

NCERT Solutions For Class 12 Geography

Chapter 2 The World Population (Distribution, Density and Growth)

1. Which one of the following continents has the highest growth of population?
 - (a) Africa
 - (b) South America
 - (c) Asia
 - (d) North America
1. (a) Africa
2. Which one of the following is not an area of sparse population?
 - (a) The Atacama
 - (b) Equatorial region
 - (c) South-east Asia
 - (d) Polar regions
2. (c) South-east Asia
3. Which one of the following is not a push factor?
 - (a) Water shortage
 - (b) Medical/educational facilities
 - (c) Unemployment
 - (d) Epidemics
3. (d) Epidemics
4. Which one of the following is not a fact?
 - (a) Human population increased more than ten times during the past 500 years.
 - (b) It took 100 years for the population to rise from 5 billion to 6 billion.
 - (c) Population growth is high in the first stage of demographic transition.
 - (d) ?
4. (c) Population growth is high in the first stage of demographic transition.
5. Name three geographical factors that influence the distribution of population:
5.
 - Availability of water: It is the most important factor of life. People prefer to live in areas where fresh water is readily available. Water is essential in development of agriculture and carrying out day-to-day activities.
 - Land forms: People prefer to live in flat plains and gentle slopes as they are favorable for the production of crops and in building roads and industries.

NCERT Solutions For Class 12 Geography

- Climate: People prefer living in areas that do not have extreme climatic conditions that is areas that do not have high diurnal and annual range of temperature and also which have adequate rainfall.
 - Soils: Fertile soils are important for agricultural and allied activities. Therefore, areas which have fertile loamy soils, have more people living on them as they can support intensive agriculture.
6. There are a number of areas of high population density in the world. Why does this happen?
6. The areas with high population density across the world have at least one or usually multiple factors favorable for the settlement of population. Wherever people found conducive conditions for living, they have been settling there. With passage of time and growth of population, these areas became regions of thick population density. For example, the regions with availability of water, good climate, presence of minerals and other resources, of religious or cultural significance became regions of thick population. Example: Ganga-Yamuna Doab, Mediterranean regions.
7. What are the three components of population change?
7.
 - Crude Birth Rate (CBR): It is expressed as number of live births in a year per thousand of population in a particular region.
 - Crude Death Rate (CDR): It is the number of deaths in a place per thousand of population in a particular region. CBR and CDR are natural factors of population growth. They result in natural population growth, which is equal to the difference between CBR and CDR.
 - Migration: It is the induced factor in population growth. It is the number of people moving in and out of a place due to various social, economic and political reasons. It is taken into account while calculating actual growth of population.
8. Distinguish between Birth rate and Death rate:
- 8.

Birth Rate	Death Rate
It is the number of live births per thousand of population during a year for a particular region.	It is the number of deaths per thousand of population during a year for a particular region.
It is calculated using the following formula: $CBR = \frac{Bi}{P} \times 1000$ Here, CBR = crude birth rate, Bi = Number of live births in a year, P = the estimated midyear population of that year.	It is calculated using the following formula: $CDR = \frac{D}{P} \times 1000$ Here, CDR = crude death rate, D = Number of deaths in a year, P = the estimated midyear population of that year

NCERT Solutions For Class 12 Geography

If birth rate is more than death rate, it results in positive growth of population.	If death rate is more than birth rate it results in negative growth of population.
---	--

9. Distinguish between Push factors and pull factors of migration:

9.

Push factors	Pull factors
These factors are the ones which makes a place less attractive for human settlement.	These factors are the ones which makes a place an attractive destination for settlement.
These factors forces people to move out- hence face emigration.	These factors force inflow of people – hence face immigration.
Examples: Unemployment, poor living conditions, political turmoil, unpleasant climate, natural disasters, epidemics and socio-economic backwardness.	Examples: Better job opportunities, better living conditions, peace and stability, security of life and property and pleasant climate.

10. Discuss the factors influencing the distribution and density of population in the world.

10. The factors influencing the distribution and density of population in the world may be classified into three broad categories, which may again be sub divided into minor factors. They are enumerated below:

Geographical factors:

- Availability of water: It is the most important factor of life. People prefer to live in areas where fresh water is readily available. Water is essential for development of agriculture and carrying out day to day activities.
- Land forms: People prefer to live in flat plains and gentle slopes as they are favorable for the production of crops and in building roads and industries. The mountainous and uneven terrain offers obstacles in infrastructure development activities that hamper human development hence are less populated. Eg: Himalayan region's in India.
- Climate: People prefer living in areas that do not have extreme climatic conditions that is areas that do not have high diurnal and annual range of temperature and also which have adequate rainfall. Eg. Mediterranean regions.
- Soils: Fertile soils are important for agricultural and allied activities. Therefore areas which have fertile loamy soils, have more people living on them as these can support intensive agriculture. Eg. Northern plains.

Economic factors:

- Minerals: Areas rich in minerals attract industries. Mining and allied activities generate employment. Skilled and semi-skilled workers move to these areas and make them densely populated. Eg. Katanga Zambia copper belt in Africa.

NCERT Solutions For Class 12 Geography

- **Industrialization:** Industrial belts provide job opportunities and attract large numbers of people. These include not only factory workers but also transport operators, shopkeepers, doctors and other professionals.
Example; The Kobe- Osaka industrial region of Japan.
- **Urbanization:** Better employment opportunities, educational and medical facilities, better means of transport and communication attract people to cities. It leads to rural-urban migration and hence cities grow in size. Eg: a large number of people move to cities like .Delhi, Mumbai, etc. and hence make them densely populated.
- **Social and cultural factors:** Some places attract more people because they have religious or cultural significance. In the same way, people tend to move away from places where there is social and political unrest. Example; emigration of people from civil war affected areas of Africa. Many a times government offers incentives to people to live in sparsely populated areas. Example; Indira Gandhi canal colonies.

11. Discuss the three stages of demographic transition.

11. Demographic transition theory can be used to describe and predict the future population of any area. The theory tells us that the population of any region changes from high births and high deaths to low births and low deaths as a society progresses from rural, agrarian and illiterate to urban, industrial and literate society. These changes occur in stages, which are collectively known as the demographic cycle.

The first stage has high fertility and high mortality rates because people reproduce more to compensate for the deaths due to epidemics and variable food supply. Population growth is slow and most people are engaged in agriculture where large families are an asset. Life expectancy is low; people are mostly illiterate and have low levels of technology. Two hundred years ago all the countries were in this stage.

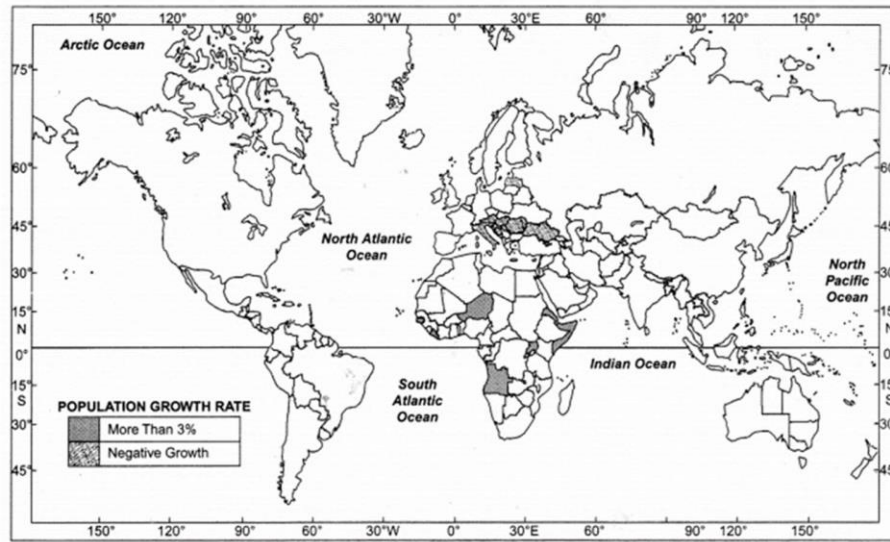
In the second stage, fertility remains high in the beginning, but it declines with time. This is accompanied by reduced mortality rate. Improvements in sanitation and health conditions lead to decline in mortality. Because of this gap the net addition to population is high. This results in population explosion. Eg. Countries like India.

In the last stage, both fertility and mortality decline considerably. The population is either stable or grows slowly. The population becomes urbanized, literate and has high technical know how and deliberately controls the family size. Some countries even face negative growth of population, E.g., many Western European countries.

12. On an outline map of the world name the following:

- (a) Countries of Europe and Asia with negative growth rate of population.
- (b) African countries with growth rate of population more than three percent.

NCERT Solutions For Class 12 Geography



12.

- Europe: Estonia, Croatia, Romania, Bulgaria etc. Asia : Japan, Armenia, etc.
- Angola, Niger, Guinea, etc.

13. What was world's population at the beginning of the 21st century?

13. The world at the beginning of the 21st century recorded the presence of over 6 billion people.

14. What did George B Cressey say about Asia's population distribution?

14. George B Cressey said that 'Asia has many places where people are few and few places where people are many'.

15. 60% of world's population is contributed by how many countries? How many of them are in Asia?

15. 60% of world's population is contributed by 10 countries. 6 of them are in Asia.

16. What is population density?

16. Population density is the ratio between the number of people and the size of the land.

17. Which areas in the world have > 200 persons per sq. km?

17. NE USA, NW Europe, South, South east and East Asia.

18. Name two areas with <1 person/sq. km.

18. North and South Poles and hot and cold deserts of the world.

19. Name two countries with medium density of population.

NCERT Solutions For Class 12 Geography

19. Norway and Sweden.
20. Why do people migrate?
20. People migrate for better economic and social life.
21. What was the population of the world around 8000-12000 years back?
21. Roughly 8 million was the population of the world around 8000-12000 years back.
22. How long did the world take to increase its population from 5 billion to 6 billion?
22. It took 12 years to increase the world's population from 5 billion to 6 billion.
23. What is population doubling time?
23. Time takes for a region to double its population at the current growth rate.
24. Which country has the highest and lowest growth rate of population respectively?
24. Liberia has the highest growth rate of population (8.2%).
Latvia has the lowest growth rate of population (-1.5%).
25. What is the correlation between population growth and economic development?
25. There is a negative correlation between population growth and economic development.
26. Which is the most serious problem of population growth?
26. Depletion of resources is the most serious problem of population's growth.
27. What is the world's and India's doubling time of population?
27. 37 Years and India : 36 years.
28. Name a country each from the different stages of demographic transition.
28. 1st stage : Bangladesh 2nd stage : Sri Lanka 3rd stage : USA.
29. What is meant by family planning?
29. Family planning is the spacing or preventing the birth of children.
30. What do you mean by the term 'population distribution'?
30. Population distribution refers to the way people are spaced over the earth's surface.
Patterns of population distribution and density help us to understand the demographic characteristics of any area.
31. Mention the names of areas where density of population is very low.
31. • Hot Deserts — Sahara, Kalahari, Atacama and West Australia.

NCERT Solutions For Class 12 Geography

- Extremely Cold Areas—Northern Part of Canada, Greenland and Northern Part of Siberia.
 - Cold Deserts — Areas of Central Asia.
 - Equatorial Region — Amazon basin of South America and Zaire basin of Africa.
- 32.** What is the impact of migration?
- 32.** Migration changes the size of population of an area by either addition (due to immigration) or subtraction (due to emigration) in the number of people.
- 33.** What is population growth? What does population change indicate for an area?
- 33.** Population growth or population change refers to the change in the number of inhabitants of a territory during a specific period of time.
It is an important indicator of economic development and historical and cultural background of the region.
- 34.** What are the components of population change?
- 34.** There are three components of population change: Births, deaths and migration. Population growth occurs not only by increasing birth rate but also due to decreasing death rate. Apart from these the population size is also affected by the movement of people from one place to another in pursuit of better living i.e., migration.
- 35.** Distinguish between place of origin and place of destination.
- 35.** Migration may be explained as a spontaneous effort to achieve a better balance between resources and population. When people move from one place to another, the place they move from is called the place of origin and the place they move to is called the place of destination.
- 36.** How did science and technology help in population growth?
- 36.** Steam engine replaced human and animal energy and also provided mechanized energy from other sources and helped in increasing agricultural and industrial production. Improvement in medical facilities, inoculation against epidemics and sanitation helped in the decline of death rate.
- 37.** What are the impacts of population change?
- 37.** A small increase is beneficial for a growing economy. But growth beyond the carrying capacity of land create problems. Resource depletion is the most serious of all the problems. Population decline also indicate that the resources are insufficient to support the population of an area which it had done earlier.
- 38.** What was Thomas Malthus's theory?

NCERT Solutions For Class 12 Geography

38. Thomas Malthus in his theory (1793) stated that the number of people would increase faster than the food supply. Any further increase would result in population crash caused by disease, famine, and war. Preventive checks are better than physical checks. For future sustainability world population need to be controlled.
39. Which areas of the world have high density of population?
39. Fertile plains with favorable climate and highly industrialized and urbanized areas are densely populated. There are four areas where density is more than 200 persons per sq. km. They are:
- East Asia (China, Japan, Korea, and Taiwan).
 - South and South-east Asia (India, Indonesia, Bangladesh and Pakistan).
 - North-West Europe (UK, France and Germany).
 - The Northeastern Coast of North America.
40. What is the trend in growth of population over the years in the world?
40. The world population attained its present strength over centuries. It grew very slowly in the early periods. About 8000 – 10000 years ago, after the introduction of agriculture the size of population was around 8 million. In the 1st centuries it was below 300 million. The 16th and 17th centuries set the stage for growth of population with expanding trade. The 2nd most significant cultural change that impacted the growth of population came around the 1750 in the dawn of 'Industrial Revolution' with approx. 550 million population. It exploded after the industrial revolution in the 18th century. The 3rd major cultural and technological change that influenced the population growth came in the 20th century through 'Medical Revolution' – which drastically brought down the 'death rate' with the introduction of several life saving drugs and improved medical facilities through better connectivity and paved the path for rapid population growth.
41. What is population change? What is the Spatial Rate of population change?
41. Difference in the birth, death and migration of an area between two points of time leads to the size of population thus resulting in change. Population growth is low in developed countries than the developing countries. Population growth and economic developments are negatively correlated. In a developing country with a large population, even a small annual growth rate will lead to a huge change in population. Even if the growth rate continues to decline, the total population grows each year. Presently the population of the world is 7.033 billion and is increasing at an alarming rate with more than 8 crores being added every year. Though the developed nations have stabilized their growth, the developing nations are yet to reach that target. The

NCERT Solutions For Class 12 Geography

population in the developing nations is bound to increase in the coming years as the proportion of their youthful population is high.

42. What is Demographic Transition? Explain the stages of demographic transition theory with examples.
42. The Demographic Transition Theory gives us the relationship between the level of economic development of a country and its demographic characteristics. It mentions the transition of a society from a phase of high fertility and mortality to a phase where both come down to low and the countries move from primitive agricultural, illiterate and rural economy to a modern industrial, literate and urban state. Initially, there were three stages of the theory—Underdeveloped stage, developing stage and Developed stage.

Stage-1: Stage of slow population growth. This stage was marked by both high birth rate and high death rates. So population growth rate was very low. Agriculture oriented activities depended on the vagaries of nature leading to low productivity. Society was highly illiterate with poor technology. Large families with high birth rates were the norms as they had to compensate the high death rate. About a couple of centuries back all the economies were at this stage of demographic transition.

Stage-2: Stage of the beginning of Industrial Revolution. With betterment economic conditions and living standards, this stage started with improvement of medical facilities, sanitation and as a result death rate went down but birth rate remained high initially. This gave rise to a sudden increase in population which is common in a developing economy.

Though both of them were falling, the rate of fall in death rate was much faster than that of birth rate – creating a wide gap between them – which in turn gave rise to sharp increase in population, often termed as population explosion triggered by the better medical facilities and food supply. Stage-3: Stage of late Industrial Revolution and urban state.

Typically characterized by low and stable growth rate of population. This stage is marked with a decline in birth rate along with a steady decrease in death rate. The mortality rate gets very low and stabilizes. This Demographic Transition theory clearly shows how an economy changes from an agrarian, illiterate rural state with high birth rate, and Death rate to an industrial, literate and urban state with low Birth rate and Death rate through technological innovations and medical improvements.

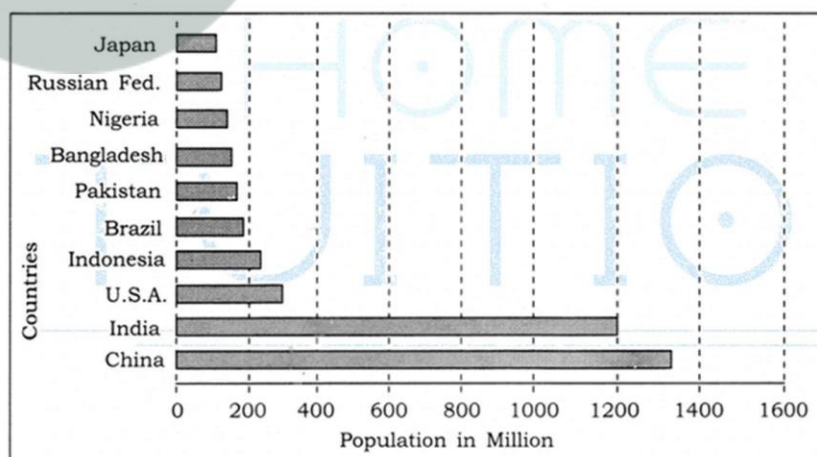
43. What are the repercussions of population increase? What are the population control measures?
43. A small increase in population is desirable in a growing economy but uncontrolled population growth leads to numerous problems mainly on the limited resources.

NCERT Solutions For Class 12 Geography

Thomas Malthus in his theory (1793) stated that the number of people would increase faster than the food supply. Any further increase would result in population crash caused by disease, famine and war. Preventive checks are better than physical checks. For future sustainability world population need to be controlled.

Access to family planning measures is an important factor in controlling population. Propaganda, creating awareness, free availability of contraceptives, tax disincentives for large families are some of the measures which can be adopted for controlling population.

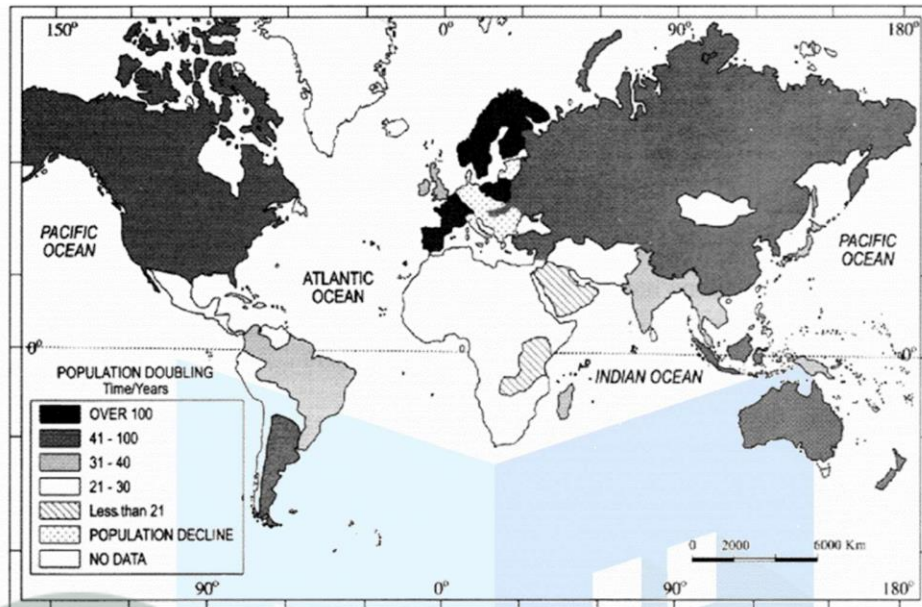
44. Why is there great variation among various regions in doubling their population?
44. Developed countries have controlled their growth rate due to expansion of educational facilities and advancement in medical facilities. Developed countries are taking more time to double their population. Developing countries are taking less time to double their population due to lack of educational and medical facilities.
45. What are the positive impacts of population change?
45. Declining population has the following positive impacts:
- Less pressure on land and on other resources.
 - Less pressure on infrastructure and civic amenities.
 - High per capita income and better standard of living.
- An increasing population if in a desirable proportion, has the following positive impacts:
- Favourable for expanding economy.
 - Resources can be utilised in a better way.
 - Biodiversity is kept intact.



46. From the above diagram identify the Asian, South American and North American countries respectively.
46. Asian countries — Japan, Bangladesh, Pakistan, Indonesia, India and China 'South America — Brazil, North America —USA.

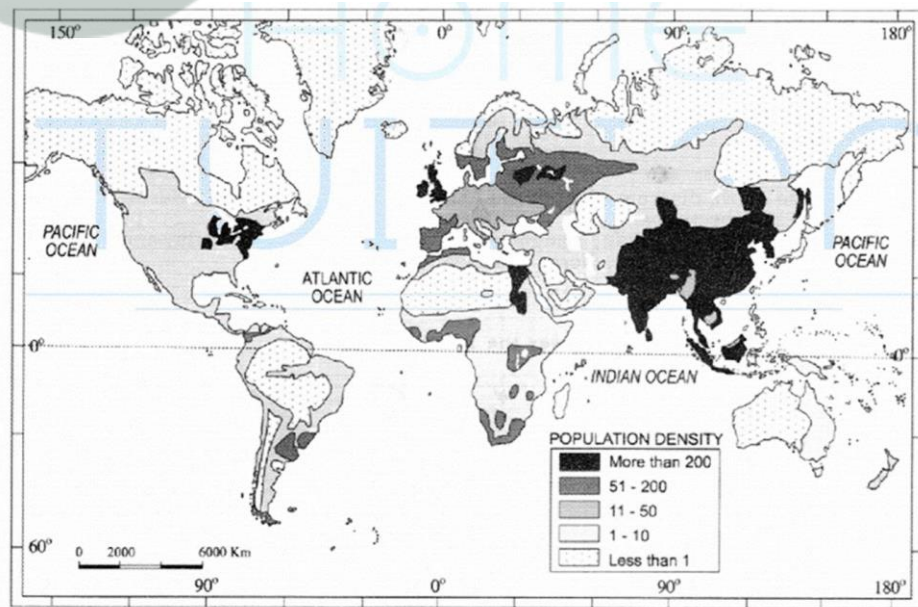
NCERT Solutions For Class 12 Geography

47. Study the given map and answer the following questions:



- (i) Name the nations that take a very long time to double their population? Why?
- (ii) Which are the nations taking about 31 to 40 years to double their population?
47. • Developed nations like Russia, Ukraine, Germany, Spain, etc. took a very long time to double their population because of low birth rates and much older populations.
- Developing nations like Brazil, India, etc. because of high birth rates and high youth population.

48. Study the given map and answer the following questions:



NCERT Solutions For Class 12 Geography

- (i) Name the nations having high density of population in Asia.
 - (ii) Name the nations having less than one person of population density.
 - (iii) Give appropriate reasons for the above two questions.
- 48.** (i) South, South-East and East Asia nations.
- (ii) Chile, Brazil, Afghanistan, etc.
- (iii) (a) These nations have high density of population because of the geographical, economic, social and cultural factors.
- (b) Because of the unfavorable factors like hot and cold deserts and also have high rainfall.
- 49.** How is the actual growth of population calculated? (Delhi 2010)
- 49.** Actual growth of population = Birth – Death + In migration – Out Migration.
- 50.** Which continent has the highest growth rate of population? (CBSE 2011)
- 50.** Africa.
- 51.** Which parts of U.S.A and Europe have density more than 200 persons- per sq. km? (A.1.2011)
- 51.** Eastern part of USA and North Western Part of Europe.
- 52.** Define the term 'positive growth of population'. (A.1.2011)
- 52.** Positive growth of population takes place when the birth rate is more than the death rate and people from the other countries migrate permanently.
- 53.** Mention any two sparsely populated regions of the world with less than 1 person per sq. km. (Foreign 2011)
- 53.** Hot Deserts—Sahara, Kalahari, Atacama etc.
- 54.** Name the most densely populated region of North America. (A.I. 2013)
- 54.** North eastern part of U.S.A.
- 55.** How is density of population of a region calculated? (CBSE 2015)
- 55.** The density of population of a region is measured by person living per sq. km area.
- 56.** Why do people migrate in large number from rural to urban areas in India? (CBSE 2016)
- 56.** In India people migrate from rural to urban areas mainly due to poverty, high population pressure on the land, lack of basic infrastructural facilities like health care, education, etc.

NCERT Solutions For Class 12 Geography

57. Explain with examples three economic factors influencing the population distribution in the world. (CBSE 2011)
57. • Minerals: Areas with mineral deposits attract industries and generate employment. Skilled and semi skilled workers move to these areas and make them densely populated. Example; Katanga Zambia copper belt in Africa.
- Urbanization: Cities offer better employment opportunities, educational and medical facilities, better means of transport and communication. Good civic amenities and attraction of city life draw people to cities. It leads to rural urban migration. Example; Mega cities of the world.
- Industrialization: Provide job opportunities and attract large numbers of people. Provide different types of jobs to different categories due to industrial belt. Example; Kobe-Osaka region of Japan.
58. Describe any three characteristics of last stage of Demographic Transition Theory. (CBSE 2014)
58. In the last stage of demographic transition theory, both fertility and mortality decline considerably. Its characteristics features are:
- It is the stage of stable population.
 - It is also the indicator of slow population growth.
 - It also indicates that humans are extremely flexible and are able to adjust their fertility.
59. Study the diagram and answer the questions that follow:
- (a) Which class of towns/cities support the largest urban population?
- (b) Explain any two reasons for such a high concentration of population in this class of towns/cities. (CBSE 2018)
59. (a) Class – I towns/cities
- (b) Reasons:
- Job opportunities
 - Education
 - Medical facilities
 - Security
 - Better communication
 - Amenities of life
60. What is the meaning of Density of population? Explain with examples four geographical factors influencing the distribution of population in the world. (CBSE 2009, 2010)
- OR
- Define the term 'density of population'. Explain four geographical factors affecting the distribution of population in the world, with examples. (CBSE 2018)

NCERT Solutions For Class 12 Geography

60. The ratio between the numbers of people to the size of land is the 'density of population'. $\text{Density of Population} = \frac{\text{Population}}{\text{Area}}$.

Geographical factors influencing the distribution of population in the world:

- Availability of Water – People live where fresh water is easily available. River valleys are among most densely populated areas.
- Land forms – People prefer living on flat plains and gentle slopes. Mountainous areas hinder the development of transport. Hence the Ganga plains are among the most densely populated areas.
- Climate – Areas with moderate climate attract people. Areas with cold and dry climates are uncomfortable for humans. Mediterranean regions were inhabited from early periods in history.
- Soils – Fertile soils are important for agricultural and allied activities. Areas which have loamy soils have more people living on it. The Ganga- Brahmaputra basins are very fertile.

51. Describe any three characteristics of the first stage of Demographic Transition Theory. (CBSE 2014)

- 51.
- The first stage has high fertility and high mortality because people reproduce more to compensate for the deaths due to epidemics and variable food supply.
 - The population growth is slow and most of the people engaged in agriculture where large families are in asset.
 - Life expectancy is low due to lack of medical aid and food security.

52. Explain the trends in population growth of the world with special reference to the help of science and technology. (CBSE 2015)

52. Population on the earth is more than 6 billion. It has grown to this size over centuries. Population of earth grew slowly in early period. It is during last few hundred years' population has increased at an alarming rate. The steam engine replaced human and animal energy. They provided mechanized . energy of water and wind. This increased agricultural and industrial production. Inoculation against epidemics and other communicable diseases, improvement in medical facilities and sanitation contributed to a rapid decline in death rates throughout the world.

53. Explain any three 'push' and any two 'pull' factors that influence the migration of population in the world. (CBSE 2016)

53. People migrate for a better economic and social life. There are two sets of factors that influence migration. The Push factors make the place of origin seem less attractive for reasons like unemployment, poor living conditions, political turmoil, unpleasant climate, natural disasters, epidemics and social-economic backwards. The Pull factors make the place of destination seem more attractive than the place of origin for reasons

NCERT Solutions For Class 12 Geography

like better job opportunities and living conditions, peace and stability, security of life and property and pleasant climate.

54. How is the mortality rate of a region affected? Explain any four push factors responsible for emigration. (CBSE 2015)
54. Death rate plays an active role in population change. By and large mortality rates are affected by the region's demographic structure, social advancement and levels of its economic development.

The following push factors make the place of origin seem less attractive:

- Unemployment
- Poor living conditions
- Unpleasant climate
- Natural disasters
- Epidemics
- Social-economic backwardness:

55. 90 percent of the world population lives in about 10 percent of its total land area, whereas remaining 10 percent population resides in the 90 percent of its land area." Support the statement with suitable examples. (Delhi 2017)

55. The population of world is unevenly distributed due to:
- Availability of water like in river valleys
 - Land forms e.g., plains are densely populated while hilly areas are sparsely populated. Deserts are also sparsely populated.
 - Climate: Hot, cold and dry climates have sparse population e.g. tundra region, desert regions etc. Areas of moderate climate have dense population.
 - Fertile soil regions are densely populated for the possibility of agriculture.
 - Availability of minerals.
 - Industrialisation.

(Any 5 points to be explained)