

Urbanization

Tapan Debnath

Urban

- Urban URB= (City) + AN =(Denotes Place) Pertaining to a large city. An urban area might be defined as an area with a large amount of people residing in it, an area that has been significantly developed, or an area where the distance between buildings is very small. Urban is used in contrast to rural, which generally indicates a low-population, often agricultural-based area.

- Urban settlements have been defined on the basis of:

- Political Definition- Administrative Functions

- Economic Definition- percentage of people in non agricultural populations

- Demographic Definition- size of the Population

- Urbanization is referred to as the migration of people in large numbers from rural to urban areas.
- Urbanization occurs mainly because of the concentration of resources and facilities in towns and cities.
- Definition urbanization is a population shift from rural to urban areas, and the ways in which society adapts to the change. It predominantly results in the physical growth of urban areas, be it horizontal or vertical.

URBANIZATION IN INDIA

- Urbanization is taking place at a faster rate in india.
- Population residing in urban areas in India, according to 1901 census, was 11.4%. This count increased to 28.53% according to 2001 census, and crossing 30% as per 2011 census, standing at 31.16%.
- Causes of Urbanization



Attractions to Urban Areas (Pull Factors)

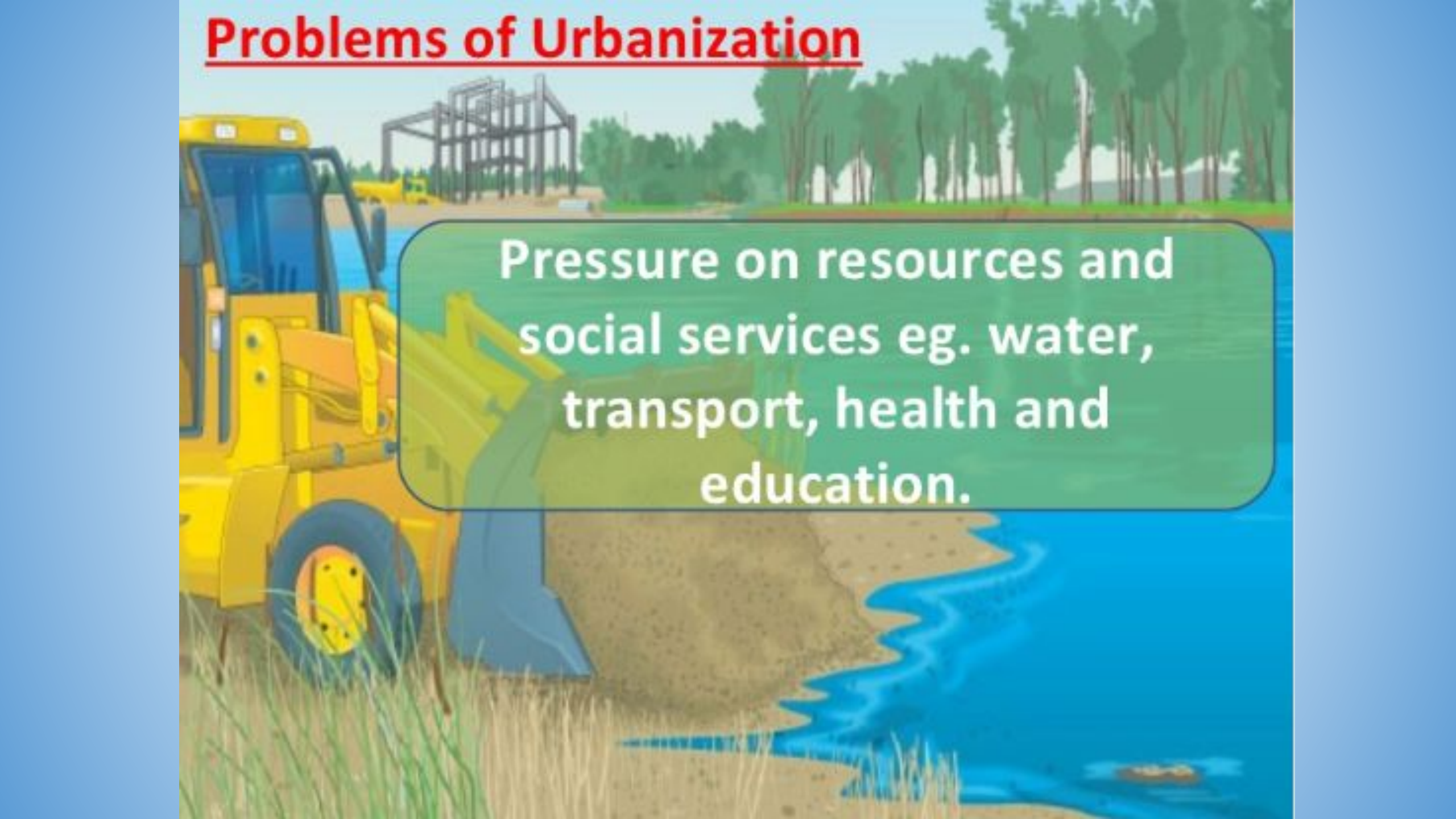


- A large number of people are attracted to urban areas because of:
The availability of jobs
- Proper infrastructure – roads, water, electricity etc.
- Availability of social services – health, education, recreation, postal services and police stations.
- A wide variety of entertainment and night life facilities.

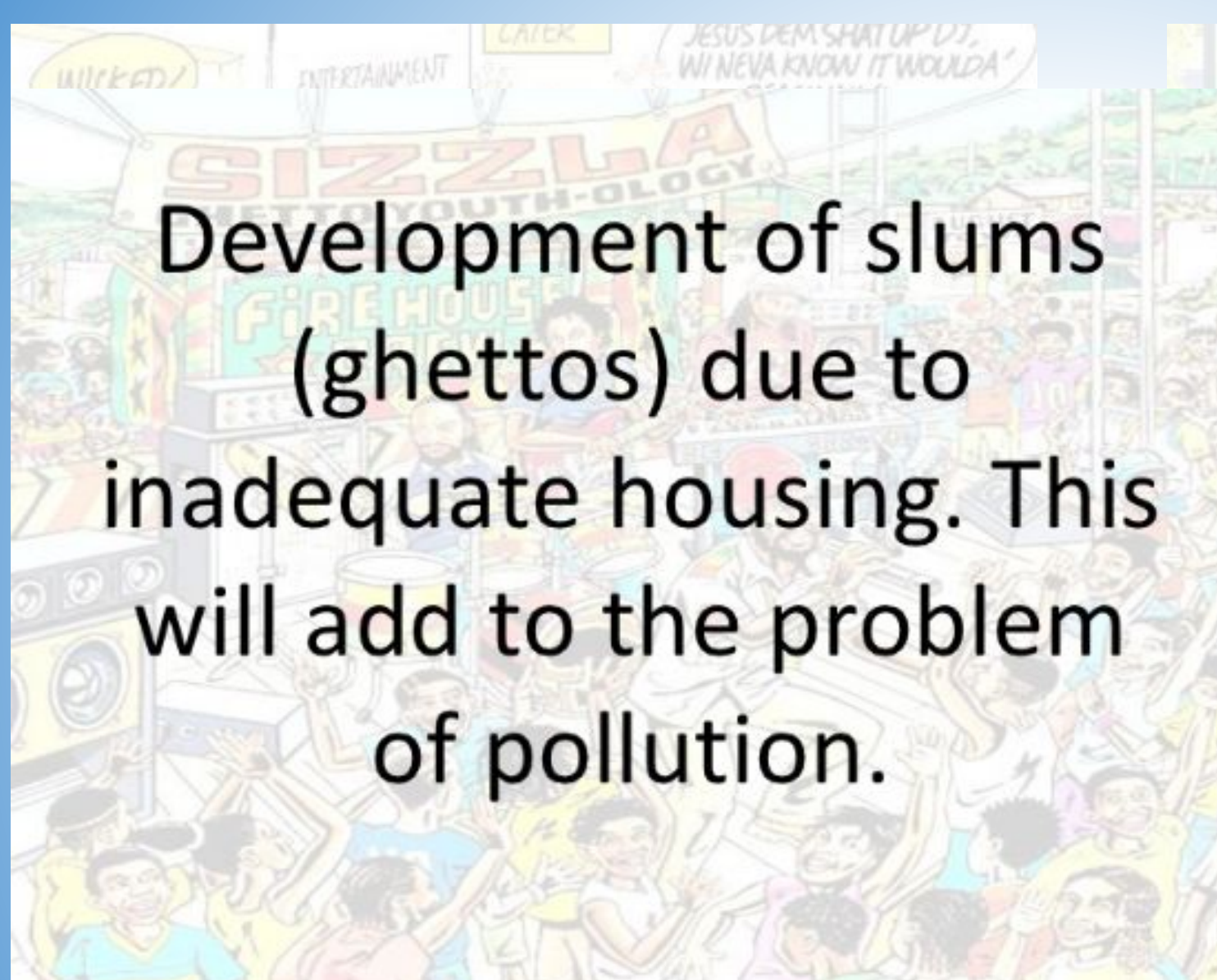
Conditions in the Rural Areas (Push Factors)

- Scarcity of jobs except in agriculture, and most people consider agricultural occupations to be low-paying, risky and menial.
- Lack of infrastructure such as poor roads, irregular water and electricity supplies.
- Poor facilities in education, health and security
- Lack of entertainment and recreational facilities.

Problems of Urbanization

A yellow excavator is shown in the foreground, partially obscured by a green text box. In the background, there is a construction site with a steel frame structure and a line of trees. A body of water is visible on the right side of the image.

Pressure on resources and social services eg. water, transport, health and education.



Development of slums
(ghettos) due to
inadequate housing. This
will add to the problem
of pollution.



Traffic congestion



More unemployment.



High levels of stress



Noise pollution

**Any
questions?**

Urban Morphology

- Urban Morphology is generally defined the internal and external plans of a town.
- It concerned with the ground layout of the houses, spatial arrangement of streets, relation between the street and houses, height of the houses, as well as sky line and ground layer relationship of build up area.
- Internal Morphology: mainly concerned with arrangement of street and build up space.
- External Morphology: involved with shape and bird's eye view of the street.

Urban Morphology

Theory

✓ Concentric zone theory

✓ Sector Model

✓ The Multiple Nuclei Model

CONCENTRIC ZONE THEORY

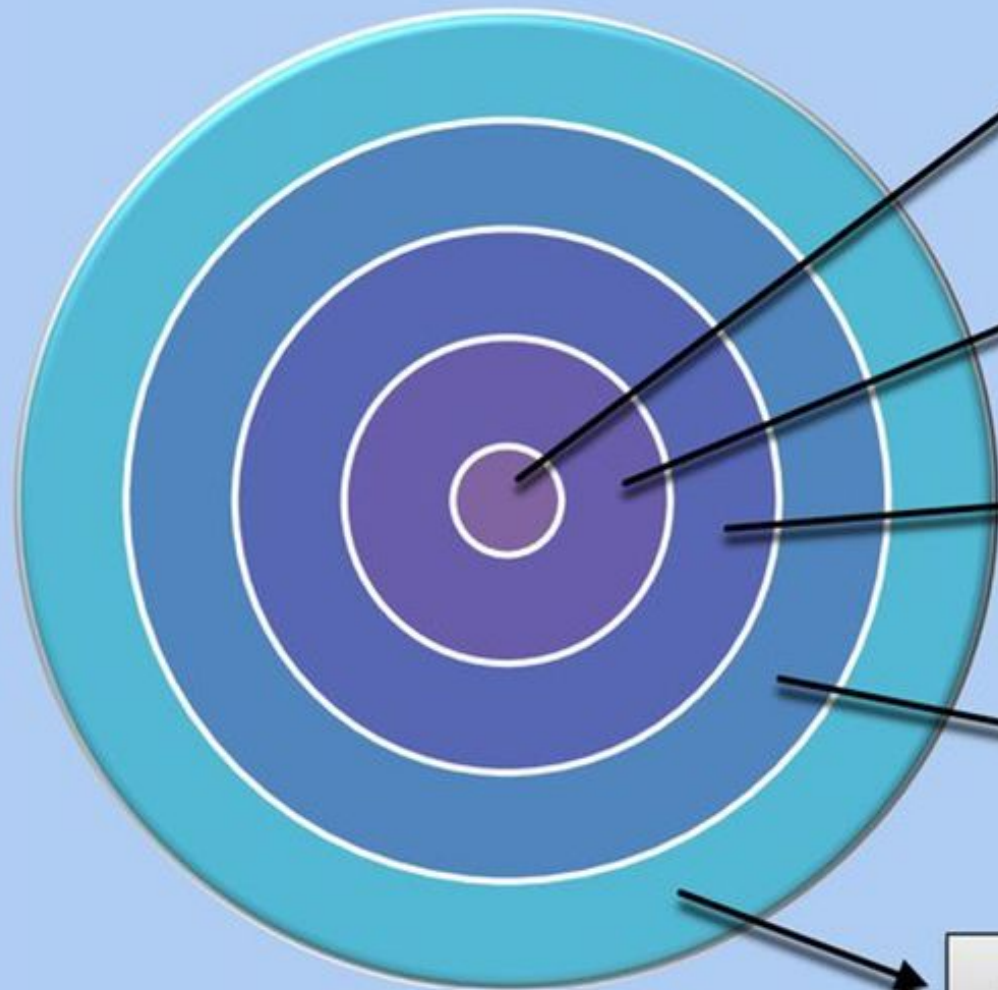
□ ORIGINS OF THEORY

- Developed in the 1925 by Ernest Burgess and Robert Park, University of Chicago.
- Sought to explain the socioeconomic divides in and out of the city
- Model was based on Chicago's city layout
- First theory to explain the distribution of social groups

- **Assumptions:**

- City grows outwards in the concentric zones or rings if there are no physical barriers.
- City has a single centre.
- Population density decreases towards outward zones
- The population is heterogeneous culturally and socially.
- The economy of the city's based on commercial and industrial activities.
- There is a private ownership of property.
- The city area and population is expanding.

Also known as the Burgess Model, the Bull's Eye Model, the Concentric Ring Model, or the Concentric Circles Model.



**1. Central
Business District**

**2. Zone of
Transition**

**3. Working
Class Zone**

4. Residential Zone

5. Commuter Zone

ZONE 1: CENTRAL BUSINESS DISTRICT

- Non-residential centre for business.
- “Downtown” area
- Emphasis on business and commerce
- Commuted to by residents of other zones

ZONE 2: ZONE OF TRANSITION

- “Least desirable place to live in the city”
- Dilapidated housing and infrastructure
- Large percentage rent
- Highest crime rate
- High rate of people moving in and out

ZONE 3: WORKING CLASS

- Modest older homes
- Stable, working class families
- Can afford to move out of Zone 2
 - Second generation immigrants

ZONE 4: MIDDLE CLASS

- Newer, more spacious homes
- Less likely to be rented
- Well educated

ZONE 5: COMMUTERS

- Mostly upper class
 - Can afford to commute into city for work or entertainment

**Any
questions?**

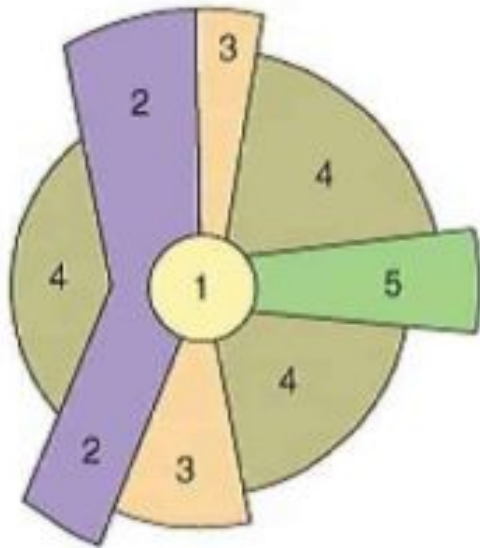
Sector Model

- Hoyt Model is somewhat similar to Burgess Model and is often considered as its improved version.
- Hoyt argued that cities do not develop in the form of simple rings, instead, they have “sectors.” Homer Hoyt in 1939 suggested that few activities grow in the form of sectors which radiates out along the main travel links.

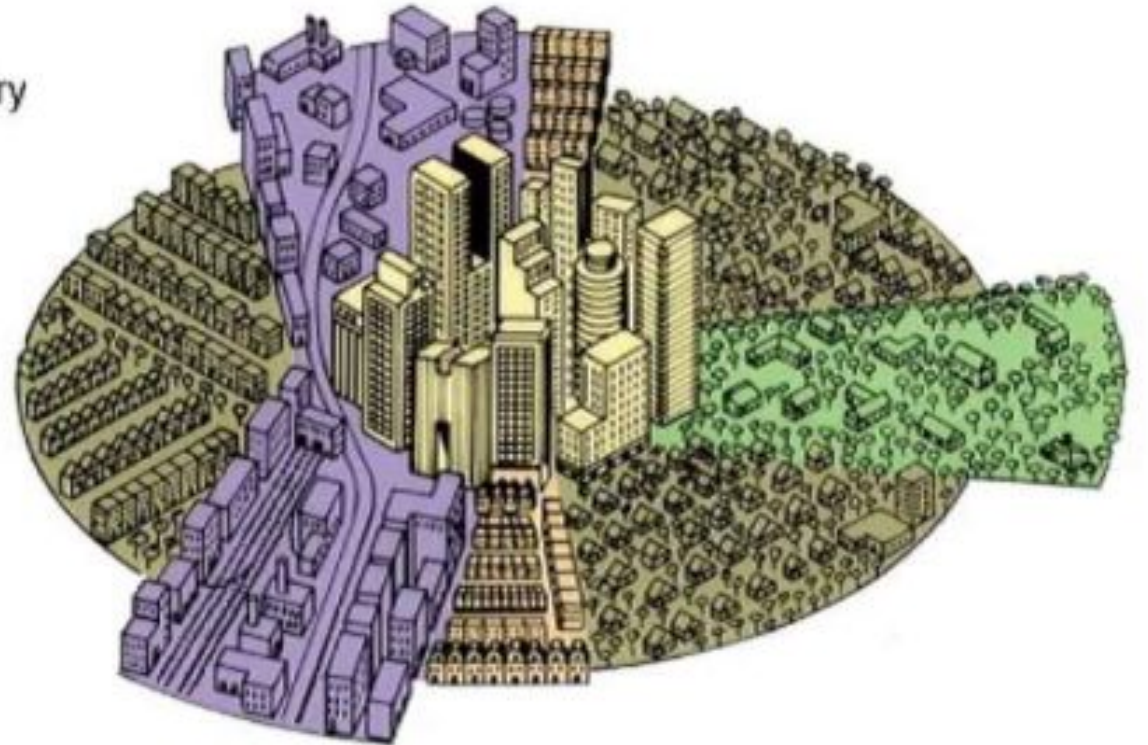
Principle of sector model

- Land rent change by sector not in the form of concentric rings.
- The value of the land, grades downward in all direction.

Sector Model



1. Central business district
2. Transportation and industry
3. Low-class residential
4. Middle-class residential
5. High-class residential



Components of Hoyt Model

- **CBD** – Central Business District is placed at the center. Sectors and the partial rings of land use/activities take place. This area is often known as downtown and has high rise buildings.
- **Industry** – Industries are represented in the form of a sector radiating out from the center. These forms sector because of the presence of a transport linkage along which the activities grew. Presence of railway line, river or road would attract similar activity, and thus a continuous corridor or “sector” will develop.

Low-Class Residential

Low-income groups reside in this area. Narrow roads, high population density, small houses with poor ventilation exist in this area.

Roads are narrow and often connects to the industries where most of the people in this sector work. Closeness to industries reduces the travel cost and thus attracts industrial workers. Environmental and living conditions are often inadequate because of the proximity to factories.

Middle-Class Residential

This area has middle income groups who can afford more substantial travel cost and want better living conditions. The activities of people residing in this area consist of different activities and not just the industrial work. It has more linkages with CBD along with some linkages to industries. This area has the most significant residential area.

- **High Class residential**

- This is the outermost and farthest area from the downtown. Wealthy and affluent people live in this area. This area is clean, has less traffic, quiet and has large houses. Corridor or spine extending from CBD to the edge has the best housing.

- **The significance of Hoyt Model**

- Ecological factors + economic rent concept to explain the land use pattern
- Stress on the role of transport routes in affecting the spatial arrangement of the city
- Both the distance and direction of growth from the city center are considered
- Brings location of industrial and environmental amenity values as determinants in a residential place
- Example: Sectors of high-class residential areas tend to grow towards higher grounds, sites with a better view, more open space, the homes of influential leaders within the community and existing outlying, smaller settlements.

- **Limitations of Sector Model**

- Only Railway lines are considered for the growth of sectors and do not make allowances for private cars.
- It is a mono-centric representation of cities; multiple business centers are not accounted for in this model.
- Physical features – physical features may restrict or direct growth along specific wedges
- No reference to out of town development

THE MULTIPLE NUCLEI MODEL

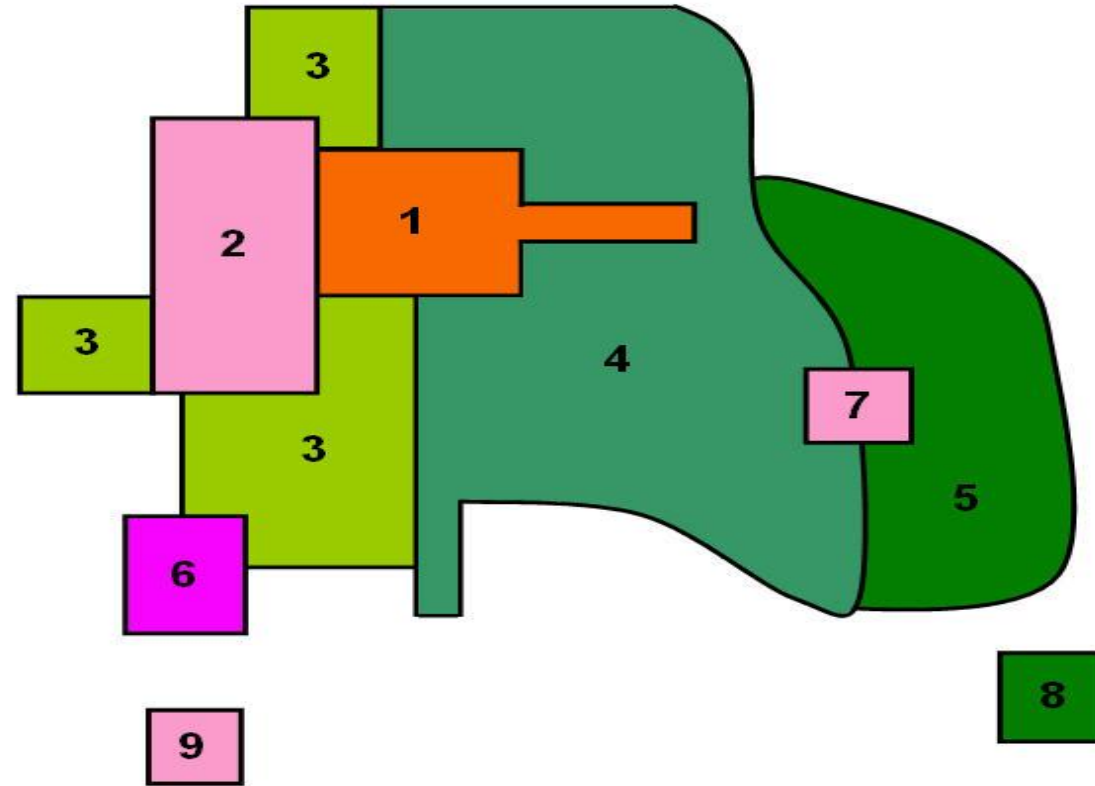
- The Multiple Nuclei Model was created in 1945 by C. D. Harris & E. L. Ullman.
- This model was based on Concentric Zone Model & Sector Model.

The model to no one's surprise describes the layout of a city based on Chicago.

- Concept :- “Multiple Nuclei Model” is a Model of urban Land use in which a city grows from several independent points rather than from one central business district. This model was given in an article by them “The Nature of Cities”. Each point acts as a growth center from a particular kind of land use , such as industry ,retail, port, university or high quality housing ect. As this expand , the merge to form a single urban area. The CBD is not the only generator of change. Example:- London, Chicago, Los Angeles etc.

- ASSUMPTION :-
- Land is not flat in all areas.
- Even distribution of resources.
- Even distribution of people in residential areas.
- Even transportation costs.

Harris and Ullman's multiple-nuclei model of urban land use



- 1 CBD
- 2 Wholesale, light manufacturing
- 3 Low-class residential
- 4 Medium-class residential
- 5 High-class residential
- 6 Heavy manufacturing
- 7 Outlying business district
- 8 Residential suburb
- 9 Industrial suburb

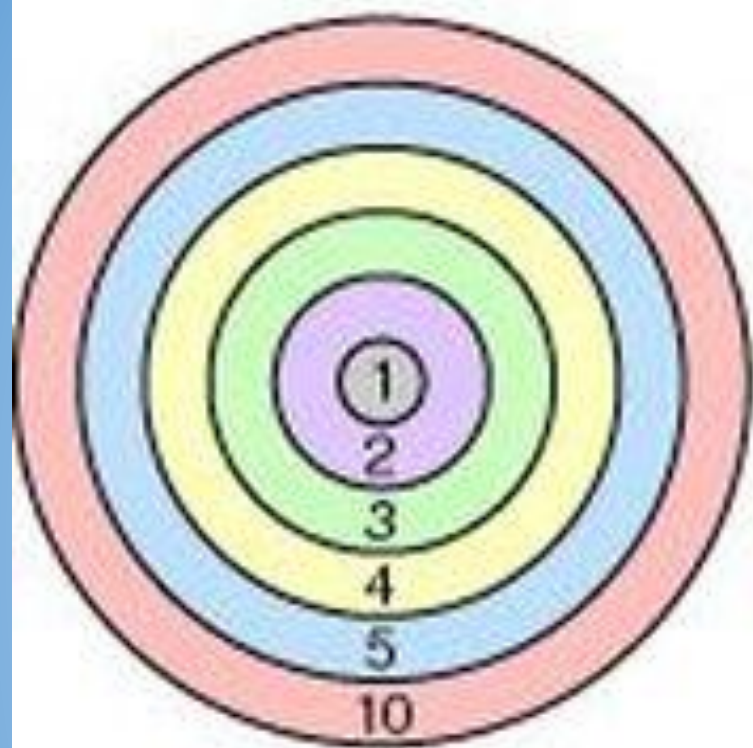
- ZONES :-
- i. Central Business district (CBD)
- ii. Wholesale Light Manufacturing
- iii. Low Class Residential
- iv. Medium Class Residential
- v. High Class Residential
- vi. Heavy Manufacturing
- vii. Outlying Business Area
- viii. Outlying Residential
- ix. Outlying Industrial Area

Discussion

Questions

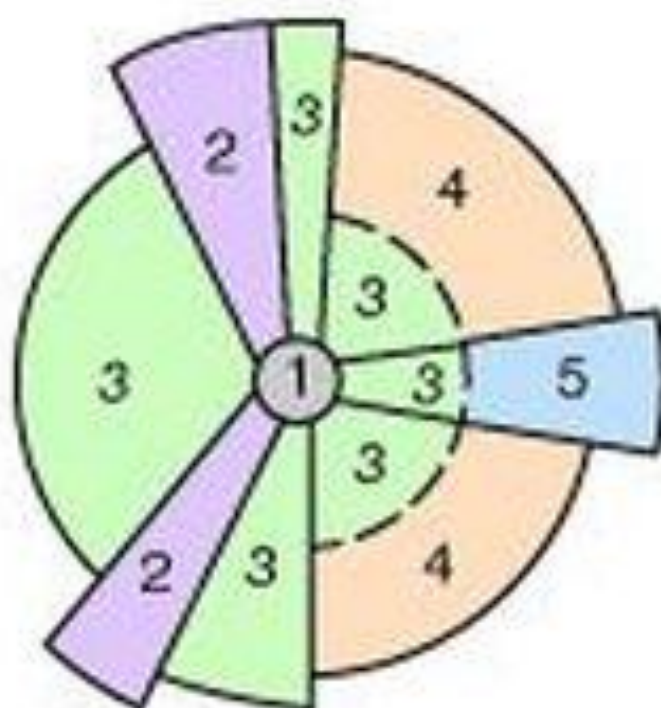
1. When Concentric zone model was developed?
2. How many zones was there?
3. What is CBD?
4. Limitation of Concentric zone model .
5. When Sector model was developed?
6. How many zones was there?
7. How many zones in Multiple Nuclei Model?
8. Which Model is called as mono-centric representation of cities?
9. What is “Downtown” area ?
10. “Least desirable place to live in the city” called _____Zones.

concentric-ring theory



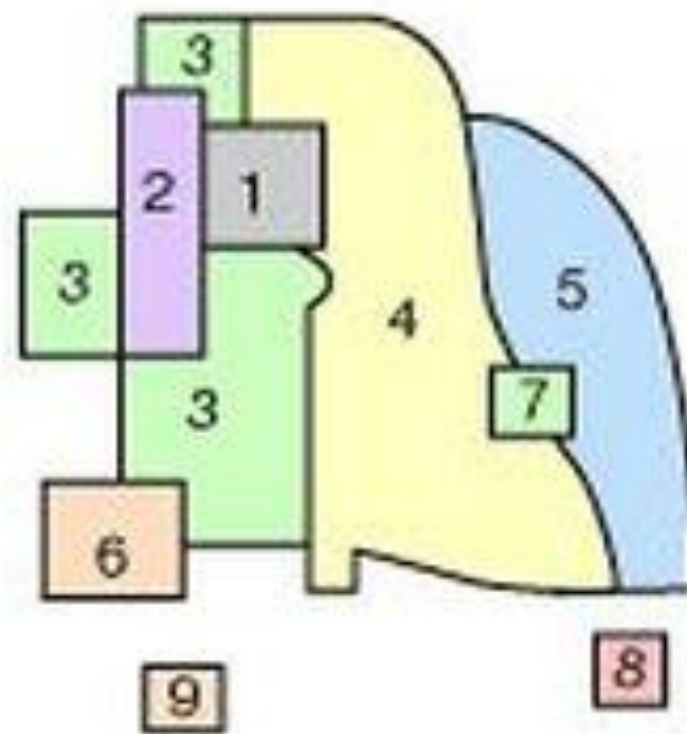
- 1 central business district (CBD)
- 2 wholesale light manufacturing
- 3 low-cost housing
- 4 medium-cost housing
- 5 high-cost housing

sector theory



- 6 heavy manufacturing
- 7 outlying business district
- 8 residential suburb
- 9 industrial suburb
- 10 commuter zone

multiple-nuclei theory



THANK YOU