2 The World Population

▶ **Patterns of Population Distribution in the World:** Population distribution means arrangement distribution of people over the earth's surface. Population is not evenly distributed as 90 per cent of the world's population lives in about 10 per cent of its land area.

▶ **Density of Population:** This means the ratio between the number of people to the size of the land. It is usually measured in persons per sq km density of population/area.

Knowledge BOOSTER

💡 *Some areas are densely populated like North-Eastern USA and some areas are sparsely populated like near the polar areas.*

$$\text{Density of Population} = \frac{\text{Population}}{\text{Area}}$$

▶ **Factors Influencing Population Distribution**
  ➤ **Geographical Factors**
    • Soils
    • Landforms
    • Climate
    • Availability of water
  ➤ **Economic Factors**
    • Industrialisation
    • Minerals
    • Urbanisation
  ➤ **Social and Cultural factors**
    • Religious significance
    • Social unrest

▶ **Population Growth**

The population growth or population change refers to the change in number of inhabitants of a territory during a specific period of time. This change may be positive as well as negative. It can be expressed either in terms of absolute numbers or in terms of percentage.

▶ **Some Basic Concepts of Population Geography**
  ➤ **Growth of Population:** Change of population in particular area between two points of time is known as growth of population.
  For example, if we deduct the population of India 2001 (102.70 crore) from population of 2011 (121.02 crore) then we shall get the growth of population (18.15 crore) in actual numbers.
  ➤ **Growth Rate of Population:** This is the change of population expressed in percentage.
  ➤ **Natural Growth of Population:** This is the population increased by difference between births and deaths in a particular region between two points of time.
  Natural Growth = Births − Deaths.
  Actual Growth of Population = Births − Death + In Migration − Out Migration

▶ **Positive Growth of Population:** This happens when the birth rate is more than the death rate between two points of time or when people from other countries migrate permanently to a region.

▶ **Negative Growth of Population:** If the population decreases between two points of time, it is known as negative growth of population. It occurs when the birth rate falls below the death rate or people migrate to other countries.

▶ **Components of Population Change:** There are three components of population change i.e., births, deaths and migration:
  ➤ **Crude Birth Rate (CBR):** Number of births in a year per thousand of population is expressed as Crude Birth Rate (CBR). It is calculated as: $CBR = Bi/P \times 1000$
  Here, Bi = Number of live births during the year;
  P = Estimated mid-year population of that area.
  ➤ **Crude Death Rate (CDR):** Number of deaths in a year per thousand of population is expressed as Crude Death Rate (CDR). It is calculated as:
  $CDR = D/P \times 1000$
  Here, D = Number of deaths in a year;
  P = Estimated mid-year population of that year.
  ➤ **Migration:** It is movement of people across region on permanent, temporary or seasonal basis. The place they move is called place of origin and the place they move to is called place of destination. There are two sets of factors that influence migration:
    • **Push Factors of 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 socio-economic backwardness.
    • **Pull Factors of Migration:** The pull factors make the place of destination seem more attractive than the place of origin for reasons like better job opportunities and living condition, peace and stability, security of life, property and pleasant climate.

Knowledge BOOSTER

💡 *Human population increased more than ten times in the past 500 hundred years.*
In the twentieth century itself, the population has increased four times.

▶ **Demographic Transition Theory**

This theory studies the changes in the population of a region as it moves from high births and high deaths to low births and low deaths. This happens when a society progresses from rural agrarian and illiterate to urban, industrial and literate. These changes occur in stages which are collectively known as the demographic cycle.

There are three-staged model of demographic transition theory. They are:

➤ **First Stage:** This stage is marked by high fertility high mortality rate because people reproduce more to compensate for the deaths due to epidemics and variable food supply.

➤ **Second Stage:** Level of technology increases and other facilities like medical, health, sanitation improves due to which the death rate reduces. But the fertility rate and birth rate remains high due to which there is huge rise in population. Population expands rapidly as there is wide gap between birth and death rate.

➤ **Third Stage:** The birth and death rate both reduces and the population moves towards stability. People become literate, urbanised and control the size of the family. There is good judicious use of technology also.

Knowledge BOOSTER

💡 *In the present day, different countries are at different stages of demographic transition.*

▶ **Population Control Measures**
➤ Family planning is the spacing and preventing the birth of children. Thomas Malthus theory (1798) states that the number of people would grow faster than the food supply, thus leading to famine, diseases and war.
➤ Therefore, it is essential to control the population. This is undertaken through measures like awareness for family planning, free availability of contraceptives, tax disincentives and active propaganda.

Practice Exercise

Multiple Choice Questions

Q 1. Which one of the following continents has the highest growth rate of population? *(CBSE 2021 Term-1)*
a. Africa
b. South America
c. Asia
d. Europe

Q 2. Which one of the following is not an area of the sparse population?
a. The Atacama
b. Equatorial Region
c. South-East Asia
d. Polar Regions

Q 3. Which of the following is not a push factor?
a. Water shortage
b. Unemployment
c. Medical/Educational facilities
d. Epidemics

Q 4. Which one of the following is not a fact?
a. Human population increased more than ten times during the past 500 years
b. Nearly 80 million people are added to the world population each year
c. It took 100 years for the population to rise from five billion to six billion
d. Population growth is high in the first stage of demographic transition

Q 5. Which one of the following physical factor is responsible for the uneven distribution of population in India? *(CBSE 2021 Term-1)*
a. Availability of water
b. Agricultural development
c. Transport network
d. Urbanisation

Q 6. Which of the following group of countries, Indians mainly migrated in third wave of migration? *(CBSE 2021 Term-1)*
a. United States of America, Canada, United Kingdom
b. Japan, China, Vietnam
c. Thailand, Malaysia, Singapore
d. Mauritius, Fiji, Sri Lanka

Q 7. Consider the following and choose the correct answer with the help of given codes.
(CBSE SQP 2023-24)

Column I (Stages of Population)	Column I (Growth Features)
A. Period between 1901 to 1921	1. Period of steady growth
B. Period between 1921 to 1951	2. Phase of stagnant growth of population
C. Period between 1951 to 1981	3. High but decreasing growth rate
D. After 1981 till present	4. Period of population explosion

Codes:

	A	B	C	D			A	B	C	D
a.	1	2	3	4		b.	2	1	4	3
c.	4	3	2	1		d.	2	1	3	4

Q 8. Which country has the highest density of population?
a. China
b. India
c. Indonesia
d. Singapore

Q 9. What is the average density of the world population (per sq. km) ?
a. 31
b. 35
c. 38
d. 54

Q 10. Which of the following formula is correct to know the actual growth of population? *(CBSE 2021 Term-1)*
a. Birth + Death – in migration + out migration
b. Birth + Death + in migration – out migration
c. Birth – Death – in migration + out migration
d. Birth – Death + in migration – out migration

Q 11. How many times the world population has increased during the last 500 years?
a. 4
b. 6
c. 8
d. 10

Q 12. What is the present growth rate of population in the world?
a. 1.0%
b. 1.2%
c. 1.4%
d. 1.6%

Q 13. The main reason of intra-migration in India is: *(CBSE 2021 Term-1)*
a. employment
b. education
c. health
d. pleasant Climate

Q 14. Identify the age group that is called as the working population:
a. 15 to 59 years   b. 15 to 60 years
c. 15 to 55 years   d. None of these

Q 15. Which country has recorded the highest sex ratio in the world?
a. Qatar   b. Latvia
c. India   d. France

Q 16. Which one of the following Union Territories has the highest density of population?
(CBSE SQP 2021 Term-1)
a. NCT Delhi
b. Andaman and Nicobar Islands
c. Chandigarh
d. Puducherry

Q 17. Which country has shown a constant population?
a. Latvia   b. France
c. Australia   d. USA

Q 18. Which of the following are the characteristics of population in developed countries?
a. Share of older people is large
b. Population in higher age group has increased due to increased life expectancy
c. The proportion of children has declined due to reduction in birth rate
d. All of the above

Q 19. Population of India according to occupation can be categorised into: *(CBSE SQP 2021 Term-1)*
a. Main workers, Marginal workers, Non-workers
b. Marginal workers, Household industrial workers, Non-workers
c. Agricultural labourers, Marginal workers, Non-workers
d. Cultivators, Main workers, Marginal workers

Q 20. What kind of pyramid is seen in less developed countries?
a. Triangular shaped pyramid with wide base
b. Bell-shaped pyramid
c. Pyramid having a narrow base and tapered top
d. None of the above

Q 21. Which of the options is reflected by population pyramid of Japan?
a. Low birth and high death rates
b. Low birth and low death rates
c. High birth and high death rates
d. None of the above

Q 22. Which one of the following states of India has the lowest female child sex ratio 0-6 years?
a. Gujarat   b. Haryana
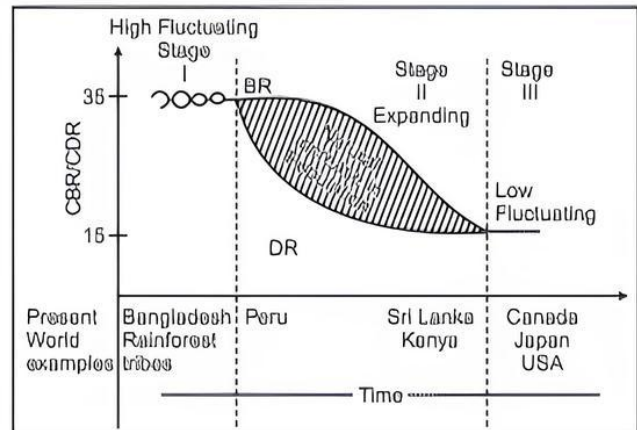c. Punjab   d. Himachal Pradesh

Q 23. Consider the following statements and choose the correct option from the given options:
Statement I: Population grown rapidly during the sixteenth and seventeenth century.

Statement II: Expansion of world trade during sixteenth and seventeenth century is an important cause of it. *(CBSE SQP 2021 Term-1)*
a. Only I is correct.
b. Only II is correct.
c. Both statements are incorrect.
d. Both the statements are correct and statement II correctly explain the statement I.

Directions (Q. Nos. 24-26): *Study the graph carefully and answer the questions that follow:* *(CBSE SQP 2023-24)*

Q 24. How does the natural increase in population occur, as per the graph?
a. Birth Rate – Death Rate
b. Death Rate + Birth Rate
c. Growth Rate – Birth Rate
d. Birth Rate + Migration

Q 25. What does the transition from high fluctuating stage to low fluctuating stage indicate?
a. Shift from Urban Industrial economy to Rural Agrarian economy
b. Shift from Rural Agrarian economy to Urban Industrial economy
c. Low Birth and Death Rate to High Birth and Death Rate
d. Migration from Urban to Rural areas

Q 26. From the given graph, what condition can you infer about the developing countries?
a. High Birth Rate and High Death Rate
b. Low Birth Rate and Low Death Rate
c. High Birth Rate and Low Death Rate
d. Low Birth Rate and High Death Rate

Q 27. Match the following:

	Column I		Column II
A.	Birth Rate	1.	The number of deaths per thousand of population.
B.	Death Rate	2.	The number of live births per thousand of population.
C.	Positive Growth of Population	3.	If death rate is more than birth rate.
D.	Negative Growth of Population	4.	If birth rate is more than death rate.

Codes:

	A	B	C	D			A	B	C	D
a.	1	2	3	4	b.	2	1	4	3
c.	4	3	2	1	d.	3	4	1	2

Q 28. Consider the following statements and choose the correct answer with the help of given options:

Statement I: Human population increased more than ten times in the past 10 hundred years.

Statement II: In the twentieth century itself, the population has increased four times.

a. Only statement I is correct.

b. Only statement II is correct.

c. Both the statements are correct and statement II correctly explains statement I.

d. Both the statements are correct, but not related with each other.

Q 29. Match the following:

Column I	Column II
A. CBR	1. Population/Area.
B. Density of Population	2. Births-Deaths
C. CDR	3. B/p × 100
D. Natural Growth	4. D/P × 100

Codes:

	A	B	C	D			A	B	C	D
a.	1	2	3	4	b.	4	3	2	1
c.	3	1	4	2	d.	2	4	1	3

Q 30. Match the following:

Column I	Column II
A. Demographic Cycle	1. Migrants who move out of place
B. Emigration	2. Collection of stages
C. Immigration	3. Population expressed in percentage
D. Growth Rate of Population	4. Migrants who move into a new place

Codes:

	A	B	C	D			A	B	C	D
a.	2	1	4	3	b.	1	2	3	4
c.	4	3	2	1	d.	3	4	1	2

Directions (Q. Nos. 31-34): *Study the table carefully and answer the questions that follow:* (CBSE SQP 2021 Term-1)

Table 1.1: Decadal Growth Rates in India, 1901-2011

Census Years	Total Population	Growth Rate*	
		Absolute Number	% of Growth
1901	238396327	——	——
1911	252093390	(+) 13697063	(+) 5.75
1921	251321213	(−) 772117	(−) 0.31
1931	278977238	(+) 27656025	(+) 11.60
1941	318660580	(+) 39683342	(+) 14.22
1951	361088090	(+) 42420485	(+) 13.31
1961	439234771	(+) 77682873	(+) 21.51
1971	548159652	(+) 108924881	(+) 24.80
1981	683829097	(+) 135169445	(+) 24.66
1991	846302688	(+) 162973591	(+) 23.85
2001	1028610328	(+) 182307640	(+) 21.54
2011**	1210193422	(+) 181583094	(+) 17.64

*Decadal growth rate $g = p_2 - p_1/p_1 \times 100$

where, p_1 = population of the base year

p_2 = population of the present year

**Source: Census of India. 2011 (Provisional)

Q 31. Which year has seen a negative population growth rate in India?

a. 1931   b. 1921   c. 1911   d. 1941

Q 32. What was the highest recorded growth rate of population in India?

a. 24.66   b. 24.80   c. 23.85   d. 21.54
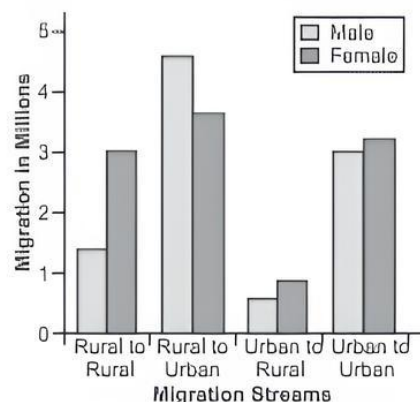
Q 33. Which year has recorded the highest growth of population in India in terms of absolute numbers?

a. 2001   b. 2011   c. 1991   d. 1981

Q 34. How much population increase has been registered between the census year 1911 to census year 2011?

a. 900789600   b. 182307640

c. 181583094   d. 971797095

Directions (Q. Nos. 35-38): *Study the graph carefully and answer the questions that follow:* (CBSE 2021 Term-1)

(Inter-state Migration by place of Last Residence Indicating Migration Streams Period 0-9 years India, 2011)

Q 35. Which one of the following streams has the highest 'male migration'?

a. Rural to Rural   b. Rural to Urban

c. Urban to Rural   d. Urban to Urban

Q 36. In which of the following streams has the highest migration of females?

a. Rural to Urban   b. Urban to Rural

c. Rural to Rural   d. Urban to Urban

Q 37. Which stream shows the least migration?

a. Rural to Rural   b. Rural to Urban

c. Urban to Rural   d. Urban to Urban

Q 38. What is the main reason of female migration in India?

a. Marriage   b. Employment

c. Education   d. Health

Directions (Q. Nos. 39-42): *Study the table carefully and answer the questions that follow:*   (CBSE 2021 Term-1)

Doubling Time of Word Population

Period	Population	Time in Which Population Doubles
10,000 B.C.	5 million	
1650 A.D.	500 million	1500 years
1804 A.D.	1,000 million	154 years
1927 A.D.	2,000 million	123 years
1974 A.D.	4,000 million	47 years
2025 A.D.	8,000 million projected fig.	51 years

(**Source:** Demographic year Book: 2009-10)

Q 39. It took 1500 years for population to reach 5 million to 500 million. If it is considered as the 'first stage of demographic transition', which of the following is the main reason for the slow pace of population growth?   (CBSE 2021 Term-1)

a. High birth rate, Low death rate

b. High birth rate, High death rate

c. Low birth rate, High death rate

d. Low birth rate, Low death rate

Q 40. In which period did the population increase rapidly?

a. 1927-1974   b. 10,000 BC – 1650 AD

c. 1804-1927   d. 1650-1804

Q 41. How long did it take for the population to reach 1,000 million to 4,000 million?

a. 123 years   b. 170 years

c. 277 years   d. 221 years

Q 42. Population explosion is the result of which of the following stages?

a. First   b. Second

c. Third   d. Fourth

Assertion & Reason Type Questions

Directions (Q.Nos. 43-46): *In the following questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option:*

a. Both (A) and (R) are true and (R) is the correct explanation of (A).

b. Both (A) and (R) are true, but (R) is not the correct explanation of (A).

c. (A) is true, but (R) is false.

d. (A) is false, but (R) is true.

Q 43. **Assertion (A):** Demographic transition theory can be used to describe and predict the future population of any area.

Reason (R): The theory tells us that population of any region changes from high births and high deaths to low births and low deaths as society progresses from rural agrarian and illiterate to urban industrial and literate society.

Q 44. **Assertion (A):** The population growth or population change refers to the change in number of inhabitants of a territory during a specific period of time.

Reason (R): Population change in an area is an important indicator of economic development, social upliftment and historical and cultural background of the region.

Q 45. **Assertion (A):** The triangular shaped pyramid shows high birth rate.

Reason (R): Nigeria shows triangular shaped pyramid.

Q 46. **Assertion (A):** Developed areas like Europe have sex ratio which is favourable for women.

Reason (R): A deficit of males in the populations of many European countries is attributed to better status of women and an excessively male-dominated out-migration to different parts of the world in the past.

Answers

1. (a)	2. (c)	3. (c)	4. (c)	5. (d)
6. (a)	7. (b)	8. (d)	9. (d)	10. (d)
11. (d)	12. (b)	13. (a)	14. (a)	15. (b)
16. (a)	17. (c)	18. (d)	19. (a)	20. (a)
21. (b)	22. (d)	23. (d)	24. (a)	25. (b)
26. (c)	27. (b)	28. (b)	29. (c)	30. (a)
31. (b)	32. (b)	33. (a)	34. (d)	35. (b)
36. (d)	37. (c)	38. (a)	39. (c)	40. (a)
41. (b)	42. (b)	43. (a)	44. (b)	45. (b)
46. (a)				

Passage Based Questions

Passage 1

Read the passage given below and answer the questions that follow by choosing the most appropriate option:

After the evolution and introduction of agriculture about 12,000 to 8,000 years ago, the size of population was small – roughly 8 million. In the first century A.D., it was below 300 million. The expanding world trade during the sixteenth and seventeenth century, set the stage for rapid population growth.

Around 1750, at the dawn of the Industrial Revolution, the world population was 550 million. World population exploded in the eighteenth century after the Industrial Revolution. Technological advancement achieved so far helped in the reduction of death rate and provided a stage for accelerated population growth.

Q 1. What was the population of world when agriculture was introduced?

a. 80 million   b. 20 million

c. 8 million   d. 5 million

Q 2. What set the stage for rapid population growth during sixteenth and seventeenth century?
a. Medical revolution
b. The expanding of world trade
c. Industrial revolution
d. None of the above

Q 3. Why did world population explode after eighteenth century?
a. Due to industrial revolution
b. Due to expanding world trade
c. Due to medical revolution
d. None of the above

Answers
▼
1. (c)   **2.** (b)   **3.** (a)

Passage 2

Read the passage given below and answer the questions that follow by choosing the most appropriate option:

Density of Population

Density of population, is expressed as number of persons per unit area. It helps in getting a better understanding of the spatial distribution of population in relation to land. The density of population in India (2011) is 382 persons per sq. km. There has been a steady increase of more than 200 persons per sq. km. over the last 50 years as the density of population increased from 117 persons per sq. km. in 1951 to 382 person per sq. km. in 2011. Population densities in the country which ranges from as low as 17 persons per sq. km. in Arunachal Pradesh to 11,297 persons in the National Capital Territory of Delhi. Among the Northern Indian States,

Bihar (1102), West Bengal (1029) and Uttar Pradesh (828) have higher densities, while Kerala (859) and Tamil Nadu (555) have higher densities among the peninsular Indian States. States like Assam, Gujarat, Andhra Pradesh, Haryana, Jharkhand, Odisha have moderate densities. The hill states of the Himalayan region and North-Eastern states of India (excluding Assam) have relatively low densities while the Union Territories (excluding Andaman and Nicobar Islands) have very high densities of population. *(CBSE 2021 Term-1)*

Q 1. Physical factor responsible for low density of population in Arunachal Pradesh is:
a. Hilly State
b. Lack of industries
c. Lack of transport network
d. Tribal population

Q 2. How much excess is the density of population of Bihar in respect to average density of population of India?
a. 720   b. 417   c. 741   d. 471

Q 3. Which of the following Union Territories has the highest density of population?
a. Andaman and Nicobar   b. Delhi
c. Lakshadweep   d. Puducherry

Answers
▼
1. (a)   **2.** (a)   **3.** (b)

Passage 3

Read the passage given below and answer the questions that follow by choosing the most appropriate option:

On an average, the world population reflects a sex ratio of 102 males per 100 females. The highest sex ratio in the world has been recorded in Latvia where there are 85 males per 100 females. In contrast, in Qatar there are 311 males per 100 females. The world pattern of sex ratio does not exhibit variations in the developed regions of the world. The sex ratio is favourable for females in 139 countries of the world and unfavourable for them in the remaining 72 countries listed by the United Nations. In general, Asia has a low sex ratio. Countries like China, India, Saudi Arabia, Pakistan, Afghanistan have a lower sex ratio. On the other extreme is greater part of Europe (including Russia) where males are in minority. A deficit of males in the populations of many European countries is attributed to better status of women and an excessively male-dominated out-migration to different parts of the world in the past.

Q 1. On an average what is the sex ratio of world population?
a. 110 males per 100 females
b. 102 males per 100 females
c. 105 males per 100 females
d. 115 males per 100 females

Q 2. Which countries has the highest and lowest sex ratio in the world respectively?
a. Qatar and Latvia   b. Latvia and UAE
c. Latvia and Qatar   d. None of these

Q 3. Why is sex ratio better in Europe?
a. Because of better status of women
b. Due to male out-migration
c. Both a. and b.
d. Neither a. nor b.

Answers
▼
1. (b)   **2.** (c)   **3.** (c)

Passage 4

Read the given passage carefully and answer the questions that follow:

The population on the earth is more than seven billion. It has grown to this size over the centuries. In the early period's population of the world grew very slowly. It is only during the last few hundred years that the population has increased at an alarming rate. After the evolution and introduction of agriculture about 12,000 to 8,000 years ago, the size of population was small-roughly 8 million. In the first century A.D., it was below 300 million. The expanding world trade during the sixteenth and seventeenth-century set the stage for rapid population growth. Around 1750, at the dawn of the Industrial Revolution, the world population war 550 million. The world population exploded in the eighteenth century after the industrial revolution. Technological advancement achieved so far helped in the reduction of the death rate and provided a stage for accelerated population growth.

Q 1. What happened after the Industrial Revolution?

Ans. The world population exploded in the eighteenth century after the Industrial Revolution.

Q 2. Which factor helped in the reduction of death rate?

Ans. Technological advancement achieved so far helped in the reduction of the death rate and provided a stage for accelerated population growth.

Q 3. In which year population was 550 million?

Ans. Around 1750, at the dawn of the Industrial Revolution, the world population was 550 million.

Very Short Answer Type Questions

Q 1. What was world's population at the beginning of the 21st century?

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

Q 2. What did George B. Cressey say about Asia's population distribution?

Ans. George B. Cressey said that "Asia has many places where people are few and few places where people are many".

Q 3. 60% of world's population is contributed by how many countries? How many of them are in Asia?

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

Q 4. What is population density?

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

Q 5. Which areas in the world have > 200 persons per sq. km?

Ans. North-Eastern USA, North-Western Europe, South, South East and East Asia.

Q 6. Name two areas with <1 person/sq. km.

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

Q 7. What is the correlation between population growth and economic development?

Ans. There is a negative correlation between population growth and economic development.

Q 8. Which is the most serious problem of population growth?

Ans. Depletion of resources is the most serious problem of population growth.

Q 9. What do you mean by the term 'population distribution'?

Ans. 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.

Q 10. What is the impact of migration?

Ans. 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.

Q 11. Which regions have unfavourable sex ratio towards women?

Ans. In region, where gender discrimination is rampant and where practice of female foeticide, infanticide and domestic violence against women are prevalent have unfavourable sex ratio towards women.

Q 12. Why have many European countries have deficit males?

Ans. Many European countries have deficit of males because of better status of females and male dominated out migration to different parts of the world.

Q 13. What does age-sex pyramid defines?

Ans. The age-sex structure of a population refers to the number of males and females in different age groups. Population pyramid is used to show age-sex structure of the population.

Q 14. What do you mean by ageing population?

Ans. Population ageing is a process by which the share of the older population becomes proportionately larger. In most of the developed countries, it has increased due to increased life expectancy.

Q 15. What does literacy rate denote for India?

Ans. In India, literacy rate denotes the percentage of population above 7 years of age, who is able to read, write and have the ability to do arithmetic calculation with understanding.

Q 16. What is the average sex ratio of the world?

Ans. Average sex ratio of the world is 102 males per 100 females.

Q 17. Name the country where sex ratio is most unfavourable to women in the world.

Ans. Qatar with 311 males per 100 females has the most unfavourable sex ratio.

Short Answer Type Questions ↘

Q 1. **What is migration and why do people migrate?**

Ans. Migration refers to movement of people from one place to another.

   (i) 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.

   (ii) The place of origin shows a decrease in population while the population increases in the place of destination.

   (iii) Migration may be permanent, temporary or seasonal. It may take place from rural-to-rural areas, rural-to-urban areas, urban-to-urban areas and urban-to-rural areas.

People migrate for a better economic and social life. There are two sets of factors that influence migration:

   (a) 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 socio-economic backwardness.

   (b) The Pull factors make the place of destination seem more attractive than the place of origin for reasons like better job opportunities and living conditions.

Q 2. **What is the trend in growth of population over the years in the world?**

Ans. The world population attained its present strength over recent centuries. It grew very slowly in the early periods.

   (i) About 8,000–12,000 years ago, after the introduction of agriculture the size of population was around 8 million.

   (ii) In the 1st centuries it was below 300 million. The 16th and 17th centuries set the stage for growth of population with expanding trade.

   (iii) 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.

   (iv) It exploded after the industrial revolution in the 18th century.

   (v) 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.

Q 3. **What is population change? What is the Spatial Rate of population change?**

Ans. Difference in the birth, death and migration of an area between two points of time leads to the change in the size of population thus resulting in change.

   (i) Spatial rate of population change means population growth in different parts of world can be compared.

   (ii) Population growth is low in developed countries than the developing countries.

   (iii) 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.

   (iv) Even if the growth rate continues to decline, the total population grows each year.

Q 4. **What are the repercussions of population increase? What are the population control measures?**

Ans. The repercussions of population increase are:

   (i) A small increase in population is desirable in a growing economy, but uncontrolled population growth leads to numerous problems mainly on the limited resources.

   (ii) Thomas Malthus in his theory (1793) stated that the number of people would increase faster than the food supply.

   (iii) 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.

Q 5. **What are the positive impacts of declining population rate and increasing population rate?**
(CBSE 2022-23)

Ans. Declining population has the following positive impacts:

   (i) Less pressure on land and on other resources.

   (ii) Less pressure on infrastructure and civic amenities.

   (iii) High per capita income and better standard of living.

An increasing population if in a desirable proportion, has the following positive impacts:

   (i) Favourable for expanding economy.

   (ii) Resources can be utilised in a better way.

   (iii) Biodiversity is kept intact.

Q 6. **Analyse the economic and social factors affecting the distribution of the population in the world.**
(CBSE 2023)

OR

Explain with examples three economic factors influencing the population distribution in the world.

Ans The three economic factors influencing population distribution are:

(i) **Minerals:** Areas with mineral deposits attract industries and generate employment. Skilled and semi-skilled workers move to these areas and make them densely populated. For example; Katanga-Zambia copper belt in Africa.

(ii) **Urbanisation:** 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. For example; Mega cities of the world.

(iii) **Industrialisation:** Provide job opportunities and attract large number of people. Provide different types of jobs to different categories due to industrial belt. For example: Kobe-Osaka region of Japan.

Q 7. What are the three components of population change?

Ans. The three components of population change are:

(i) **Crude Birth Rate (CBR):** It is expressed as number of live births in a year per thousand of population in a particular region.

(ii) **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.

(iii) **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.

Q 8. How is occupational structure a good indicator of levels of economic development of a nation?

Ans. The working population (i.e., women and men of the age group – 15 to 59) take part in various occupations ranging from agriculture, forestry, fishing, manufacturing construction, commercial transport, services, communication and other unclassified services. Agriculture, forestry, fishing and mining are classified as primary activities, manufacturing as secondary, transport, communication and other services as tertiary and the jobs related to research and developing ideas as quaternary activities. The proportion of working population engaged in these four sectors is a good indicator of the levels of economic development of a nation. This is because only a developed economy with industries and infrastructure can accommodate more workers in the secondary, tertiary and quaternary sector. If the economy is still in the primitive stages, then the proportion of people engaged in primary activities world be high as it involves extraction of natural resources.

Q 9. (i) What do you understand by population composition?

(ii) What is the significance of age structure?

Ans. (i) People of any country are diverse in many respects. Each person is unique in his own way. People can be distinguished by their age, sex and their place of residence. The entire gamut of people residing in a particular place along with their growth, distribution and variety may be termed as its population composition.

(ii) Age structure represents the number of people of different age groups. This is an important indicator of population composition, since a large size of population in the age group of 15-59 indicates a large working population. A greater proportion of population above 60 years represents an ageing population which requires more expenditure on healthcare facilities. Similarly, high proportion of young population would mean that the region has a high birth rate and the population is youthful.

Q 10. What is the impact of rural-urban migration on the age and sex structure on the place of origin and destination?

Ans. Migration leads to redistribution of population within a country. Rural-urban migration is one of the important factors contributing to the population growth of cities.

(i) Age and skill selective out migration from rural areas have adverse effect on rural demographic structure.

(ii) High out-migration results in serious imbalance in age-sex composition.

(iii) Male population within the working age group migrate out of rural areas leaving females, children and old aged people, which increases the share of dependent population in rural areas.

(iv) The situation is especially difficult for females because they have to look after both domestic and economic work in the villages, leading to higher participation of women in agriculture without decrease in their household workload.

(v) Also it leads to loss of human resource from the rural areas, leaving them with unskilled people thus reducing the total productivity and hence hampering the development of rural areas.

(vi) Urban areas receive heavy in migration of working age male population, causing sex ratio to be highly unfavourable for females, which gives rise to crimes against women and increases their vulnerability.

Long Answer Type Questions ↘

Q 1. Distinguish between:

(i) Birth rate and Death rate

(ii) Push factors and pull factors of migration

Ans. (i) Difference between Birth rate and Death rate

S.No.	Birth Rate	Death Rate
(a)	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.
(b)	It is calculated using the following formula: $CBR = BI/P \times 1000$ Here, CBR = Crude Birth Rate, BI = Number of live births in a year, P = The estimated mid-year population of that year.	It is calculated using the following formula: $CDR = D/P \times 1000$ Here, CDR = Crude Death Rate, D = Number of deaths in a year, P = The estimated mid-year population of that year.
(c)	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.

(ii) Difference between Push Factors and Pull Factors of Migration

S.No.	Push Factors of Migration	Pull Factors of Migration
(a)	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.
(b)	These factors forces people to move out-hence face emigration.	These factors force inflow of people-hence face immigration.
(c)	**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.

Q 2. Discuss the three stages of demographic transition.

Ans. 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.

(i) 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.

(ii) 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, e.g., countries like India.

(iii) In the last stage, both fertility and mortality decline considerably. The population is either stable or grows slowly. The population becomes urbanised, 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.

Q 3. Analyse the effects of geographical factors on the distribution of world population.

OR

What are the geographical, social and cultural factors that influence migration?

Ans. Geographical factors that influence migration are follows:

(i) **Availability of Water:** People lives where fresh water is easily available. River valleys are among most densely populated areas.

(ii) **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.

(iii) **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.

(iv) **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.

Social and cultural factors that influence migration are:

(i) **Religious or Cultural Significance:** Some places attract more people because they have religious or cultural significance.

(ii) **Social and Political Unrest:** People tend to move away from places where there is social and political unrest.

Q 4. What are the factors on which the population distribution in rural and urban areas are based?

Ans. The division of population into rural and urban is based on the residence. This division is necessary because rural and urban lifestyles differ from each other in terms of livelihood and social conditions. The age-sex occupational structure, density of population and level of development vary between rural and urban population and is also dependent on the state of development of a country.

(i) The more progressed a country is with respect to its development, more number of people are engaged in non-primary activities, thus leading to shift from rural areas to urban areas.

(ii) Moreover, industrialisation also makes headway into the rural countryside, constructing new

towns in hitherto traditionally agrarian areas and therefore the population that was originally rural, becomes urban now.

(iii) The criterion for classifying settlement as rural or urban varies from country-to-country.

(iv) In general terms in rural areas more people are engaged in primary activities whereas in urban areas majority of population is associated with secondary or tertiary sectors.

(v) The sex composition of rural and urban settlements varies between developed and developing countries.

(vi) In the developed countries like the Western European nation due to security and availability of jobs women move out to urban areas.

(vii) Farming is mostly mechanised there hence men tend to stay in rural areas and look after farming activities.

(viii) Whereas a completely contrary picture can be seen in developing countries like India where due to lack of security, housing, job opportunities females tend to stay back in rural areas and look after farming whereas male members move out to urban areas in search of working opportunities.

Q 5. "The uneven spatial distribution of population suggests a close relationship between population and socio-economic and physical factors." Analyse the statement. *(CBSE 2023)*

Ans. Geographical factors play a significant role in the distribution of world population.

The distribution of population in the world is also influenced by economic and social factors. Economic factors such as job opportunities, wages, and standard of living can attract people to certain areas. For instance, urban areas with a higher concentration of industries and businesses have a higher population density as compared to rural areas. Social factors such as education, healthcare, and security can also influence the distribution of population. Areas with better access to education and healthcare facilities tend to have a higher population density. Similarly, areas with a higher crime rate and political instability may have a lower population density as people tend to migrate to safer areas. Cultural and religious factors can also play a role in the distribution of population by influencing migration patterns.

Q 6. Discuss the factors responsible for imbalances in the sex-age found in different parts of the world and occupational structure.

Ans. The factors responsible for imbalances in the sex-age found in different parts of the world with focus on occupational structure are as follows:

(i) The working population (in the age group of 15-59) takes part in various occupations ranging from agriculture, forestry, fishing, manufacturing, construction, commercial transport, services, communication and other unclassified services, being employed in the four sectors of the economy.

(ii) That work force is a clear indicator of the level of development, particularly economic and social development.

(iii) This is because only a developed economy with industries and infrastructure can accommodate more workers in the secondary, tertiary and quaternary sector.

(iv) If the economy is still in the primitive stages, then the proportion of people engaged in primary activities would be high as it involves extraction of natural resources.

(v) Moreover, the age structure of a country also is an indicator of the level of development.

(vi) A large working population shows the progress of a nation and a large dependent population of children and retired citizens show a burden on the economy of the country, dragging its developmental processes down.

(vii) A higher participation of women in the secondary, tertiary and quaternary sectors also is a strong indicator of the progress of a nation. The sex composition of rural and urban settlements varies between developed and developing countries. In the developed countries like the Western European nation due to security and availability of jobs women move out to urban areas. Farming there is mostly mechanised hence men tend to stay in rural areas and look after farming activities. Whereas a completely contrary picture can be seen in developing countries like India where due to lack of security, housing, job opportunities, females tend to stay back in rural areas and look after farming whereas male members move out to urban areas in search of working opportunities.

Q 7. What is meaning of age structure of population? Describe in brief four main characteristics of age structure of the world population.

Ans. Age structure represents the number of people of different age groups. This is an important indicator of population composition.

Following are the four characteristics of age structure of the world population:

(i) **Population Composition:** The age group 0-15 is called young population, 15-59 age group of working population and above 60 years represents an ageing population which require more expenditure on healthcare facilities.

(ii) **Age-Sex Pyramid:** The age-sex structure of the population refers to the number of females and males in different age-groups.

(iii) **Expanding Population:** Nigeria, Bangladesh, Mexico, India and other developing and under developed countries of the world is having the characteristics of expanding population which have triangular shaped pyramid with a wide box. These have larger population in lower age groups due to high birth rate.

(iv) Constant Population: The developed countries like Australia, has age-sex pyramid of bell shaped and tapered towards the top. It shows birth and death rates are almost equal leading to a near constant population.

(v) Declining Population: The developed countries having low birth and death rates come under this category which shows the pyramid of narrow base and a tapered top. The population growth in developed countries is usually zero or negative. For example: Japan, Britain, France, etc.

Q 8. Examine the different aspects of the growth of population in India during the 1951-1981 and 1981-2021. *(CBSE 2023)*

Ans. India has experienced significant population growth since independence in 1947.

(i) The period from 1951-1981 saw a rapid increase in population due to a decline in mortality rates, improved healthcare facilities, and increased life expectancy. This period also witnessed an increase in agricultural productivity due to the Green Revolution, resulting in better food security and a decrease in famine.

(ii) However, the period from 1981-2021 saw a slower but steady increase in population due to increased awareness and access to family planning methods. The growth rate of population has gradually declined, but the absolute numbers continue to increase. The fertility rate has decreased, but still remains high compared to developed countries. The increasing urbanisation and changing lifestyles have also contributed to the changing patterns of population growth in India .

Chapter Test

Multiple Choice Questions

Q 1. Identify the age group that is called as the working population.
a. 15 to 59 years
b. 15 to 60 years
c. 15 to 55 years
d. None of these

Q 2. Which country has recorded the highest sex ratio in the world?
a. Qatar
b. Latvia
c. India
d. France

Q 3. What kind of pyramid is seen in less developed countries?
a. Triangular shaped pyramid with wide base
b. Bell shaped pyramid
c. Pyramid having a narrow base and tapered top
d. None of the above

Assertion and Reason Type Question

Q 4. *In the question given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option:*

Assertion (A): The sex ratio is an important information about the status of women in a country.
Reason (R): In regions where gender discrimination is rampant, the sex ratio is bound to be unfavourable to women.
a. Both (A) and (R) are true and (R) is the correct explanation of (A).
b. Both (A) and (R) are true. but (R) is not the correct explanation of (A).
c. (A) is true, but (R) is false.
d. (A) is false, but (R) is true.

Passage Based Question

Q 5. *Read the passage given below and answer the questions that follow:*

The population on the earth is more than seven billion. It has grown to this size over the centuries. In the early period's population of the world grew very slowly. It is only during the last few hundred years that the population has increased at an alarming rate. After the evolution and introduction of agriculture about 12,000 to 8,000 years ago, the size of population was small-roughly 8 million. In the first century A.D., it was below 300 million. The expanding world trade during the sixteenth and seventeenth century set the stage for rapid population growth. Around 1750, at the dawn of the Industrial Revolution, the world population was 550 million. The world population exploded in the eighteenth century after the industrial revolution. Technological advancement achieved so far helped in the reduction of the death rate and provided a stage for accelerated population growth.

(i) What happened after the Industrial Revolution?
(ii) Which factor helped in the reduction of death rate?
(iii) In which year population was 550 million?

Very Short Answer Type Questions

Q 6. What is the correlation between population growth and economic development?

Q 7. What is the impact of migration?

Short Answer Type Questions

Q 8. What are the three components of population change?

Q 9. What are the three stages of demographic transition?

Long Answer Type Question

Q 10. Discuss the factors responsible for imbalances in the sex-age found in different parts of the world and occupational structure.