

**REVIEW QUESTIONS****A. MULTIPLE CHOICE TYPE:****Question 1:**

What was directly responsible for the rapid rise of world population in the twentieth century?

- (a) Increased food production
- (b) Better transport facilities
- (c) Better education and job prospects
- (d) Use of antibiotics and prophylactic vaccinations

**Solution 1:**

- (d) Use of antibiotics and prophylactic vaccinations

**Question 2:**

Birth rate is the number of live births

- (a) Per 1000 people per year
- (b) Per 100 people per decade
- (c) Per 1000 people per decade
- (d) Per 100 people per year

**Solution 2:**

- (a) Per 1000 people per year

**B. VERY SHORT ANSWER TYPE:****Question 1:**

Give the technical term for the statistical study of human population of a region

**Solution 1:**

Demography

**Question 2:**

Name two surgical techniques (one for the human male and another for the human female) that can be used to prevent pregnancy.

**Solution 2:**

- (i) Tubectomy (For Female)
- (ii) Vasectomy (For Male)

**C.SHORT ANSWER TYPE:****Question 1:**

Write true (T) or false (F) for the following:

- (a) Vasectomy is the surgical method of sterilization in human males.....
- (b) Tubectomy is the placing of a diaphragm on the cervix.....

**Solution 1:**

- (a) True
- (b) False

**Question 2:**

What is the total world population at present?

**Solution 2:**

It is approximately 7 billion.

**Question 3:**

Define the following terms:

- (a) Birth rate
- (b) Death rate
- (c) Rate of growth of population
- (d) Population density
- (e) Exhaustible resource

**Solution 3:**

- (a) **Birth Rate:** It is the number of live births per 1000 people of population per year.
- (b) **Death Rate:** It is the number of deaths per 1000 of population per year.
- (c) **Rate of growth of population:** It is the difference between the birth rate and the death rate. As long as the birth rate exceeds the death rate, the population grows. If the birth rate is lower than the death rate, the population declines.
- (d) **Population density:** It is the number of individuals per square kilometre ( $\text{Km}^2$ ) at any given time.
- (e) **Exhaustible resource:** Exhaustible resources are the once which are perished by the prolonged use and they can never be renewed or replaced.

**Question 4:**

Mention whether the following statements are true (T) or false (F) Give reason in support of your answer

- (a) Cow was the first domesticated animal
- (b) Rapidly growing industries favoured population rise
- (c) Present human population growth is following arithmetic progression
- (d) Birth rate (natality is the number of live births per hundred people of population per decade.
- (e) Tubectomy is a popular surgical method of contraception in human males

**Solution 4:**

- (a) False.  
Dog was the first domesticated animal.
- (b) True.  
Rapidly growing industries made human life more and more comfortable, with greater opportunities of jobs and with more production of food. All this favoured population rise.
- (c) False.  
Present human population growth is following geometrical progression.
- (d) False.  
Birth Rate (natality) is the number of live births per 1000 people of population per year.
- (e) False.  
Vasectomy is the surgical method of contraception in human males while tubectomy is the surgical method used in females.

**Question 5:**

What is the present rate of growth of population of the world and of our own country?

**Solution 5:**

The rate of growth of population of the world is 1.092% (this rate results in about 145 net additions to the worldwide population every minute or 2.4 every second {2011 estimates}) and for India is 1.344%.

**Question 6:**

What are the age restrictions for marriage by law for boys and girls in india?

**Solution 6:**

By law the minimum age is 21 years for boys and 18 years for girls.

**Question 7:**

Give two advantage of a small family

**Solution 7:**

Two advantages of small family are:

- (a) Parents can give more attention to their children.
- (b) Small family helps every country in controlling the growth of population.

**Question 8:**

Mention two reasons for the rapid increase of population in india

**Solution 8:****(a) Illiteracy:**

Most of the rural population which forms the bulk of our society is still illiterate, ignorant and superstitious.

They also do not know the functioning of the human reproductive system.

**(b) Traditional Beliefs:**

Among the people from lower strata of the society, children are regarded as a gift of God and a sign of prosperity.

Therefore, they make no effort to avoid pregnancy.

**Question 9:**

Some great author has said that a population explosion is far more dangerous than an atomic explosion. Justify his statement?

**Solution 9:**

Population growth is not the only threat humanity is facing, but it will be a major contributor to the crises that await us and the planet in the coming century. Overpopulating the planet puts us all at risk of extreme environmental and social consequences that we are beginning to witness today. The extreme growth in human population is mortally taxing the Earth and its resources. Each individual person has a unique impact on the planet's environment. Some people may be relatively less damaging than others, but no living individual is without an ecological footprint. In other words, each person needs basic resources and almost all people aspire to utilize significantly more resources than are required by their basic needs. As a result, the Earth is attempting to impose its own checks on human population. We can witness these "checks" in the form of widespread disease and the emergence of new disease strains, food and water shortages, poor harvests and violent and destructive weather caused by climate change. While it should be obvious that the Earth is a finite sphere and cannot endure infinite growth by any single species, we should also remember that Earth's current web-of-life is the result of billions of years of complex evolution. It is irreplaceable. When we look forward to the next 40 years, the most significant population increases will take place in the areas of our world where natural resources and the infrastructure of modernity are already the scarcest. 95% of the human population growth is occurring in countries already struggling with poverty, illiteracy and civil unrest. It will further stress, the already strained ecological systems and worsen poverty in much of the developing world, thus aggravating threats to international security.

Thus, the statement made by an author 'some great author has said that a population explosion is far more dangerous than an atomic explosion' is true.

**Question 10:**

Explain briefly the relationship between poverty and population and how one affects the other.

**Solution 10:**

Poverty and population have been closely linked ever since the world faced changes due to the major revolutions. Poverty has its own effects on the population and vice versa. Poverty prevails because of illiteracy and traditional beliefs in the economically weaker strata. Since illiteracy and traditional beliefs prevail the people from this stratum, they regard children as gift of God and a sign of prosperity. They consider children to be helping hands in increasing the family income, hence they keep producing more children forgetting that their current situation would do no good for the children and they would add more to this already overburdened poverty strata. Hence, the population keeps on rising and so does poverty. As the population increases the quality of life goes down.

**Question 11:**

List three major landmarks in human history which contributed to the sudden rise in population of the world.

**Solution 11:**

- (i) Tool making revolution.
- (ii) Agricultural revolution.
- (iii) Scientific industrial revolution.

**Question 12:**

What was the approximate Indian population according to the 1981 census? What was it in 1991?

**Solution 12:**

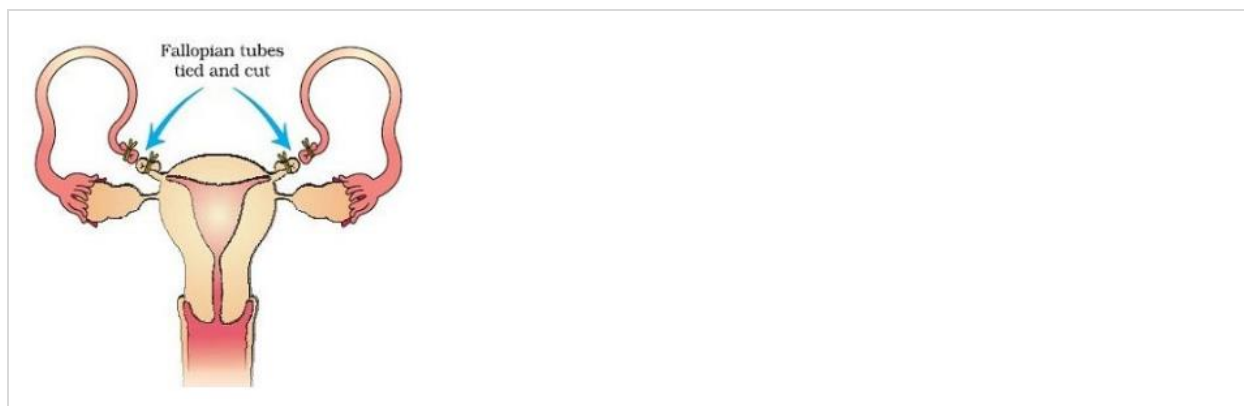
According to census, the Indian population in 1981 was 685 million and it was 846 million in 1991.

**Question 13:**

Sterilization in men means preventing the flow of sperms into the seminal vesicles by cutting or ligaturing the vas deferens. Can there be a corresponding operation made in women? If yes, where?

**Solution 13:**

Yes, there could be a corresponding operation made in women. The name of the surgical procedure in females is 'tubectomy'. In tubectomy, the abdomen is opened and the fallopian tubes (oviducts) are cut or ligated i.e. tied with nylon thread to close the passage of the egg.

**Question 14:**

What is meant by family welfare centres? What is the symbols of family welfare in our country?

**Solution 14:**

Family welfare centres are those places where any help or advice about family planning is available free of cost. These places could be any hospitals, dispensaries, etc. The inverted red triangle is the symbol of family welfare in India.

**Question 15:**

List the advantages of having small families.

**Solution 15:**

Below are some of the advantages of having a small family:

- (i) Financial condition of family is deeply related to the size of the family. A living cost of a large family is surely much higher than a small family. A large family has more expenses on cloth, toys, education and food whereas expenses in small family are very low.
- (ii) Parents can easily fulfill the needs of one or two children. They can provide them best education and look after them very well whereas when there are many children to look after parents just cannot fulfill even the basic needs of the children properly. Therefore, as a result, children suffer, the parents suffer and the nation suffers.
- (iii) A child in a small family receives more support from their parents than in a large family. In large family, parents have many children to look after, so they cannot give their best support to everyone whereas in small family parents can give more support to children as they have only one or two children to look after.
- (iv) Family size also affects the health, especially that of the mother and the child. Frequent pregnancies can cause illness to both the mother and the children. It can disrupt the health

of the women. It puts mother and baby's health at risk. So having a small family definitely leads to healthy and happy family.

#### **D. LONG ANSWER TYPE:**

##### **Question 1:**

Our resources cannot keep pace with the rising population. Give three examples in support of this statement.

##### **Solution 1:**

- (i) **Food:** The first and most important need of the humans (or any living organism) is food. But with the production of food rising by arithmetic progression and population growing by geometric progression i.e. the number at each step is being multiplied. At the same time growing population is increasing the use of more and more agricultural land to build houses. Thus it is evident that food would be running short for the unchecked rising population.
- (ii) **Water:** Availability of clean and germ-free water for drinking purposes would be more and more scarce with increase in population; the reason would be mainly, the pollution of rivers, ponds, lakes etc.
- (iii) **Land:** Man is bringing more and more land under cultivation and also using up land for building more residential colonies, factories and industries. Usable land would thus become less and less available.

##### **Question 2:**

How can the knowledge of processes of reproduction help people in limiting the size of their families? Give two concrete examples

##### **Solution 2:**

- (i) The orthodox view, to have at least one son especially in Indian society, should be modified with education. People should be educated that their greed for a son can lead to numerous children in the household which would worsen both their family's health and wealth. They should focus on proper upbringing of the child, be it a son or a daughter.
- (ii) Married couples should be educated to delay the birth of their first child, to space the second with a sufficient interval for proper upbringing and to stop the third. They should also be educated to adopt family planning methods by which they can prevent pregnancy after two children. These include devices for both men and women, for example: Condoms, intrauterine devices (IUD) and oral pills.

**Question 3:**

What is the idea behind the phrase “population explosion”?

**Solution 3:**

For developing countries like India, population explosion is a curse and is damaging the development of the country and its society. The developing countries are already facing a lack in their resources, and with the rapidly increasing population, the resources available per person are reduced further, leading to increased poverty, malnutrition, and other large population-related problems. The literal meaning of population is "the whole number of people or inhabitants in a country or region", and the literal meaning of population explosion is "a pyramiding of numbers of a biological population". As the number of people in a pyramid increases, so do the problems related to the increased population. Some of the reasons for this population explosion are poverty, better medical facilities, and immigration from the neighboring countries. The population in India continues to increase at an alarming rate. The effects of this population increase are evident in the increasing poverty, unemployment, air and water pollution, and shortage of food, health resources and educational resources.

**E. STRUCTURED / APPLICATION /SKILLS TYPE:****Question 1:**

Given below are hypothetical figures in regard to population (in crores) of two countries A and B during the last three decades.

Country	1971	1981	1991
A	6.4	9.6	10.6
B	15.7	15.7	15.3

**Fill in the blanks:**

- (a) Rate of growth of population of country ..... has declined between years ..... and .....
- (b) The country ..... shows negative population growth between years ..... and .....
- (c) The country ..... shows zero population growth between years ..... and .....

**Solution 1:**

- (a) B; 1981; 1991.  
(b) B; 1981; 1991.  
(c) B; 1971; 1981.