PLANNING AND DESIGNING OF MODERN CITIES

BRASILIA

- Brasilia is the federal capital of Brazil.
- Brasilia, the planned city of Brazil.
- It has a population of (2,562,963), making it the fourth largest city in Brazil.
- It is the third capital of Brazil after Salvador (1549-1763) and -Rio de Janeiro (1763-1960). In 1891 they decided to shift the capital.
- Brasilia is the largest city in the world that did not exist at the beginning of the 20th century.
- The city was planned & developed in 1956 by LUCIO COSTA (principal urban planner) and OSCAR NIEMEYER (principal architect).
- In 1960 it formally became Brazil's capital.
- City's shape resembles an airplane or a bird. The body was monuments axis for the principal public buildings and offices. The wings were the residential and other areas.
- It is listed as world heritage site by UNESCO

CANBERRA

- In April 1911, an International Competition for the design of Australia's new capital was held. The Canberra was selected for new capital of Australia.
- Walter Burley Griffin (November 24, 1876 – February 11, 1937) was an American architect and landscape architect who is known for designing Canberra city.

<u>PLANNING CONCEPTS</u>

1) "City Beautiful"—an idea used in Chicago City Plan by Daniel Burnham involving planning and landscaping, main buildings around formal water basins.
2) "Garden City" by Ebenezer Howard which used parks to screen residential areas by major highways and used street patterns to change directions so as to discourage through traffic from using residential roads as shortcuts.

In comparison with the Central Washington Plan designed by McMillan in 1901, Griffin's Geometrical Concept is much the same.

- The name Kanberra (Ngummural Language) means meeting place.
- Introduction to the plan "maybe considered as an irregular theatres on which the proposed to stage the great dramas of god."
- Capitol hill includes governmental buildings
- The court of justice, the parliament house finally on the highest internal hill – the capitol buildings.

The accent, the drama, stage and arena would form a triangle, with the Capitol Hill as the rear open and both these on the audience's ride of the water – the military establishments and market centre to their front left. The national university and municipal centre to front right. These two would be joined to apex by broad highways crossing the lake. An elegantly monumental art gallery and national library have joined the courts of justice at front stage. Visually the right edge of the triangle has become the dominant feature. It leads the edge back from the municipal commercial centre, a past traffic circle, via a broad highway across Lake Burley Griffin.

Canberra city's concept is linear development and dispersal planning. Having two avenues; King Avenue and Common Wealth Avenue.

CHANDIGARH

- It houses a population of 1,054,600 inhabitants (2001) and is one of the richest cities of the nation.
- American architects Albert Mayer and Mathew Novicki were the first architects to be appointed for the project.
- After the death of Novicki in 1950, Le Corbusier was commissioned.
- Fan-shaped was Master plan proposed by Albert Mayer.
- Grid-Iron Master Plan proposed by Le Corbusier.
- Chandigarh is designed on the concept of neighborhood planning and sectorial planning.

- The primary module of city's design is a Sector, a neighborhood unit of size 800 meters x 1200 meters.
- Each SECTOR is a self-sufficient unit having shops, school, health centers and places of recreations and worship.
- The population of a sector varies between 3000 and 20000 depending upon the sizes of plots and the topography of the area.
- Development was done in 2 phases due to lack of economic resources, 1st phase consist of 1-31 sectors were designed and in 2nd phase 32-47 sectors were designed.
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ROADS

The roads of the city are classified into seven categories, Known as the system of 7 V s, as below:

V -1 - Fast roads connecting Chandigarh to other towns;

V-2 -arterial roads.

V-3 --Fast vehicular roads;

V -4 -Meandering shopping streets;

V -5 -Sector circulation roads;

V -6 -Access roads to houses;

V -7 -footpaths and cycle tracks

Buses will ply only on V-I, V-2, V-3 and V-4 roads. A wall shall seal the V-3 roads from the sectors.

Comparison with Human Body Parts

- **Head** (the Capitol Complex, Sector 1),
- **Heart** (the City Centre Sector-17),
- **Lungs** (the leisure valley, innumerable open spaces and sector greens),
- **Intellect** (the cultural and educational institutions),
- **Circulatory system** (the network of roads, the 7Vs) and
- **Viscera** (the Industrial Area).

NEW DELHI

- Planned by Edwin Lutyens and Herbert Baker in 1911.
- King George (V) and Queen Mary and Captain Stanley (viceroy) laid the foundation stone in dec-15-1911 at a darbar under a purposely built Shah Jahani Dome.
- Delhi is planned on Grid iron and Radial pattern
- Streets crossing at right angle are much like in New York.

The Road Network

Besides the major Pathway there were extremely wide avenues. The original design of the road network was capable of accommodating 6000 vehicles however these avenues had the potential of increasing their carriageway the reason why the road layout has survived till today.

In general the road network consisted of diagonals and radials at 30 degree/ 60 degree angles to the main axis forming triangles and hexagons.

Commercial District

Consist of Connaught place (inner circle and outer circle) and adjoining areas like Kasturba Gandhi Marg, Barakhamba Road.

Intentions of the Layout

Lutyens' Delhi was planned on the most spacious garden city lines with the great avenues decorated with classical buildings with lush landscape. The layout of Lutyens Delhi was governed by three major visual corridors, linking the government complex with:

- Jama Masjid
- Indraprastha
- Safdarjungs Tomb

Features

1. The plan reflects Lutyens' "transcendent fervour for geometric symmetry," which is expressed through amazing sequences of triangles and hexagons, through sightlines and axes.
2. Lutyens' plan is also remarkable for the generous green space, lawns, watercourses, flower and fruit-bearing trees,

and their integration with the parks developed around monuments.

3. The attempt was to include all natural and historical wonders in the new city.