

Human Settlements and Land Use

EXERCISE Q.1 [PAGE 29]

Exercise Q.1 | Q 1 | Page 29

Identify the correct correlation:

A: Assertion; R: Reasoning

A: Settlements can be of various types.

R: Various physical factors affect the growth of settlements.

1. Only A is correct.
2. Only R is correct
3. Both A and R are correct and R is the correct explanation of A.
4. **Both A and R are correct but R is not the correct explanation of A.**

Solution: Both A and R are correct but R is not the correct explanation of A.

Exercise Q.1 | Q 2 | Page 29

Identify the correct correlation :

A: Assertion; R: Reasoning

A: When cities grow, their functions also grow.

R: Cities can have only one function.

1. Only A is correct.
2. **Only R is correct**
3. Both A and R are correct and R is the correct explanation of A.
4. Both A and R are correct but R is not the correct explanation of A.

Solution: Only R is correct

EXERCISE Q.2 [PAGE 29]

Exercise Q.2 | Q 1 | Page 29

Give a geographical reason:

Not all rural settlements change into urban settlements.

Solution: - The area between rural and urban is called the rural-urban fringe.

- Villages are beyond the rural-urban fringe and cities have different land use pattern.
- In villages, the land is mainly used for agriculture and related activities such as permanent pasture, grazing land, miscellaneous tree crops and groves, fallow land, etc.
- In city areas land is mainly used for industries, residential purposes, recreation, transportation, etc.
- Since the villages are far away from the city, they maintain their distinct identity and do not change into an urban settlement.

Exercise Q.2 | Q 2 | Page 29

Give a geographical reason:

In rural settlements, land use is related to agriculture.

Solution: - Generally, the land in rural areas is used for agriculture and related activities.

- The classification of the land use in rural areas is done according to the Land Records Department.
- As per Land Records Department, the land in rural areas is mainly used for activities related to agriculture, such as some land is under permanent pastures and grazing lands or some under tree crops or culturable waste-land or fallow land, etc.
- Thus, all the above types of land use around the rural settlements are related to mainly agriculture.

Exercise Q.2 | Q 3 | Page 29

Give a geographical reason:

Rural-urban fringes have the characteristics of both urban and rural settlements.

Solution: - The area between urban and rural areas is called the rural-urban fringe.

- It has the characteristics of both urban as well as rural areas since it is a transition zone between the two.
- Thus, in the rural-urban fringe, there is a mixture of urban-rural land use.
- In some rural areas apart from the land use for agriculture, some agricultural land has been converted into residential and industrial uses.
- The villages in the rural fringe are partly affected by urbanization.

- Thus, the rural-urban fringe has the characteristics of both urban and rural settlements.

Exercise Q.2 | Q 4 | Page 29

Give a geographical reason:

Growth of urban areas is linked to land use.

Solution: - Land use in urban areas is different from land use in rural areas.

- In rural areas, the land use is closely related to agricultural activities like the cultivation of different crops, plantation of trees, permanent pastures, grazing land, cultivation of tree crops, fallow land, etc.
- On the other hand, land use in urban areas is varied and closely related to housing and economic activities.
- As the population of the urban area increases, more and more non-agricultural activities develop in urban areas.
- Growth of urban areas depends upon area under construction, industries, different types of institutions such as school, college, insurance companies, bank, etc.
- Recreational activities, transportation are the other urban land uses.
- Thus, the growth of urban areas is linked with land use.

EXERCISE Q.3 [PAGE 29]

Exercise Q.3 | Q 1 | Page 29

Write a short note on:

Interrelationship between rural and urban settlements.

Solution: - Settlements can be divided into urban and rural on the basis of their functions. Rural settlements are smaller than urban settlements.

- In rural areas agriculture and allied agricultural activities like livestock rearing, fishing, lumbering, etc., are developed.
- In urban areas, industries, construction, and economic activities like trade, transport, and communication, banking, and insurance are important activities.
- The development industries need various raw material and services which are

supplied by rural areas.

- For example, cotton grown in rural areas is supplied to cotton textile industries in urban areas. Everyday many rural people commute to urban areas to work in different activities.
- Thus, there is a good interrelationship between urban and rural areas since they depend on each other.

Exercise Q.3 | Q 2 | Page 29

Write a short note on:

Problems of urban settlements.

Solution: - Most of the urban areas have a very large size of population and the density of the population is also very high.

- When cities increase in size, many changes occur. These changes are related to land use and the structure of the city.
- The large size of the population and high density creates a number of socio-economic, cultural, infrastructural, administrative, and environmental problems.
- The air, water, and noise pollution, development of slums, traffic jam, overcrowding in trains and buses, waste disposal, etc., are some of the serious problems in most of the urban settlements.

Exercise Q.3 | Q 3 | Page 29

Write a short note on:

Suburbs

Solution: - In the outer part of the urban areas there are small towns or small cities, they are known as suburbs.

- When big cities become overcrowded and overpopulated, the further development starts outside the city area and thus suburbs develop.
- For example, Dombivali, Kalyan, Ambarnath, etc., are the suburbs of Mumbai.
- Suburbs generally consists of residential housing and shops of a low order, which acts as a central place for the local community.
- Often, suburbs are the most recent growth of an urban area and their end marks the urban fringe.

- With an increase in population there is the growth of suburbs, the growth of suburbs may result in urban sprawl.

Exercise Q.3 | Q 4 | Page 29

Write a short note on:

Mixed land use.

Solution: - Mixed land use is observed in some of the urban areas.

- It is an area where different types of land use exist together.
- In some cities residential, industrial, commercial, administrative functions are found in an integrated manner.
- In many cities in developing countries one can find schools, clinics, houses, business shops in one place itself.
- Generally mixed land use is found in cities which are growing very fast, because land in the city is not sufficient to reserve certain areas for certain land use, therefore there is mixed land use.

EXERCISE Q.4 [PAGE 29]

Exercise Q.4 | Q 1 | Page 29

Answer the following question:

Explain the characteristics of rural settlements.

Solution:

- On the basis of functions, settlements can be divided into two types - rural and urban.
- Agriculture and allied agricultural activities like fishing, livestock rearing, lumbering, etc., are most economic activities in rural areas.
- The classification of land use in rural areas is done according to the Land Records Department.
- As per Land Records Department the land in rural areas is mainly used for activities related to agriculture, such as some land is under agriculture, some under permanent pastures and grazing lands or some under tree crops or culturable waste-land or fallow land, etc.
- Most of rural settlements are semi-clustered or fragmented and small in size.
- Primary activities like agriculture, lumbering, fishing, livestock rearing are more

developed in rural settlements.

- In rural areas, sometimes agricultural areas are converted into residential or industrial areas.
- Many people in rural areas daily commute to city areas for work, thus rural and urban areas are connected with each other.
- There is an area between rural and urban areas which is called the rural-urban fringe, rural settlements are beyond the rural-urban fringe.

Exercise Q.4 | Q 2 | Page 29

Answer the following questions:

What factors are responsible for the development of various patterns in the settlement? Give examples.

Solution:

- Patterns of settlements are affected by various physical factors like relief, soils, climate, availability of water supply, etc.
- Physical factors influence the type and spacing of settlements, which results in various patterns of settlements.
- Type of soil and quality of soil are two important factors that affect rural settlements.
- Fertile plains and valleys have thick, rich and fertile alluvial soil, which supports agriculture, so nucleated settlements develop in these areas. For example, most of the villages in Ganga plains have nucleated settlements.
- Settlements develop as per the relief of that area. For example, Foothill settlements develop at the foot of the mountain, hilltop settlements develop at the top of the hill. For example, hilltop settlement at Shimla or Manali.
- In the areas of mountainous or hilly relief, due to inaccessibility, there are dispersed or isolated settlements. For example, dispersed or isolated settlements in the Himalaya mountains.
- Sometimes settlements develop along the coastline, canal, river, road, or railway line. They are in a straight line; they are called linear settlements. For example, settlements along the Konkan coastline and settlements along the Mumbai-Pune road.
- Climate also affects the development of settlements. Areas of extreme climate are avoided by people. Therefore, such areas have dispersed settlements.
- For example, due to the extremely hot climate there are dispersed settlements in Rajasthan and due to extreme cold climate, there are isolated settlements in the polar regions.
- Water is essential for human development. Therefore, many settlements develop around lakes or natural tanks, they are circular settlements.
- Sometimes settlements develop at the confluence of two rivers, the settlements grow in all three sides, they are triangular settlements. For example, Karad town is on the confluence of Krishna and Koyna river.

- Sometimes settlements grow around the mines or any central object. This center point provides a source of livelihood to the people. Thus, the radial pattern of settlement develops. For example, radial settlements around coal mines in the State of Bihar.

EXERCISE Q.5 [PAGES 29 - 30]

Exercise Q.5 | Q 1 | Page 29

Differentiate between :

Land use and Landcover

Solution:

Land Use	Land Cover
(i) Land use describes the use of land by people for different activities, such as recreation, housing, agriculture, educational institutes, etc.	(i) Land cover describes the physical surface covering the land such as forest rock, ice, sand, water, etc.
(ii) For example, in any city, people may use some land for housing, some for recreation, some for sports ground, etc.	(ii) For example, in any area land may be covered by natural factors such as vegetation, river, sand dune, snow-covered mountain, etc.
(iii) Land use may change from place to place depending upon the type of land and need for the people.	(iii) Land cover is a natural factor it hardly changes unless man purposefully makes changes in it.
(iv) Land use cannot be studied by the satellite imagery alone.	(iv) Land cover can be studied by satellite imagery.

Exercise Q.5 | Q 2 | Page 30

Differentiate between:

Barren and Non-agricultural land

Solution:

Barren Land	Non-agricultural Land
(i) The land which is not used for any human activity is called barren land. In other words, it is a wasteland.	(i) The land which is used by man for various human activities except for agricultural activity, is called as non-agricultural land.

(ii) For example, hilly or mountainous land, desert land, ravines, swamps, and marshy land, etc.	(ii) For example, land used for housing, industries, construction of roads, railways, etc.
(iii) Generally barren land cannot be used for agriculture or other activities with available technology.	(iii) Due to the development of secondary or tertiary activities there is an increase in the use of non-agricultural land.

Exercise Q.5 | Q 3 | Page 30

Differentiate between:

Radial Pattern and Circular Pattern

Solution:

Radial Pattern	Circular Pattern
(i) In radial pattern settlements grow around the certain objects.	(i) In circular pattern settlements grow around the water body.
(ii) They develop near a temple or a center of commercial activity.	(ii) They develop near a lake or natural tank.
(iii) For example, settlements near Vindhyachal in Uttar Pradesh.	(iii) For example, settlements around Nainital lake in Uttarakhand.

Exercise Q.5 | Q 4 | Page 30

Differentiate between :

Nucleated and Dispersed Settlement

Solution:

Nucleated Settlement	Dispersed Settlement
(i) Settlement where buildings or houses are grouped or clustered around a central point	(i) Settlement where buildings or houses are scattered or dispersed, is known as a dispersed settlement.

or nucleus is known as nucleated settlements.	
(ii) Houses or buildings are very close to each other. There may be a common wall between two houses.	(ii) Houses or buildings are far from each other. One house may be at a distance of half a kilometre from the other.
(iii) Geographical factors are favourable such as spring or fertile river valley.	(iii) Geographical factors are not favourable such as extreme climate, barren land etc.
(iv) For example, settlements in river valleys.	(vi) For example, settlements in the desert of Rajasthan.

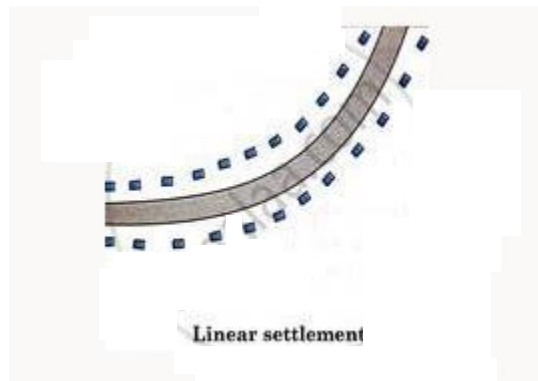
EXERCISE Q.6 [PAGE 30]

Exercise Q.6 | Q 1 | Page 30

Draw a neat and well-labeled diagram for:

Linear settlement

Solution:

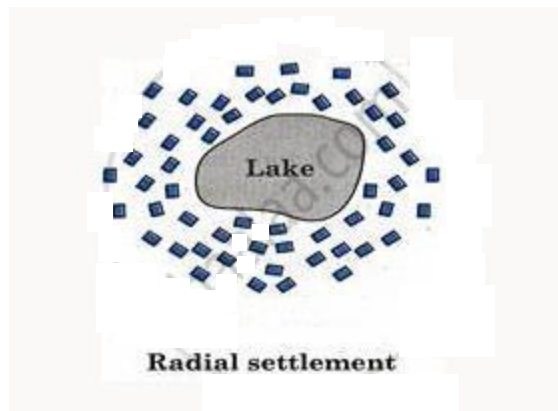


Exercise Q.6 | Q 2 | Page 30

Draw a neat and well-labeled diagram for:

Radial settlement

Solution:

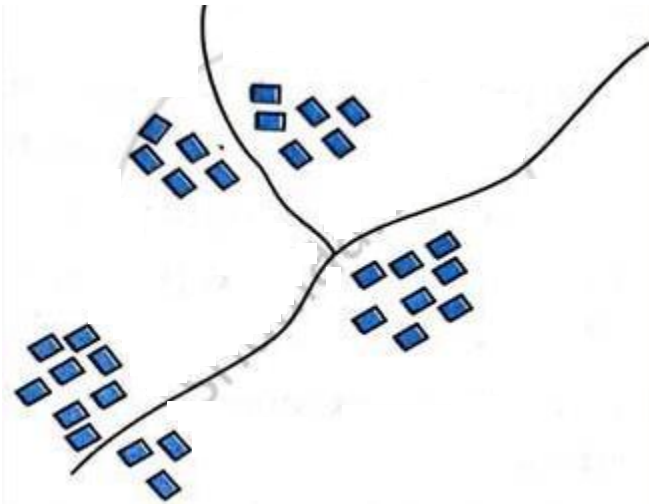


Exercise Q.6 | Q 3 | Page 30

Draw a neat and well-labeled diagram for:

Compact settlement

Solution:

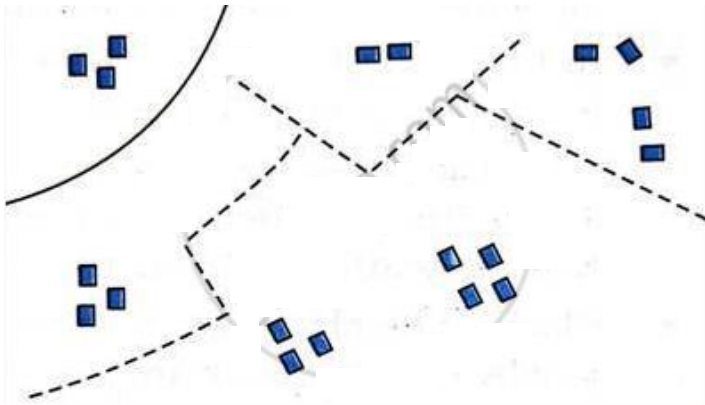


Exercise Q.6 | Q 4 | Page 30

Draw a neat and well-labelled diagram for:

Dispersed settlement

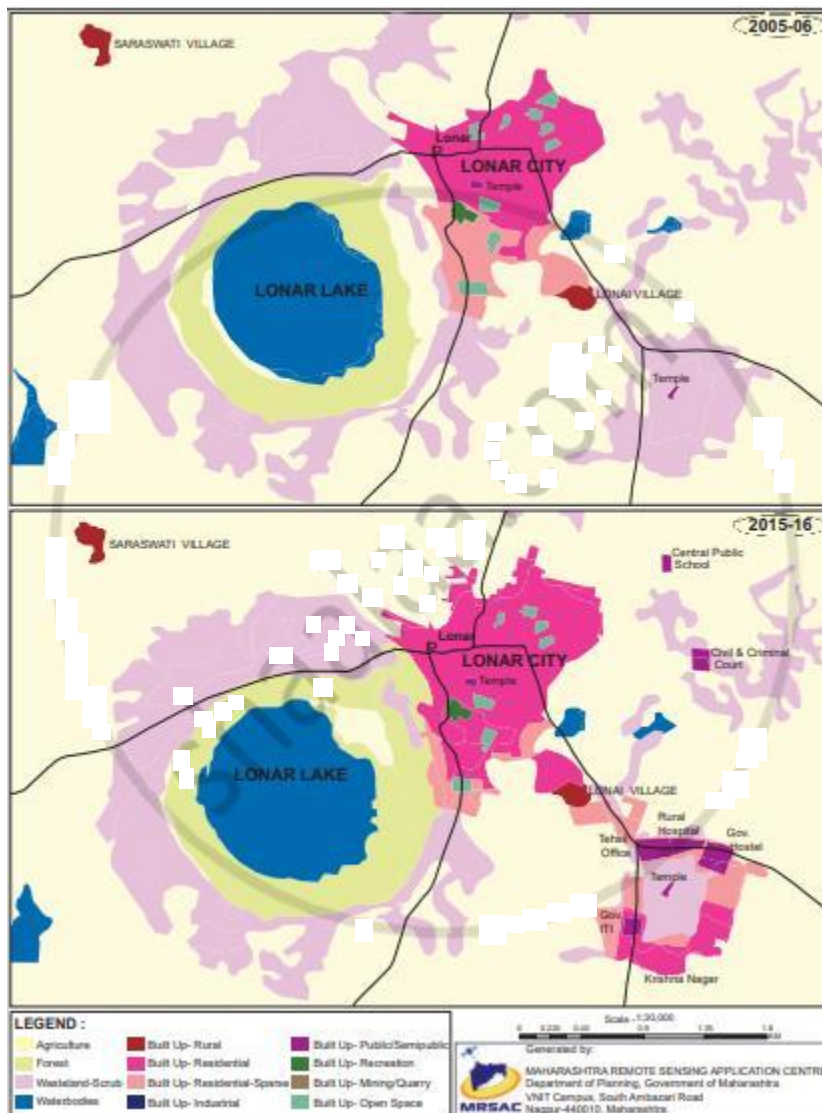
Solution:



EXERCISE Q.7 [PAGE 30]

Exercise Q.7 | Q 1 | Page 30

Write a note in your own words about how land use in Lonar city has evolved over time.



Solution:

- Two maps of Lonar city are given. One map is of the year 2005-06 and another is of 2015-16.
- These two maps show the changes in land use that have taken place in the span of 10 years.
- The following changes have been registered.
- There is no change in the size of Lonar lake.
- The area occupied by Lonar city has increased substantially.
- Forest area around the lake has increased.
- An area under waste land/ scrubs have increased.
- Around the temple in the southeast, on the waste scrub land a new rural hospital, government hostel, government ITI, Tahsil office, etc., has been developed. This newly developed area has been named as Krishna Nagar, which is not in the 2005-06 map.
- To the north-east of the Lonar city two more buildings have been constructed. One is a central public school and another is a civil and criminal court.
- To the south of the temple in the heart of Lonar city built-up residential area is spreading over built-up residential sparse.
- Overall built up residential sparse is increasing in all directions around Lonar lake and south-east of the Lonar city and thus there is encroachment over agricultural land.

EXERCISE Q.8 [PAGE 31]**Exercise Q.8 | Q 1 | Page 31****Read the given passage and answer the following questions:**

Different types of human settlements include hamlets, villages, small towns, large towns, isolated places, cities, and conurbations. In some systems, types of human settlements are broken up into urban, suburban, and rural; for example, the U.S. Census Bureau divides settlements into urban or rural categories based on precise definitions. Small settlements, such as hamlets and villages, have low populations and restricted access to services. Larger types of settlements, such as cities, have higher populations, higher densities, and greater access to services. For example, a village may have only one or two general stores, while a large metropolis may have many specialized stores and chain stores. These differences are known as low-order service settlements and high-order service settlements. Larger settlements also have a sphere of influence affecting surrounding settlements. Settlements may also be divided by the site chosen, such as sites selected based on resources, trading points, defensive sites, shelter, and relationship to water resources. The functions of human settlements also differ, as settlements may be established as ports, market towns, and resorts. Types of rural settlements may also be classified by function, such as proximity to farming, fishing, and mining. Settlements that focus on one economic activity are called single functional settlements. Human settlements may be permanent or temporary. For example, a refugee camp is a temporary settlement, while a city is a permanent settlement.

- 1) Which human settlements are mentioned in the passage above?
- 2) On what basis are urban and rural areas classified?
- 3) What are the functions carried out in rural settlements?
- 4) Explain the difference between low-order service and high-order service settlements.

Solution:

- i. Hamlets, villages, small towns, In The towns, isolated places, cities, and conurbations are the types of settlements mentioned in the passage.
- ii. The settlement is classified on the basis of the size of the population, density, access to higher-order and lower-order services, the site chosen, functions, permanent or temporary, etc.
- iii. Functions carried out in rural settlements are farming, fishing, mining, one or two general stores, etc.
- iv. The hamlets and villages have a low population and restricted access to lower-order services. For example, a village may have only one or two general stores. They are called low order settlements,
 - Large metropolitan cities have a higher population, higher density, and greater services of higher-order
 - For example, large metropolitans may have chain stores, malls, departmental stores, supermarkets, etc. They are called higher-order settlements.