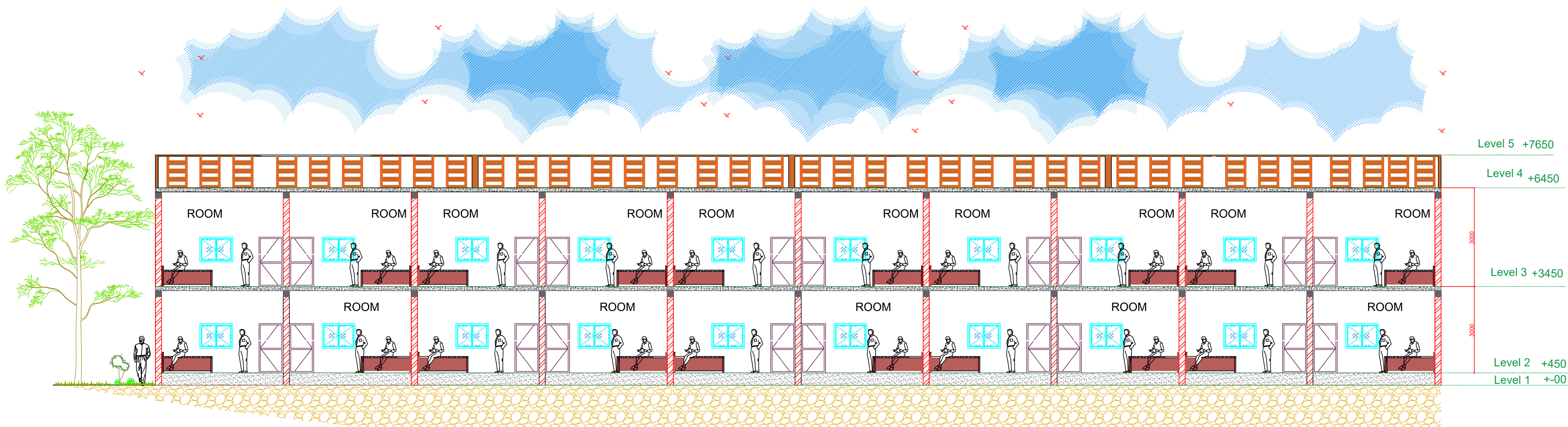
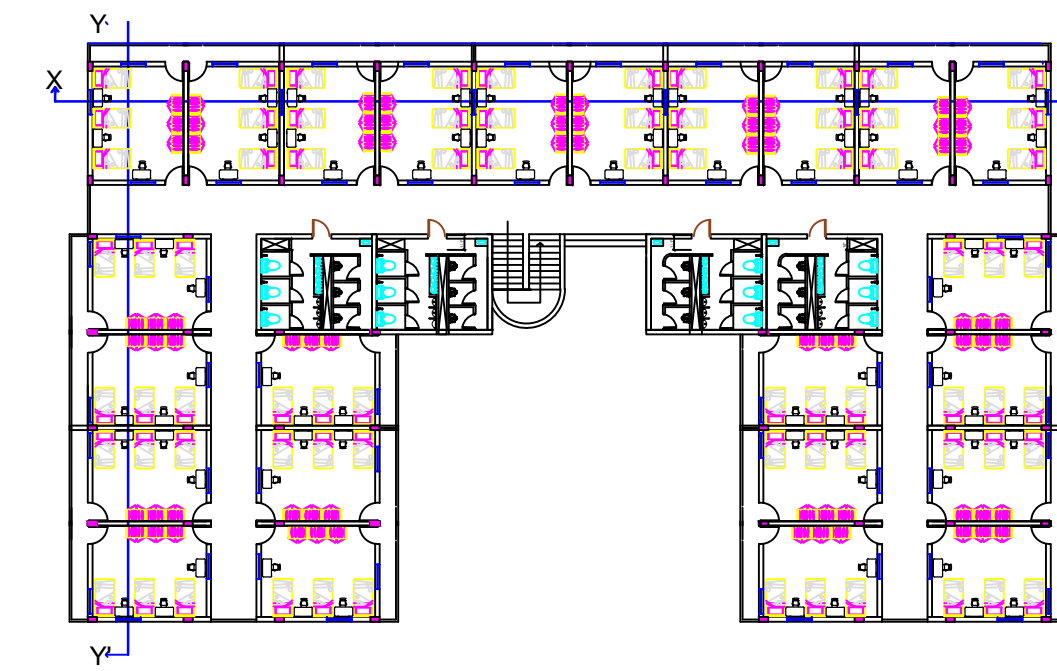
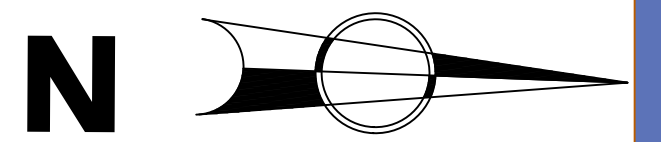
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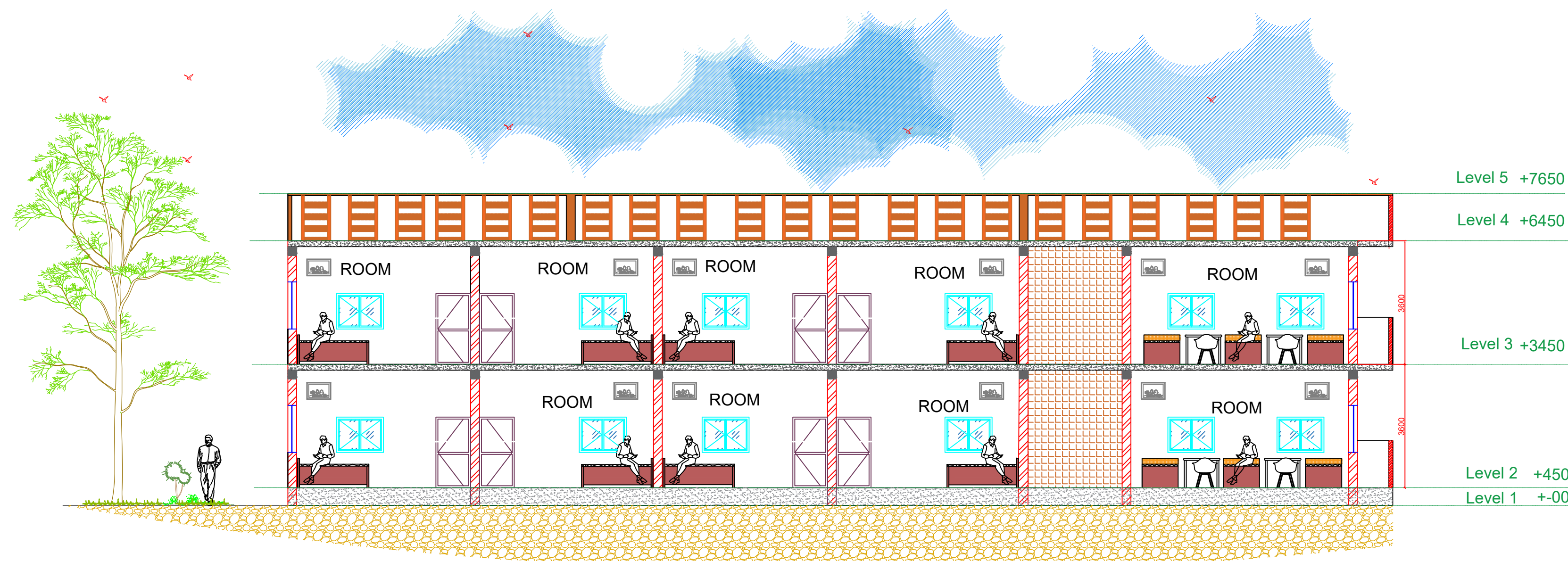
SUBMITTED BY-
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1180101028
5th YEAR



ORIENTATION



SECTION X-X'



SECTION Y-Y'

sill level of window
+900
sill level of door
+450
sill level of ventilator
+2550

TITLE :-

HOSTEL
SECTION

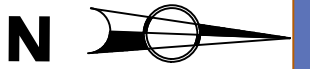
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SCALE :-

1:100

SUBMITTED BY-
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5th YEAR

ORIENTATION



sill level of window
+900
sill level of door
+450
sill level of ventilator
+2550

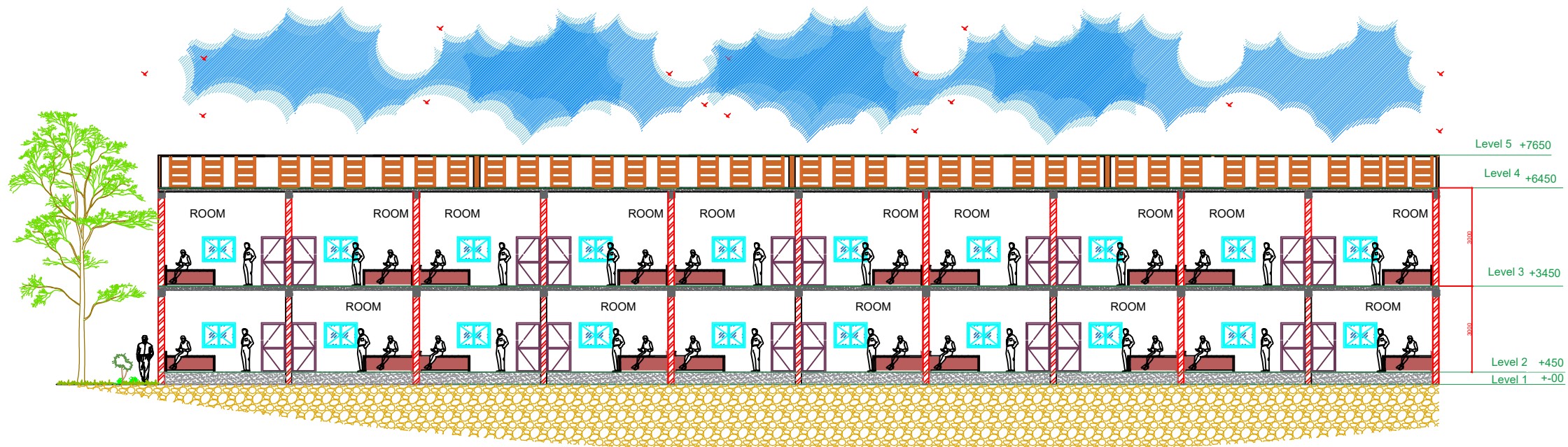
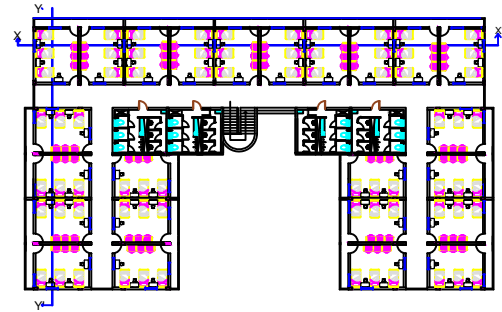
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HOSTEL
SECTION

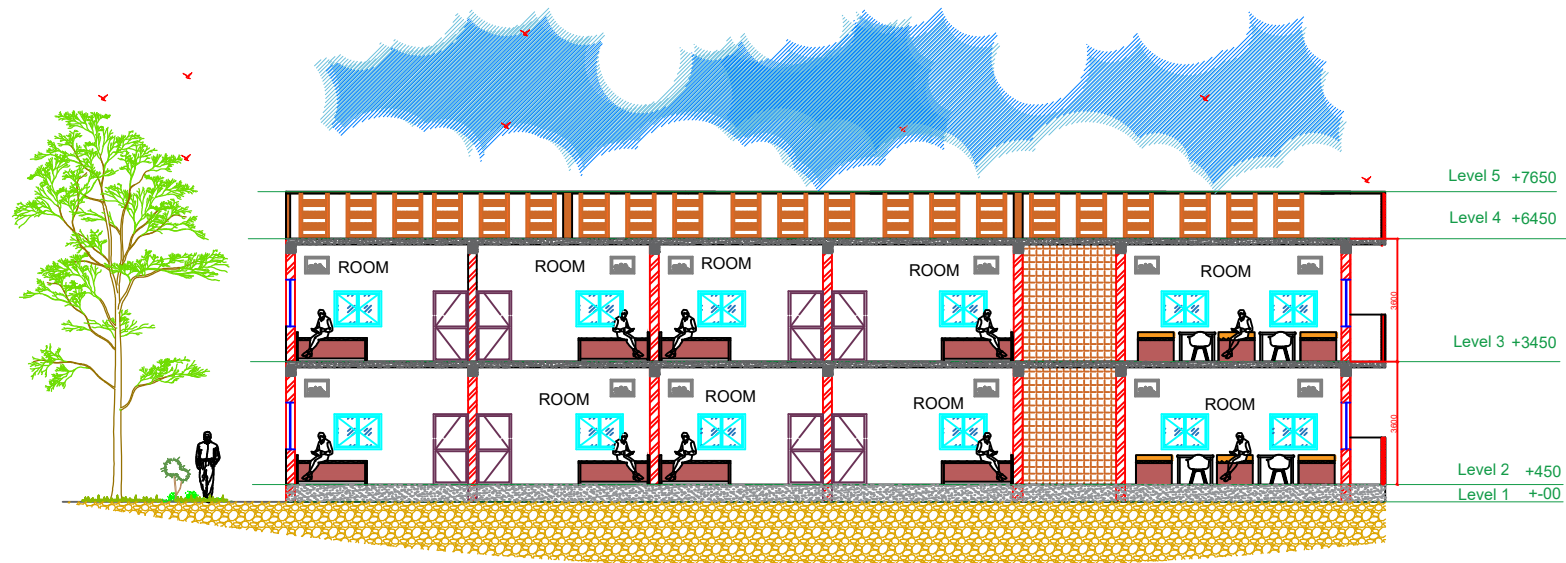
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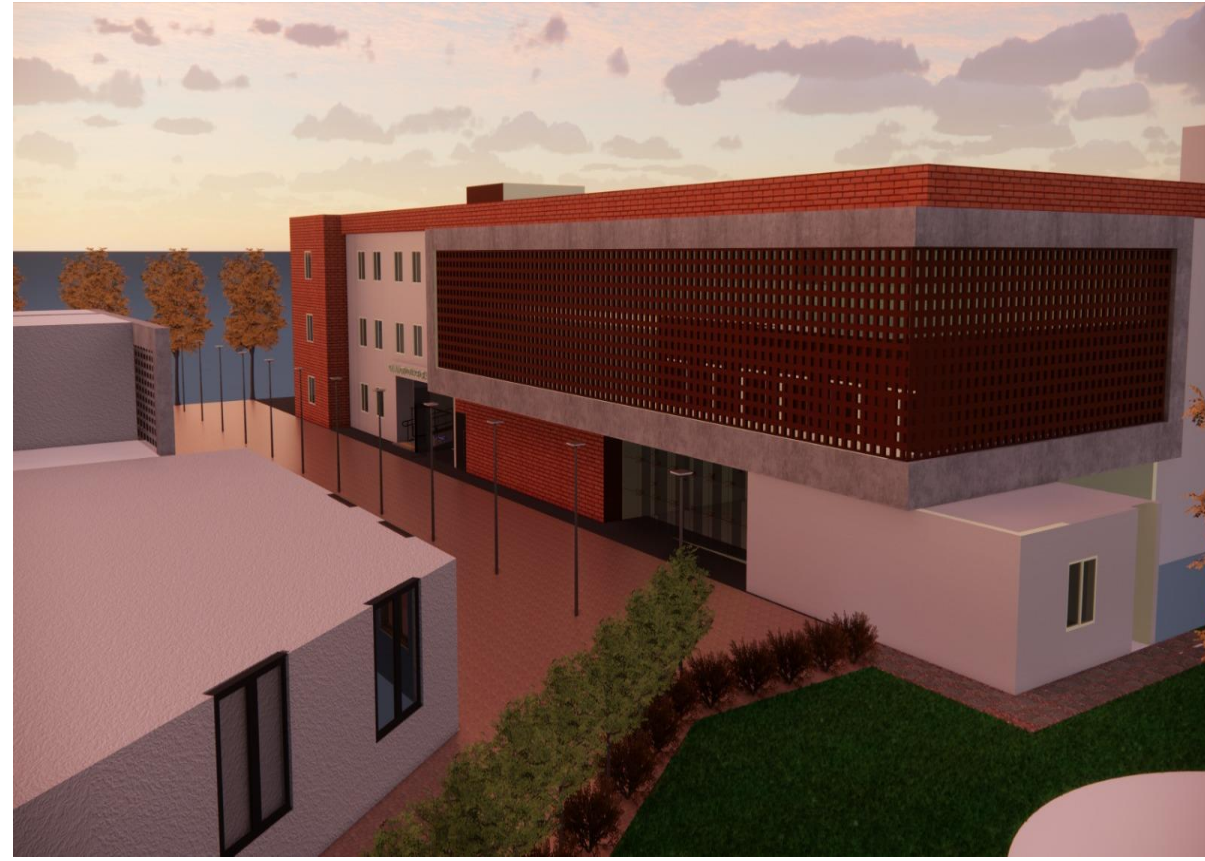


SECTION X-X'

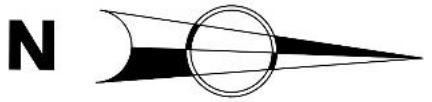


SECTION Y-Y'

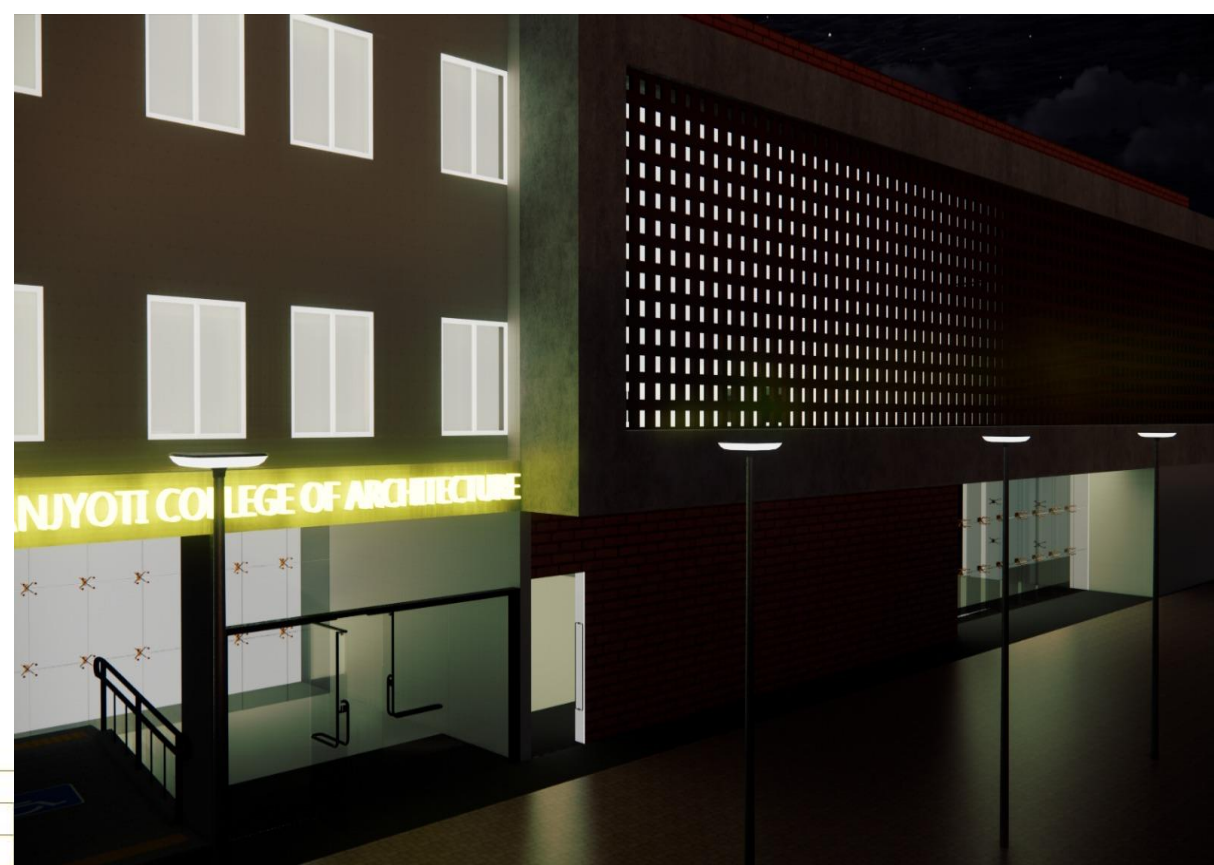
GYANJYOTI COLLEGE OF ARCHITECTURE



ORIENTATION



TITLE :-



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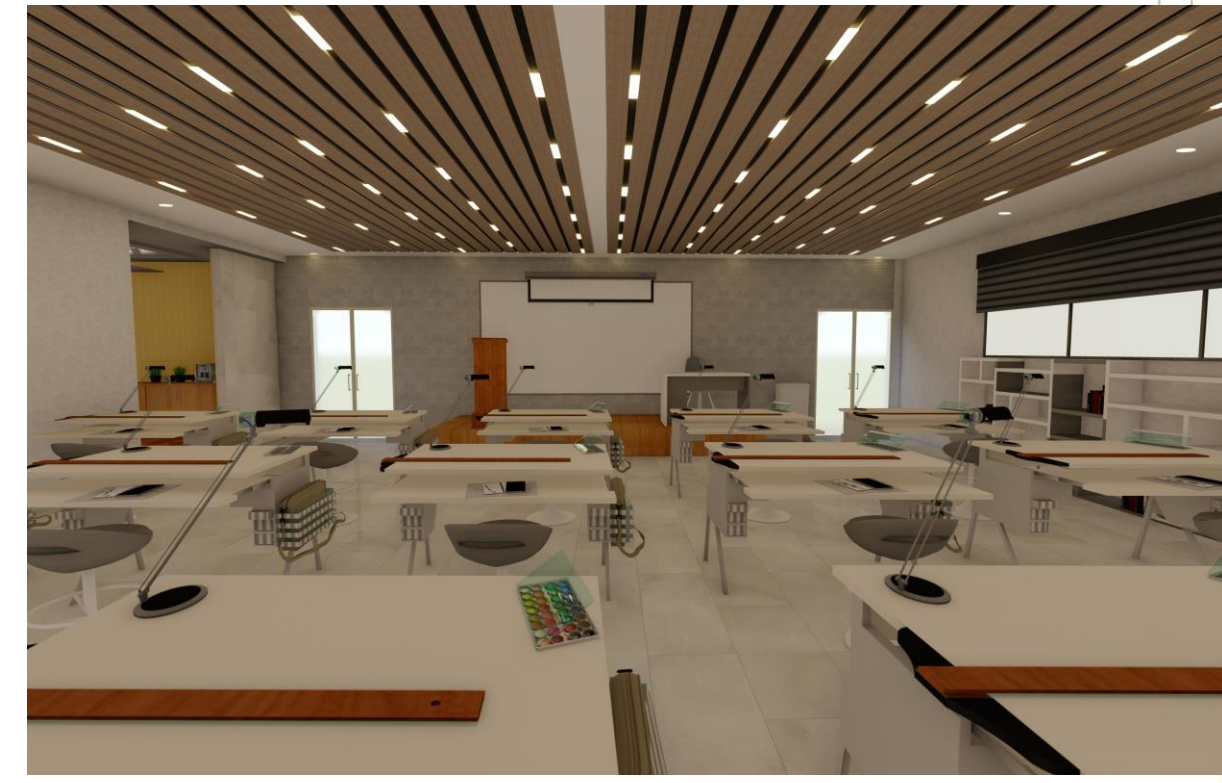
3D VIEWS

SCALE :-

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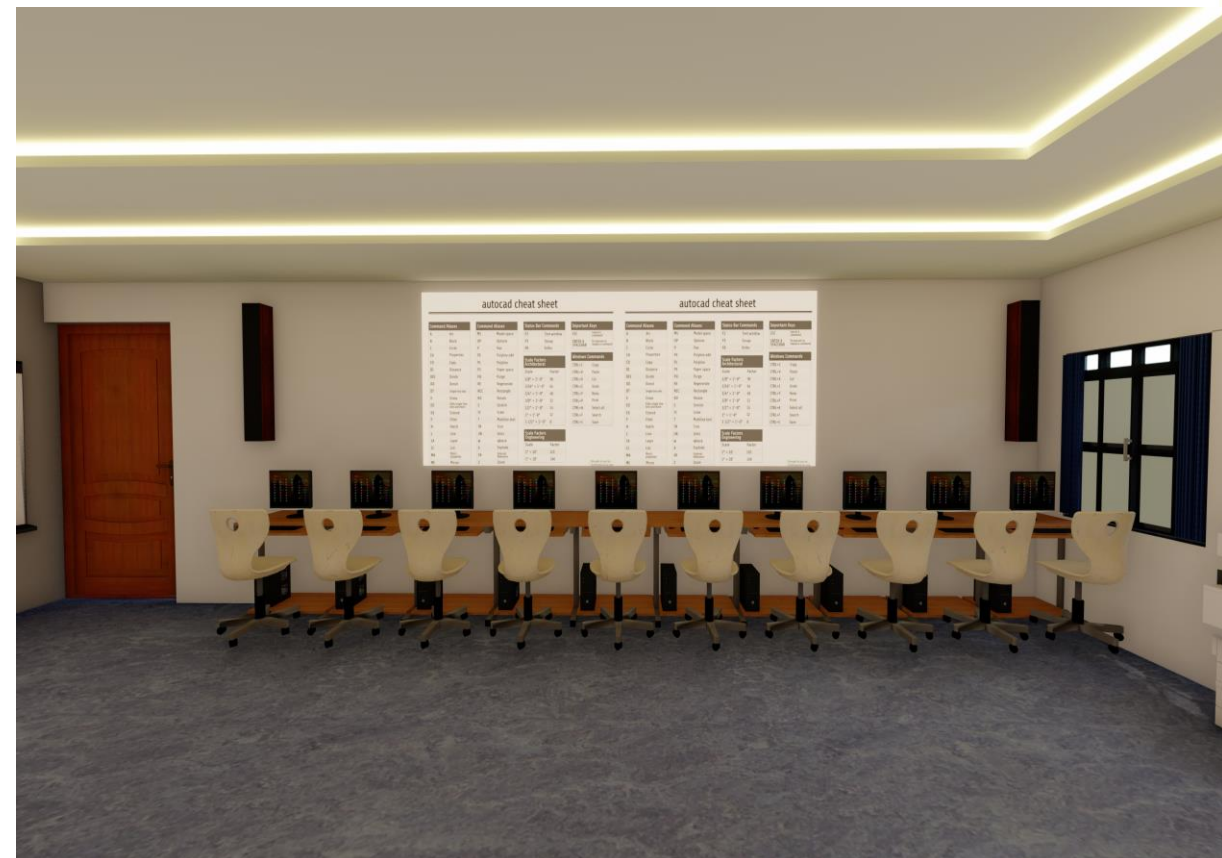
DESIGN STUDIO



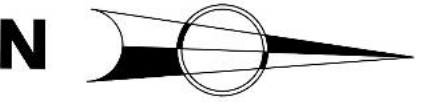
LECTURE ROOM



COMPUTER LAB



ORIENTATION



TITLE :-

ELECTIVE 2 -
INTERIOR

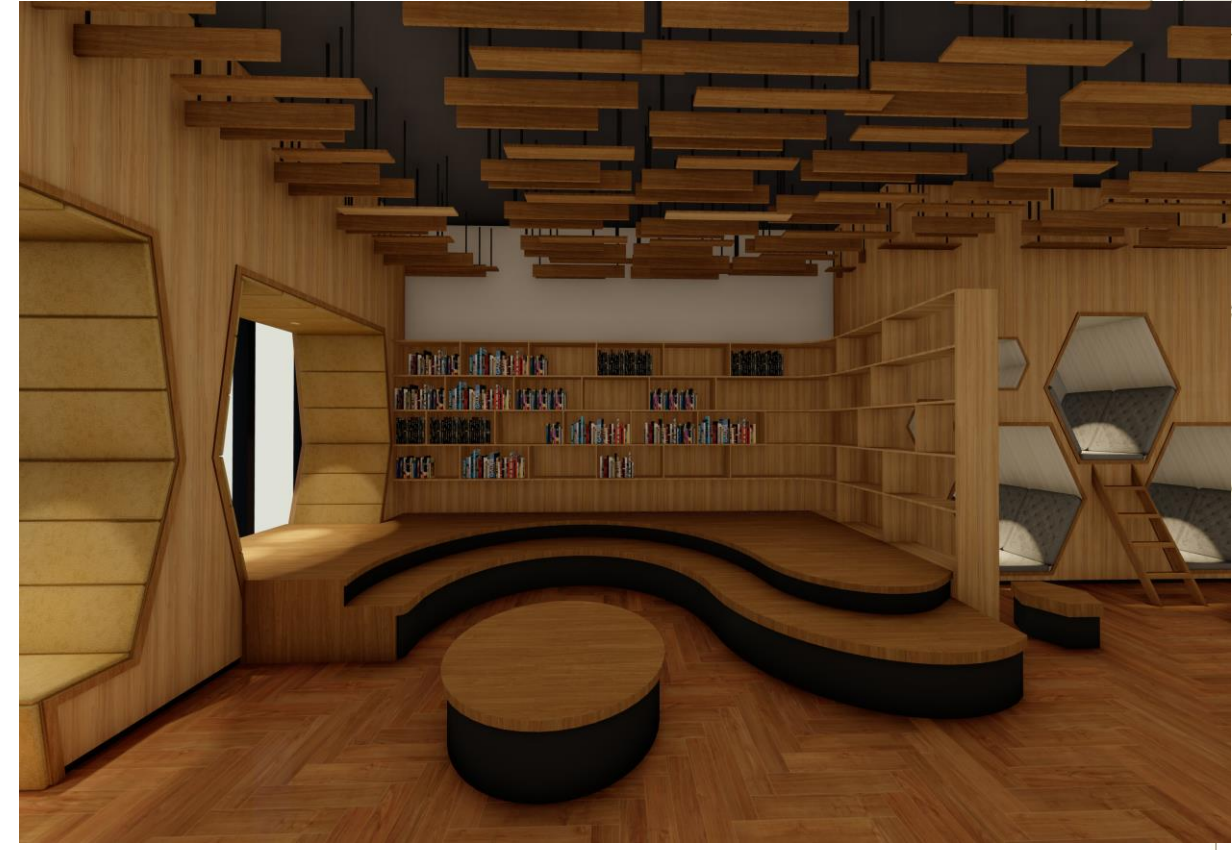
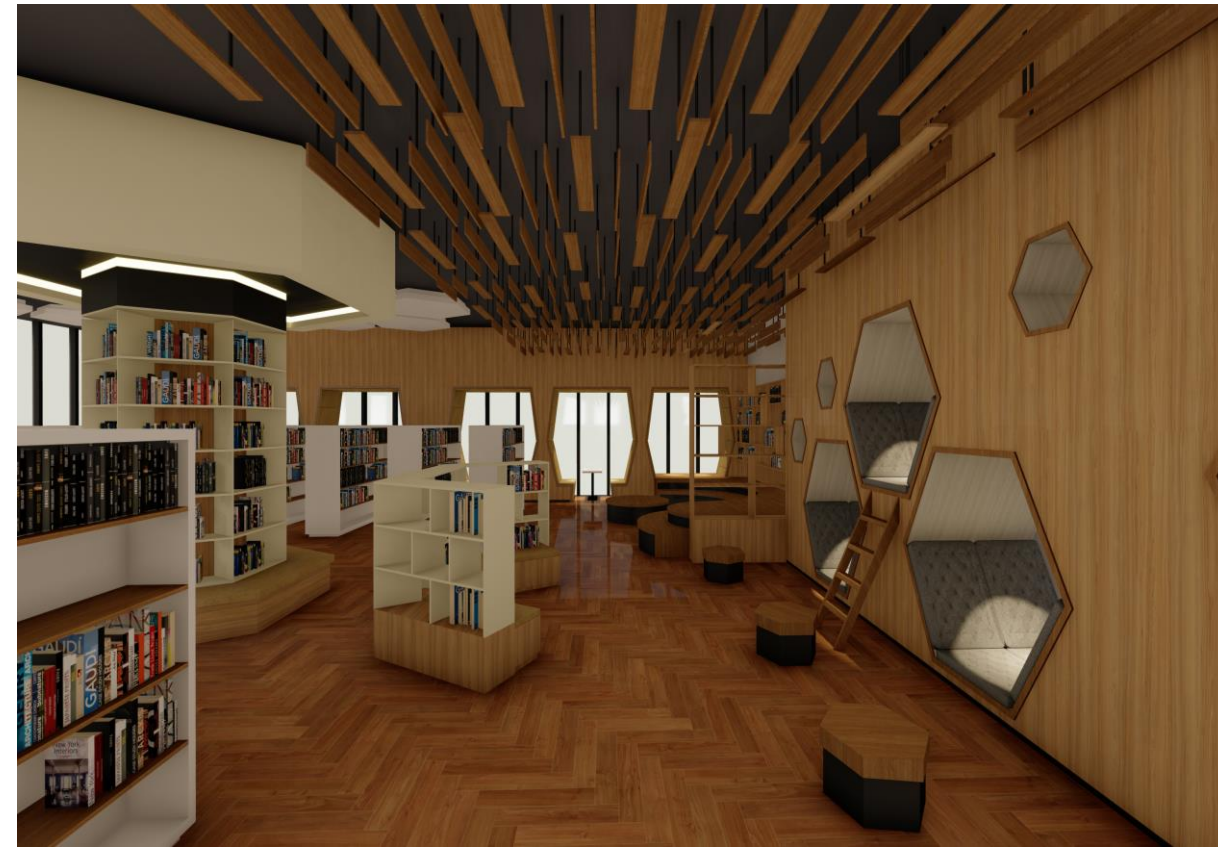
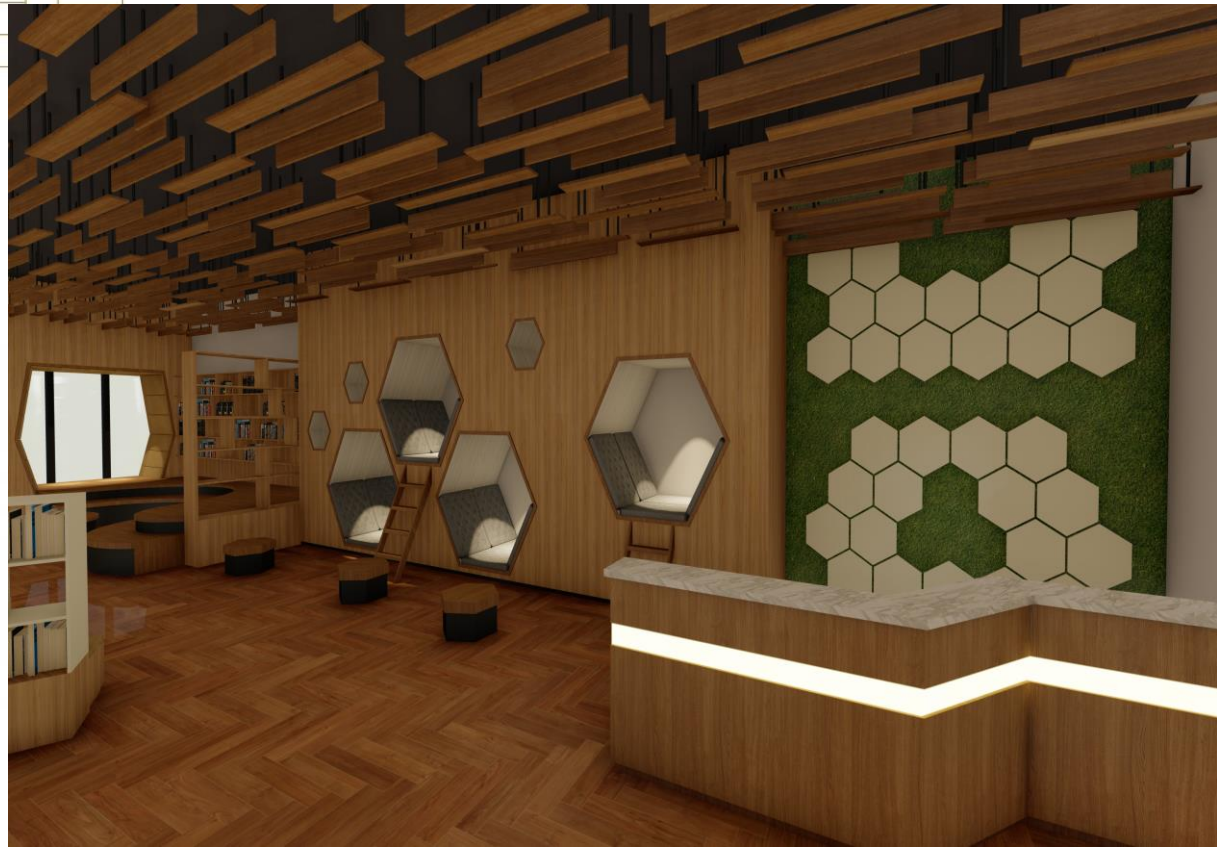
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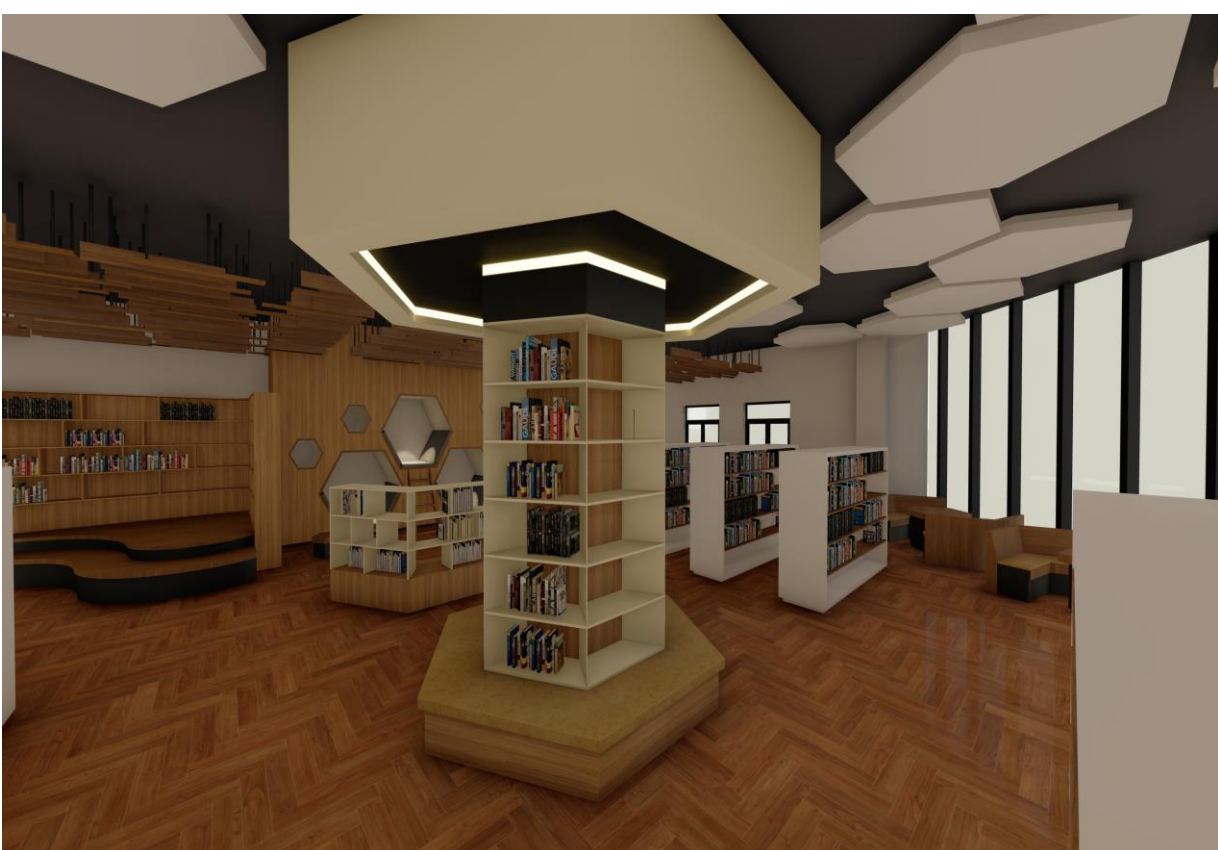
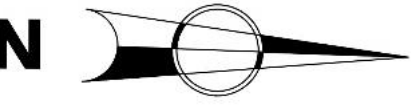
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1180101028
5th YEAR

GYANJYOTI COLLEGE OF ARCHITECTURE

LIBRARY



ORIENTATION



CONFERENCE ROOM



TITLE :-
ELECTIVE 2 -
INTERIOR

SHEET NO:-

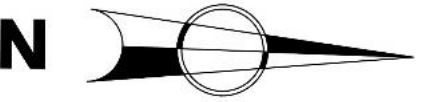
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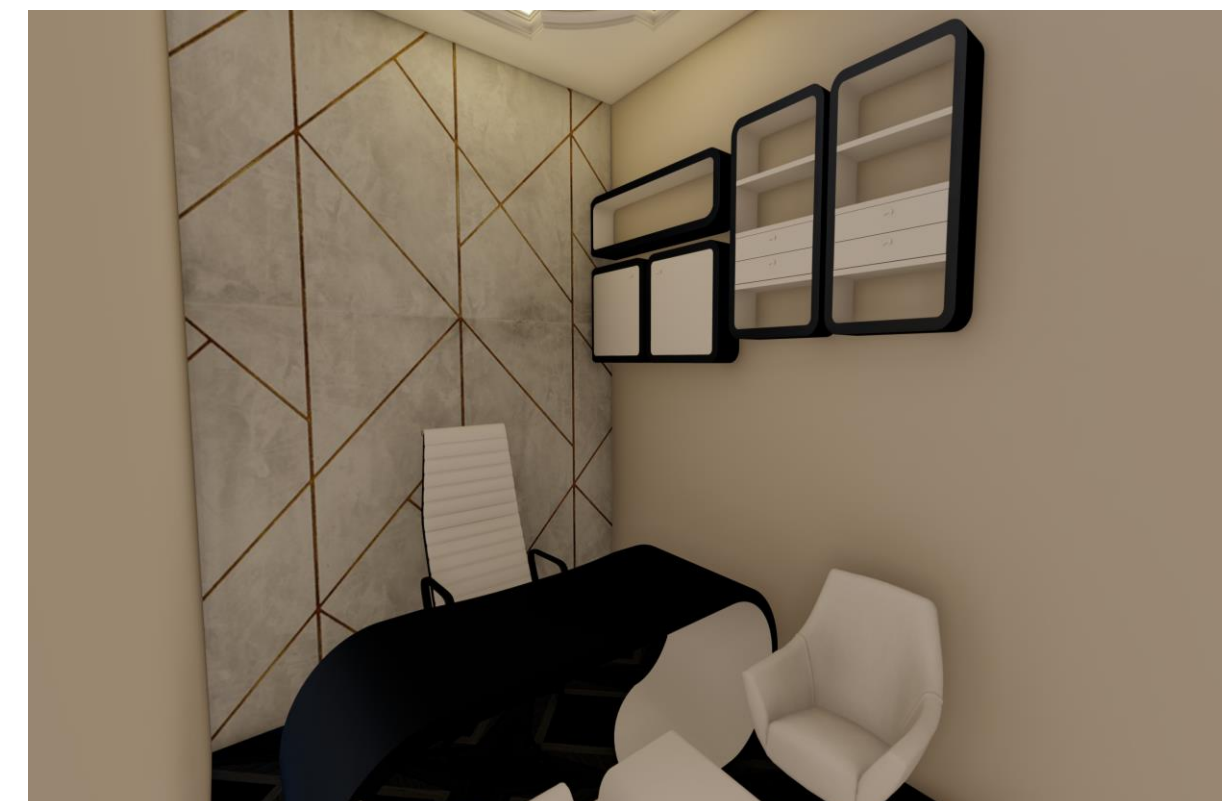
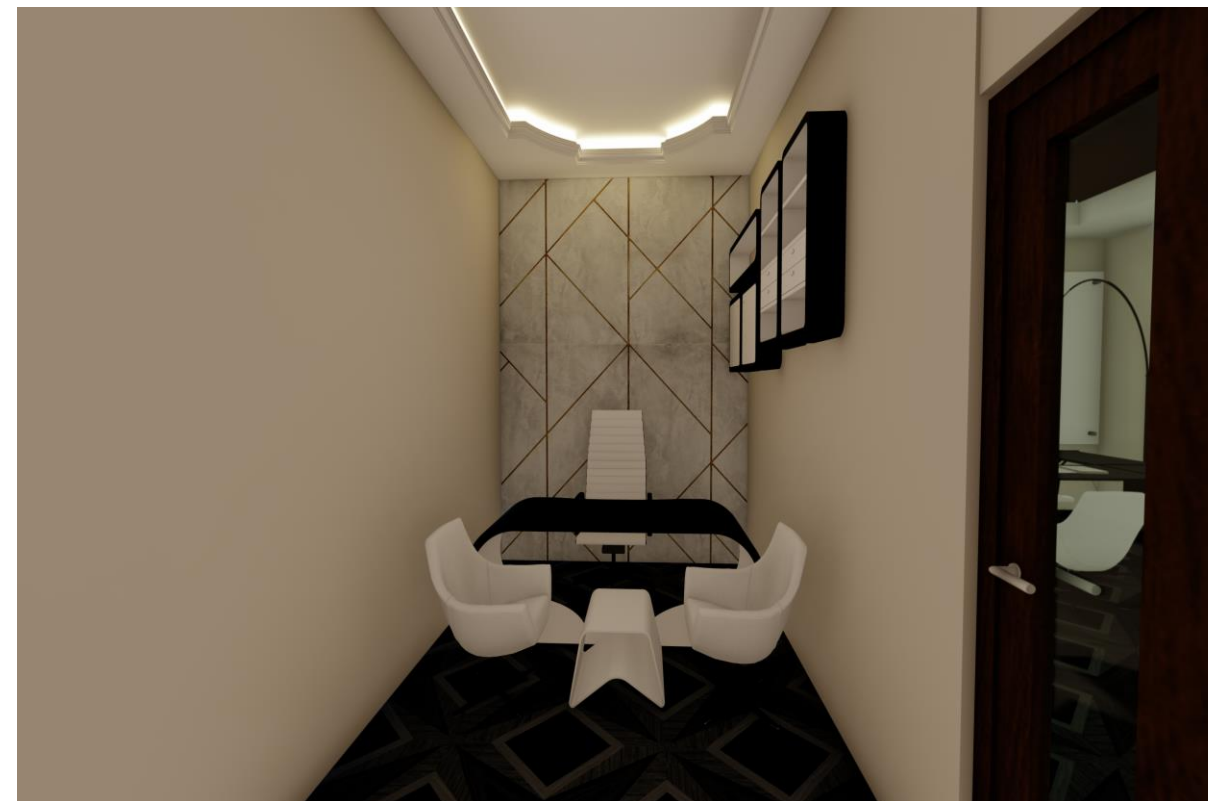
CHANCELLOR'S ROOM



ORIENTATION



PA ROOM



HELP - CENTER



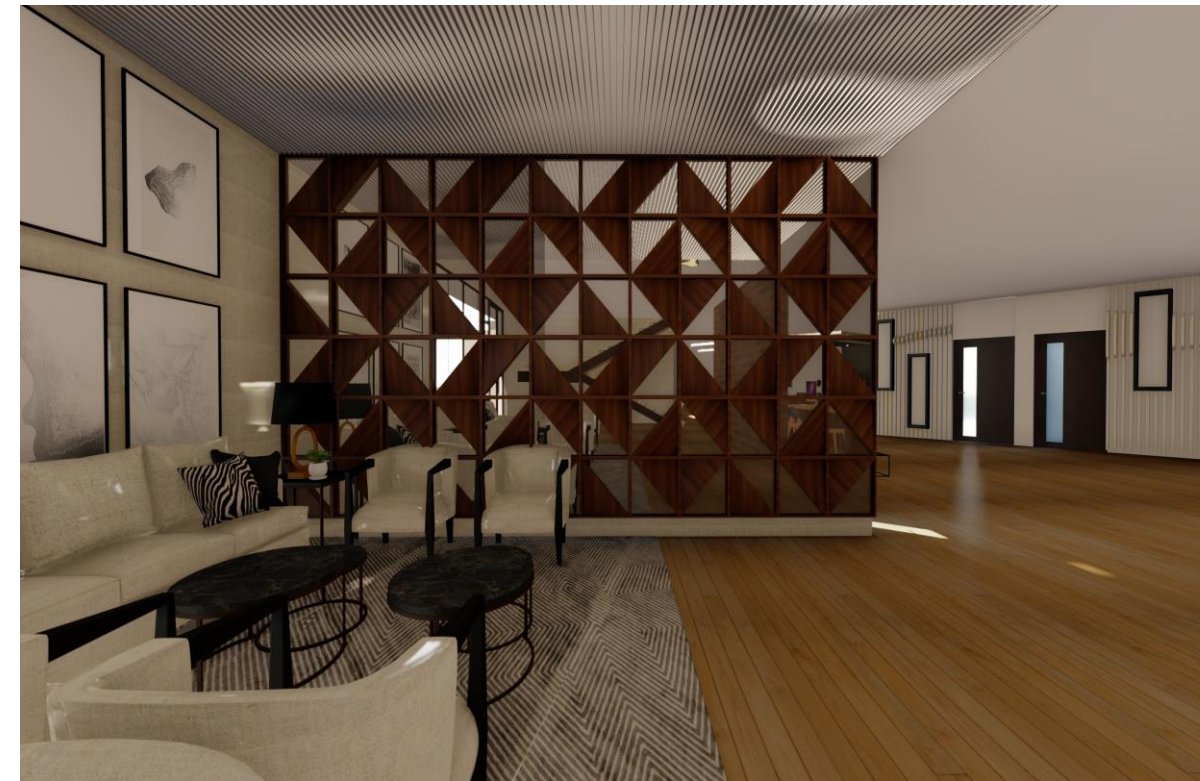
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INTERIOR

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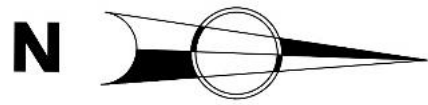
WAITING AREA



RECEPTION AREA



ORIENTATION



TITLE :-

ELECTIVE 2 -
INTERIOR

SHEET NO:-

SCALE :-

SUBMITTED BY-
MOHD HASNAIN
1180101028
5th YEAR