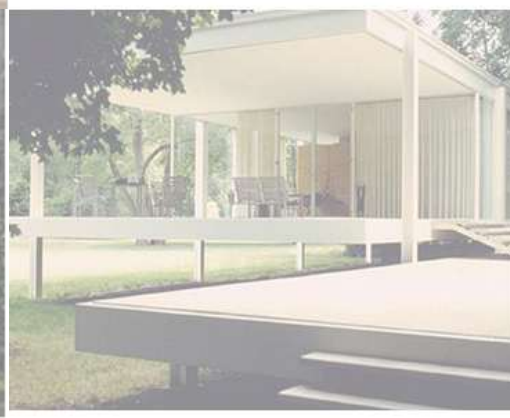


History of architecture

-modern architecture



5th sem

Q.1 explain a few major works of mies

- 1) Crown Hall (Chicago):

- It was not designed considering function in mind.
- Classism came back as Palladian style entrance was made.
- Centrality, axuality, were seen in the design.
- Series of steel & glass boxes were used.
- Vertical dimensions were given more importance as we approach the two porticos (like ears).
- Lot of space was created which could be used as universal space.
- We feel slightly lost in campus.
- It was School of Architecture.
- A pair of interior stairways led's to the basement level used for workshops & offices.

- 2) Fransworth House:

- It is a classical building.
- Columns have more importance.
- House is put on raised plinth.
- Everything is a plane, even the plinth is converted into a plane.
- Structure of building is using combination of planes with use of glass in it.
- Below the house there is space as if it has been delicately placed over stilts.
- Building belongs to nature instead of nature belonging to house in forms of gardens.
- There are two planes & third plane, glass is added to enclose a space.
- Thus the building is completely transparent.
- Corners & walls of building vanishes.
- Off centered but precious entry.

- 3) German Pavilion:

- It was a non functional building but it was designed for temporary function ie for barcelona exhibition for display of German design.
- It was a simple structure with composition of planes & there is no enclosed space.
- It seems as though we are sharing the space with nature.
- Thus it teaches us how to deal with space.
- Movement is provided through architecture.
- There is no singular experience unlike traditional & historical buildings like Pantheon.
- Plinth is on ground & is reduced to a plane.
- Planes don't want to touch each other.
- Everything is simple but is well worked out.
- Series of spaces were created which was never done in history.
- Space can be borrowed trying to qualify the space in terms of scale, light & various other ways.

- 4) Seagram Building:

- Mies walked along park avenue & realized tat one could not see any of its buildings from the pavement.
- The building is set back 100 ft from Park Avenue.
- To accommodate the slightest changes in the level which were present in the Park Avenue frontage & Lexington Avenue, the granite paved plaza was raised a few steps above the Park Avenue pavement, & as the streets fall away from Park to Lexington, the plaza becomes further detached from the noise & bustle of heavy vehicle & pedestrian traffic.
- At these north & south boundaries the plaza is defined by wide marble benches which act as protective elements at the plaza's edge.
- The east boundary of the plaza is set by four storey-section of the building which extends across the full site directly behind the 39 storey tower.
- The restaurant & bar which are accommodated in this low wing overlook the plaza.

Q-2) "HOUSE IS A MACHINE TO LIVE IN", ELABORATE THE STATEMENT WITH EXAMPLES.

- It was Le Corbusier's most important statement.
- He was wrongly castigated for his statement as an advocacy of an inhuman functionalism, for he meant nothing of the sort.
- Le Corbusier's statement was a humanizing critique of the original Futuristic dogma that a 'house is a gigantic machine to live in.'
- For him, the house wasn't threateningly 'gigantic' but it was for "living in" and it was the creation of a mechanomorphic house furthering life enhancing feelings that counted uppermost to him during High Modernism.
- For Le Corbusier, the new architecture was machine like in many ways:
 - Machine-age materials and methods of construction.
 - Its machine like efficiency in serving the physical and psychological needs.
 - And its resemblance to actual look of machines.

- Beginning in 1914, he produced several new structural formats for houses, of which the most important was the 'domino type.'
- It derived from the ferro-concrete work of Hennebique and Perret.
- Little different from Perret, Corbusier began with the floor slabs as primary, domino like units floating on six freestanding posts.
- The structure was thus freed of trabeated rigidity, not only in the openness of the interior but in the cantilever of the floor beyond the line of supports, from whose presence periphery of the building was liberated.
- Modernist determinism can be justified by the use of concrete 'predetermined' such a scheme and functionalism by liberating the house from the dark, humid ground storey and letting in salutary light and air, efficiently exploiting space including the roof and thus promoting a vigorous life-style.
- But ultimately what mattered most was not the structure or the function but the scheme's potential for space and volume, for attaining the high modernist image of a masonry and glass membrane stretched around a geometric form.
- His ideas about the implications of the structure ere later published.

The elimination of the ground story with the elevation of the house above pilotis (freestanding ferro-cemeny posts), by domino format, this merely required omitting ground floor walls.

Flat roof, used as a garden terrace.

Free interior planning by means of partition walls slotted between the supports.

Free composition of the external curtain walls.

A preference for ribbon windows.

Villa Savoye is another of Le Corbusier's buildings at Poissy outside Paris.

The villa originally looked out from a half circle of trees across a gently rolling, idyllic landscape below it.

Unlike the confined urban locations of most of Corbusier's early houses, the openness of the Poissy site permitted a freestanding building and the full realization of his five point program.

The stunning exterior realizes fully Le Corbusier's ideal of "the masterly, correct and magnificent play of masses brought together in the light.

Like the exterior, rest of the also has formal oppositions, which create effects ranging from somber drama to the lighthearted play.

- The truly dramatic gesture in the foyer, however is the juxtaposition of the steep spiral staircase against the leisurely ramp that ascends in effortless glide.
- Essentially the house comprises of two contrasting, sharply defined, yet interpenetrating external aspects.
 - Dominant element: square, single storied box, a pure, sleek, geometric envelop lifted buoyantly above slender pilotis, its taut skin slit for narrow ribbon windows that run unbroken from corner to corner.
 - Secondary element: fragmented and composed of incomplete circular forms – the tubular windscreens of the roof solarium and the half oval enclosure recessed behind the pilotis within a semi-circular driveway.

Q-3) EXPLAIN THE BUILDING WHICH TRIGGERS THE CONCEPT OF UTOPIAN LIVING.

- The building resembling the concept of utopian living was Unite d' Habitation designed by Le Corbusier in France.
- The building was designed as a township – it was a city within a building.
- It comprised of almost all the functions required for day to day living.
- The common facilities included swimming pool, club, restaurant, shopping complex, living houses, gym, jogging tracks, meeting places, etc.
- We can say it was a vertical township.
- The building was designed for easy access to day to day requirements as well as for following reasons:
 - Communal living
 - Socialism
 - Ghetto (people of one community or religion living together so there is a sense of security).

- The basement area was beautifully articulated.
- In the parking lot stronger materials were used, there was a roughness in concrete and the columns were thick which were called 'pilotis'.

Living space was given importance by making them double heighted.

The building was not transparent but was a solid mass.

- The building represented the idea of how the city was growing.

Q.4 Explain the characteristics of Modern Architecture giving examples from work of Frank Lloyd Wright.

- 1) Robie House:
 - Horizontal planes extending far behind the internal space using similar idiomatic expression of planes.
 - Turn house normally built in restricted plot.
 - Wright was one of the 1st to start analyzing how people live prior to vernacular architecture.
 - He gave name the name "Living Room" where all members of the family could live, sit, dine, etc. together
- 2) Larkin building:
 - Functional building.
 - It is basically an office building, high rise building.
 - Articulation of function is seen very well in this building.
 - Use of atriums.

- 3) Falling Waters:

- It is functional building but at the same time has qualities same as that of German pavilion.
- Merging of inner spaces is much more exaggerated through Barcelona pavilion.
- Wright has established space & can look from all over in all ways.
- So we always relate the experience of German pavilion with this building.
- It is not always the visual idiom that plays role but there are lot more other things like structure.
- Cantilever is used more in depth.
- Abstraction is total sort of framed structure & use of material.
- Idiomatically been done but in Robie house it was load bearing & some part was resting upon some other material i.e., brick & concrete.
- elongated horizontal elevated planes brings down scale.
- Slowly removing mass & they are getting thinner & thinner, they are thin planes as if made from cardboard.
- If we remove the idea of weight , then there is 3D composition & space is there.
- Space is a major criteria in modern architecture either by itself or by some means.
- Part of outside space is stolen & participates in the internal space.

Q.5 how did industrialisation affect architecture and urbanisation?

- When Industrialization comes up:
 - Development of streets
 - Classes of people come up
 - Urban development
 - Growth of mega cities

- Over crowding led to development of slums, middle classes, etc.
- Due to slums, diseases spread, which in turn led to development of health set ups & small clinics.
- Research started taking place.
- More of hygienic development.
- Housing in general.
- Lot of people started migrating & living here.
- Common & minimum requirements like drainage, sewage, kitchen, one bedroom, one bathroom, etc for a common man's family was provided in a house.
- Discovery and invention of new materials like cast iron, concrete, etc.
- Effect on aesthetics
- Arts & crafts were replaced by machines which led to unemployment.

- This all gave rise to a number of building types:
 - Housing
 - Public parks
 - These were always there but new in modern era.
 - These are specially assigned places but separately made for everybody.
 - Hospitals
 - Civic buildings
 - Commercial buildings
 - Markets
 - Banks (due to growth of wealth)
 - Academic buildings (like schools, etc)
 - Prisons (increase in thefts, etc)
 - Religious places (belief in god)
 - Institutional buildings (necessity is the mother of all inventions)

Q.6 which aspects of modern architecture may be attributed to ideals of democracy

- First came up Renaissance, then followed:
 - Humanism
 - Colonialism
 - Industrialization
 - Urbanism
- French revolution was going on during the 1st three periods after renaissance.
- Colonialism helped in diversification of ideas in terms of architecture.
- It really opened up lot of avenues dealing with functions, spaces, etc.
- French revolution's main motto was for democracy; against the state.
- "Looking common man as a ruler & giving status to common man"
- Now if democracy comes into existence obviously it will have a great effect on architecture of that place.
- Different kinds of buildings came up.
- It was the professional domain of architecture.
- Schools & colleges on architecture came up.
- How further architecture & engineering became two separate branches altogether.
- Because of industrialization & French revolution as well new materials came up as well as new methods for dealing with then came up too.

- More production, more facilities were given to workers.
- Professional attention given to the building needs like town planning, common man's house, etc.
- Des Cartes said, "Cogito ergo sum", which means "I think therefore I am".
- This implicates rule of reason.
- Scientific analysis of things, commonly set of universality of ideas.
- It establishes:
 - Commonality
 - Religion
 - Rationality
 - Scientific temperament
 - Democracy.
- These are the signs of modernity.
- Accepted methods of governance : Democracy.
- Varied dimensions in terms of for example:
 - language: idioms, vocabulary
 - Music
 - art
- Basic analysis of problems & its solution.