FAQ's

1. **Describe the Sector Model.**

   A second theory of urban structure was proposed in 1939 by an economist named Homer Hoyt. His model, the sector model, proposed that a city develops in sectors instead of rings. Certain areas of a city are more attractive for various activities, whether by chance or geographic and environmental reasons. As the city grows and these activities flourish and expand outward, they do so in a wedge and become a sector of the city.
   If a district is set up for high income housing, for example, any new development in that district will expand from the outer edge. To some degree this theory is just a refinement on the concentric model rather than a radical restatement. Both Hoyt and Burgess claimed Chicago supported their model. Burgess claimed that Chicago's central business district was surrounded by a series of rings, broken only by Lake Michigan.
   Hoyt argued that the best housing developed north from the central business district along Lake Michigan, while industry located along major rail lines and roads to the south, southwest, and northwest. Calgary, Alberta almost perfectly fits Hoyt's sector model.

2. **Discuss the assumptions made by the sector model as well as the limitations of the same.**

   Assume land is flat
   Cities develop in sectors not in rings along major attractive areas whether by chance or geographic and environmental reasons
   Building age as one move into the city center
   There exist well defined separation either ethnically or economically along transport networks
   Concentration of heavy industries in certain areas

   Limitations of the Sector Model
   The theory is based on early 20th rail transport and does not make

allowances for private cars that enable commuting from cheaper land outside city boundaries. Physical features –physical features may restrict or direct growth along certain wedges. The growth of a sector can be limited by leapfrog land use.

3. **What are the characteristics of the multiple nuclei model?**

Geographers C.D. Harris and E. L. Ullman developed the multiple nuclei model in 1945. According to this model, a city contains more than one center around which activities revolve. Some activities are attracted to particular nodes while others try to avoid them. For example, a university node may attract well-educated residents, pizzerias, and bookstores, whereas an airport may attract hotels and warehouses.

Other businesses may also form clusters, sometimes known locally as Iron Triangles for automobile repair or red light districts for prostitution, or arts districts. Incompatible activities will avoid clustering in the same area, explaining why heavy industry and high-income housing rarely exist in the same neighbourhood. The model describes the layout of a city. It says that even though a city may have begun with a central business district, or CBD, other smaller CBDs develop on the outskirts of the city near the more valuable housing areas to allow shorter commutes from the outskirts of the city. This creates nodes or nuclei in other parts of the city besides the CBD thus the name multiple nuclei model. Their aim was to produce a more realistic, if more complicated, model. Their main goals in this were to:

Move away from the concentric zone model.

To better reflect the complex nature of urban areas, especially those of larger size

4. **Describe the assumptions of the multiple nuclei model.**

- Certain industrial activities require transportation facilities e.g. ports, railway stations, etc. to lower transportation costs.
- Various combinations of activities tend to be kept apart e.g. residential areas and airports, factories and parks, etc.
- Other activities are found together to their mutual advantage e.g. universities, bookstores and coffee shops, etc.
- Some facilities need to be set in specific areas in a city– for example the CBD requires convenient traffic systems, and many factories need an abundant source of water
- Certain events benefit from the adjacent distance like the positions of factories and residence.
- In some cases, some constructions are located in less-than-ideal locations, often due to outside factors such as rent.

5. Discuss the different factors affecting growth of settlements.

Physical factors that influence the location of a settlement include;

- Water supply – settlements need water, they often locate on wet point sites for this. Settlements built away from rivers and water supplies to avoid flooding are located at dry point sites.
- 2.Defence – building on high ground allowed people the chance to look out for enemies (e.g. Edinburgh castle) while surrounding a settlement with water also helped with deed defence e.g. Durham is built inside a meander.
- 3.Aspect and shelter – In the northern hemisphere south facing slopes receive more sunlight and are protected from cold Northerly winds. More settlements and agricultural land is therefore located on South facing slopes.
- The economic factors include;
- Communications – settlements often located next to rivers that could be easily crossed. These are called bridging

points. Other favourable places included where at the junctions of valleys or in gaps through hills.

- These locations allowed maximum communication between different settlements and increased trade. E.g. Newcastle is built on the Tyne at a bridging point and could benefit with trade from the North and the South.
- •Resources - Early settlers relied upon wood for fuel and building. A site close to woodland was there fore an advantage. Later, resources such as Iron ore, coal and bauxite encouraged the growth of settlements.
- Each center will supply particular types of goods forming levels of hierarchy. In the functional hierarchies, generalizations can be made regarding the spacing, size and function of settlements.
  - The larger the settlements are in size, the fewer in number they will be, i.e. there are many small villages, but few large cities.
  - The larger the settlements grow in size, the greater the distance between them, i.e. villages are usually found close together, while cities are spaced much further apart.
  - As a settlement increases in size, the range and number of its functions will increase .
  - As a settlement increases in size, the number of higher-order services will also increase, i.e. a greater degree of specialization occurs in the services.

6. What are the factors that affect the decay of human settlements?

(Environmental and Social Problems)

One obvious result associated with economic development is rapid urbanization. This is coupled with an urban unemployment rate of 23% of the economically active population, and with its rural-urban migration increasing at a rate of 5.5% per annum.

- Too much of disparity between poor and rich will create both social and political unrest leading to fall of government and eventually decay of the urban fabric.
- Rapid urbanization without support of good infrastructure will lead to overcrowding and creation of slums and other unwanted urban elements.
- As a byproduct of urbanization, there will be excessive construction and business developments which will lead to uneven distribution of services and create a greater divide between rich and poor.
- Many cases of gentrification will lead to exclusion of certain population groups and reduce the character of the city.
- Environmental degradation like various types of pollution- water, air and noise.
- Depletion of natural resources and as a result causing escalation of prices or forcing communities to move elsewhere.
- Combination of social and environmental problems (usually mutually exclusive) are the main reasons for decay of human settlements.