

# Population

## Exercises

### A. Fill in the blanks

1. **China** has the largest population in the world.
2. **Death rate** is number of deaths per year per 1,000 of the population.
3. **Life expectancy** is the number of years that a person is likely to live.
4. Urban areas generally have a **higher** population density.
5. A **population pyramid** is a diagram that shows the age and sex composition of a population.

### B. Choose the correct answer

1. Which continent has the highest population ?

1. **Asia**
2. Europe
3. North America
4. South America

2. Which of these is an adverse effect of over population ?

1. Environmental degradation
2. Poverty
3. Unemployment
4. **All of these.**

3. Which of these is not a positive effect of under population?

1. Adequate employment
2. **fewer taxpayers**
3. Lesser environmental degradation
4. Lower levels of poverty

4. Which of these is a part of the demographic structure of a population ?

1. Age composition
2. Sex ratio
3. Rural and urban populations
4. **All of these**

5. Which type of population is shown in a bell-shaped population pyramid ?

1. Expanding population
2. Declining population
3. **Constant population**
4. None of these

**C. State whether the following are true or false**

1. In 2016 alone, the population of the world increased by more than 80 million.

**Answer.** True.

2. Immigration is a factor that can cause overpopulation.

**Answer.** True.

3. In rural areas, people are typically engaged in secondary activities.

**Answer.** False. In rural areas, people are typically engaged in primary activities.

4. An adverse sex ratio shows the high position given to women in society.

**Answer.** False.

An adverse sex ratio shows the low position given to women in society.

5. In a population pyramid, the youngest age group is shown at the bottom.

**Answer.** True.

**D. Answer the following questions in brief**

**Question 1.**

Define the term 'population'.

**Answer:**

The term 'population' refers to all the people who live in a particular area, city or country.

**Question 2.**

Define population density.

**Answer:**

Population density refers to the number of people living in a unit area of space, such as a square kilometre.

**Question 3.**

Distinguish between immigration and emigration.

**Answer:**

Immigration is the process of coming to live permanently in another country that is not one's own.

Emigration is the process of leaving one country to go and live permanently in another country.

#### **Question 4.**

Write any two causes of overpopulation ?

**Answer:**

**Causes of overpopulation are :**

1. **Immigration** – When people come from another country.
2. **Increased birth rate** – due to better medical facilities
3. **Decreased death rate** – due to better medical facilities.
4. **Better medical facilities**
5. **Lack of family planning.**

#### **Question 5.**

Mention any two factors that cause population growth in a developed country.

**Answer:**

In the developed countries of the world, the population increased earlier due to :

1. Economic growth and prosperity as a result of industrialization.
2. Improved medical techniques and health care facilities.
3. Immigration because of better job opportunities and better living conditions.

#### **Question 6.**

Mention any two factors that cause population growth in a developing country.

**Answer:**

In developing countries of the world, rapid increase in population was due to :

1. Modern medical techniques which increased the lifespan of the people.
2. Ignorance of the masses.
3. Traditional beliefs, customs and outlook of people.

#### **Question 7.**

What do the rural and urban population consist of ?

**Answer:**

The rural population consists of the people residing in villages.

The urban population consists of the people living in towns and cities.

#### **Question 8.**

What do you understand by the term 'working population'?

**Answer:**

The section of the population between 14 – 60 years of age is

considered to be the working population. They are willing and eligible to work and considered an asset for a country as it means high availability of labour for the development of the nation.

### **E. Answer the following questions in one or two paragraphs:**

#### **Question 1.**

Write a note on the distribution of population in the world.

#### **Answer:**

At present, the population of the world stands at 7.35 billion. China has the largest population in the world with over 1.3 billion people, followed by India, with over 1.2 billion people, the USA with over 321 million people and Indonesia with over 257 million people. Island nations of the Pacific Ocean have populations of just a few thousand. Continent-wise, Asia has the largest population with over 4.4 billion people, followed by Africa with 1.18 billion people. Europe has over 738 million people, North America has over 573 million people, South America has over 418 million people and Oceania (Australia, New Zealand, Pacific Islands of Fiji, Papua New Guinea, Vanuatu, Samoa, etc) has over 3.9 million people)

#### **Question 2.**

Briefly explain any four factors that affect the population of a place.

#### **Answer:**

There are various factors that affect the population of a place such as birth rate, death rate, immigration, emigration, influx of refugees, agricultural development, urbanization, education, topography and climate of a place, employment opportunities, etc. In developed countries, due to improvements in medical facilities, the death rates have reduced and the lifespan of the people have increased resulting in an increase in population.

#### **Question 3.**

What is the impact of overpopulation ?

#### **Answer:**

#### **Impact of Overpopulation :**

1. **Adverse effect on the environment :** Higher population consumes more natural resources like fresh water, arable land and mineral resources. This leads to deforestation, scarcity of water, extinction of plants and animals, depletion of fossil fuels, pollution, global warming.
2. **Adverse effect on economy :** Higher population leads to unemployment, overcrowding, shortage of food, fuel, minerals and other resources. This leads to poor quality of education, low per capita income, inflation, less productivity and slow economic growth of the country.

3. **Poor quality of life** : There is not enough affordable food, shelter and education. People live in congested areas with poor sanitary conditions leading to spread of diseases, poverty and rise in crime rate.

#### **Question 4.**

Write the positive as well as negative effects of under population.

#### **Answer:**

Impace of Under population

**Under population has several positive effects :**

1. There are sufficient employment opportunities for everyone.
2. There are fewer instances of overcrowding.
3. There are lower levels of poverty.
4. There are adequate educational, medical and other facilities to meet everyone's needs.
5. There are sufficient natural resources to meet the requirements of the population.
6. There is lesser pressure on the environment, and hence, lower rates of environmental degradation.

**However, there are also some negative effects of under population :**

1. The lack of adequate labour leads to low productivity.
2. In some instances, a higher proportion of the population is either too young or too old to work.
3. There are lesser taxpayers, leading to low income for the government.
4. There are not enough people to develop the natural resources of the country.

#### **Question 5.**

Write the main differences between rural and urban populations.

#### **Answer:**

##### **Rural Population**

1. It refers to people living in villages.
2. The population density in rural areas is low.
3. The people do primary activities like farming, fishing, mining etc.
4. The educational and medical facilities are not very highly developed.
5. Poor standards of transport and communication there.
6. Village communities are usually closely-knit with strong emphasis on culture and traditions.

##### **Urban Population**

1. It refers to people living in towns and cities.
2. The population density in urban areas is generally high.
3. The people do secondary and tertiary activities like trade, transport, services, etc.

4. The educational and medical facilities are highly developed.
5. Better standards of transport and communication.
6. The socio-cultural ties between people in cities are not as strong as in villages.

#### Question 6.

What is sex ratio ? What is the meaning of favourable and unfavourable sex ratios ?

#### Answer:

Sex-ratio means the number of females per 1000 males in a given population. In India, sex ratio is calculated in terms of females per 1000 males. The formula to calculate the sex

$$\text{ratio is — Sex ratio} = \frac{\text{Female population}}{\text{Male population}} \times 1000$$

The sex ratio is an important characteristic that helps us to study the population of a given area. For example, when we say that the sex ratio in India is 940, it means that there are 940 girls for every 1000 boys.

**Favourable sex ratio:** The sex ratio is considered favourable if there is an equal or higher number of females per 1000 males in the population. For example, Latvia in Europe has the highest sex ratio with 1179 females for every 1000 males.

**Unfavourable sex ratio :** An unfavourable sex ratio means that there is a lower number of females per 1000 males in the population. Practices like female foeticide (killing of girls in the womb), female infanticide (killing of girls when they are babies) and domestic violence towards women due to gender discrimination lead to unfavourable sex ratio. For examples, countries like India, Pakistan, Afghanistan, China and Saudi Arabia have low sex ratio.

#### G Picture study.

#### Question 1.

What does the picture tell us?

#### Answer:

A crowded street in Mumbai, India's most populous city.

#### Question 2.

Mention any three impacts of such a condition.

#### Answer:

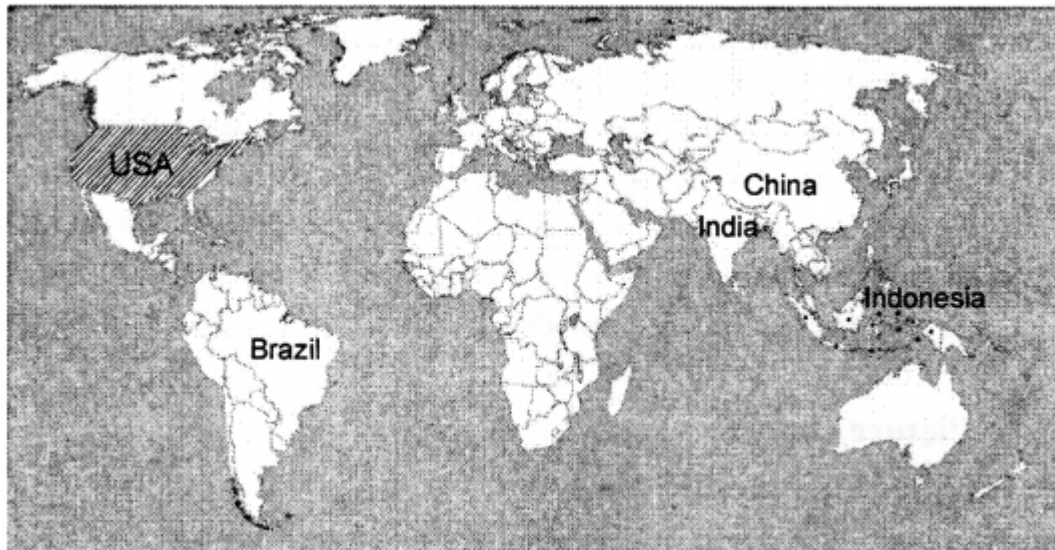
Overpopulation usually has an adverse effect on the environment, the economy and the quality of life that people lead. A larger population consumes more natural resources



such as fresh water, arable land and mineral resources. As more land is brought under cultivation, the amount of land under forests keeps reducing, impacting the diverse animal and plant populations in these forests. Increases mining for minerals causes further environmental damage. As more factories are set up to meet the needs of the people, more fossil fuels are used and more pollutants are released into the environment.

**G Map work. On an outline map of the world mark the top five populous countries of the world.**

**Answer:**



## Extra questions

### Question 1.

Define the following —

1. **Birth rate**
2. **Death rate**
3. **Life expectancy**
4. **Family planning**
5. **Demography**
6. **Overpopulation**

### Answer:

1. **Birth rate** — It is the number of live births per year per 1000 of the population. The formula for calculating birth rate is

$$\text{Birth rate} = \frac{\text{Number of births}}{\text{Total population}} \times 1000$$

2. **Death rate** — It is the number of deaths per year per 1000 of the population. It is calculated as :

$$\text{Death rate} = \frac{\text{Number of deaths}}{\text{Total population}} \times 1000$$

3. **Life expectancy** — It is the number of years that a person is likely to live. It is calculated as the average life span of a population.
4. **Family planning** — It is the process of controlling the number of children that a person has and the intervals between their births.
5. **Demography** — It refers to the study of population of a place especially of humans, based on physical, socio-cultural and economic factors such as age and sex, language, religion, economic status, literacy, marital status, etc.
6. **Overpopulation** — It is an undesirable condition where the number of people in a given area exceeds the availability of resources to meet the needs of all the people. In an over-populated environment, the number of people might be more than the available essential materials for survival like food, clothes, water, shelter, transport, etc.
7. **Under population** — It is a condition where the number of people living in a given area is less in relation to the available resources of a country. This happens when there are not enough people to make full use of resources such as land, water, forests and the available technology.
8. **Population pyramid** — It is specially designed diagram that shows the age and sex composition of a population. It is also called as age-sex pyramid.



**Question 2.**

List few countries with high population density (over population) and few with low population density (under population) ?

**Answer:**

**(i) COUNTRIES WITH HIGH POPULATION DENSITY**

Country	Population	Density
Singapore	5.60 million	8005.3 persons per sq. km
Bahrain	1.38 million	1,812.2 persons per sq. km
Bangladesh	161.0 million	1,236.8 persons per sq. km
Maldives	0.36 million	1,212.2 persons per sq. km
Lebanon	5.85 million	571.9 persons per sq. km

**COUNTRIES WITH LOW POPULATION DENSITY**

Country	Population	Density
Mongolia	2.96 million	1.9 persons per sq. km
Namibia	2.46 million	3.0 persons per sq. km
Australia	23.97 million	3.1 persons per sq. km
Iceland	0.33 million	3.3 persons per sq. km
Suriname	0.5 million	3.5 persons per sq. km

### Question 3.

Mention the causes of underpopulation ?

**Answer:**

**Causes of underpopulation are :**

1. Increase in the death rate due to natural disaster like earthquake, Tsunami, flood or man-made disasters such as war.
2. Decrease in birth rate due to genetic reasons.
3. Infertility in the people
4. Emigration – people moving out of a country.

### Question 4.

What do you mean by composition of population or demographic structure? What is its significance? Name any two characteristics of a population.

**Answer:**

Population composition or demographic structure: Refers to the physical, sociocultural and economic attributes of the population such as age and sex, place of residence, language, religion, marital status, literacy, etc.

Significance: The characteristics of population composition are measurable and help in distinguishing one group from another.

**Two Characteristics of a population are :**

1. Rural and Urban Composition: This is on the basis of where a person resides. Rural refers to villages and urban refers to cities and towns.
2. Age and sex Composition : It refers to the percentage of people in different age groups in a given population and sex ratio (number of females per 1000 males in a population).

### Question 5.

What do you understand by age composition of a population ?

**Answer:**

Age composition refers to the percentage of people in different age groups in a given population. It differs from country to country. It can be working population (people between 14-60 years of age) or dependent population (below 14 and above 60 years of age).

### Question 6.

What is the working population of India ?

**Answer:**

62.5 per cent of the population of India is working population. 29.5 % is in the age group of 0-14 years while 8 % is above 60 years of age.

### Question 7.

What leads to unfavourable sex ratio at some places ? Name few social practices leading to it ?

#### Answer:

Gender discrimination is the major cause of unfavourable sex ratio which gives women a lower status in society. Few social practices leading to **unfavourable sex ratio are :**

1. Female Foeticide
2. Female infanticide
3. Domestic violence.

### Question 8.

Name one scheme launched by the government of India that works towards generating awareness and improving the efficiency of welfare services meant for women in the country.

#### Answer:

Beti Bachao, Beti Padhao (Save girl child, educate girl child).

### Question 9.

What is the most effective way to show the age and sex structure of a population ?

#### Answer:

Population pyramid or Age-sex Pyramid.

### Question 10.

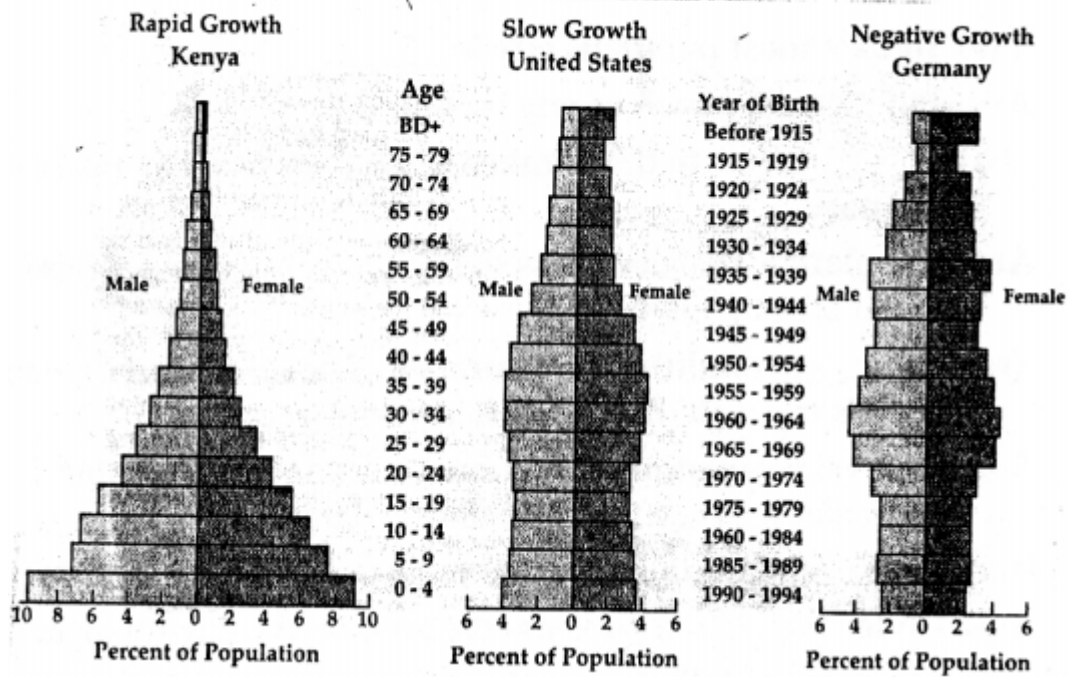
Explain the diagram of a population pyramid. Also show the three types of pyramids.

#### Answer:

The diagram of a population pyramid consists of bars arranged in the form of a pyramid. The bars show different age groups, with the males on the left and females on the right. The base represents the youngest age group and the top represents the oldest. The shape of the population pyramid **shows the characteristics of the population. The three types of pyramid are :**

1. **Expanding population :** In this case, the age-sex pyramid is more or less triangular with a broad base and a narrow top. The broad base shows large population of young people which indicates high birth rate. The narrow top shows high death rate in the older age group. Such a pyramid indicates rapid population growth. For example, countries like Bangladesh, India, Mexico, Nigeria have such a population pyramid.
2. **Constant Population :** The shape of the pyramid is like a bell, with the narrow top and a broad middle for several bars. This shows that the birth rate is almost equal to the death rate, leading to a constant population with the percentage of males and females remaining almost the same. Usually, developed countries such as the USA have this kind of a pyramid.
3. **Declining Population :** Such a pyramid has a narrow base, a bulging middle that indicates low birth rate and death rates and a slightly narrow apex. Countries like

Japan, Germany and Italy have this kind of a pyramid.



### Question 11.

Why is it important to study the population ?

#### Answer:

Studying the population helps us to understand how it shapes the world in different ways. Controlling the population correctly is an important task for the government. It plays a big role in the development of a country.

### 12. Fill in the blanks

1. **Population** refers to all the people who live in a particular area.
2. At present, the population of the world stand at **7.35** billion.
3. Second most populated country in the world is **India**.
4. Continent-wise, Asia has the largest population, followed by Africa
5. India's most populous city is **Mumbai**.
6. **Population Density** refers to the number of people living in a unit area of space.
7. In **Overpopulation** condition, the number of people in a particular area is more than the available resources.
8. **Under** population puts less pressure on the environment.
9. Sex ratio of 940 means there are **940** girls for every **1000** boys.
10. The sex ratio is usually unfavourable in those countries where **gender discrimination** is widespread.
11. The average sex ratio in the world is **982** females to every 1000 males.
12. **Latvia** in Europe has the highest sex ratio with 1179 females for every 1000 males.

13. **Triangular** shaped population pyramid indicates rapid population growth.
14. Not being able to have babies or produce young ones is called **infertility**.
15. In India 69 % population is rural and **31 % urban**.