

URBAN GEOGRAPHY

Introduction
Nature
Scope

A brief note

- Urban geography as a discipline evolved in the 20th century.
- Urban Geography is a new branch of Human Geography. (Part of Settlement Geography)
- Deals with the study of urban settlements within the framework of their geographical setting
- SCOPE :
 - the study of origin of urban settlements,
 - their morphology and its development,
 - **their functions** in and around their environs.

Dickinson (1901) defines "urban geography as the study of a city directing the neighboring region." He describes that the city behaves like a king in its hinterland.

H.M. Mayer (1951) urban geography is concerned with interpreting the patterns and relationships that exists within the urban areas, on the one hand, and between urban areas and non-urban areas that cities serve on the other hand.

Harold Carter (1972) is of the view that as the geographer deals with the study of the uneven character of the earth's surface; and considerable proportion of population resides in urban settlements these settlements with its inhabitants and the buildings together are of special interest to the urban geographer. Moreover, the problems faced by the city dwellers are of utmost importance while studying urban geography.

Raymond E. Murphy (1966) goes a step further and states that the urban geographer always plays a dual role.

Firstly, he examines cities in the context of *location*, *characteristics*, *growth* and their *relationship* with its hinterland and

secondly, discusses city's morphology in terms of land use, social and cultural landscape, circulation patterns (transport) and also the components of the physical environment – all these in interrelation and interaction within the urban area.

R. L. Singh

Urban Geography deals with the towns and cities mainly in two ways:

- 1. The urban settlement is treated as an organic whole with a distinctive build and structure that is *morphology*, evolved through various ecological processes.
- 2. It seeks to analyze the <u>urban settlement as a regional focus</u> indicating various relationships with the region it serves and the vitality it receives from the region I return to its services.

R. Blanchard:

The geographical study of an urban settlement is concerned with four main problems:

- 1. The *physical and cultural conditions* that were involved in the origin of the nucleus of the settlement.
- 2. The *reaction of the nucleus*, in its functional and historical development, to the impacts of historical events.
- 3. The *life and organization of the contemporary settlement* viewed areally, both as a whole and with respect to the differentiations within it
- 4. Th *interrelations* between the settlement and its surrounding territory

What Is Urban????

Geography studies Earth surface as a home of man

- Settlement: An attempt of man's introduction on earth
- Man is active agent
- His imprint on earth is in the form of his habitat or settlement.
- Settlement: transformation of *physical* landscape into *cultural* landscape
- Settlement represents an organized Colony of human beings
- Initially they bear *simpler* forms such as *hamlet*, *village*, *town*.
- Later on the degree of **variability in their size** and **form** and of complexity become increasingly greater.
- A symbol of a superior civilization: city, metropolitan, megalopolis, conurbation.

What Is Urban????...

The study of their size, functions, growth, evolution, and functional status.

- Village and town represent basic facts of settlement geography.
- > Village a community or population group mainly engaged in agricultural activities.
- **Town:**
- A physical conglomeration of houses and streets buildings.
- Densely populated
- Centre of exchange and commerce.
- It has regional serving capacity: serving the neighborhood
- Clustering of certain functions. Multi-functional
- Centre of arts, literature, culture, education, and trade.
- Town is capable to influence the villagers **economically, socially, culturally, and politically** therefore it is a multifunctional centre.

BASE

- ✓ ECONOMIC Activity
 - we know that the difference between rural and urban is dependent on the function of that settlement that is in the former the main function is agriculture while in the latter the population by large is engaged in non-agricultural activities
- ✓ Anderson, a sociologist defines "*urban*" as a way of life or a condition of man that is characterized with certain attitudes like superficiality, ambiguity etc.
- ✓ But, for, geographers it is much more than that. ■
- ✓ They perceive **urban in terms of location** which has following features –
- ✓ (a) the **population density** of such a settlement is relatively more than that of general population,
- ✓ (b) most of the dwellers are engaged in non-agricultural **economic activities** and
- ✓ (c) the centre acts as a hub of social, cultural, administrative and economic activities.
- ✓ *Dickinson* (1948) states that an urban settlement can be regarded as a man-made habitat on the surface of the Earth; where economic activities are separated from the soil and are carried out in association with similar activities at a fixed location.
- For *Northam* (1975) city is a locale with a relatively large population living urbanism as their way of life.

- The United Nations Demographic Year Book (United Nations, 1990) has given many examples, in which different countries that define **demographic** are included. The United Nations Organization defines permanent settlement with a minimum population of **20,000** in the form of an urban location.
- ▶ But in many countries, Botswana (5,000), Ethiopia (2,000), Argentina (2,000), Israel (2,000), Czechoslovakia (5,000), Iceland (200), Norway (200), Portugal (10,000), Japan (50,000), Australia (1,000), India (5,000), etc.

- The UN Demographic Year Book concludes: "There is no point in the continuum from large agglomerations to small clusters or scattered dwellings where urbanity disappears and rurality begins the division between urban and rural populations is necessarily arbitrary."
- The review of these definitions reveals that the following characteristics can be identified to define a place in the form of urban. These are:
 - (1) A place designated by the administrative status
 - (2) minimum population
 - (3) minimum population density
 - (4) A concept of reconciliation or loose dealing settlement to join or exclude suburban areas
 - (5) Proportion of non-agricultural occupations and
 - (6) A functional character

'Urban' in India

In the case of our country (India), the census of 2011 has said the following places as urban:

- (1) Administrative Unit: Municipal, City Board, Cantonment Board / Notified Town Area Centres;
- (2) a minimum population of 5,000;
- (3) 75 percent of men engaged in non-agricultural activities;
- (4) A minimum population density 400 person per sq km

Cities in India



| Rank + | UA ^[a] | State/Territory + | Population (2011) ^[4] |
|--------|-------------------|-------------------|----------------------------------|
| 1 | Mumbai | Maharashtra | 18,394,912 |
| 2 | Delhi | Delhi | 16,349,831 |
| 3 | Kolkata | West Bengal | 14,112,536 |
| 4 | Chennai | Tamil Nadu | 8,696,010 |
| 5 | Bangalore | Kamataka | 8,520,435 |
| 6 | Hyderabad | Telangana | 7,749,334 |
| 7 | Ahmedabad | Gujarat | 6,361,084 |
| 8 | Pune | Maharashtra | 5,057,709 |
| 9 | Surat | Gujarat | 4,591,246 |
| 10 | Jaipur | Rajasthan | 3,073,350 |

World Factfile

source: World Urbanization Prospects2018 Revised

- ✓ 55% (4.2 billion) of the world's population (7 billion) lives in urban areas, a proportion that is expected to increase to 68% by 2050
- ✓ The growing total population will add another **2.5 billion** people to urban areas by **2050**
- ✓ 90% of this increase taking place in Asia and Africa
- ✓ Between 2018-2050 the urban population will be concentrated in just a few countries :India, China and Nigeria will account for 35% of the projected growth

By 2050, it is projected that India will have added 416 million urban dwellers, China 255 million and Nigeria 189 million.

CONTINENT WISE

Northern America - 82% Latin America and the Caribbean (81%)

Europe 74%

Oceania 68%

Asia - 54%

Africa - 43%

Urbanization around the world

The Americas are the most urbanized regions in the world today.



World Urbanization Prospects: The 2018 Revision

Access the report: bit.ly/wup2018 •

#UNPopulation



World Cities

Tokyo is the world's largest city with an agglomeration of 37 million inhabitants

New Delhi with 29 million,

Shanghai with 26 million, and

Mexico City and São Paulo, each with around 22 million inhabitants.

Cairo, Mumbai, Beijing and Dhaka - 20 million inhabitants.

By 2020, Tokyo's population is projected to begin to decline, while Delhi is projected to continue growing and to become the most populous city in the world around 2028.



Urban GEOGRAPHY: Some Major Works

- **1899 O. Schulter** included the **study of the morphology** of towns in urban geography.
- 1907 Mark Jefferson The <u>Law of Primate City</u>. He forwarded his ideas on the character and distribution of Central places.
- 1911 Patrick Geddes emphasized the need of town planning.
- 1924 M. Aurousseau gave the <u>functional classification</u> of towns on the basis of qualitative method and put the towns into groups of <u>non-basic</u> <u>functions</u> and <u>basic</u> functions.

1927 C. W. Burgess developed <u>Concentric Zone Theory</u> and explained the characteristics and variations of the urban landscape (morphology).

1933 German scholar Christaller propounded the <u>Central Place Theory</u>: distribution of settlements in South Germany.

By now it was felt that site is not more than a historical interest while situation is related with the transport routes so Geographical study were made on other aspects of town like morphology, function and so on. (shifted to structure)

- 1938 Lewis Mumford studied on the <u>origin and growth of</u>
 towns. Proposed the *functional classification* of urban areas.
- 1939 Homer Hoyt propounded <u>Sector Theory</u> of Urban Development.
- 1945 Edward Ullman and C.D. Harris propounded Multiple
 Nuclei Theory on the internal structure of the town.

- After Second World War European cities faced many problems due to uncontrolled industrial development and the use of atomic weapons in the war which brought the cities under the fear of sky war these problems compelled geographers to pay their attention on the subject of town planning made in consideration to its relations with the countryside.
- 1942 Wehrwein presented his important views on <u>Urban Fringe</u>: influence of town on its adjacent rural areas.
- 1949 Griffith Taylor in his book on Urban Geography explained its subject matter and examine the impact of physical factors on the location and development of towns.
- 1949 G. K. Zipf propounded Rank-Size Rule on the basis of the concept of primate city.
- 1957 Jean Gottman introduced the concept of Megalopolis.

Themes in Urban Geography

There have been two themes in urban geography:

- 1.The study of towns as an individual entity एक विशिष्ठ इकाई के रूप में शहरों का अध्ययन
 - Urban Geography is concerned with the SPATIAL aspects of cities: Location, Site, Situation, Origin,
 Growth.
 - It is related with the form, size, function, spacing, layout, and buildings of the town.
 - The **internal structure आंतरिक संरचना** of the city, its **morphology आकारिकी**, various zones within city.
 - The study of problems relating to the spatial distribution (स्थानिक वितरण) of cities and patterns of movement and links (परिवहन तंत्र के प्रारूप का अध्ययन) that connect them across space.

- The urban settlement is treated as an organic whole.
- It is also concerned with the **historical**, **social** and **political** aspects which are contributed to the evolution and origin of the town.
- Urban geography is also concerned with the past and future aspects of towns morphology.
- It examines present urban land-use functions and changing patterns over the time.

2. The study of town in relation to its surrounding region: अपने आसपास के क्षेत्र के संबंध में नगर का अध्ययन

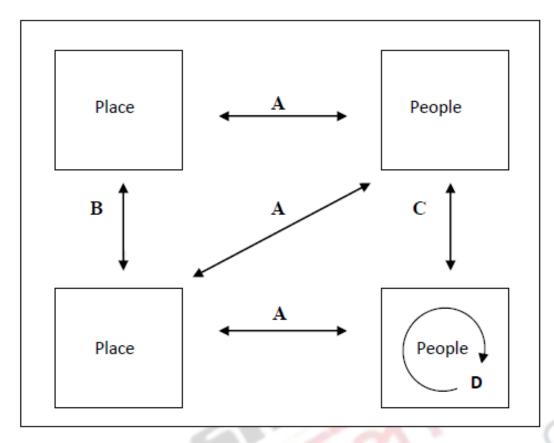
- > Ecological approach पारिस्थितिकी उपागमः relationship of cities with their neighborhoods
- > How the city relates to other cities on regional प्रादेशिक , national राष्ट्रीय and global वैश्विक levels.
- > It seeks to analyze the **urban settlement as regional center**.
- Therefore, the subject forms an *integral part* of Regional planning and development

Subject matter

According to R.M. Northam:

- ✓ Urban Geography is concerned with four types of relations with man and the land.
- ✓ A involves relationship between a place and its people (spatial variation and distributional pattern of population in the town)
- B deals with association between different places (morphological pattern, spatial distribution, spacing of urban settlements)
- C is concerned with the study of relationship between people of different places (economic relations)
- ✓ **D** is associated with the relations that exist within one place or among the people of one particular place (internal relations) (urban land use & commercial structure of an urban centre)

Thrusts of Study in Urban Geography



Source: R. M. Northam (1975) Urban Geography, pp.5

Scope of Urban Geography

- 1. The study of town as a unit
- 2. The study of town and its neighboring area
- 3. The comparative study of town with other towns
- 4. The study of planning of towns

1. The Study of Town as a Unit

A. Site: Actual location

Situation: Relative location

Nodality: The degree to which a place is a *point of convergence* for different routes

B. Historical development

C. Size: Population & Areal Expansion

D. Demographic structure

E. Physical and Functional Structure of Town

2. The study of town and its neighboring area

- Town tries to snatch rural land of its countryside
- It resemble the expansion of city in the form of **urban sprawl**
- Encroachment (अतिक्रमण) over countryside
- Noida to Greater Noida (addition of 110 villages)
- Expansion takes place to a considerable distance and tuns into 'Conurbation' सन्नगर
- Concepts of : 'Umland', 'City Region': the influential (प्रभाव) area of the city
- With the introduction of the <u>speedy and cheap transportation system</u>, the influential area of the city has been widely and distantly extended.

3. The comparative study of town with other towns

- Led to the development of 'concept of town classification'
- Bases:

Genetic (Taylor):

- 1. Pre-historic towns
- Old-cultural towns (Greek towns)
- 3. Roan towns
- 4. Medieval towns
- 5. Modern towns

- Morphology: concentrated, Linear,Fragmented, Composite
- **Functional** (Mumford): Eopolis, Polis, Metropolis, Magalopolis
- Developmental stage (Taylor):
 Infantile, Juvenile, Adolescent, Mature,
 Senile

4. The study of planning of towns

- Prepares guidelines for the development of the city in future
- Solutions to city problems
- Efficient land-use
- Serving the needs of the citizens: water facility, transportation, environment, waste disposal, recreation, housing





Origin and Growth of Towns नगरों की उत्पत्ति और विकास

Ancient Towns प्राचीन नगर

Background

By virtue of their important locational circumstances, origin of towns have a long history.

But on the other hand few of these towns have **lost their existence** with the course of time, few have been **rejuvenated**.

In this way the **development**, **rise** and **downfall** or **decline** of the towns have been made with the changes in course of time.

A.B. Gallion has said that in the beginning man has passed away through two stages:

- 1. The first stage took place in Paleolithic (Old stone Age 2.5 million years ago to 9,600 BCE) age:
 - Man moved from his cave into shelters, constructed of bows and leaves (hunter).
- 2. The second one in **Neolithic** (*New stone age-9,000 BCE to 3,000 BCE*) age:
 - Man started to live in a group
 - Adopted the occupation of cultivation and herding of animals
 - Emergence of settlements
 - Family is collected into friendly groups and form villages where population enjoyed the advantage of mutual protection

Background...

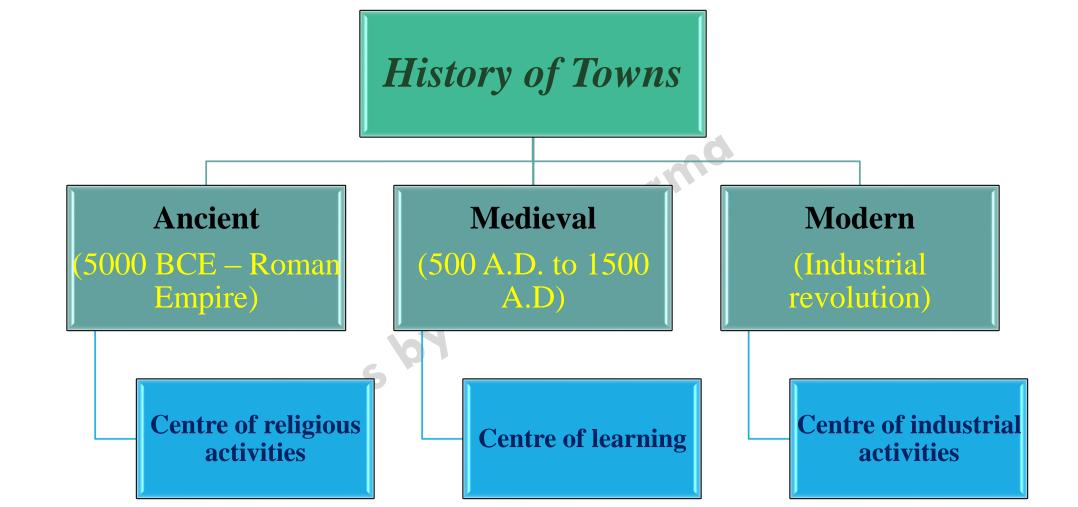
The sites for villages had natural protection of <u>elevated terrain</u>, <u>islands</u>, <u>peninsula</u> or surrounded with <u>barricades</u>

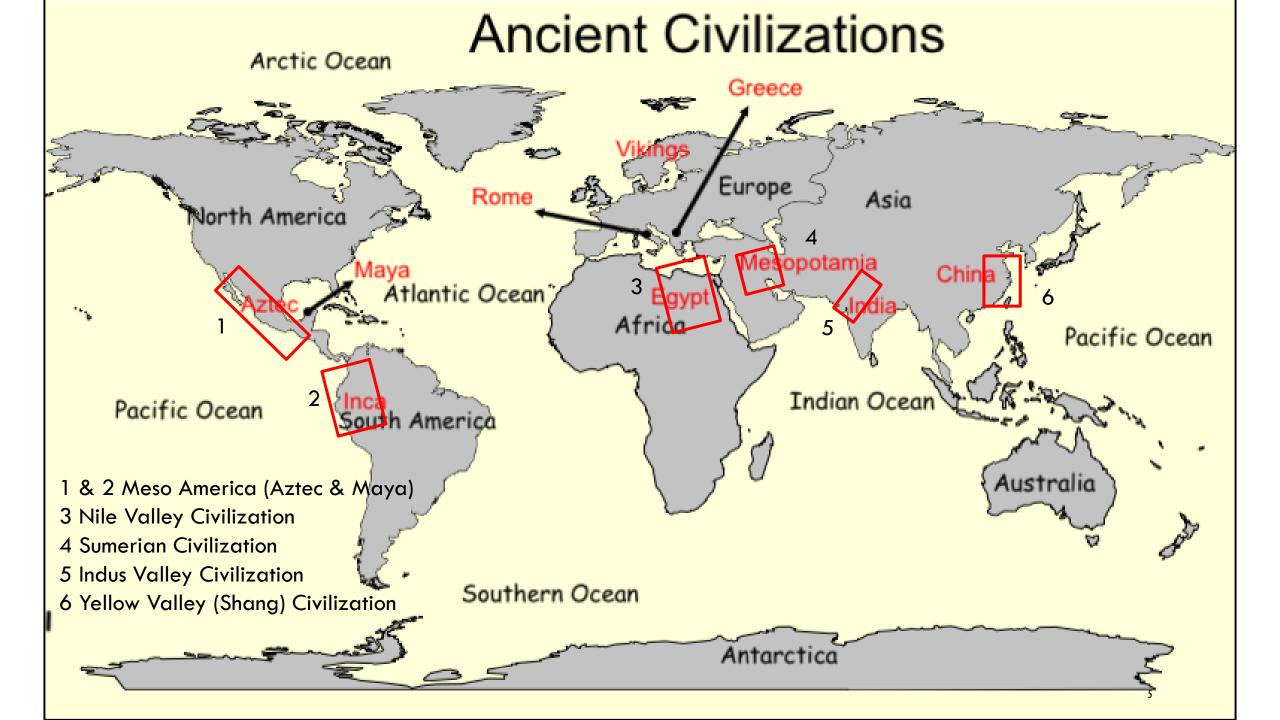
These villages with the time attained the **Status of City**

According to:

S.A. Queen & L.F. Thomas "Present town is the converted form of village."

A. E. Smailes: "The cities are as ancient as civilization."





Cause...

A.B. Gallion has observed that:

- ✓ **The Neolithic man** started to cultivate the land where physical conditions were most favorable. This gave birth to **agricultural evolution**.
- ✓ The surplus production (अधिशेष उत्पादन)in agriculture generated the practice of exchange (विनिमय).
- ✓ This activity inspired the **development of transport facilities** and by virtue of that the **human groups living at distant places came in contact** to each other.
- ✓ The villages became the symbol of permanent living. गाँव स्थायी जीवन के प्रतीक बन गए।
- ✓ Finally, agricultural economy having social, economic and geographic advantages (अनुकूल परिस्थित) grew up into cities.

The early cities

- ✓ It is revealed from historical excavations that the cities had come into existence during 5000-6000 BCE.
- ✓ In beginning the cities immersed in **Nile** and **Euphrates-Tigris valleys**. The cities were developed here during **4,000 to 2500 BCE**.
- ✓ Erech, Ur, Babylon towns originate in Mesopotamia while Memphis and Thebes in Nile valley.
- ✓ After sometime

Mohenjo-daro and Harappa were developed in Indus valley

Shiang in **China**

Athens and Sparta in Europe

Twinkle town in Meso-America

✓ The cities were emerged out in the **Eastern part of Mediterranean sea** near about **3500** years before.

Tyre, Korilz, Sircule, Rome, Carfez

- ✓ The early dynastic cities of lower Mesopotamia operated as centres of Storage, Exchange and Redistribution (भंडारण, विनिमय और पुनर्वितरण)
- ✓ Spread over several **hundred acres**
- \checkmark The **population** of several towns had touched the figure of few 1,000.

In early stage the **urban development didn't show growth of population**:

- ✓ Primitive urban civilization was agriculture.
- ✓ Nearly 4500 years back the **density of rural population** in the fertile crescent area of Middle East Asia was estimated **25 persons per sq mile** (~**10 persons per sq km**). The density of population in **Sumeria** an urban settlement of Mesopotamia was observed **50 persons per sq mile** (~**20 persons per sq km**).

Ratio of population density between agricultural area and urban area was 1:2.

Ancient Towns

- ✓ Ancient towns are known as river valley towns.
- ✓ They give this evidence that those river sides which where free from the fear of floods, got incentive for the origin of ancient towns.
- ✓ These sites had various facilities like drinking water, transportation, water for irrigation and fertile soils for cultivation.
- ✓ The surplus production in agriculture gave rise to cities to develop as the centre of food collection and distribution.

Ancient Towns

Region:

The origin of ancient civilization flourished in those areas of Middle East Asia that are known today by the name of

Egypt, Syria, Israel, Jordan, Iraq, Lebanon and Pakistan

Fertile valleys of river

- 1. Nile नील
- 2. Tigris दज़ला
- 3. Euphrates फ़रात
- 4. Indus सिन्धु

Ancient Towns...

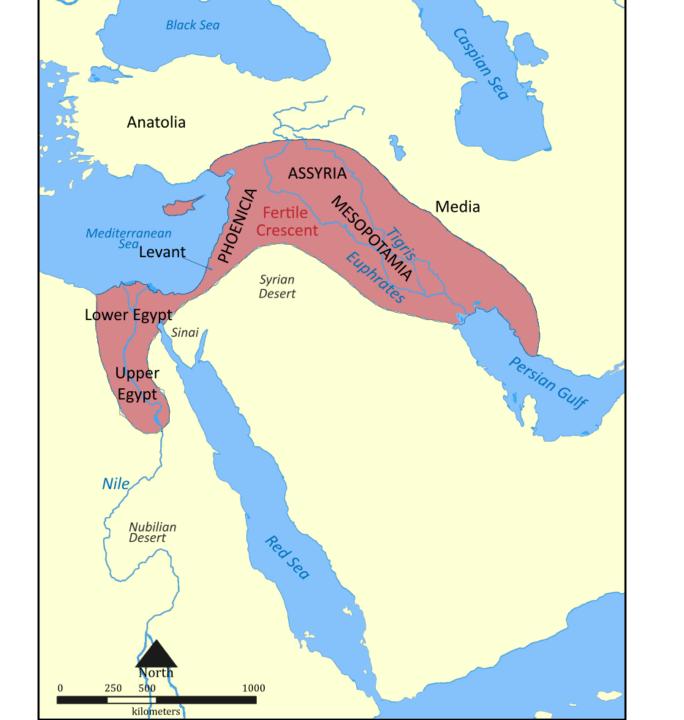
Other regions in the world:

- **✓ Hwang Ho valley** of East Asia
- ✓ **Aegean** island of South Europe,
- ✓ Greece peninsula,
- ✓ **Italy** peninsula,
- ✓ Coastal areas of **Peru**, countries of **Isthmus** and **Mexico** of Central America

The agricultural practices such as **irrigation** and **use of seasonal river floods** raised the food production. Such practices created **two groups** in the society

- 1) people engaged in occupation of farming and
- 2) another group got engaged in *non farming occupations*

Non-farming people proved helpful in the growth of towns.



Towns of river Nile Valley

The evolution of cities in this valley took place nearly in 3500 BCE.

MEMPHIS

- The **oldest city** of this valley
- Situated on the western flank of river Nile
- The streets were narrow and were used for the purpose of drainage and transport both
- Walls were constructed around the cities to protect the city from
 - 1. The attack of enemies and
 - 2. To keep free the city from the fear of flood
- The **open spaces** in the houses surrounding the rooms from all sides.

KAHUN

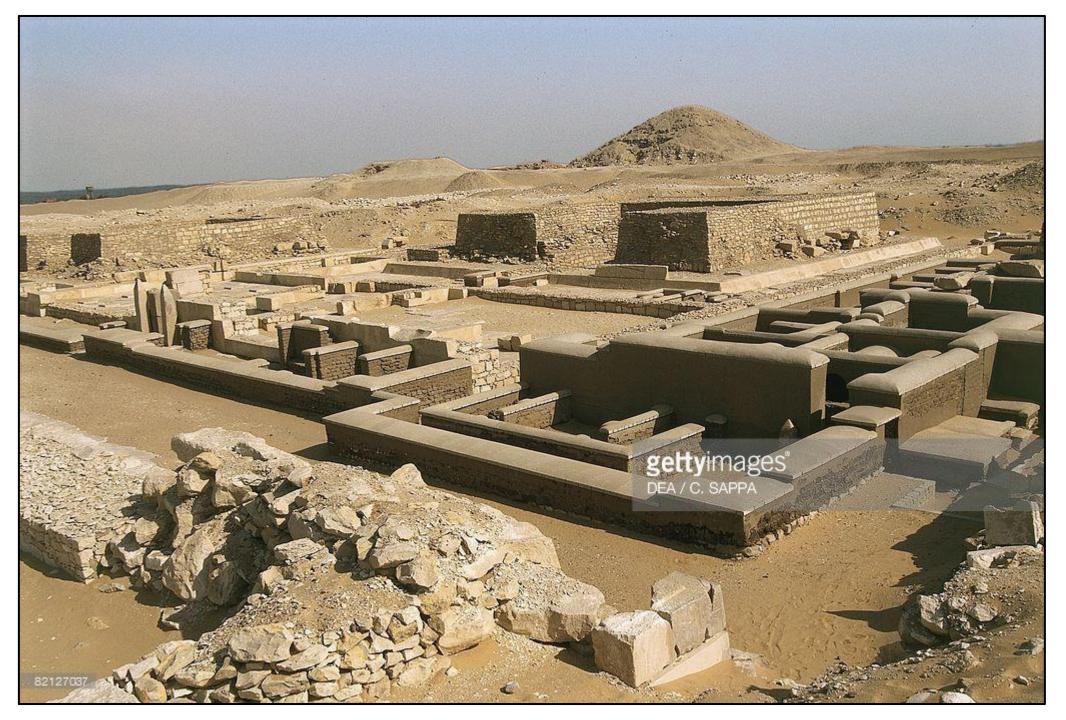
- ✓ This town was **developed for the slaves** (*social segregation*)
- ✓ Houses were having a number of rooms which was surrounded by the courtyard
- ✓ These courtyards were used for **cooking** and other **domestic** purposes

CAIRO

Egyptians had constructed pyramids here which were known for the **graves of emperors and scholars**

- A number of **temple towns** were developed on the banks of Nile river by the emperors of Egypt in 2,000 BCE.
- By this time Memphis was emerged out as a largest city of the world with a population above 1 lakh

Other towns were: FOSTAT (representative of Memphis) and THEBES



Memphis



Giza near Cairo

Constructed around 4,500 yrs. ago

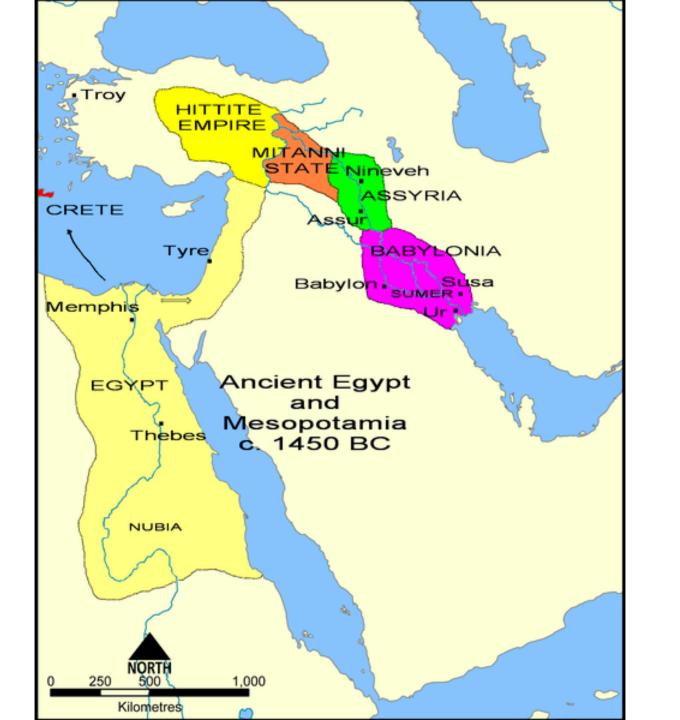
Mesopotamian cities

- ✓ The cities of Mesopotamia are considered to be the **most ancient** in the world (**5000** years before)
- ✓ Number of cities-states were emerged out on the basis of differences in religion and customs.
- ✓ The city-states had trade relations with each other.
- ✓ The evidences of the presence of <u>temples</u>, <u>well developed means of irrigation</u>, <u>wells</u>, <u>reservoirs and social organization was found here</u>.

Mesopotamia the area:

- ✓ Land between two rivers: **Euphrates** (*Farat*) and **Tigris** (*Dazla*)
- ✓ Its **southern** part was known by the name of *Sumer*,
- ✓ **South-east** by *Babylonia* and *Achchar*
- ✓ **northern** uplands by *Asyria*

Cities were heavily fortified where temple dominated the cities



Mesopotamian cities...

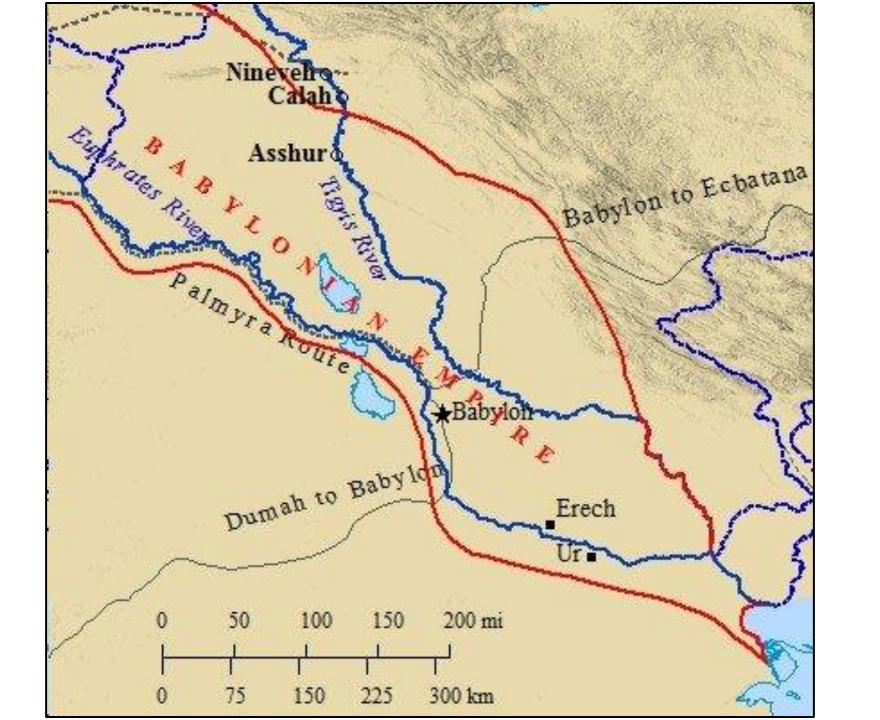
Ur

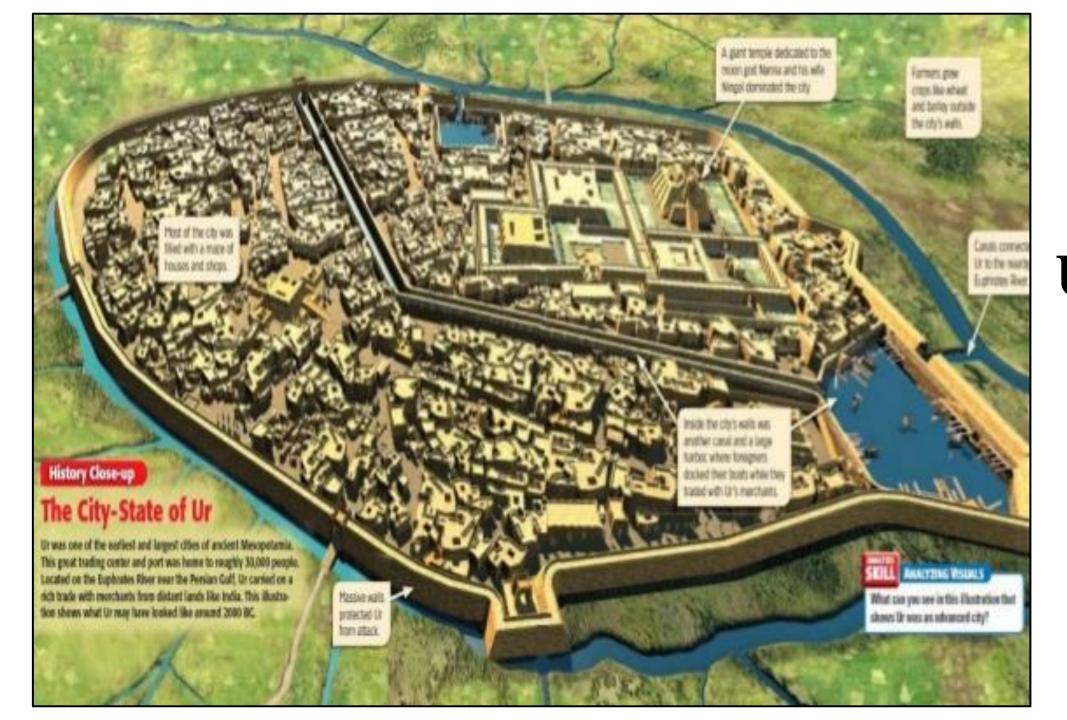
- The **largest town of Mesopotamia** with the population of nearly 25,000.
- It was divided into **three sectors**: **Sacred place**, **Fortified** town developed on the knoll and **Outer town**.
- The first was having a **temple** which was constructed with burnt bricks. It was also an **administrative centre**.
 - Number of offices and stores were developed here from the distant places.
- The other two were are the **residential areas** of the town.

Other towns:

Eric Town, Babylon, Jerusalem, Akkad, Lagash, Kish, Umma, Larsa, Assur, Karkomish, Sorsa Vad



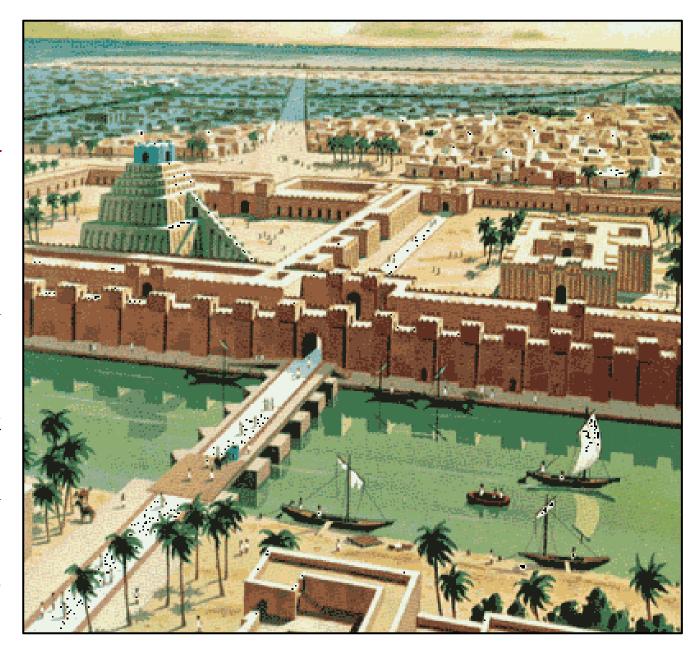




Ur

Babylon

- Evolved in 2250 BCE
- Capital city of great king *Khammurabi*
- Population in 612 320 BCE was around 2 –
 2.5 lakhs
- It was a large city spanning the Euphrates river
- Surrounded by **great wall** and a *moat* (আई)
- Main architecture: Bel temple, Ishtar Gate and Hanging gardens
- The old town was once destroyed by the flood
- New town was developed on the western bank of the river
- It was *fortified* and had *copper gates* on entrance
- By 275 BE the town dwellers shifted to Selucia in the north and led to the desertification of the Babylon



Jerusalem

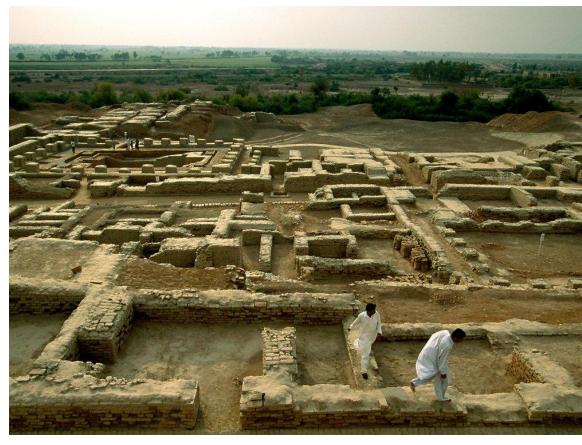
- Established in Tyropoen valley in 1000 BCE
- Fortified town situated at a height of 800 m from MSL
- Religious importance
- It is one of the oldest cities in the world, and is considered holy to the three major Abrahamic religions—

 Judaism, Christianity, and Islam.
- Jerusalem has been destroyed at least twice, besieged 23 times, captured and recaptured 44 times, and attacked 52 times

Old City of Jerusalem







Origin and Growth of Towns नगरों की उत्पत्ति और विकास

PART - 2

Ancient Towns

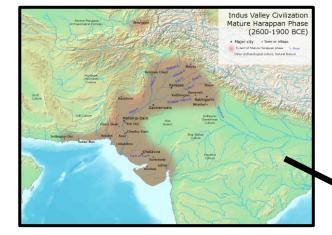
प्राचीन नगर

Indus Valley Towns

- ✓ The Indus valley civilization dates back to **5,000** years ago.
- ✓ It is called **Indus valley civilization** because this culture was raised for the first time on the old riverside *sites of river Indus*.
- ✓ It was extended in the northwest part of the Indian subcontinent. (India and Pakistan)
- ✓ It is defined by the name of **Harrapan culture** and named after *Harappa town*.
- ✓ It was extended on the lands of present Baluchistan, Sindh, Haryana, Rajasthan, Gujarat and western Uttar Pradesh.

Indus Valley Towns

- The invention of this urban civilization was made possible by the **British** archaeologists who found the evidence of **Mohanjo-daro town** by digging the site near river Indus in 1922.
- ✓ It is found that this area was on its **peak of urban civilization during 2500 to 2000 BCE**
- ✓ It was equivalent to the civilization of Egypt, Mesopotamia and Sumer empire
- ✓ The **Indus valley civilization** was **very extensive** as compared to these other civilizations.
- ✓ The period of this civilization is known as **Bronze** (**पीतल**) age.
- ✓ It was **declined** before **1500 BCE**



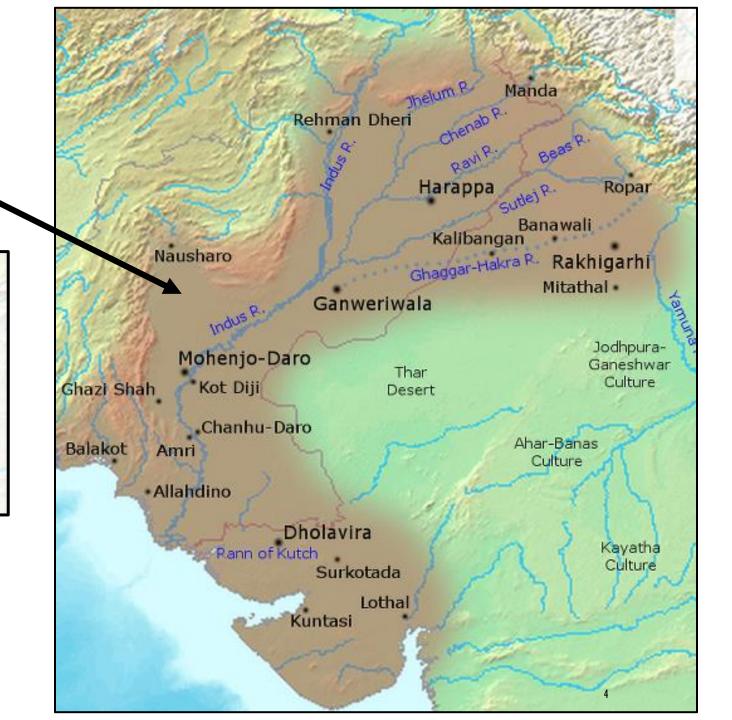
Indus Valley Civilization Mature Harappan Phase (2600-1900 BCE)

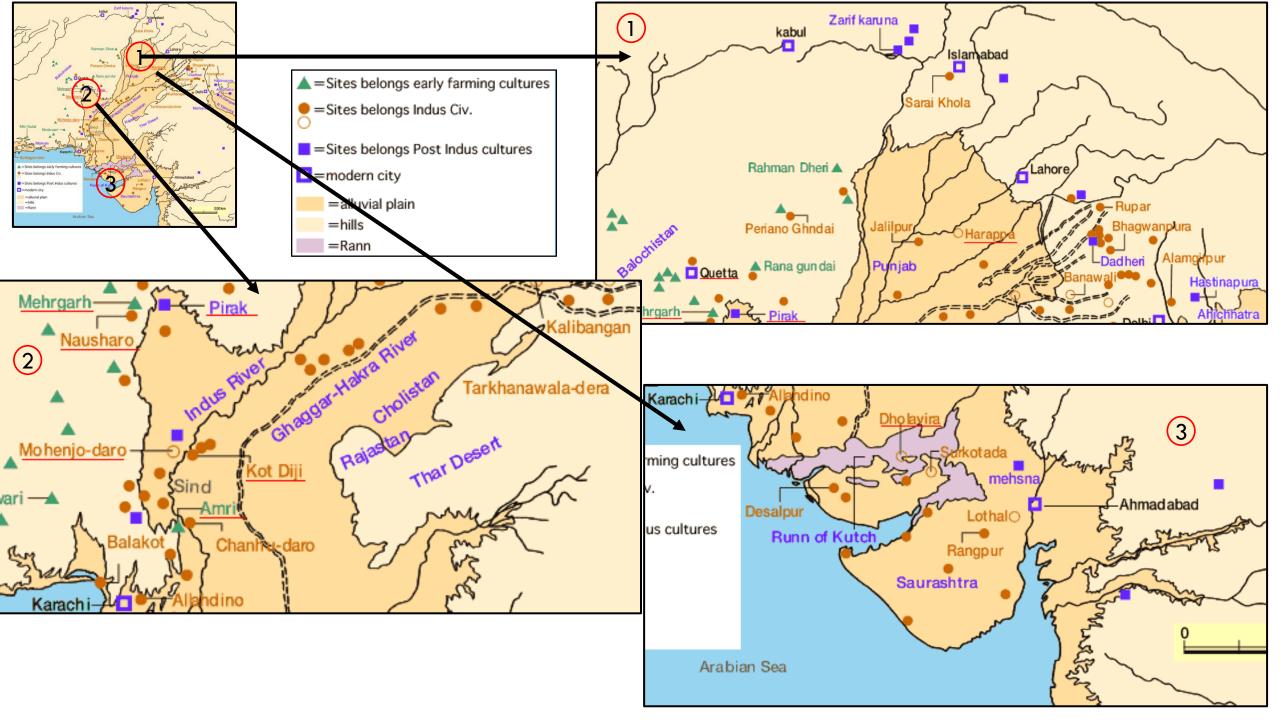
Major city
 Town or village

Extent of Mature Harappan phase

River

Other archaeological culture, Natural feature





Mohenjo-Daro

- Mohenjo-daro the "Mount of the dead" (मृतकों का पहाड़)
- It has the evidence of decline and rise of the town by **7 times**.
- An example of 'Town planning' (नगर नियोजन) and 'Planned Architecture'
 - ✓ Roads and streets were straight and join each other at a right angles (समकोण).
 - ✓ The main road of the town was in north-south direction and was known as First road: 10 m in length 800 m wide
 - ✓ Roads joining this main road was having the width between 3 m and 9 m length
 - ✓ Building material used was bricks and clay
 - ✓ House were made of bricks and were having doors and windows

Mohenjo-Daro...

- Most of the houses were two storeyed दो मंजिला
- ✓ Each house noted the presence of one well, bathroom, hearth, fire-place and drains (कुँआ, स्नानागार, भट्ठी, चूल्हा तथा नालियाँ) for the flow of rain and dirty water
- ✓ It is clear that houses were built with consideration of human comfort air ventilation and cleanliness (शुद्ध और स्वच्छ हवा के लिए घरों में प्रावधान)
- ✓ Remains of large size buildings have also been noted here which were mainly used for public purposes (*Great Bath*).

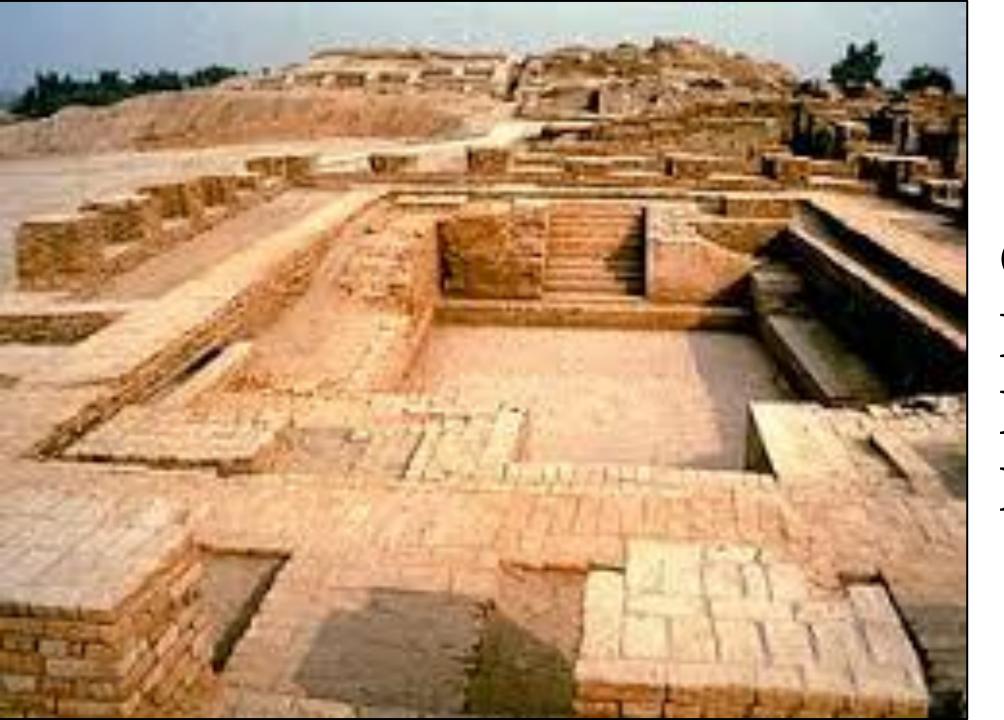
Mohenjo-Daro

- 1. Main Gate
- 2. Main Street
- 3. Cattle Bazaar
- 4. Market Square
- 5. Granary Square
- 6. Shrine Forest
- 7. Entry to Shrine
- 8. Arena
- 9. Upper City Gate
- 10. Maham's House
- II. Great Bath
- 12. Senate
- 13. River Gate
- 14. North Gate





Excavations at Mohenjo-Daro



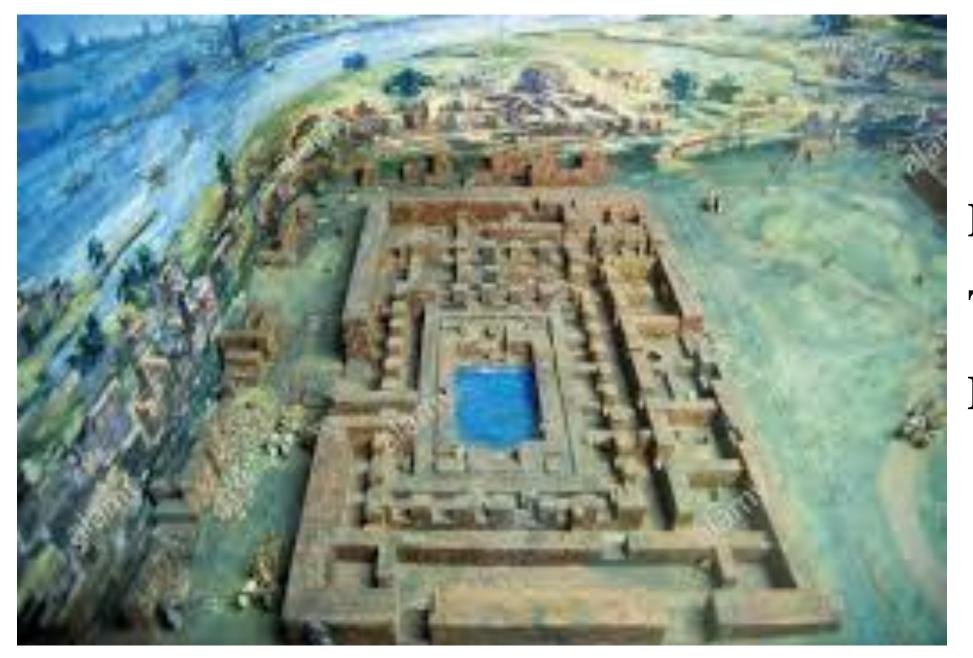
Great
Bath,
MohenjoDaro

Harappa

- ✓ Situated on the bank of river *Ravi*.
- ✓ It is **600 kilometers** away in the **north** —**east from Mohenjo-daro**
- ✓ Site of the town is situated in Montgomery district of Pakistan 160 km southwest from Lahore
- ✓ It was known for the **collection** and **distribution** of *cotton*, *wheat* and *rice*.
- ✓ A big size store-house भेडार गृह was constructed to preserve the food grains
- ✓ It was a safe harbor सुरक्षित बंदरगाह
- ✓ Number of people migrated here from the countryside to this town

Harappa...

- ✓ The development of Harappa was made on the *principles of town planning*:
 - ✓ 24 m high platforms for built up on the front face of the houses to protect them from the river floods
 - ✓ Proper sanitation facilities उपयुक्त स्वच्छता सुविधाएं on the roads
 - ✓ The **drain lines** were built on *both sides* of the road
 - ✓ An artificial harbor was developed near the mouth of Indus where ships had to stay for loading and unloading of goods.
- **✓** The civilization of Indus valley was **urban dominated civilization**
- ✓ The main occupation of city people were *trade*, *manufacturing*, *spinning*, *weaving*, *making utensils*, *toys* and river boats. Farming was the main occupation of the villagers
- **✓ Relations** were established with **other countries**



Harappa Town Model

Towns of post Harappan culture:

- Rupar

- Kalibanga
 Lothalides

Towns of Post-Harappan Culture (2000 BCE)

Rupar

- Situated in the foothills of Shivalik
- Situated on the <u>contact point of Sutlej valley</u> crossing Shivalik hills and southern plains
- Emerged as **commercial centre**: exchange of agro-products of Sutlej valley with forest products
- Suitability of the site: transportation by river Sutlej
- Archeological evidence suggest that: The town has rejuvenated 5 times

Dholavira

- 3rd largest town of Harappan culture
- Ruins are found in Kutch region (Gujarat)
- Established in 3000 BCE
- In 2500-2200 BCE it touched its **peak urbanization**
- It was of a *parallelogram* shape and covered an <u>area of 1 sq km</u> with a population of 20,000 people.
- **Two river site:** *Mansara* (north) & *Manhara* (south)
- City was surrounded by wall.
- There was a **moat** between this **wall and the town**
- It was commercial town and a trade centre of food grains
- Facility of reservoirs to store water
- The town noted the decline with the shortage of water and changes in the course of the river

Wanavali

Kunal

Kalibanga

- Originated in 500BCE in Harappan civilization
- Present day –Haryana state

- Site of the town is found in the Hisar district of Haryana
- Situated on the dry bank of Saraswati river
- Site of the town is found to be 310 km in the **north-west of Delhi**
- Site is extended on the left bank of the river Saraswati
- Black bangles' were obtained during excavation that's why named as 'Kalibanga'
- **Two layers** were found at the time of excavation: *lower* layer (preharappan culture) while *upper* layer (Indus valley civilization)

Factors affecting development and characteristics of the towns in the ancient period

- > नगरों का विकास नदी के किनारे सुरिक्षत स्थलों पर।
- शहरों की आबादी 10,000 से 40,000 के बीच थी।
- > **सिंचाई** और **पीने के पानी की व्यवस्था** निदयों तथा <u>जलाशयों</u> के माध्यम से।
- परिवहन के साधन के रूप में निदयों का उपयोग
- > अधिशोष कृषि उत्पादन के <u>वितरण</u> और <u>व्यापार</u> केंद्रों के रूप में नगरों का विकास।
- नगरों की आकारिकी की योजना बनाई गई थी। सभी परिवहन मार्ग एक दूसरे से समकोण पर मिलते थे।

Factors...

- शहर के चारों ओर सुरक्षा की दृष्टि से दीवार का निर्माण।
- > घरों के निर्माण में **मिट्टी**, पक्की ईंटों और पत्थरों का उपयोग।
- घरों के अंदर सभी प्रकार की सुविधाओं को विकसित किया गया था: आंगन, रसोई क्षेत्र, स्नानगृह, उचित स्वच्छता सुविधाएं और जल निकासी की उपयुक्त व्यवस्था।
- बड़े जलाशयों का निर्माण किया गया: बांधों का निर्माण नदी की बाढ़ से बचाने और पानी के संग्रहण करने के लिए किया गया था।
- > नगरों में लघु उद्योगों का संकेन्द्रण: **हस्तशिल्प, खिलौने, उपकरण, गहने**।

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Origin and Growth of Ancient Towns

प्राचीन नगरों की उत्पत्ति और विकास

Greek and Roman towns

PART - 3

Prehistoric Towns and Pre-Vedic Towns

- The Prehistoric period begins from **700 BCE**.
- Aka the **second stage of Urban Development** in the history of human civilization.
- > Before this time the towns of river valleys were declined or destructed or they have reached to their last stage of urban development.
- > Spread of urban civilization: extended from west corner of Europe up to the Indian subcontinent in the east.
- > Other regions: **South West Asia, Russia** and countries located near **Mediterranean sea**.

Ancient Greek Cities

- A number of **small city-states** developed. (*around 1,000*), beginning about 750 B.C.E
- The city-states began as *small agricultural communities and over the time the population of some city-states increased to form large cities.*
- ➤ In Greek language these were known as 'Polis'
- ➤ Time of Wars: small city-states merged to form the big city-states and some developed as capital cities like Athens, Sparta, Corinth, Thebes and Megara
- Greece was land of Hills and has the scarcity of levelled land for cultivation
 - This compelled Greek people to establish their colonies in nearby areas.
 - Greek colonies were developed on the lands extended between **Black Sea** and **Mediterranean** sea
 - Developed **TRADE** relations with these areas
- > Scarcity of plain surface hindered the **lateral expansion of city-states**
- > Population was between **60,000** and **70,000** including **rural** as well as **urban** residents.

Ancient Greek Cities...

- Number of <u>trade cities</u> were developed **engaged in trade of food grains** supplied by the Black sea areas
 - ➤ Ifisans and Miletus in Asia Minor
 - > Cilinus and Naples in Italy and Sicily
 - > Miletus become famous for woollen textiles
 - > Corinth was renowned for manufactured products
 - > Athens was known for export of primary products, oil, wine, pottery and metal goods.



Ancient Greek Cities...

- ► **Alexander** the Great the biggest emperor of Greece who developed a number of cities
- Empire extended from: Egypt, Asia Minor, Mesopotamia, Persia, Afghanistan, Baceria to river Indus.
- > Today they are: United Arab Emirates, Turkey, Jordan, Saudi Arabia, Iraq, Iran, Afghanistan and Pakistan.
- Alexandria is the most famous city of that time situated on north-west of Nile Delta on the Mediterranean sea coast area, around 900 hectares of land
- **Population** was **3 lakhs** in 1000 BCE

Greek Cities and City Planning

1. Before planning:

- > Lack proper facility: drainage and sanitation
- Unpaved lanes
- > Water was carried out from local wells
- > No palaces
- > Few public buildings

Greek Cities and City Planning...

2. After planning

- > In 5th century an architect *Hippodamus* prepared a *Grid Iron Street* system
- According to Aristole, he is known as the *Father of European Urban Planning*
- ➤ He developed the science of town planning
- > Grid pattern type of geometrical form was identical to the early towns of Egypt Mesopotamia and the Indus valley
- Rectangular pattern of streets was developed and rebuilding of Greek cities occurred
- > The city plan was considered as a design to serve all the people
- The **functional uses of buildings** and **public spaces** were recognized in the arrangement of streets

Greek Cities and City Planning...

2. After planning...

- Common assembly place was known as <u>Pynx</u>: an open air podium where citizens meet to consider affairs of state
- Marketplace was the centre of urban activity and was known as agora
- Very little distinction between the two dwellings of the citizens of high and low income groups
- > Most towns were surrounded by **protective walls**

Polis

- ✓ *Polis* literally means *city* in Greek.
- ✓ It defined the *administrative* and *religious city center*, as distinct from the rest of the city.
- The ancient Greek city-states or polis consisted of a fortified city centre built on an *acropolis* or harbor and controlled the surrounding territories of land.
- ✓ Self-governance, autonomy, and independence
- ✓ Each city-state was organized with an <u>urban center</u> and the <u>surrounding countryside</u>.
- There grew to be over <u>1,000 city-states in ancient Greece</u>, but the main polis were Athína (**Athens**), Spárti (**Sparta**), Kórinthos (**Corinth**), Thíva (**Thebes**), Siracusa (**Syracuse**), Égina (**Aegina**), Ródos (**Rhodes**), Árgos, Erétria, and Elis.

Agora:

social hub and financial marketplace



- ✓ The Located on and around a centrally large open space
- ✓ Centre of business and political life
- Connected with major streets in the *east-west* and *north-south* directions
- ✓ Open space enclosed by the *Agora* occupied about 5% of the city area
- ✓ The plan of the *Agora* was in geometrical form

Acropolis



- An acropolis was a **settlement** in ancient Greece, especially a **citadel**, <u>built upon an area of elevated ground</u>—*frequently a hill with precipitous sides*, chosen for purposes of defense.
- The word acropolis literally means in Greek "**upper city**" which features as highest, topmost and outermost area.
- Acropolis also had a **function of a religious sanctuary** with sacred springs highlighting its religious significance.
- **✓** Acropolis became the nuclei of large cities of classical antiquity.
- One well-known acropolis is the Acropolis of Athens, located on a rocky outcrop above the city of Athens and containing the Parthenon (temple).

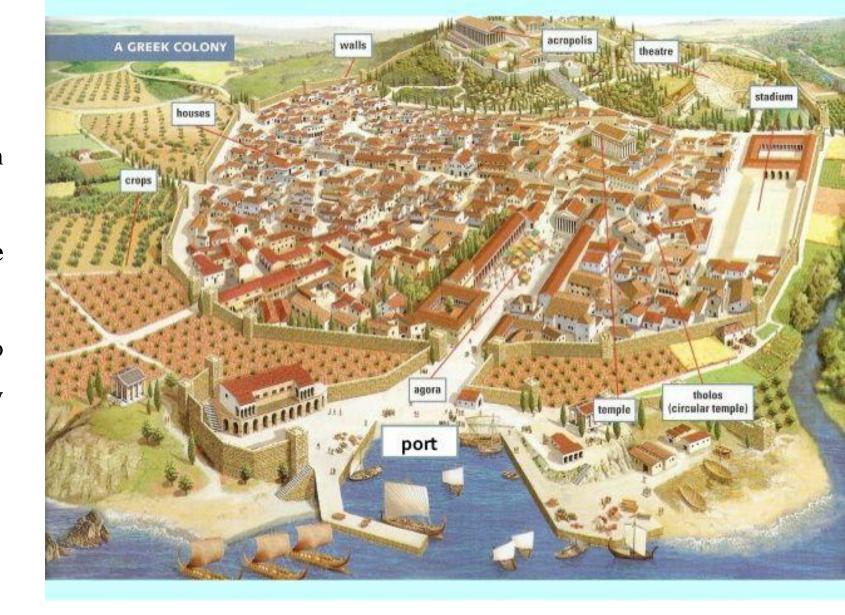
Athens

- It was a **powerful city-state** that emerged in Greek empire
- A center for the arts, learning and philosophy,
- Home of Plato's Academy and Aristotle's Lyceum
- It is widely referred to as the **cradle of western civilization** and the **birthplace of democracy** largely because of its cultural and political impact on the European continent.
- In modern times, Athens is capital of Greece, a large cosmopolitan metropolis and central to economic, financial, industrial, maritime, political and cultural life in Greece.



Sparta

- ✓ It was a **prominent city-state** in ancient Greece.
- ✓ Situated on the banks of the Eurotas River in Laconia
- ✓ Around 650 BCE, it rose to become the dominant **military** land-power in ancient Greece.



The dwellings

- > Privacy was the main factor of Greek houses
- > Contacts and business, office work carried out on outside the home
- > Small traders had shops adjacent to their houses
- > Sports and recreation were constructed in the gymnasium
- > Drama and festivals were celebrated in the theatres
- > Religious exercises took place in temples
- > Houses were enclosed about a central hearth

The dwellings

- > गोपनीयता/ एकांत यूनानी घरों की मुख्य विशेषता थी
- > व्यापार और **कार्यालय** का काम घर के बाहर किया जाता है
- > **छोटे व्यापारी की दुकान अपने घरों** के बाहरी हिस्सों में होती थी
- व्यायामशाला में खेल और मनोरंजन का निर्माण किया गया था
- > थिएटरों में <u>नाटक</u> और <u>उत्सव</u> मनाए जाते थे
- > <u>मंदिरों</u> में धार्मिक अभ्यास हुए

The dwellings...

- > Sanitation was improved
- > Installation of underground drains from dwellings
- > Towns maintained reservoirs
- > There was the arrangement of private baths in each house
- > The great architecture
- > The principal rooms were faced to the south
- > North wall was punctual with only a few small windows to protect them from the effect of north cold winds

निवासस्थान ...

- > स्वच्छता में सुधार किया गया
- आवासों से भूमिगत नालियों की स्थापना की गयी
- प्रत्येक घर में निजी स्नानघर की व्यवस्था
 महान वास्त्रकः
- महान वास्तुकलामुख्य कमरे दक्षिण की ओर थे
- > उत्तर की दीवार में छोटी खिड़कियों का प्रावधान दिया गया जिससे ठंडी हवाओं के प्रभाव से बचा जा सके

THE DECLINE

- Various wars across city-states and outside world weakened the Greek empire.
- Alexander, the Great of Macedonia conquered many Greek cities
- Old cities flourished and new cities were found
- Pergamon, Alexandria, Syracuse and Candahar grew large and became populous

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Origin and Growth of Ancient Towns

प्राचीन नगरों की उत्पत्ति और विकास

PART - 4

Roman towns

Ancient Roman Towns



The Ancient Roman Towns

- ➤ The Roman empire had its influence on the lands of

 Mediterranean sea and also in some parts of Western

 Europe
- > They were amazing city organizers & engineers
- > They organized a large army force
- > They were able to establish the biggest empire of the time

What were Roman towns like?

- The Roman towns were full of fine buildings and temples.
- The Romans liked everything to be organized and orderly.
- Streets were laid out in neat, straight lines, like on a chess-board.
- In the **middle** there was a **large square**, called the *forum*.
 - It was used as a market place and for meetings.
 - It had **shops** and **offices** on three sides and **government offices** on the other side.
- At one end of the forum was a *large building* called the **Basilica**.
- There were temples too where the Roman gods were worshipped.
- Some towns had **public baths**, an **open-air theatre** and **huge monumental** arches.

What were Roman towns like?...

- Many towns had running water and sewers.
- Aqueducts (system of pipes, ditches, canals, tunnels, and other structures) were bridges for bringing water to the towns.
- Only the rich had water piped to their houses
- Everyone else used water from **public fountains**.
- The only toilets were **public lavatories**, which were built around the town and connected to underground sewers.

What was the general layout of a Roman town?

- ✓ Throughout their empire the Romans built towns in exactly the same style.
- They were designed in the form of a grid, with streets built at right angles to each other and parallel with one of the two main roads.
- ✓ The streets of Roman towns were between **5 and 8 meters wide.**
- **✓** Their **width depended upon their importance**.
- Each town had two main roads.
 - ✓ One heading *North-South* and the other *East-West*.
 - ✓ At the point where these roads met was the town centre, where the administrative centre and the forum were found.
- ✓ The central part of the town contained the main businesses, with the homes and dwellings of the citizens further towards the edges of the town.



The Ancient Roman Towns...

Constructed dense planned network of roads

"All roads lead to Rome"

- Forts were made shelter place for the armed forces.
- All these factors inspired the growth of a number of new cities.
- The roman people treated each city as a small state and thus provided all civic facilities नागरिक सुविधाएं to the cities.
- Most of the towns were situated on various hills (not river sites as was the case in ancient towns).
- > Tuskano (12) and Lotiun (30) states were having these number of towns.
- Towns were established near Po river valley in Italy (*Aguileis*) (to control commercial routes).
- ➤ Iberian Peninsula (Spain + Portugal): 354 towns.
- > Sagunto, Taraguna, Merida, Kayambra.
- London, Paris, Rome (City of Seven Hills), Turin, Leons and Marsellies cities were also established.
- > Cities were also found in the Middle East as **colonies of officials**, **traders** and **retired soldiers**.

Cities developed in the Mediterranean region:

- ➤ Alexander created the city **Alexandria** in the Nile Delta (650 **BCE**)
- ➤ In Roman world Alexandria became an important centre of waterways
- > It became chief granary अन्न भंडार of Rome
- > It was developed as a collection centre of food grains and corn

Factors responsible for the emergence of cities

- > The development of **agriculture** and **mining activities**
- > The construction of roads
- > These roads were known as the route of civilization
- > The sites of the cities were having strategic importance
- > By this military towns got an impetus to grow as trade centres
- The cross point of these roads emerged out as main urban centres:

 Lyons, Rome and Turin

Port towns (A key feature of Roman towns)

A number of Port towns also developed

- > Ostia (Import corn from Rome): at the mouth of Tiber river
- > Puteoli (Import of Iron ore from Elba) near Naples
- > Carthago-Nuova (Export of silver & lead) in South-East Spain
- > Myos, Hermos, Aksinoe & Berenice (Red Sea)
- > Other: **Delos** (food grain, luxury products, slaves from eastern Medi. sea)
- > Petra and Palmyra (Syria)
- Colonge, Belgrade, Yark

Some Important Structures of Roman Towns





Amphitheatre called as Colosseum





Layout of Ancient Roman town

- Grid pattern
- Large size public buildings
- Protective walls around the town

- I.M. Houston in his book 'A Social Geography of Europe' has said that Romans developed heirarchy of urban centres which reach from the simple military camp through the small market centres around a local forum or a highway to the great regional capitals or civitas.
- > The cities were based on grid or chess board plan
- > They were able to manage large population of cities
- The height of the building reached almost 6 to 7 or 8 floors due to increase in population and proportionately less availability of land
- > Later on various problems in the cities occurred
- > Many congested cities became are converted into slums
- > Barbaric attacks: decline of roman empire

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REFERENCE LINKS

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slides

मध्यकालीन नगर Medieval Towns

Origin and Growth

Key points

- Medieval period: 500 A.D. to 1500 A.D.
- The period of medieval age came into existence after the decline of Roman empire
- The early phase of this age is known as DARK AGE अधिकार युग
- Barbaric rulers of Africa created violence in South Europe and destroyed many cities
- Western Civilization started to decline.
- Trade was disintegrated.
- Cities shrank in <u>size</u> and <u>importance</u>

- **Wars** were frequent
- Strategic sites were sort for lord's castles
- Protective walls
- Irmisharma Fortification was extended to include the dwellings that lasted about the castle GT and monastery HO
- These monasteries served as refuge centres शरण केंद्र
- Reappearance of urban life after the dark age was the product of the revival of trade and growth of population
- It was the traders who created the medieval towns

- -युद्धों की तीव्रता बढ़ती गयी
- सामरिक स्थल राजाओं के महलों के लिए उपयुक्त स्थान बने
- सुरक्षात्मक दीवारं बनाई गयी
- · किले और मठ के बाहर स्थित आवासों को शामिल करने के लिए किलेबंदी का विस्तार किया गया था
- -इन मठों को शरण केंद्र के रूप में तैयार किया गया
- अंधकार युग के बाद नगरीय जीवन की पुन: उपस्थिति व्यापार के पुनरुद्धार तथा जनसंख्या में वृद्धि के कारण बनी

- The gathering points of these traders were places of relative security and protection
- New cities sprang up on the coastal lands of Mediterranean Sea, North and East Africa
- Tunis, Cairo, Mumbasa, Cano, Tombouctou cities were developed in Africa
- Baghdad city originated in Arabian Peninsula acted as capital city of Muslim rulers
- Mecca had 1,00,000 population
- Tang dynasty in **China**: **Changan** town was established
- Hanoi in North Vietnam
- Kathmandu in Nepal

- Greek colonization left its impact on the growth of cities in Eastern Europe

- Kiev, Rostov, Novograd towns developed

 Moscow as Citadel City

 Hemburg, Warsaw, Frankfurt, Budapest developed in Central and western Europe
- By now, cities noted enormous growth in the population and size
- The 'Chester' term was affixed for the trade towns
- All such activities encouraged growth of number of cities in Europe: Amsterdam, Rotterdam, Brussels, Antwer, Colonge, Venice, Milan, Paris, Frankfurt, Geneva.

European cities can be grouped into three categories on the basis of their origin and growth:

- 1. Roman origin towns: Towns which survived during the period of Dark Age.

 Deserted due to the fall of Roman empire again emerged out at their original sites.
- 2. Citadel towns: Inhabited military dwellings सैन्य आवास and were called as 'burghs'. Later on, these are were known for <u>trade activities</u>.
 - A citadel is a castle or fortified structure built on higher ground
- 3. Natural growth towns: Towns took their origin as a village and developed with time without any plan in a natural process.



Citadel City

The origin and growth of towns in Europe in adjoining areas: CAUSES

- 1. Impact of the publicity of Christian religion:
- The Bishops became administrative head of each province
- All political, cultural and religious systems were controlled by them.
- They also took part in the enthronement अपदस्य of the kings.
- They became the big landlords जमींदार
- New towns were established near the Churches called as Cathedral (Principal Church) cities (France and Germany).

CAUSES...

Impact of Battles:

- Every state in this period was affected by the battles
- The strategic importance of locations favored emergence of settlements
- Wars among rival feudal lords for frequent.
- These Lords developed their own armies and kept them in the Castles
- The neighboring sites of these castles were safe and people settled near to them
- Such towns were known as Garrison cities
- Garrison' is the collective term for any body of troops stationed in a particular location, originally to guard it.

CAUSES...

- 3. The impact of the development of trade and transport activities:
- Number of suburbs grew up near the castle for the purpose of trade activities which helped in the emergence of new towns.
- The Merchant of these towns formed guilds मंडली to strengthen their economic and social positions
- These guilds gave birth to trade unions in modern times
- Venice, Milan, Florence and Geneva: trade towns

CAUSES...

- Mosel, Kabul, Mecca, Madina, Damshaq, Tripoli, Tunis Cordov

 Effective roads and Control
- 5. Effective roads and Central advantageous location of towns
- Emergence of educational Institutions:
- Colonge, Paris, Cambridge: establishment of universities
- Town which became popular due to local market, fairs and religious activities grew as centres of learning.
- By this time towns can be classified into two groups: Planned and Unplanned Towns.
- In medieval period most of the towns in Europe were unplanned

They can further be <u>classified</u> into three categories according to the pattern of their development:

- 1. Nuclear towns ना मिकीय नगर : These are of two types
 - i. Cathedral City गिरजाघर नगर:
 - Surroundings cathedrals of the priest in an irregular manner
 - The church plaza was the focal point of such towns
 - ii. Garrison City:
 - Spread around the castle developed by feudal chieftains. Having permanent troops.
 - **Germany** had a greater number of such towns.
 - These towns grew in a cellular काशिका growth manner. Brunswick city (Germany) five concentric points.

Linear towns रेखीय नगर :

- Along rivers and roads

 Radial towns:

 They have their origin from the focal point like Church, Castle or Monastery.
- Gave roads a radial pattern

The Structure of Houses and Buildings of Medieval Towns:

- The towns were designed to fit the topographic features therefore, the growth of towns was natural and they assumed an informal character
- Conservation of heat in cold climate and the restrictive areas of the town caused the houses to be built in connected rows along narrow streets.
- The dwellings had open spaces reserved for domestic animals and gardens
- The workshop and kitchens occupied the ground floor

The Structure...

- The average dwelling was two storied
 The workers used to live in the homes of their employers
- Streets were usually paved and maintained by the owners of property facing upon them
- Monasteries and Universities were the main focal points

Medieval towns of other parts of world:

- South America: Tumbez, Vinague, Quito
- China: Shanghai (1264), Hangchow and Peking (Beijing)
- Russia: Moscow, Baltimore, Novograd
- Japan: Kamakuta and Kyoto, Tokyo (in 16th century), Hiroshima
- India: Delhi, Agra, Jaipur, Bangalore, Hyderabad, etc.

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- 2. 6 names of Garrison towns in Europe
 3. Medieval towns: 1. L.
- 4. Towns in renaissance: the Baroque style

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