

1. Population: Part - 1

Q. (1) Identify the correct correlation:

A: Assertion; R : Reasoning

(1) A: Areas which have fertile soil have dense population

R: Fertile soils are good for agriculture.

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.

(2) A: Population of a region does not change.

R: Birth rate, death rate and migration affect the population of a region.

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.

(3) A: In stage 2, death rate reduces but birth rate is constant.

R: The population increases rapidly in stage 2.

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.

Q. 2) Write short notes on:

(1) Impact of relief on population distribution.

Ans. - Relief is one of the most important factors influencing the distribution of population.

- Generally, mountains are thinly populated, plains are thickly populated and plateaus are moderately populated.

- The mountains and hilly areas are less populated because of limited means of livelihood; agriculture is poorly developed and transportation facilities are limited. For example, north eastern states of India have less population due to hilly and mountainous relief.

- On the other hand, plains are densely populated because of fertile soil and well-developed agriculture. Due to plain relief, it is easy to construct roads and develop industries. Better employment facilities attract people in these areas. For example, Ganga plains are thickly populated

- In short, we can say plains are densely populated and mountains and plateaus are sparsely populated.

(2) Correlation between birth rates and death rates.

Ans. - Birth rate and death rate are the important components of population change.

- Birth rate is the number of live births in a year per thousand population.

- Death rate is the number of deaths in a year per thousand population.
- Population growth depends upon birth rate and death rate in a year. Population growth occurs not only by increasing birth rate but also because of decreasing death rate.
- When birth rate is more than death rate, population increases.
- When birth rate is less than death rate, population decreases.
- If both, birth rate and death rate is same then population is said to remain stable. However, the birth rate and death rate being same is only a hypothetical situation.

(3) Stage 3 of Demographic Transition Theory.

Ans. - Stage 3 of Demographic Transition Theory is the stage of expanding population.

- From second stage to this stage, death rates are decreasing. Birth rates are also decreasing. Decrease in both birth rates and death rates, reduces the rate of growth of population. But actually, population is growing because the birth rates are higher than death rates.
- In this stage, since the country is making progress, the income of the people is above the subsistence level and there is an improvement in the standard of living of the people. Poverty is also reducing
- There is development of technology as a result secondary and tertiary activities develop.
- Due to increase in education level, people understand the importance of family planning so size of family reduces.
- In short in stage 3 countries are moving from developing stage to developed stage.

Q. 3) Give geographical reasons:

(1) India is passing through Stage 3 of demographic transition.

Ans. - In India, since there is a decrease in the birth rates and death rates, the growth rate of population is also decreasing.

- Due to the development in the country, income of the people has reached above subsistence level, standard of living is improved, poverty is decreasing, technology is developing.
- Number of people engaged in secondary and tertiary activities are increasing.
- Due to increase in the literacy rate, people have understood the importance of family planning. Therefore, there is a decrease in the size of family.
- Hence, India is passing through Stage 3 of demographic transition.

(2) Population distribution is uneven.

Ans. - Distribution of population in the world is very uneven because distribution of population depends upon many physical factors such as relief, climate, availability of water supply, soil etc.

- For example, if you consider relief factor, mountains and hilly areas are thinly populated. Plateau regions are moderately populated and plains are densely populated. The Himalayan region in India is thinly populated but the Gangetic plains are thickly populated and Deccan plateau region are moderately populated.
- The distribution of population also depends upon human factors such as agriculture, mining, transportation, urbanisation etc.
- For example, agriculture or mining activities support large population since they provide source of living to many people.
- Sometimes government policies also affect population distribution. For example, government provided land, water, electricity at concessional rate in New Mumbai area to attract people and to reduce pressure of population in Mumbai city.

(3) Population increases because of transportation facilities.

Ans. - The development of roads and railways makes the region more accessible.

- Such areas provide favourable conditions for the development and manufacturing industries, which generate employment. Therefore, people from different areas migrate in search of jobs. Thus, such areas become densely populated. For example, Gangetic plain of India, where the density of roads and railways is highest in India.

- Population increases in port cities due to availability of sea transport for the development of trade. Therefore, the coastal region is densely populated. For example, many port cities like Chennai, Mumbai are developed on the east and west coast of India.

- Thus, population increases because of transportation facilities.

(4) Secondary and tertiary activities increase in the third stage of demographic transition.

Ans. - In Stage 3 of demographic transition theory, growth rate of population decreases.

- As a result, the income of the people in the country reaches above subsistence level. Poverty rate decreases and standard of living increases. Therefore, the use of technology increases and this generates an employment in secondary and tertiary activities.

- Due to increase in education level and development of health facilities there is increase in employment in tertiary sector.

- Thus, secondary and tertiary activities increase in the third stage of demographic transition.

(5) Population may increase though birth rates are low.

Ans. - The growth of population depends upon the difference between number of live births in a year per thousand population and number of deaths in a year per thousand population.

Therefore, growth of population depends upon both birth rate and death rate.

- When birth rate is low and death rate is also low, then though the number of live births per thousand population are less, but due to a smaller number of deaths per thousand population, there is increase in population of the country.

(6) Population density is a function of population and area of a region.

Ans. - The number of people living in an area or country is called total population of the area or country.

- Density of population is the ratio between total population and a total area of that region or country.

- For example, as per the census of 2011, Density of population in India is 325 persons per sq. km. It is a ratio between total population in India and total area of India in sq. kms.

- In some countries total population may be less but the density of population is high due to small area of the country. For example, Bangladesh's total population is less but area of country is small therefore, density of population is high.

- In some countries total population may be more but the density of population is low due to very large area of the country. For example, Brazil has more total population but area of country is also large therefore, density of population is low.

Thus, population density is a function of population and area of a region.

Q.4) Answer in detail:

(1) Explain the physical factors affecting distribution of population.

Ans. Physical factors affecting distribution of population are:

(i) Relief (ii) Climate (iii) Availability of water (iv) Soils

(i) Relief

- Distribution of population is greatly affected by relief features.
- Generally, flat plains or gently sloping lands are densely populated.
- Plains are suitable for agricultural activities.
- In these areas it is easier to construct roads and railways and development of industries and trade. As a result, many people are attracted to plains and they become densely populated. For example, Ganga plains are thickly populated.
- On the other hand, in mountainous and hilly areas density of population is low. This is because in such areas agricultural development is difficult.
- The construction and development of transport facilities is very difficult and costly too. Such areas are inaccessible.
- Due to inaccessibility, movement of goods and people are restricted. Therefore, mountainous and hilly areas are thinly populated. For example, north eastern states of India have less population due to hilly and mountainous relief.

(ii) Climate

- Climate is the most important factor of all the factors influencing the distribution of population.
- Areas having very hot or very cold climate, heavy rainfall are very uncomfortable for human settlement. Such areas are thinly populated.
- For example, polar regions where Eskimos and Lapps live are sparsely populated due to extreme cold climate. Sahara Desert is sparsely populated due to extreme hot climate.
- On the other hand, areas with equable climate, that is climate having not much seasonal variation attract people. People feel comfortable to stay in these areas.
- For example, coastal areas have dense population because of equable climate and wide scope for the development of agriculture, industries and trade.

(iii) Availability of water

- Water is the most important factor affecting distribution of population. It is the most essential factor for all human activities.
- Therefore, more people live in areas where potable and sufficient water is available. As a result of this most of the river valleys are densely populated i.e. Nile river valley.
- Even in desert areas there is more population near oasis due to availability of water.

(iv) Soil

- Fertile soils are most important for the development of agriculture.
- The areas having fertile alluvial soil have developed intensive agriculture and support large number of people and hence they are densely populated, e.g., Gangetic Plain, Plains of Mississippi, Irrawaddy and Yangtze etc.
- Similarly, in the areas having very fertile black cotton soil or regur soil, agriculture is well developed and hence such areas are densely populated.
- The volcanic soil is very fertile hence, it supports agriculture. Therefore, slopes of volcanic mountains have dense population. For example, volcanic mountain slopes of Java island.

2) In the first and fifth stage of the demographic transition, population growth is almost nil. What is the difference between the two stages then?

Ans. - In the stage 1 both birth rates and death rates are high. The difference between the two is very less and therefore, population is stable.

- In stage 1 birth rates are high due to limited educational opportunities, people feel having many children is good. Therefore, families are big.
- In stage 1, due to lack of sanitation facilities, medical facilities, spread of contagious diseases, malnutrition, etc., death rate is high.
- In stage 5 birth rates and death rates are very low. Birth rates are almost equal to death rates.

- As a result, the population growth is almost minimal or very low or even negative in case of some countries.
- In stage 5, death rate is low because of improved medical facilities, eradication of contagious diseases and healthy environment.
- In stage 5, due to increase in awareness among the people, birth rate is low.

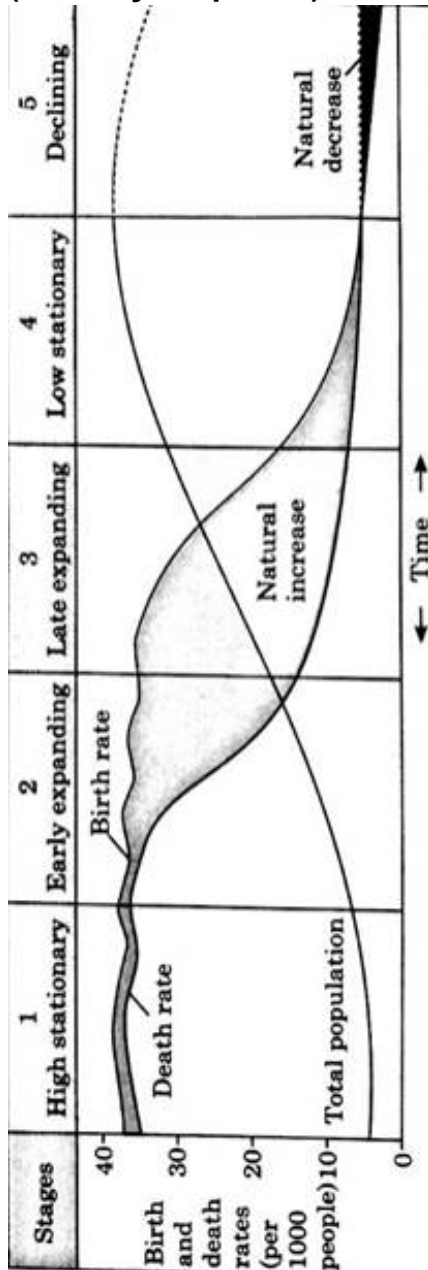
(3) Discuss the problems faced by countries in stage 4 and stage 5.

Ans. Problems faced by stage 4 countries are as under:

- The death rate is very low and going down as the medical facilities have improved and pandemic like plague, cholera, small pox, etc., are eradicated.
- Birth rate is the same as death rate so population growth is minimal. Problems faces by stage 5 countries are as under:
- In this stage the birth rate is very low and death rate is high. Therefore, the growth of population is slow or negative growth of population is seen.
- Due to large number of old people the death rate is high and due to a smaller number of young people birth rate is low.
- Due to large number of old people, dependent population is high.
- Due to less young age population, working population is limited.
- As a result, the size of dependant population is larger than active population and adverse effect on economy of the country.

Q.5) Draw a neat labelled diagram for demographic transition theory and its various stages.

(Rotate your phone)



Q. 6) On an outline map of the world, show the following with index:

- 1) Highly populated region in Australia.
- 2) Sparsely populated region in India.
- 3) Any 2 countries in stage 5 of Demographic Transition Theory
- 4) Any 2 countries in stage 2 of Demographic Transition Theory

