

THESIS REPORT ON

NATIONAL INSTITUTE OF FASHION TECHNOLOGY

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

BACHELOR OF ARCHITECTURE
BY

ASRA KHANAM

ROLL NO. - 1180101013

THRSIS GUIDE

AR. SHALINI DIWAKAR

SESSION

2022-2023

TO THE
SCHOOL OF ARCHITECTURE AND PLANNING
BABU BANARASI DAS UNIVERSITY
LUCKNOW.



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CERTIFICATE

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onafide work of the students and can be accepted as partial fulfillment of
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f Architecture and Planning, BBDU, Lucknow.

Prof. Mohit Kumar Agarwal Dean of Department Prof. Sangeeta
Sharma
Head of
Department

Recommendation

Accepted

Not Accepted

External Examiner

External Examiner

BABU BANARASI DAS UNIVERSITY, LUCKNOW (U.P.).

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2.	Roll No. : 1180	101013	
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Name: AR. SHALINI DIWAKER

(Signature of the Candidate) Name: ASRA KHANAM

Roll No.: 1180101013

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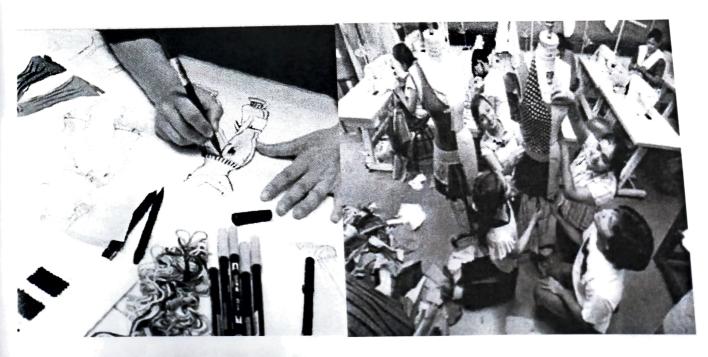
<u>ABSTRACT</u>

The Project chosen is Campus designing for National Institute of Fashion and Technology situated at BAREILY. This will be the first campus of that kind in UTTAR PRADESH State. The problem to be solved is to create a Sustainable and Practices enhanced Environment within the new Campus. For designing a proposal for the new campus, a specific methodology is followed which initiated for the decision of design concept, building techniques and contextual design. Few campus visits, detailed analysis, climatic study and form functionality has been considered at the most prior level. The way of working of any particular NIFT has been analyzed to understand the general practices and habitant's requirement. Majorly, the designing was started after having a detailed study about campus spaces and to understand the types of constructions and design which are followed in the region selected, a site visit was done. All the work done during the designing process is presented in the upcoming chapter.

1: INTRODUCTION

1.1 NATIONAL INSTITUTE OF FASHION AND TECHNOLOGY

National Institute of Fashion Technology (NIFT) is a fashion institute in India. It was set up in 1986 under the aegis of the Ministry of Textiles, Government of India and is an institution of design, management and technology for the international fashion business. National Institute of Fashion Technology plays a distinct role in bridging the young talent with the thriving fashion and textile industry. NIFT offer a varied range of programs for interested students and individuals who are looking to make a break in the fashion industry. The programs in fashion designing are designed to train students with the advanced skills, language and process of fashion design. NIFT's programs are designed to provide students a complete skill-set right from drawing, draping, pattern making, sewing, and haute couture along with training in production. The institution boosts of a unique culmination of both the worlds of academia and industry training. National Institute of Fashion Design has been equipping students for success at every level, from haut couture to ready-to-wear to mass market.



1.2 WHAT IS FASHION

Fashion is a state of mind. A spirit, an extension of one's self. Fashion talks, it can be an understated whisper, a high-energy scream or an all knowing wink and a smile. Most of all fashion is about being comfortable with yourself. Fashion is lifestyle, fashion is attitude, fashion is experience, fashion is culture. Fashion industry is one of the biggest industry in our nation now-a-days. So we can say fashion is business also.

1.3 WHY IT IS IMPORTANT

Fashion is a means of self-expression that allows people to try on many roles in life. It's a way of celebrating the diversity and variety of the world in which we live. Fashion is about change which is necessary to keep life interesting. It's also a mirror of sorts on society. It's a way of measuring a mood that can be useful in many aspects, culturally, socially even psychologically.

The National Institute of Fashion Technology, a premier academic institute of design, management and technology, aims at establishing the benchmark for the quality of professionals that go into the fashion industry was set up in 1986 under the aegis of the Ministry of Textiles, Government of India.

The Institute is a pioneer in envisioning and evolving fashion business education in the country through a network of professionally managed domestic centers at New Delhi, Bangalore, Chennai, Gandhi Nagar, Hyderabad, Kolkata, Mumbai, Raibareli, Bhopal, Kanpur, Patna. NIFT has further spread its wings globally with the opening of an international centre at Mauritius.

NIFT has set academic standards and excelled in thought leadership by providing a pool of creative genius and technically competent professional.

The Institute provides a common platform for fashion education, research and training.

1.4 RELATION BETWEEN ARCHITECTURE AND FASHION

Architects and fashion designers create designs that are attractive and functional and uniquely suited to the human needs. Architecture can be inspiration for a fashion design whether it is in the overall theme of the building or just a detail, useful ideas in the architecture can be found as inspiration to create a garment or vice-versa. Architecture and fashion may seem far from each other; in architecture, designing monumental buildings are meant for a long visual life, where as fashion in clothes-changes every season. However, both forms are three dimensional and contain space; both are structures; both are related to fine and visual arts.

Both disciplines start with the human bodies and expand on ideas of space and movement, serving as outward expressions of personal, political and cultural identity. Architects and fashion designs produce environments defined through spatial awareness-the structures they create are based on volumes, function, proportion and material.

It is one possible way of speaking truth. It is a term applied to such fields as literature, theatre, dance, music etc. Areas of creativity and is closely related to art. Designing or creating anything new, as in design, is an art. The element

There are various elements, which are basic elements common to all arts, such as line and color, and principles of compositions such as:

- -Unity
- -Balance
- -Rhythm
- -Proportion

1.5 VARIOUS FORMS OF VISUAL ART:

Painting

Sculpture

Architecture

Furniture

Commercial

Product design

Fashion design is one such form of visual arts which involves designing and manufacturing of clothing and other fashion accessories, this form of visual arts involves creativity and innovation in the design of fashion products and apparels. Apart from basic elements common to the various forms of visual arts, fashion design also involves several other aspects related to the society, culture, economy, climate and continuously changing trends of fashion.

INTRODUCTION

Fashion is an universal language. Not just limited to design of apparels and accessories, it is an act of man. Globalisation of information and mass media, is increasing fashion consciousness in society is at a rapid rate. Hence, to attain global competency, the industry requires trained professionals who can spearhead positive changes and exploit its inherent strength.

It is all about change and has relevance to more than the clothes we wear.

It is an application of scientific knowledge to the practical aims to human life.





<u>ARCHITECTURAL SCOPE</u>

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

AIMS AND OBJECTIVES

- To blend the Indian tradition and heritage with international fashion and design.
- To design for the convenience of the main user groups such as and Visitors.
- To understand the characteristics and spatial requirement of the institute to design.
- To make full use of the potential of the site- the design and layout of the built forms should be such that it is in conformity and harm only with the natural elements of the site.
- To portrays the image of the building being a place of specialized learning.
- It is proposed to promote the development of the fashion industry in larger international context. It is hoped that in future, this institute will become an important fashion centre, promoting the various branches of fashion industry, thus boosting the Indian fashion trade towards quality and quantity of exports thereby enhancing the position of the industry as prime foreign exchange earner for the country.

ABOUT NIFT

National Institute of Fashion Technology was set up in 1986 under the aegis of the Ministry of Textiles, Government of India. It has emerged as the premier Institute of Design, Management and Technology, developing professionals for taking up leadership positions in fashion business in the emerging global scenario. NIFT has been granted statutory status under the act of Parliament of India in 2006, empowering the Institute to award degrees and other academic distinctions.



 The Institute is a pioneer in envisioning and evolving fashion business education in the country through a network of twelve professionally managed domestic centres at —

REQUIRMENTS

- Academic Block-All Department
- Administrative Block
- Canteen
- Resource Centre
- Hostel Block-Girls & Boys
- Student Facility Centre
- Residential Block(Faculty & Staff)
- Open Air Theatre
- Auditorium
- Fashion & Apparel
- Technology Block
- Landscape Areas

SITE STUDY

GOAL OF SITE ANALYSIS

- To achieve a successful design, site analysis is a must & should be done carefully.
- Site Analysis involves taking an inventory of site elements and analyzing these factors relative to the clients needs & aims.
- Gather relevant information about the properties of the site, from topography to climate to wind pattern and vegetation Analyze these features and incorporate them into the design.

A. GENERAL SITE CONTEXT:-

1. Geographical Location

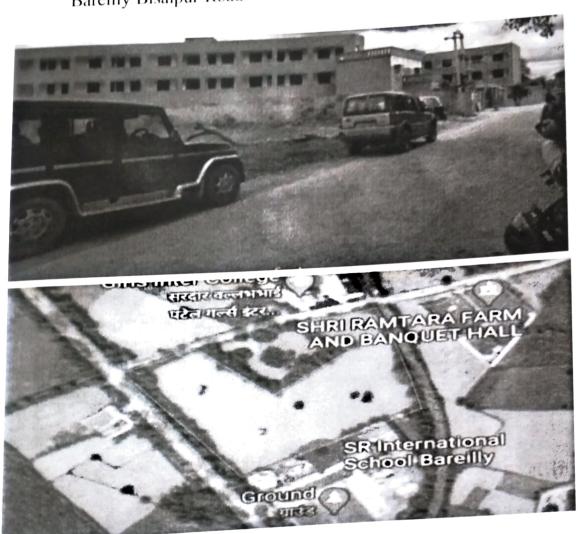
•	Airport Bareilly	14km
•	Bareilly Railway Station	11km
•	Satellite Bus Station	5.9km
•	Green Park	3.1km
•	Fun City	12km
•	Medicity Hospital	5.7km
•	Fire Station	8.2km
•	Police Station Rohilkhand	3.8km
•	Bareilly Development Authority	10km

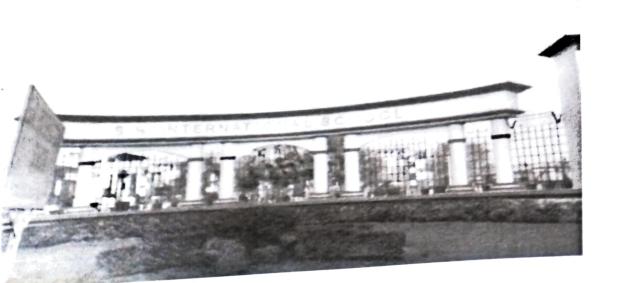
2. Adjacent land use patterns Institutional Land

- S.R International School.
- 2. Sardar Vallabhbhai Patel Girls Inter Collage.

3. Access System-

Bareilly Bisalpur Road





ABOUT THE SITE : -

80937.1sqm.(20 acres) Site Area

Balipur Ahmadpura situated closed to Bada Bypass. Location

28°21'45.2"N 79°29'13.5"E Longitud

Flat surface land with no contours. Land Type

Bareilly-Bisalpur road is 6m wide and minor road Access Road

4m wide. The subject land has road to the east.

A minor road to the north and west.

Location in the institutional area giving a clam and silent Environment to study. The area is quite green environmental friendly and pollution free.

SOIL PROFILE:

Bareilly type-2 (khadar or low -land soils):

• This type of soil is found in all tehsils in younger alluvial plain or low land along the river courses and are characterised by generally ash-grey to brownish-grey colour on the surface and their texture is silty loamy sand or sandy(the clay contents being low)

GROUND WATER LEVEL

The groundwater level of Bareilly in 2017 was recorded at 17.79 metres as against 17.41 metres in 2016.

RECOMMENDATIONS FOR GROUND WATERCONSER VATIONS:

SINCE LONG TERM WATER LEVEL DATA ARE INDICATING A VERY DISTRICT **EXCEPT** ENTIRE IN THE TREND RISING SLIGHT

FATEHGANJ WEST AND ALAMPUR JAFRABAD INDICATING NEGATIVE TREND. A REGULAR MONITORING OF WATER LEVEL AT CLOSE INTERVAL, THROUGH SUITABLY LOCATED STRUCTURE IS ESSENTIAL.

BUILDING BYE LAWS:

FOR COLLEGE

- F.A.R: 1.50

PARKING: 1 E.C.S / 100 SQ.M. OF FLOOR AREA

GROUNDCOVERAGE:35%

SET BACKS: FRONT: 15M

REAR AND SIDES:9M

FOR HOSTEL FACILITIES

MIN. 7.5 SQ. M. AREA PER PERSON FOR ROOM

CLIMATE

Bareilly has a <u>humid subtropical climate</u> with hot summers and cool winters. The average temperature for the year is 25 °C. June, with an average temperature of 32.8 °C is the warmest month, while the coolest month of the year is January, with an average temperature of 15 °C. Bareilly receives 1038.9 mm precipitation for the year on average. The month with the most precipitation on average is July with 307.3 mm of precipitation, while November is the month with the least precipitation on average of 5.1 mm. There are an average of 37.7 days of precipitation, with the most precipitation occurring in August with 10.3 days and the least precipitation

occurring in November with 0.5 days. The summer is noticeably wetter than the winter, although rain falls throughout the year.

RAINFALL: <u>a)</u>

The summer monsoon is the major source of rainfall, which generally lasts from mid-june to mid-october. july and august being wettest months receiving about 319.6 mm and 312.1 mm rainfall respectively. the highest annual normal of rainfall has been recorded at (1236.8 mm) and lowest at (979.1 mm), the average of the district being 1087.9 mm (monsoon-936.6 mm .

TEMPERATURE: b)

The maximum mean atmospheric temperature, 40.50C has been Recorded during the month of may and minimum 8.60C in the January.

The average annual maximum being 31.50C and 18.90Crespectively.

HUMIDITY: c)

During the peak monsoon period (i.e. August and September) And in mid winter season (during December) the relative humidity Is at highest level ranging between 79% and 84%.while it is Lowest around 38% during peak summer month of April and May.

d) <u>WIND</u>

The wind speed is generally highest (7.3KM/HR) during the month of June While it is lowest (2.2KM/HR).

During November, the average annual wind speed is 4.8KM/HR.



CASE STUDY:1

INTRODUCTION

Client: National Institute of Fashion Technology

B.V. Doshi Structural

Himanshu Parikh, Ahmedabad Principal Architect

11650 sq.mt.(approx 3 acres) Consultant

Site Area: 13570 sq.mt.

Total Built-up Area:

Rs. 8.5 million(1994) Project cost:

300 students Intakes:

Courses: Fashion & Apparel, Fashion communication,

Fashion and FashionTechnology, GarmentManufacture, Leather, Garment

OBJECTIVE

The objective of this institute is to impact education in apparel design for the ready-made garment industry, to undertake research in this field in tune with our cultural heritage and train personnel in the field of garment marketing. It is hoped that in future this institute will become an international fashion center and more importantly a model agency promoting regional institutes all over India to boost talents which would enrich the national garment design and manufacturing.

Being the first of such institutes to facilitate easy access to local and Foreign professionals, visitors and Buyers a centrally located site in Hauz Khas at Delhi.

Building is aligned with its long sides along NW and SE axis, facilitating good exposure to the sun and breeze, at times causingglare.

Different blocks of building complex are placed according to the site lines. All the pe- ripheral building lines are parallel to the site lines.

Openings for light and ventilation have been Sacrificed for aesthetic considerations than climatic comfort.

EVOLUTION OF THE DESIGN

Doshi's concept of the building revolves around form-imagery perception thus providing building with roots, life and history. The NIFT. campus becomes a village square growing organically over time to become a theatre, the scene for unfolding drama of day to day daily life. For central kund like court, wide casually aligned steps, water- channels, green areas, over looking terraces and bridges emerge aselements of space making to recreate for fashion and design.

REFERENCES

According to Doshi followng references have been used:

STEP WELL: The steps leading to water body surrounded by platforms and galleries.

INDIAN

The idea of introverted Indian bazars relating to the theatrical **BAZARS**: quality of fashion and traditional chowk or mohalla to faster a sense of community.

• **KUND:** The main dominant feature in the formation of Institute design which guides the way to the campus.



SITE PLANNING

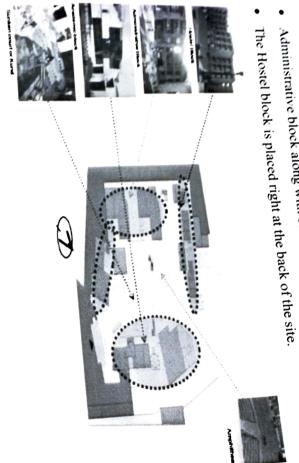
- The site was a flat land.
- The kund and the levels are all architect's creationswhich has changed overall site contours.
- The landscape is all planned with no trace of any natural growth of vegetation but main focus has been given to the hard landscape, neglecting theeffectiveness of soft landscape.
- The access is through a plot reserved for zonal greenarea now handled by NIFT on the condition that no building shall be constructed on this part.

About The Building

- The building covers almost the entire site leaving very less green area.
- The plan follows the site boundary with a setback of 6m maintaining its character.
- The opening are designed such that they maintain a visual unity in their form and proportion.
- Academic clusters have been grouped to- gether to form units comprising class rooms, labs, common lobby, and service spaces.

ZONING

- Academic block are similar in plan and in function also, occupies the left The site is basically divided in to three basic zones.
- Administrative block along with canteen and library is in right hand side.

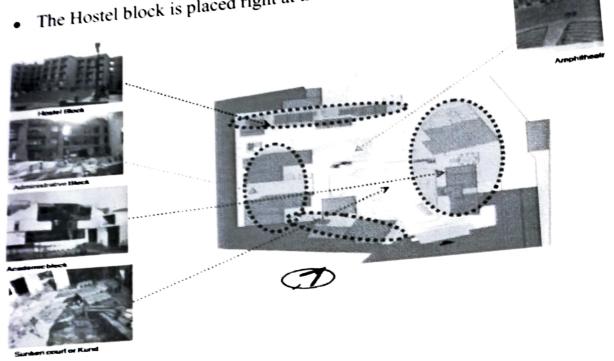


Building Layout

- functionsthey are accommodating Different blocks acquire different shapes and forms depending upon the
- Permeability of the blocks, due to accessibility from all the sides.
- generating activity and creating lively environment. The building blocks are concentrated around the sunken court thus
- becomes culturally appr. and climatically comfortable outdoor space The front court separated from amphitheatre by terraced academic wing

ZONING

- The site is basically divided in to three basic zones. Academic block are similar in plan and in function also, occupies the left
- Administrative block along with canteen and library is in right hand side.
- The Hostel block is placed right at the back of the site.



Building Layout

- Different blocks acquire different shapes and forms depending upon the functionsthey are accommodating.
- Permeability of the blocks, due to accessibility from all the sides.
- The building blocks are concentrated around the sunken court thus generating activity and creating lively environment.
- The front court separated from amphitheatre by terraced academic wing becomes culturally appr. and climatically comfortable outdoor space.

- •The double height gateway like entrance and the three floors high ENTRANCE PLAZA through building flanges on either side of the edges define the front
 - ·It gives the way towards the academic as well as administrative block reached by a series of steps.

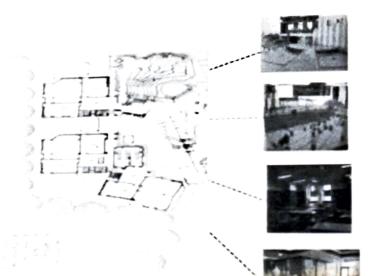
<u>FOYER</u>

- •It is a series of steps with seating at various levels from the entrance plaza. These give an informal atmosphere to the area & it is well utilized by students especially during evening hours.
- •The entrance plaza leads to large to foyer also has the platform used to informal seating.
- •The foyer leads to the reception & also opens out of the sunken courtyard.

ACADEMIC BLOCK

- The whole complex forms a vibrant composition.
- •The academic blocks are connected through different systems of circulation overlooking the central court.

Academic facilities have been provided in the areas joined together in the form of a cluster. The cluster comprise of lobby, lecture rooms, labs and toilets.



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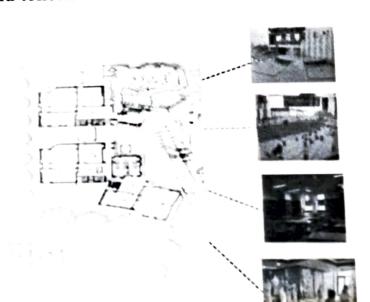
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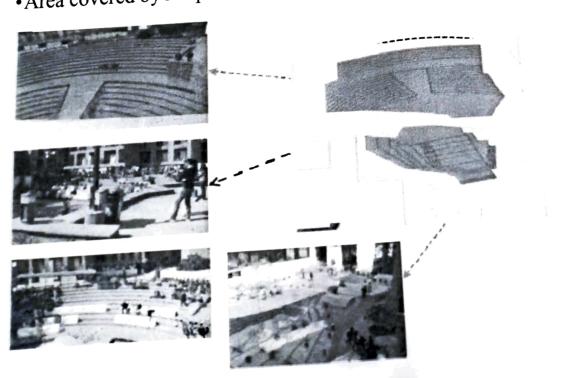


STRUCTURE

- This complex is based on frame structure square module has been followed up. The 7.88mts. Grid of square hollow columns (serving as ducts) works as a vertical plenum for future air conditioning and evaporative cooling systems.
- The roofing is done with waffle slabs (1.7mx1.7m) thus providing a column free space of 6.85 sq., this sub-division used is a basic module for all the components of the building.
- The external thickness of 990mm (3'-2") Acts as adequate sun protection for the Windows, providing insulation.

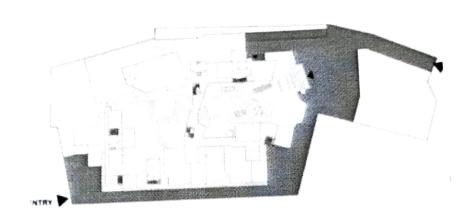
AMPHITHEATER -(ACTIVITY SPACE)

- •It is mainly designed to accumulate the person for fashion shows as it helps the students to keeps a contact with thechanging friends.
- The amphitheatre is not been constructed as it was designed. It was supposed to have the stage floating in the water body below, but the direction of stage has also been changed, without taking the consideration the orientation of the sun.
- Total seating capacity is for 300 students, which is not large enough for large gathering.
- Area covered by Amphitheater = 319.35 sq.mts.



PARKING

- Open parking has been provided for 20 cars & scooters along the paved access to the building. One side is flanked by staff car parking and the
- Covered parking has been provided for 100cars in the basement and light is provided through randomly placed cutouts and glass bricks on periphery of the internal courts which is now used as multipurpose halls and offices.
- Parking for hostel block is provided on stilts for 25 cars.
- Open parking is also flanked by greenery with earth mounds, flower beds so as to add richness to the space enclosed.



CIRCULATION

Horizontal circulation

- Pedestrians, which leads to the main building block from main entrance.
- The components of horizontal circulation are enclosed corridors, which connects administrative block to the academic block at upper three levels.
- Bridge acts as both transitional as well as interaction space between academic and administrative block

Vertical circulation:

The vertical system of circulation is through small lobbies by means of lift and staircases which are grouped together at different points in the building blocks. The segregated arrangement provides easy access at each floor.

There are service staircases which resembles with the traditional straight flight staircase of jodhpur fort.

• Structure - R.C.C and brick walls.

Cladding-Random rubble stone masonry on some part of the plinth, walls in some places, imported float glass used as a special material as a non reflecting glass used as a complete wall, steel frame screened with reflected glass, and use of vibrant colors in theinteriors spaces.

Windows: Jharokhas of traditional architecture and new materials and expression creating an interesting.

- Finish: Block granite and white marble check
 flooring in reception hall, Kota green and Jaisalmer yellow in corridors, Plain cement floor finish in classrooms and laboratories, chip flooring in exhibitionhall, stone in open spaces.
- Façade Treatment: The exterior although uniformly finished in grey-colored grit, the interiors come as a surprises, with composition in white, grey and greensof the court reflected in the glass wall.

CASE STUDY:2

INTRODUCTION

Client: Pearl Academy of Fashion

Architect: Morphogenesis

Site Area: 11745 sq.mt.

(approx 3 acres)

Project year 2008

Intakes: 500 students

Courses: Accessory Design, Interior Design

Jewellery Design, Fashion Design Textile Design, Event & Experimental Marketing, Wedding & Event Photography.

General Overview

The Pearl Academy of Fashion is a campus which by virtue of its design id geared towards creating an environmentally responsive passive habitat. The institution creates interactive space for a highly creative student body to work in multifunctional zones which blend the indoor with the outdoors seamlessly. The radical architecture of the institution emerges from a fusion of the rick traditional building knowledge bank .

ARCHITECTS INTENT & RESTRAIN:

- The idea was to create a low-cost, environmentally sensitive unique campus.
- Architects were restrained to complete the building budget to within a

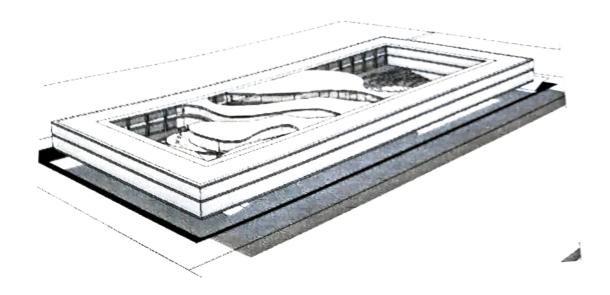
- tight budget of about 29\$ per square foot inclusive of the building, landscape, interiors, furniture etc.
- This was done by eliminating HVAC & deploying such as the use of local materials, techniques etc.

CONCEPT

Due to the project location within an in- dustrial site context and the impact of form optimization on built form, a rectangular volume was formulated that would provide with minimum exposed surface area. The entire building is raised above the ground and 4 meters were excavated to create an underbelly. The underbelly forms a natural thermal sink which is cooled by water bodies through evaporative cooling. Floating above the underbelly is a teaching block raised on pilotis, two stories high with footprint of 111 by 50 meters. The mass is broken into several courts creating alternative solids and voids which respond to solar geometry as shown.

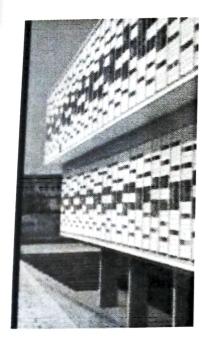
THE SITE

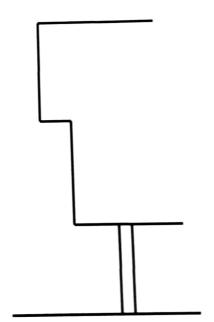
Learning was derived from the built heritage of Rajasthan, replete with havelis, inward- looking blocks with rooms along corridors and in enfilade, surrounding a single or multiple courtyards. The havelis typology epitomizes the idea of the building as a device for environment control, where the solid-void balance is calibrated for maximum daylight penetration, minimum heat ingress and the accommodation of multiple functions. Hence, The Design response was an introverted building, given the setting which was largely industrial. A long low-lying two-floored perimeter block pushes the building envelope to the mandatory setbacks, optimizing the exposed surface area to volume ratio of the form and almost seems to float above the land.



Perspective view showing the optimised buildingenvelope floating over the sunken court.

SECTION OF THE UNDERBELLY





Elevation Strategy

Jaali acts as a second skin to the building, servicing the functions of 3 filters air, light and privacy, a 1.2 m wide sliver of space between the two buildings

skins along the outer perimeter of the teaching block cuts down solar heat gain without.

PASSIVE COOLING CONTROL METHODS

- Morphogenesis was able to develop two passive-cooling control methods to keep the work spaces and courtyards cool at 27 degrees Celsius even when it is 47 degrees Celsius outside.
- First, the entire building is elevated off the ground, sucking air in around the edges of the building which is eventually released up through the open-air courtyards

JAALI:

- The building is protected from the environment by a double skin which is derived from a traditional building element called the 'Jaali' which is prevalent in Rajasthan 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.

<u>COURTYARD</u>

- The traditional courtyards take on amorphous shapes within the regulated form of the cloister-like periphery.
- This curvilinear geometry is generated through a computerized shadov analysis that tracks the precise movement of the sun through the day an across the seasons.

INTERESTING FEATURES OF THE BUILDING

- The Pearl Academy of Fashion, Jaipur by virtue of its design is geared towards creating an environmentally responsive passive habitat.
- The radical architecture of the institute emerges from a fusion of the rich traditional building knowledge bank and cutting edge contemporary architecture. incorporating various passive climate control methods becomes a necessity and also reduces the dependence on mechanical environmentalcontrol measures.

INTRODUCTION

• Project : NIFT, BANGALORE

• Ownership: Ministry of Textiles

• Architect : STUP Consultants

• Site Area: 4.5 acres

• Cost: 25 crore

• Location: C.A. Site # 21, Sector 1,27th.Main, HSR

• Year of completion: 2001



CONCEPT

This complex is based on framestructure – circular module hasbeen followed.

COURSES OFFERED

BACHELOR PROGRAMMES: B.Des – Design

•	Fashion Design	30
•	Accessory Design	30
•	Textile Design	30
•	Knitwear Design	30
•	Fashion Communication	30

BACHELOR PROGRAMME: B.F. Tech. -

Technology

Apparel Production

32

MASTER PROGRAMMES

Master of Fashion Management (M.F.M)
 Master of Fashion Technology (M.F.Tech) 31

KEY DISTANCES

- Nearest bus stop BBMP is at a distance of 400m.
- Bangalore Railway station is at a distance of 14.4 km

LITERATURE STUDY:2

INTRODUCTION

NIFT, Mumbai due to the presence of glamour world, major national international fashion brands and retail houses provide an ideal environment for fashion students in terms of industry exposure

Ownership: Ministry of Textiles

Architect: Hafeez Contractor

Site Area: 20234.94 sq.mt.

Location: Kharghar, Navi Mumbai



The physical environment of the campus is woven around the sensitivity that a lot of interaction occur in a spontaneous manner and as a result an activity space around the formal study area.

There is a contrast of space from narrow to wide, short to tall, enclosed concrete to the exposed steel structure gives an interesting sense of aesthetics. The corridor while linking the departments physically provide ample of space for the casual activities and informal fashion shows.

<u>LOCATION</u>

- The Institute is located near Mumbai-Pune Highway at Kharghar.
- Distance from kharghar railway station is 0.5 km.

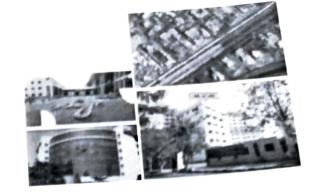
<u>ABOUT THE BUILDING</u>

No. of Floors: Ground + 2 Total

number of students: 360Non-teaching

Staffs: 15

Administration: 15



CLIMATE

· Warm and Humid climate.

Highest Temperature: 33 degree C

Lowest Temperature: 16 degree C

Average Rainfall: 244 cm

Latitude: 18.9467 degree North

Longitude: 72.8258 degree East

Wind Direction: Southwest to Northeast Topography: Flat land



<u>STRUCTURE</u>

- Framed structure is used in all the different departments and blocks.
- Building has a combination of two materials; Concrete blocks for walls and lots of Steel work, visible steel columns and roofing is present which adds on to the aesthetics of the building as a whole.

ADMINISTRATION BLOCK

- The administration department consist of various different departments
 academic affairs, commoller of exam, accounts, building department, current
 affairs and director's cubin
- Inside the admin block the main entrance has the reception in front. It is double heighted which is visible from the connecting passage.
- The plan of the main foyer gives a very warm and welcoming appeal while entering

SITE PLANNING

Blocks as per depending on the functioning of the building blocks.

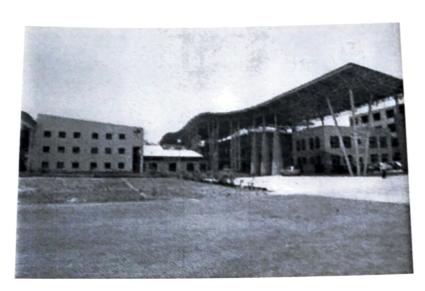
- There are 5 big staircases running whitin the whole campus.
- Corridors play a vital role while linking the departments physically.
- There is a central lawn around which the main building blocks revolve.
- The entry to the campus is from two sides.

TEXTILE DESIGN DEPARTMENT

- The textile design department is of 3 floors.
- The ground floor consist of the weaving lab and dying and printing room wit attached testing lab.
- The 1st floor consist of 2 art rooms, a design collection store room and faculty room.
- The 3rd floor consist of a conference room, faculty room and 2 art rooms.

ELEVATION

- These forms are arranging vertically and others at inclined angles.
- Different geometrical shapes has been added in the elevation of the building.
- The steel roofing act as of the main element in the enhancing of the whole building.

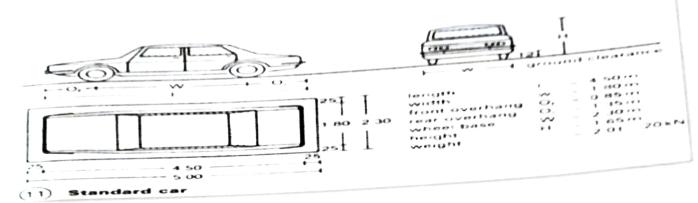


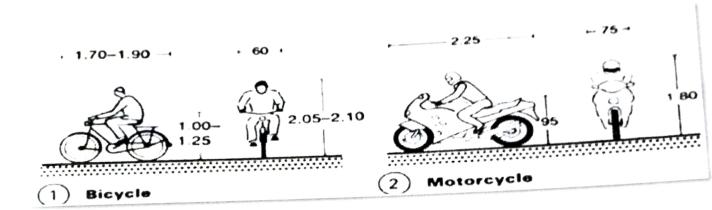
The Surrounding Area Is Developed

- Proper Drainage System
- Proper Electrical Line Laid Out
- Ludhiana Highway Bridge Is Constructing On The Highway From This It
 Will Give Lot Of Benefit

10. STANDARDS

10.1 PARKING





11. SITE

Site is located on the barren and plain land. Main entrance is of 22.4 m wide including pedestrian and greenway. Road is 7.2 m wide and it is a two way road entrance.

11.1. SEGREGATION

Academic block is separated on the left side by a central courtyard and admin block is on the right side connected with auditorium of capacity 0f 900 people.

Hostels and faculty residences are at the back of the site and a seperate entry has been provided from the 18 m wide road on the left side of site.

A central landscape area has been provided with O.A.T. in it and with some kiosks and open exhibition area which segregates academic and hostel zone

11.2. AUDITORIUM

900 capacity auditorium 16 m height includes make up room, instrument room backstage and store with restrooms and guest lounge. The access to auditorium is through ramp and entry is from the first floor. Guest entry is from ground floor.

11.3. RAMP

Parking for vehicles are provided in basement also which is headed by ramp going down from left side while one enters and another ramp is at the right corner of site for exit.

Ramp is provided on the ratio of 1:10.

11.4. OPEN AIR THEATRE

An auditorium is provided facing North South direction. The seating arrangement is on 60 degree angle and facing north side. The O.A.T. is 2.2 m in basement from ground level.

11.5. WATER BODY

A water body is provided in the central landscape area to channelize wind pressure and cool the bringing air and maintaining micro climate of campus.

11.6.1. ART ROOM

This room is to be used by students for the purpose of making sketches, art works and rendering of garments. Students are to be provided with independent tables having height comfortable for working while standing or sitting on a high stool. The table should have the dimensions to accommodate an imperial size sheet to work on it. A small storage cabinet may be attached to the tanked itself.

A small size pull out is also of a good use during working. Art room is to be

provided with instructor's table a black board/soft board/steel board art room should be provided with get cod natural day light. Also ample supply of artificial light is to be provided. Space for pin board all around the walls for reference and display of sheets, garments etc is to be provided.

11.6.2. PRINTING/DYEING ROOM

It is used by FD,GMT and TDD students for experiment printing of fabric dyeing. A printing shop should be provided with printing tables of different width and lengths. Dye making and storage area; wash up area, dark room and storage space for screen blocks etc. Also storage of raw fabric and primed samples of different kinds is to be provided. A small discussion area is to be provided and also an instructor's cabin to be provided.

11.6.3. PRACTICE ROOM

It is room used for practice of modeling and ramp walk for the improvement in the display of products enhanced by the students. This room requires a large mirror on one side of wall and on the other end the ramp walk is performed to check the skills and work.

11.6.4. PHOTOGRAPHY ROOM

It is a dark room which will have white and yellow lights for photoshots. Professional photo shots can be performed in this room for fashion.

11.6.4. TUCK SHOPA centre for all the type of materials related to textile and fashion such as needle, thread, cotton, cloth and accessories related to subject will be available.2 tuck shop on two floors will serve students of al departments.

An excellence centre for well trained computer training. 2 Labs with 40 computer in each on two floors will serve students of all departments under the guidance of lab technicians. CAD training will be teach here.

11.7. RESOURCE CENTRE BLOCK

The resource centre block will have:

11.7.1. **LIBRARY**

A capacity of 50 students is designed facing North light into library with all required amount of books, magazines etc required for NIFT.

11.7.2.MANUSCRIPT

It will have collection of old preserved textile and fashion reading materials.

11.7.3. MULTIMEDIA

This room will have digital display of formal presentation on large screen and seating arrangements are done on levels as lecture hall at appropriate angles.

11.7.4.INCUBATION CENTRE

It is a centre for huge textile and weaving machines which are required in specific case and hence is designed on separate block at the top floor.

11.8. AUDIO VISUAL ROOM

This room will have digital display of presentation and audio video interaction.

11.8.1 KNITTING LAB

This lab is all about helping knitwear and fashion design students for their practical subjects and for understanding of all techniques which is related to th study of same.

11.8.2. WEAVING LAB

Weaving is all one of the stage for getting any kind of fabric and fabric is one of the most important source of fashion designing.

11.8.3. STITCHING LAB

Once a design get started then a designer should be able to understand that how to construct the same, stitching lab is the most important source for understanding the development of any design.

11.8.4. DRAPING LAB

Draping is a process in which anyone can create their design directly by using their material on dummy and for the designer need of draping lab.

11.8.5. IRON ROOM

Large iron machines with cloth rest table are required attached with stitching lab.

11.8.6 . Pattern Making Lab

Pattern making is drafting any particular body on the sheet which makes so many creative designs easier for the designers.

11.8.7. LECTURE ROOMS

Lecture room of capacity 35 students in a room as per the capacity of batch of one year.

11.9 FACULTY CABINS

A space for 40 faculty and 6 professors have been designed with a discussion

11.9.1 DIRECTOR ROOMS AND LOUNGE

Directors office and Junior Director Office is provided with their separate restroom and lounge area.

11.9.2 STAFF OFFICES

6 Staff offices in admin block for accounts and administrative purpose.

12. BADMINTON COURT

One badminton court is provided in front of mess which is equally accessible from both boys and girls hostel.

13. HOSTEL BLOCK

Single Bedded Room (3.5x4M) = 14 SQ.M.

Triple Bedded Room (4x6M) = 24 SQ.M..

14. DESIGN CRITERIA

The primary aim of the thesis is to produce a design for an institutional campus by establishing physical and visual relationship between built form and surroundings.

14.1 APPROACH

The 12 m road which connects to the South side with 30m wide road is the main link road for reaching the site along with 18m road on North side

14.2 TYPOLOGY

a) After the study, about campus planning and due to its considerations the best suited is zonal pattern of growth with central main zone. As the site has high tension line pole and wire passing through its centre. The centre part will act as an interactive space of landscaping area and will separate residential and academic zones.

b) Clustered planning will be adopted as there is limitation for ground floor extension layout planning and the overall fabric of the campus.

14.3 ZONING

The site would be divided into two zones and the healthy environment between these zones will be kept in mind while designing.

14.4. ORIENTATION

Since it is an educational institute campus so N-S orientation will be strongly considered for individual building and as well as for layout of whole campus. All lecture rooms and studios are oriented slightly tilted towards North so that it can bring the natural light to the rooms without any glare and heat.

14.5. CIRCULATION

Linear circulation has been kept direct and minimal as possible, directed to the efficiency of the total plan so that a sense of direction is maintained in the campus.

14.6. LANDSCAPING

An well integrated landscaping system will be used in which spaces are closely related to the natural setting. This should be an integral part of the overall campus fabric and not a mere surface treatment. Landscaping will be the centre focus of the campus with water body to channelize air and help in maintaining micro climate.

14.7. MATERIAL

Material used will be totally brick work and frame structure will be implemented. Glass will be used mostly on Northern Facade. Steel and thread rope will be used for tensgrity structure.

14.8 EVOLUTION OF CAMPUS FORM

Teaching began with a man under tree, scholar who did not know that he was a teacher, discussing his theories with the people who did not realize that they were students. The need for these meetings became evident and the first seat of learning came into being. So the relation between the student and the teacher was direct i.e. not through any institution. This may be due to limited number of students and scope of knowledge. But as the number of students increased with passage of time and with the increase in scope of knowledge, institution came into being with the place of meeting of student teacher shifted from open to sky to classroom. So, all these inventions gave way to the present stage of the design of the campus.

14.9 CAMPUS DESIGN

College and university campus environments are seedbeds for India future leaders.

According to kanvinde "Campuses are powerful instruments in fulfilling the aspirations of the nation. A good or bad campus can spell the difference between a fine university and a mediocre one".

- a) A good campus helps attract well teaches and the quality of the university physical environment affects the atmosphere of the campus activities the mood of students and the interest of outside agencies.
- b) One the other hand, poor design violates aesthetic qualities and thereby greatly dampens the morale of persons living and studying in such campus environment. Campuses should be the living laboratories of experiments in the planning the design of it.

The burden of successfully functioning campus lies in the efficient and imaginative design of the campus.

14.10 THREE TYPES OF GROWTH:

14, 10.1. LINEAR PATTERN OF GROWTH

the central core can expand at either end as the campus grows, existing clements extend outwards but grow.

14.10.2. CONCENTRIC PATTERN OF GROWTH

The central area of core of the campus becomes the highly enclosed and successive rings of development closed in and prevent selective expansion.

14.10.3. ZONAL PATTERN OF GROWTH

Zones are allocated specifically to academic, residential or recreational activities. This restricts the Integration of campus activities.

14.11 SIZE OF CAMPUS

The ideal size depends upon individual circumstances. The demands of the campus, the location of the campus and the type of instructions influence its size. Experience has shown that when an ultimate size was predetermined, the campus often continued to grow beyond what was originally considered ideal. Major controlling factor is the walking distance from hostel to the classroom. "Ten minutes are the maximum allowable walking distance and three to five minutes is optimum"

14.12. CAMPUS FORM

- Numbers of buildings are constructed at one time.
- Campus usually has formally planned relationship between the buildings.
- The campus plan is highly organized.
- Each element of the campus is composed with elements and principles of design.

₁₅. SWOT ANALYSIS

- 15.1 STRNGHTH
- The Surrounding Area Is Developed
- Proper Drainage System
- Ludhiana Highway Bridge Is Constructing On The Highway From This It
- At the back of site residential colonylt is going through the site which helps in maintaining the micro climate and keeps environment healthy and green.

15.2 WEAKNESS

The site isbeside the national highway and there is a movement of traffic is more that will create the noise as well as air pollution.

15.3. OPPORTUNITY

The Surrounding Area Is Well Developed And Government Offices And Colony Is There

15.4. THREAT

• Site lies in Zone 3 of earthquake prone area.

16. DESIGN IDEATION

The basic idea is to develop an institute for fashion which is environmentally friendly and goes with the site context.

The design of National Institute of Fashion and Technology (NIFT) establishes a relation between open and covered mass. Landscape feature with water body in between will emerge as the most exciting place in the centre of site which will segregates two zones and forms a bridge which connects them.

A huge podium is designed at entrance which will have display of murals and logo of NIFT on a huge scale which will give essence of an institute for fashion and art.

An open courtyard within the academic block has been provided in order to achieve North light to each lecture room as well as design studio lab too. The centre area will have a tent like structure with a light cloth covering on over it which will provide shade and act as a common interactive place for all.

Design studios are planned in such manners that at every floor each studio gets it private green space on terrace which will make student to be in more healthy environment and help their mind to evolve and develop new and better designs.

Going forward the level difference will create an obstruction to viewer from residential block as a high false brick parametric design wall is made near open air theatre and a huge arched entry is provided which take the visitor to below level from ground and enjoy the stage shows and have a feel of calmness with the help of landscape in its surrounding, it refreshes the mood and act as a recreational space for leisure.

Canteen area and coffee shop has been provided within approach of both academic and admin block which is also accessible from O.A.T. as students in their leisure period can enjoy their meal by sitting on green contours sitting on the bank of water body getting cool breeze air and having view of hills on the Northern side.

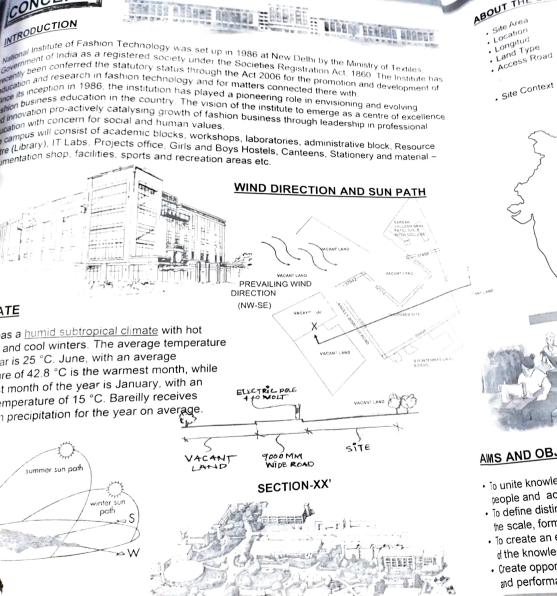
O the sides of water body jogging path has been provided for hostel students and faculty keeping in mind their health factor too which creates a mesmerizing view of water body green contours and mountains range.

Two bridges are connecting two floors from academic block to admin block will be made of glass and steel and will be transparent so that a visual connectivity is maintained throughout the campus while crossing.

17. MATERIAL AND STRUCTURE

Architecture is not just about designing the blocks and placement, it gets it feel by the use of material and form of geometry. The material speaks for itself, every brick has its own identity, every bit of concrete has a texture which fits in a place.

The institute is a centre for different kinds of course hence different kind of architectural construction technology has been implemented such as. A frame structure comprises of concrete and brick work. Tensgrity structure is used for open space cover or for shading purpose in order to achieve a semi covered area without any hard surface wall and column in between which allows the visitor a feel and sense of a textile and fashion institute as the centre courtyard will serve tilted columns attached to one another by strings or rope reflecting the weaving of structure and education.



R0937 1sqm (20 acres Ralipur Ahmadpura Flat surface land with no contr Bareilly-Bisalpur road is 6m wide and mir 4m wide. The subject land has road A minor road to the north Location in the institutional area giving a cae

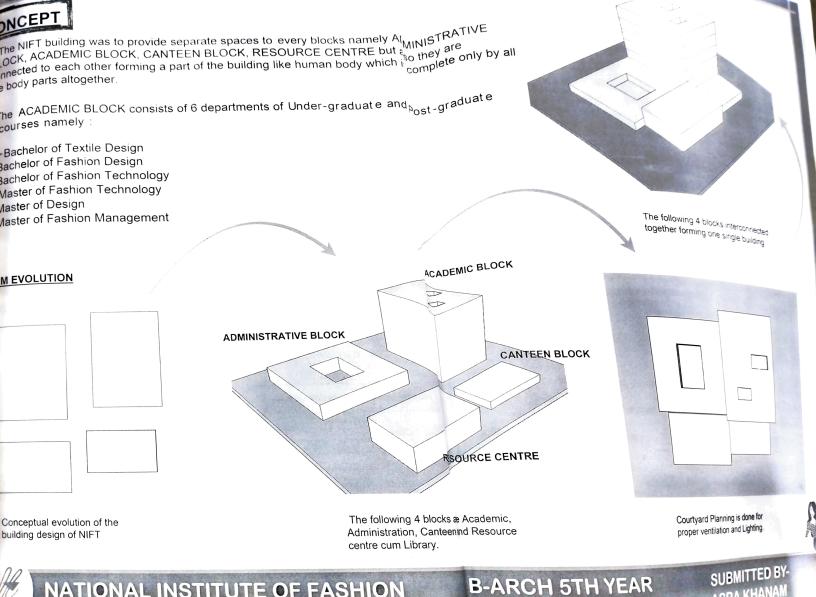
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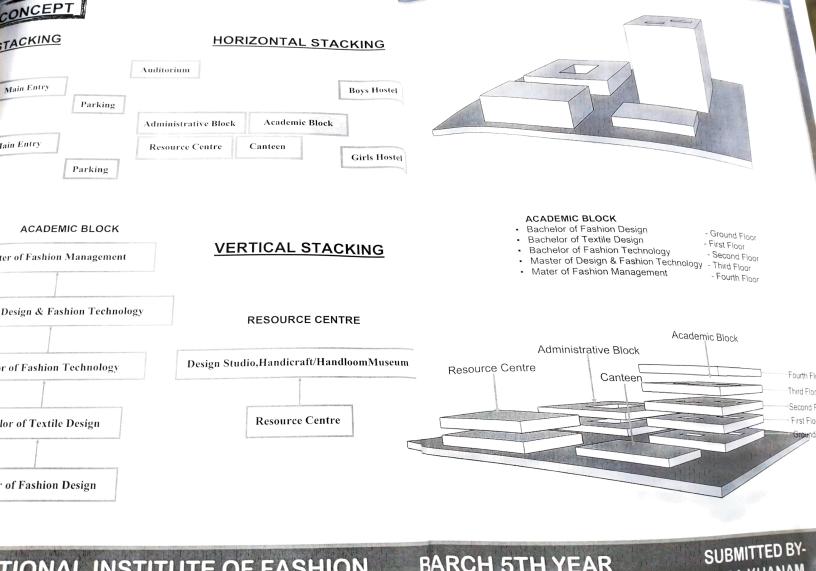
AMS AND OBJETIVES

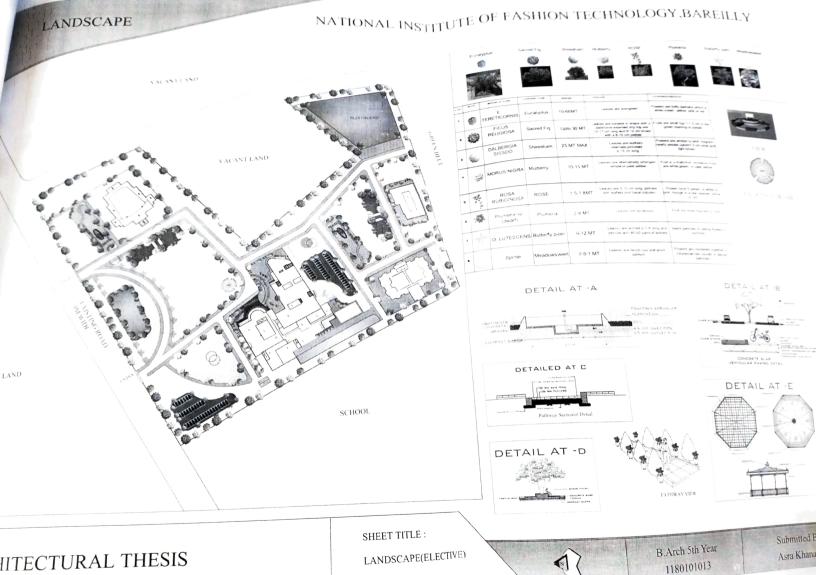
- To unite knowledge, as in an ideal campus, by creating such spaces between
- To define distinct settings for social interaction and strengthen the unity of the entire of the soal the soals. the scale, form, colour, texture, light and other architectural characteristics of the spa
- To create an environment which is ecologically, culturally and mentally suited for the of the knowledge to be perceived and to bring the inner self and talent to the surface Create appointment. Create opportunities for the students and young artists to develop their potential the and performance.

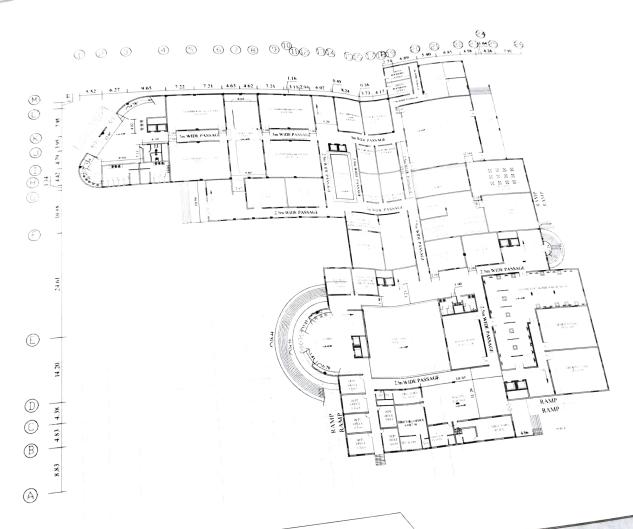
 Our potential to the students and young artists to develop their potential to the students and performance.
- and performance.

SUBMITT





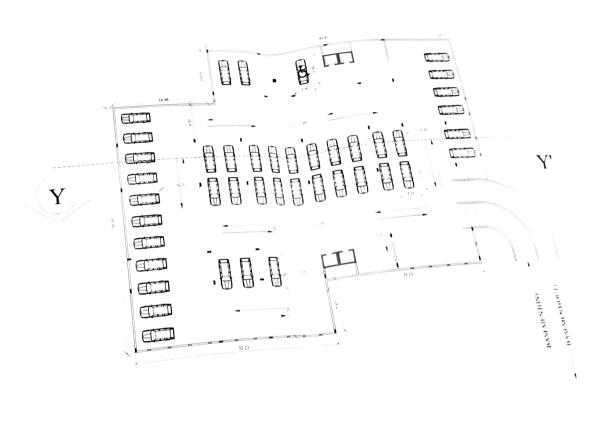




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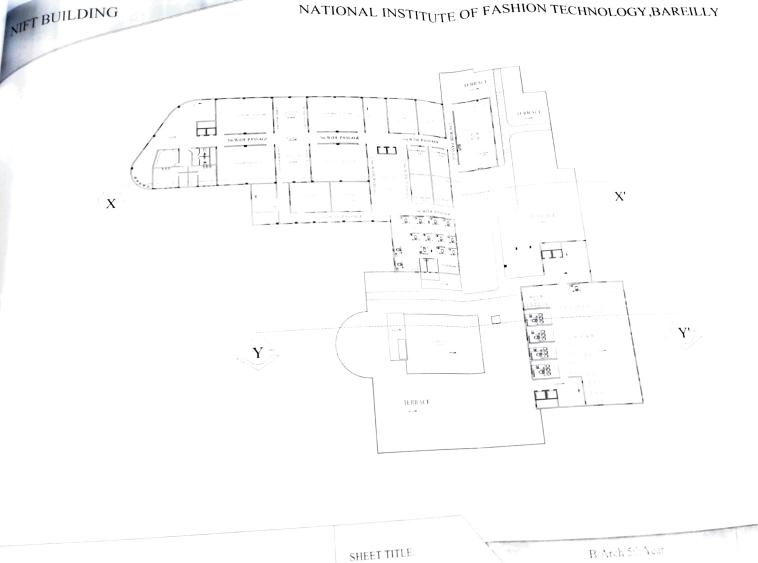
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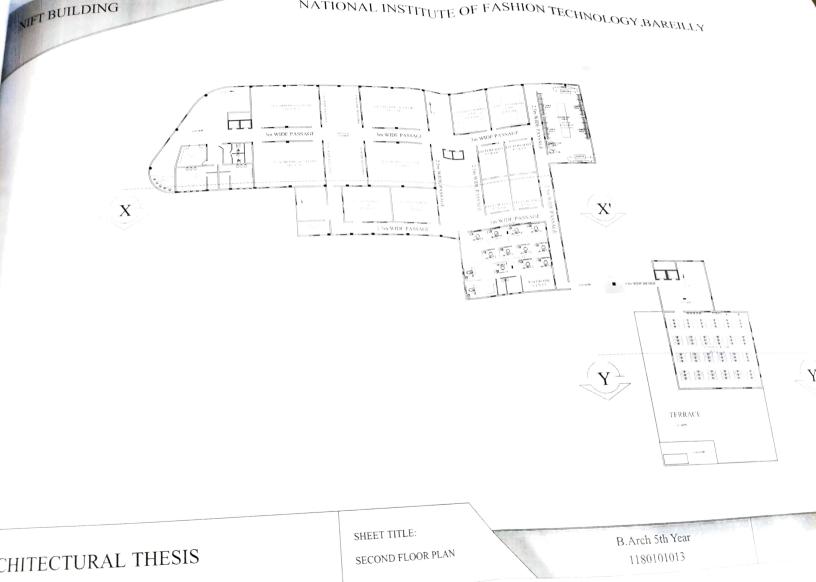


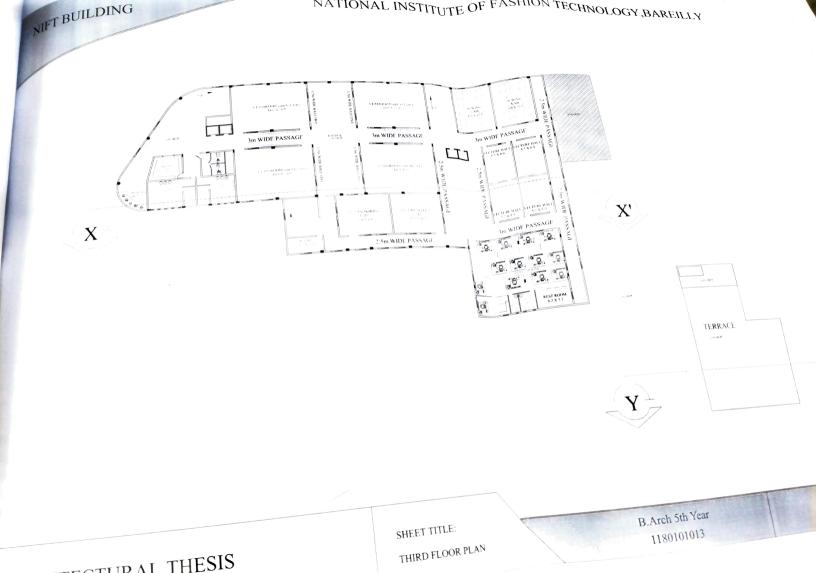
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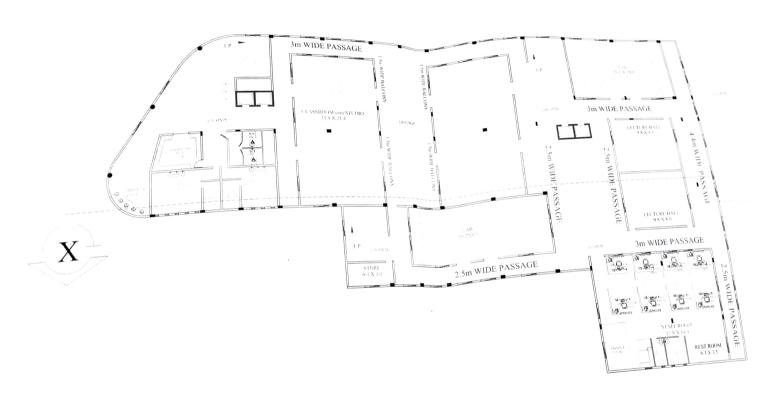
FIRST FLOOR PLAN

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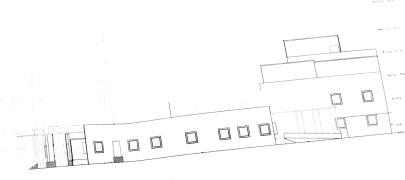


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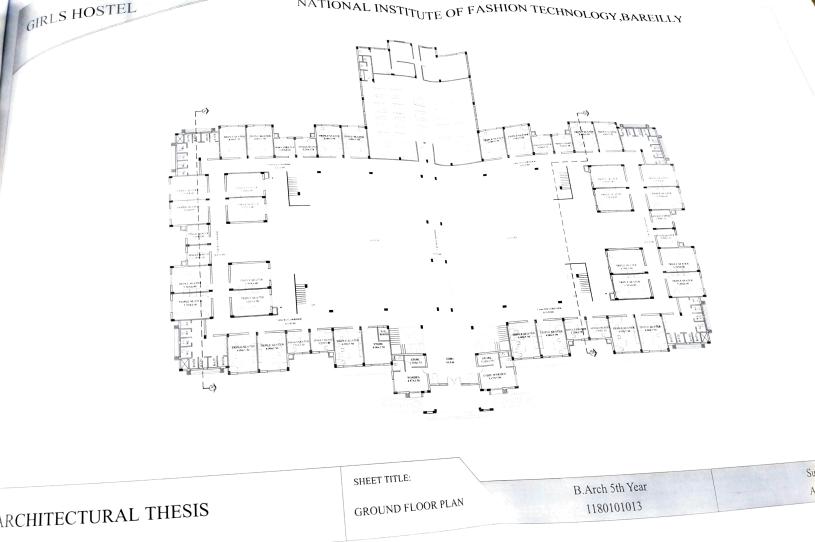


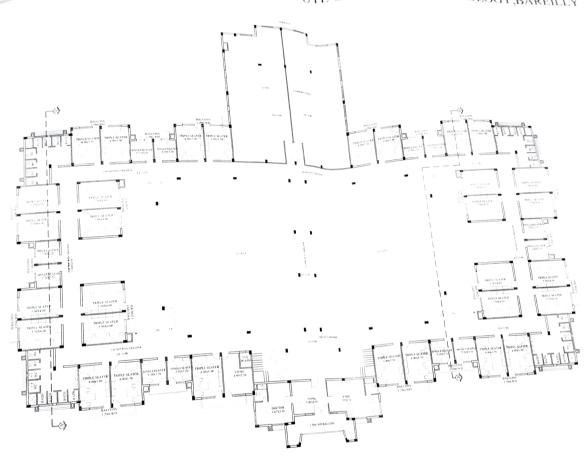


NORTH ELEVATION



WEST ELEVATION

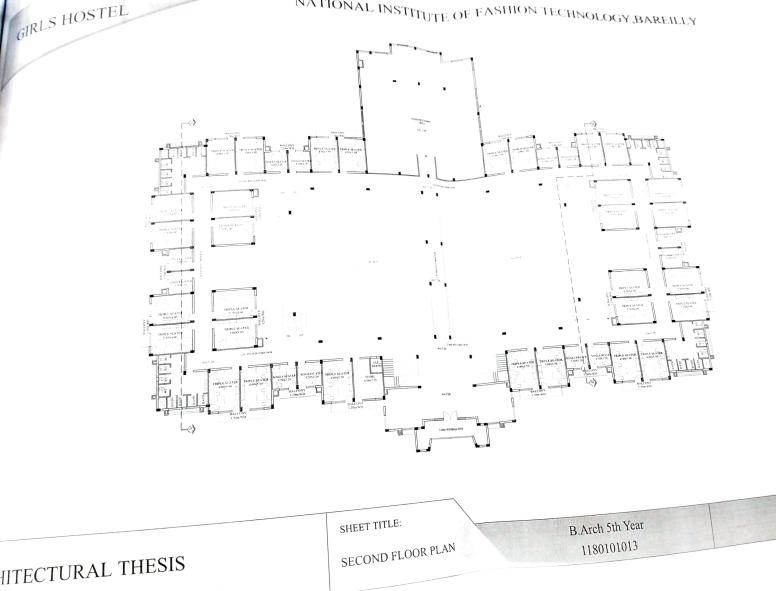




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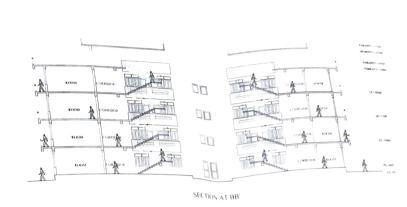
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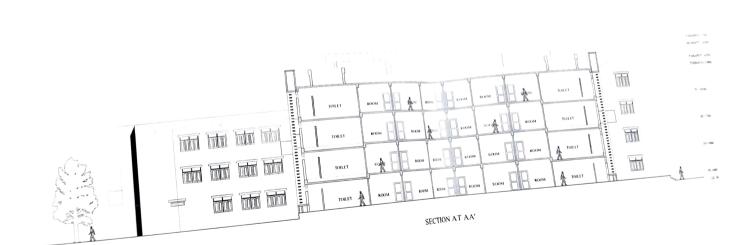
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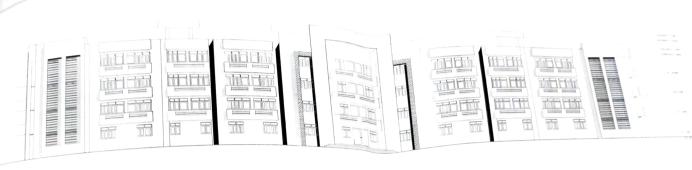




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NORTH ELEVATION

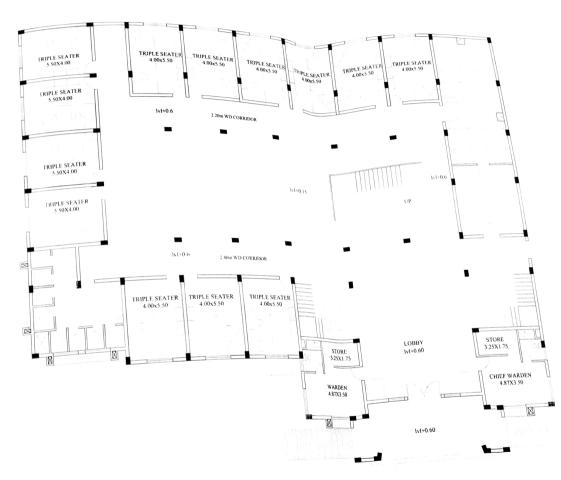


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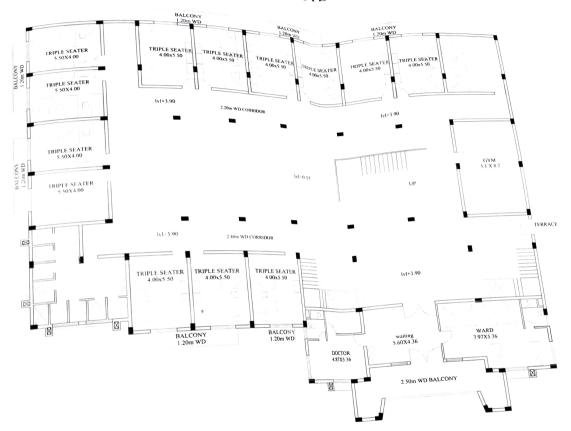
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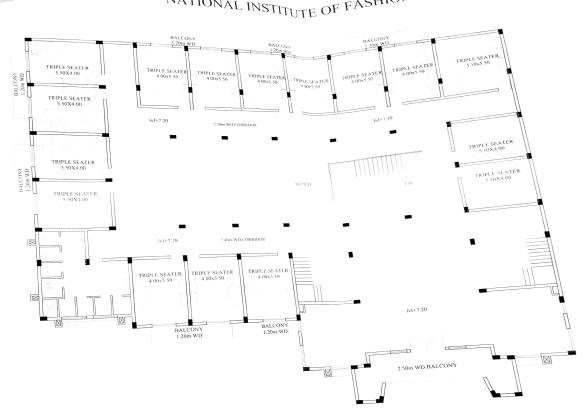
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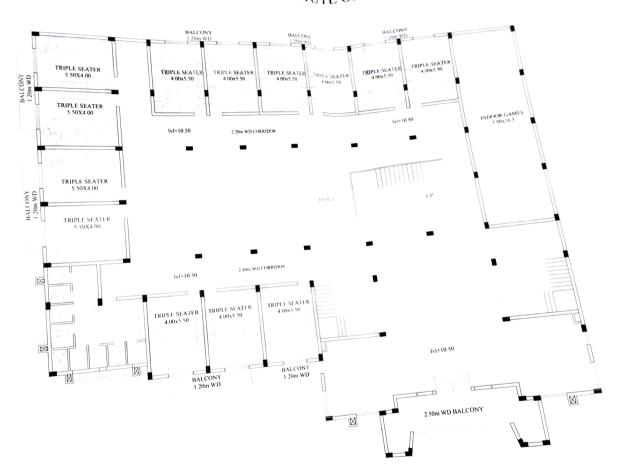


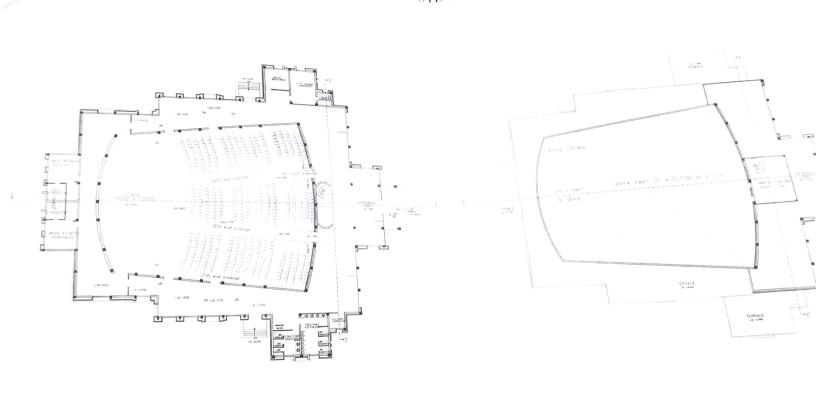
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GROUND FLOOR

B.Arch 5th Year

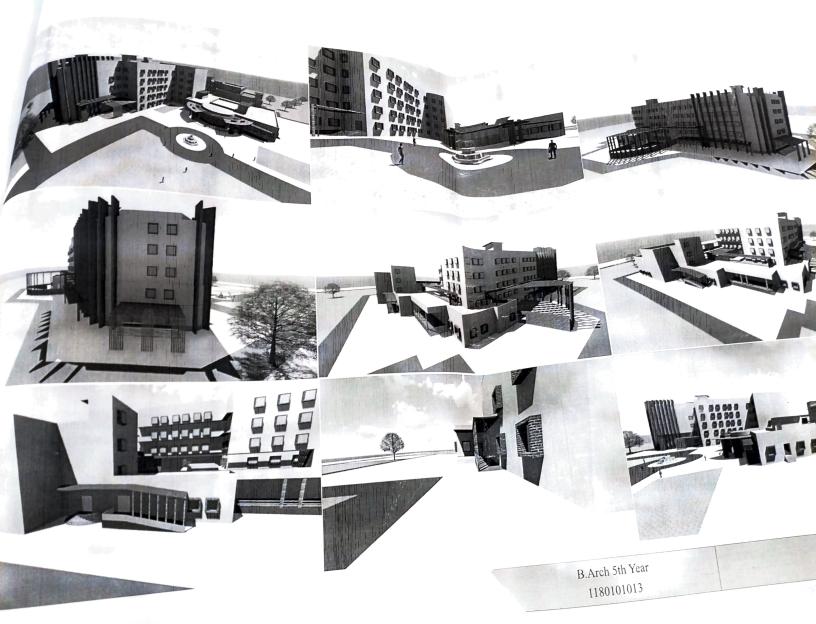


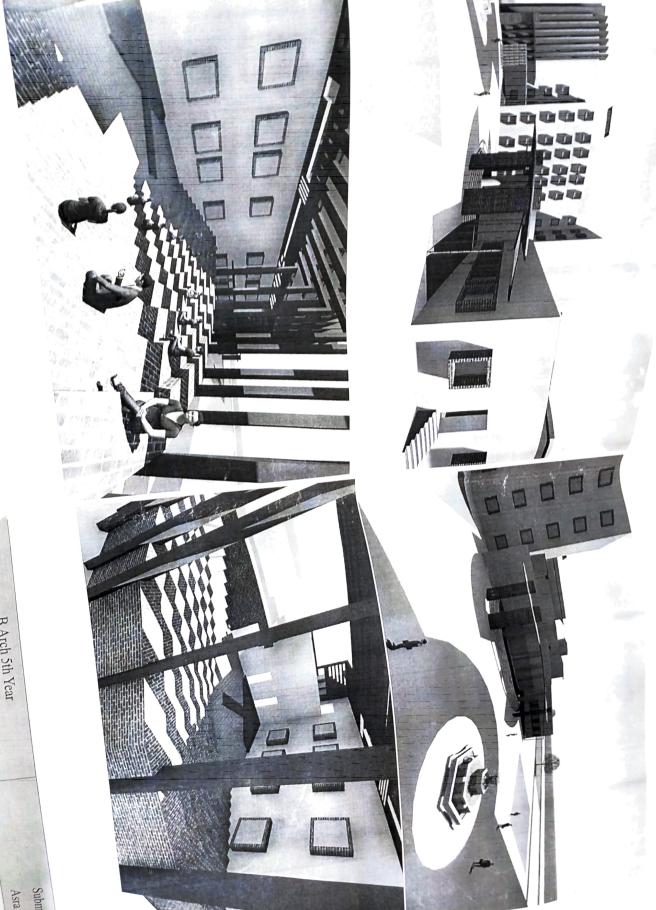
FRONT ELEVATION



SECTION X-X'







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