Population:
The total number of inhabitants of a country / city or any other area is called population.

Overpopulation:
It refers to an area where its natural resources cannot support its inhabitants for a long time.

Rural Area (Overpopulated)
When the growth of crops / output of crops is not sufficient to fulfill the requirements of farmer and his family for a long time, then we say that a rural area is overpopulated.

Urban Area (Overpopulated)
When the job opportunities and infrastructure facilities are not sufficient for the people living in urban area, then urban area is said to be over populated.

Crude Birth Rate (CBR)
The number of live births per thousand person in a particular year.

Crude Death Rate (CDR).
The number of deaths per thousand person in a particular year.

Natural Increase:
The difference between birth rate and death rate is called natural increase.

Population Growth Rate
The annual increase in the total population is known as population growth rate.

Q.1. Explain the reasons for high population growth rate in Pakistan.
Ans. Religious beliefs
    Early marriages
    Child labor
    In migration (Afghan refugees)
    Illiteracy
    Strong desire for son.
    Polygamy
    Warm climate
    Increase in birth rate
    Control on death rate.

Q.2 How to reduce the population growth rate in Pakistan?
Ans. 1. Family planning programmes. e.g. Green star clinics, Chabi ka Nishan, Sabz sitara,
      2. Lady health worker programmes.
      3. Free contraceptives available in rural areas.
      4. Education and awareness of population growth / how to improve living standards.
      5. Education of women / jobs for women. (Delay / later marriage).
      8. Clean water.
     10. Religious support for birth control.
Q.3. Describe the effects of population growth on the economy and development of Pakistan.

Ans. **Economy**
- Shortage of money / foreign exchange to buy food / negative balance of payments
- Need for foreign loans
- Debts
- Lack of money for investment

**Development**
- Overpopulation leading to -
  - Shortage of -
  - Food,
  - Water,
  - Education,
  - Health services,
  - Unemployment,
  - Poverty,
  - Pollution,
  - Traffic congestion,
  - Inflation / high prices,
  - Load shedding,
  - Little industrial development.

**Occupation** (Employed labor force by sectors)

The occupations can be divided into **three** broad categories.

1. **Primary Occupation**
   - It is related to all such occupations that extract raw material directly from the earth or sea. e.g. Agriculture, Mining, Fishing.

2. **Secondary Occupation**
   - It includes occupation which process and manufacture the primary products. e.g. steel making, shipping or furniture making and assembly industries.

3. **Tertiary Occupation**
   - It comprises of all those occupation which provide services such as transport, banking, trade, insurance, administration, health, education.
Study Fig.1, which shows the proportion of workforce in each sector of industry.

Q.1. Study Fig.1. Which of these three sectors is labeled Y?
Ans. Tertiary

Q.2. Which of these three sectors is labeled Z?
Ans. Secondary

Q.3. Which of these three sectors is labeled X?
Ans. Primary

Q.4. Explain the reasons why so many people work in agriculture / primary occupation.
Ans. Traditional / Inheritance
Subsistence farming
Large % of population lives in rural areas
Farming is the main occupation
Large areas of Pakistan are suitable for farming
Alluvial soils
Irrigation schemes
Lack of money for farm machinery
Pakistan has an agro-based economy
Many industries are agro-based and therefore promote farming
Growing population requires feeding
Lack of other jobs available
Pakistan is rich in some minerals e.g. limestone / rock salt / natural gas.
Forests are an important source of fuel
Fishing employs many in coastal fishing / some in inland fishing.
Q.5. Why has the percentage of the labor force working in agriculture declined steadily in the recent years?
Ans. Increasing mechanization on farms
Fragmentation of holdings has made them unable to support the family.
Problems for tenants caused by landlords
Not enough farmland for increasing population
Loss of farmland due to water logging and salinity / soil erosion
Consolidation of holdings
Improving education so people want to work in jobs using their skills
Increase in manufacturing industries so more jobs in industries
Higher wages in manufacturing industry
Rural urban migration
Find other jobs for additional income.

Q.6. Why has the percentage of the workforce working in tertiary industries increased steadily in recent years?
Ans. Rising standard of living due greater demand for services
Higher literacy / more educated so sue qualifications in tertiary sector
Want higher wages
Want better working conditions
Rural-urban migration tends to mean a change from a primary occupation to a tertiary
Government efforts to improve services / development
Improving educational standards so more teachers / lecturers needed
Growth of tourism
Extension of road network
Fewer people make their own clothes
More shops
Spread of IT
More opportunities in banking
More trade
Industrialization

Q.7. Why are very few primary jobs available in urban areas?
Ans. No pasture
No mines or quarries
No forest
Creates pollution
High cost of land
No arable land.

Q.8. Why are many people unemployed in cities?
Ans. Illiterate / uneducated
Lack of skills / training
Tertiary jobs / jobs needing qualifications
Shortage of jobs
IT in offices
Machines in factories
Family contacts.
Q.9. Why is the sector of tertiary employment likely to increase more in urban areas than in rural areas?

Ans. Rural – urban migration
Increase in literacy / more jobs for the educated people
Growth of services
People have more money to spend
More transport / shops / offices
Growth of informal sector.

Study Fig.2. Which shows the proportion of workforce in Pakistan’s main categories of employment?

![Fig.2](image)

Q.10. Study Fig.1. Which of these categories of employment has all its workforce in the primary sector of industry?

Ans. Agriculture / category 1.

Q.11. How many of the categories of employment given are in the tertiary sector of industry?

Ans. 3 / items 2,3,6 in key.

Employ: A job to do for payment. OR
To use the services of (a person) in return for payment.

Employee: A person employed for wages. OR
A person who is paid to work.

Employer: A person or company that pays people to work for them.

Employment: Work, especially when it is done to earn money.

Self Employed: Working independently and not for an employer. OR
Working for your self and not employed by a company.
**Under Employed**: Not having enough work to do. OR
Not having work that makes full use of your skills and abilities. OR
Not fully employed.

**Unemployment**
Unemployment means the state of being unable to find a paid job. OR
A lack of paid employment.

Q.1. **Explain the Causes of Unemployment in Pakistan.**

Ans. High rate of population growth
Illiteracy
Mechanization in agriculture
Revolution in information technology
Rural urban migration
Political instability
Lack of skills
Jobs needing qualification
Machines in factories.

Q.2. **How can we overcome the problem of unemployment in Pakistan?**

Ans. To provide technical education, training and skill facilities
Establishment of heavy industries and invite foreign investors
Establishment of cottage industries in rural areas
Computer education
To improve technology
Establishment of technical institution
Establishment of industrial estates
Establishment of export processing zones
Establishment of dry ports
Establishment of other seasonal industries.
Government schemes (Khushal Pakistan Programmes)
Explore more overseas employment opportunities.

Study Fig. 3, which shows the sectors of employment by percentage in Pakistan.
Q.3. Which is the largest sector?
Ans. Paid employment

Ans. Farmer, Shopkeeper, Driver.

Q.5. What is the percentage of ‘unpaid family workers’?
Ans. 25%

Q.6. State two jobs that may be done on a farm by unpaid family workers.
Ans. Sowing, harvesting, threshing, weeding, feeding animals etc.

Q.7. Suggest why many farms rely on unpaid family workers.
Ans. Poverty
    Subsistence / small farms
    Manual labor / not mechanized
    Large families / no other jobs available
    Inherited / learned skills.

**Migration:**
Movement of the people from one place to another is called migration.

**Types of Migration:**
There are three types of migration
1. Internal Migration
2. External / International Migration
3. Seasonal Migration

1. **Internal Migration:**
   Movement of the people within the country is called internal migration. Internal migration has four types;
   i. Rural to Urban
   ii. Rural to Rural
   iii. Urban to Rural
   iv. Urban to Urban

2. **External / International Migration:**
   The movement of the people from one country to another for purposes of settlement with the intention of staying a year or more. e.g. Afghan Refugees.

**Emigration:**
The act of leaving a country is called emigration.

**Immigration:**
The act of entering a country is called immigration.

**Emigrant:**
Those who migrate are called emigrants.

**Immigrate:**
Those who immigrate are called immigrants.

3. **Seasonal Migration:**
The movement of the people within the country due to climatic changes. e.g. In winter season northern areas to plain areas.
Q.1. Explain the causes of migration / Rural push factors and Urban pull factors.
Explain the causes of rural-urban migration.

Ans. Rural Push Factors:
1. Unemployment due to mechanization.
2. Lack of health facilities.
3. Lack of school / trained teachers.
4. Natural disasters e.g. flood.
5. Lack of named facilities e.g. shops, entertainment.

Urban Pull Factors:
1. More jobs.
2. Better pay.
5. Attractions of entertainment.
6. More reliable food supply.

Q.2. What problems are caused in rural areas by migration to urban areas?

Ans. Loss of workforce / only the old and young left.
Fewer children.
Loss of services e.g. education, medicines, public transport and shops.
Loss of infrastructure. e.g. roads, electricity, telephone.
Loss of educated people.
Women left behind / unbalanced sex ratio.
Lack of government investment.

Q.3. What are the effects / problems of population movements from rural to urban areas within Pakistan?

Ans. Shortage of housing.
Water / Air pollution.
Unemployment in urban areas.
Littering of streets.
Traffic congestion.
Spread of diseases.
Crime / Violence / drugs increases.
Burden increases e.g. Schools, power supplies, food water.
Depopulation in rural areas.
Imbalance sex ratio / less agricultural production.

Q.4. What are the environmental problems of overpopulation?

Ans. Air pollution.
 Noise pollution. (due to traffic)
Health problem. (Viral diseases)
Polluted water.
Cleaning problem.
Q.5. Why do some people go to live in other countries? Or Why do some people emigrate from Pakistan?

Ans. Lack of jobs in Pakistan.
For higher wages / higher standard of living.
To support family in Pakistan.
Opportunities such as construction in Middle East, unskilled to Malaysia and skilled to Canada.
To support family in Pakistan.
For medical treatment.
Political instability, Corruption, lack of security in Pakistan.
Lack of development in rural areas.
Government encouragement so that foreign exchange is sent back.

Q.6. Why do some people make seasonal migrations within Pakistan?

Ans. To avoid from severe summers / winters.
Move from mountainous areas in winter to find jobs in plains.
Nomadic movements in search of pastures and water.
In mountains take animals up to higher pastures in summer / when snow clears bring animals down to valley pastures for winter.
Work in cotton / sugar mills after harvests then return home when work finishes.
Move from the active flood plain to save from flood.
Enjoy holidays in summer and winter.

Q.7. Explain the advantages and disadvantages of emigration.

Ans. Advantages:
Collection of Remittance in the form of foreign exchange.
Help to correct the balance of payment.
Easy flow of information technology to the country.
Rate of unemployment decreases.
Pressure reduced on the jobs within the country.
Investment in different projects increases.
Strong cultural relations created.

Disadvantages:
Loss of educated people.
Loss of skilled workers.
Loss of taxes.

Age Pyramid:

It is a type of bar graph that illustrates the structure of population.
Age pyramids are a useful indicator of age distribution. To make an age pyramid, the population of an area is divided into five-year age groups on the basis of gender. Every age group is represented by bars placed one on top of another from the lowest age group to the highest. In most cases, the number of children is usually higher than the number of elderly people. As a result, the bars, once place on top of another, end up looking like a pyramid.

The Pakistan’s age pyramid has a broad base, which indicates the high proportion of children to adults in the population. It also indicates that Pakistan has a high birth rate. The pyramid shrinks upwards quite sharply. This means that Pakistan also has a high death rate amongst the older segments of the population. An age pyramid with a broad base and a tapering peak is called an expansive or progressive age pyramid.

An age pyramid with a narrow base and broad in middle is called a regressive age pyramid. It indicates a low birth rate, a low death rate and a large number of people in the productive age groups. Such age pyramids belong to UK and USA.
Distribution of Population by Age Composition

The age composition can be divided into three groups.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0 - 14 years</td>
</tr>
<tr>
<td>B</td>
<td>15 - 60 years</td>
</tr>
<tr>
<td>C</td>
<td>61 years and over</td>
</tr>
</tbody>
</table>

Children
Working population/Active population
Elderly persons

Study Fig.4, is a population pyramid for Pakistan in 1998.

Q.1. Describe the overall Shape of the Graph (Population Pyramid).
Ans. 1. Concave.
2. Mainly pyramidal/triangular
3. Broad base and narrow top
4. Bulge of males at 30 – 34 and 60 - 64

Q.2. Why is the birth rate in Pakistan high?
Ans. 1. Lack of awareness about the problems of population pressure.
2. Lack of family planning/Lack of education about contraceptives.
3. Contraceptives not readily available especially in remote rural areas.
4. Contraceptives not affordable.
5. Many think that the use of contraceptives is discouraged by Islam.
6. Tradition of large family.
7. Early marriage.
8. Prestige about large family.
9. Children work on farms/bring in money.
10. Desire of sons.
11. Wanted as security for old age.
12. Religious beliefs because Allah provide rizk to every one.
Q.3. **Explain why the birth rate has decreased a little in recent years.**

**Ans.**
1. Family planning programmes. e.g. Green star clinics, Chabi ka Nishan, Sabz sitara,
2. Lady health worker programmes.
3. Free contraceptives available in rural areas.
4. Education and awareness of population growth / how to improve living standards.
5. Education of women / jobs for women. (Delay / later marriage).
8. Clean water.
10. Religious support for birth control.

Q.4. **Explain why has the death rate fallen in recent years.**

**Ans.**
1. More food.
2. More balanced died.
3. Cleaner / fresh water.
4. Improved sanitation.
5. More doctors, more nurses, more medical colleges.
6. More hospitals and more medical facilities.
7. Better transport to get to medical centers.
8. Spread of medical facilities to rural and remote areas.
10. Foreign aid.
11. Improved facilities for / care of old people.

Study **Fig.5**, a population pyramid for Pakistan in 1998.

![Population Pyramid for Pakistan in 1998](image)

**Fig.5**

Q.5. **The number of elderly people are likely to have increased since 1998. Explain the effects of this on the economy and development of Pakistan.**

**Ans.**
1. More dependents / burden on working population.
2. More older family members to care for children.
3. More older people to give advice.
4. Overpopulation / strain on resources.
5. Shortage / demand of food.
6. More medical services needed.
7. More old people’s homes.
8. Less money for development.
Q.6.  The number of Children are likely to have increased since 1947. Explain the effects of this on the economy and development of Pakistan.

**Ans.**

1. It consists of 0 - 14 years.
2. Special care / look after needed.
3. Overpopulation.
4. Dependent population increases.
5. Shortage of food.
7. More doctors / nurses needed.
8. More schools needed.
10. Child labor increases.

Study **Fig.6**, which shows a population pyramid for Pakistan for 2006.

```
Fig.6
```

Q.7. **How is the shape of the population pyramid likely to change from 2006 to 2026?**

**Ans.**

1. Narrow base / shorter bars / fewer children under 15 years / fewer young children.
2. Wider middle / longer bars / more 15 – 59 years / more working population / more independents.
3. Wider top / longer bars / more over 60s / more old dependents / more old people.
Q.8. The changing shape of the population pyramid affects Pakistan’s workforce both now and for the future. Explain the advantages and disadvantages of the changes.

Ans. **Advantages.**
- Fewer children to look after / more money for development
- More workers for developing the country / less burden on the economy
- More young workers / more energetic / innovative
- Young more likely to be educated
- More old to give advice to young.

**Disadvantages.**
- More old to look after
- More unemployment due to larger workforce
- Loss of educated / skilled workers through emigration
- More taxes needed to support older people e.g. health care. Pensions.

**Population Distribution and Density**

The density of population is the number of people per unit area. The unit can be a square mile or square kilometer. The density is obtained by dividing the total population of a country (province, district etc.) by its area.

**Factors affecting distribution and density of population:**

The following factors shows the high / low density of population in Pakistan.

**Physical / Natural Factors:**
- Natural topography. (Flat land and Doabs)
- Climate. (Moderate)
- Soil.
- Water supply.
- Natural Routes (natural harbors, pass)

**Human Factors:**
- Efficient transport system.
- Port facilities.
- Industrial areas.
- Trade and business centres.
- Tourism development.

**Political Factors:**
- Favorable Government policies.
- New towns.

**Social Factors:**
- Education and health facilities.
- Better accommodation facilities.
Q.1. **Give four reasons for the low density of population in Baluchistan.**

**Ans.**
- Very low rainfall / arid conditions
- Lack of water for domestic / industrial purposes
- Lack of sources for irrigation
- Very hot in summer
- Very high evapo-transpiration
- Very cold winters
- Mountainous areas / rugged
- Steep slopes
- Deep, steep sided valleys
- Large areas of bare rock / barren area
- Infertile soil e.g. sandy
- Limited mineral resources
- Lack of communications over vast areas
- Lack of education / health
- Lack of jobs
- Very little industry.

Q.2. **With the help of named examples explain why density of population varies considerably in NWFP?**

**Ans.**

**Low Densities due to…**
- Very high areas
- Steep areas / steep slopes
- Areas of permanent snow
- Areas of severe cold
- Areas lacking communications
- Areas lacking water
- Areas lacking electricity
- Pastoral activities support few people
- Out migration from these areas.

**Moderate Densities due to…**
- Valleys with patches / areas of farming
- Areas with unmetalled road access
- Mining areas
- Minor defence sites
- Rural areas with tourist attractions.

**Higher Densities due to…**
- Farming areas / valleys
- Areas with metalled roads / railway access
- Industrial centers
- Administrative centers
- Market / shopping centers
- Main tourist centers
- In migration (Afghan refugees have settled)
- Major defence sites.

**Seasonal variations in densities…**
- Winter migration / nomadic due to severe cold, snow covered areas and being unable to work.
Q.3. **Explain the causes of high density of population in Karachi and Lahore.**

**Ans.**
Provincial capitals
- Administrative offices
- Shopping centers / Big market
- Better education facilities
- Better health facilities
- Tourist attractions
- Good network of industry
- Good communication system
- Good network of roads and railway
- Availability of jobs
- Better infrastructure facilities
- Trade centers
- Recreational facilities.

Q.4. **Explain the causes of high density of population in Punjab and Sindh provinces.**

**Ans.**
Provincial capitals
- Administrative offices
- Shopping centers / Big market
- Better education facilities
- Better health facilities
- Tourist attractions
- Good network of industry
- Good communication system
- Good network of roads and railway
- Availability of jobs
- Better infrastructure facilities
- Trade centers
- Recreational facilities.
- Flat areas / plain areas
- Fertile soils i.e. Alluvial, Loamy and Clay.
- Good irrigation schemes.
- Good agriculture system
- Availability of fertilizers, high yielding varieties.
Study **Fig. 7**, which shows a map of Pakistan.

**Q.5.** With reference to **Fig. 4**, explain how the population density of the area north of the line D is related to relief (topography) and water supply.

**Ans.**

**Relief**

- Higher density on Indus plain / flat land / low land
- Lower density in mountains / hills / sloping land
- Lower density in foothills of Hindu Kush / other ranges
- Lower density in Sulaiman Hills / north Baluchistan plateau.

**Water Supply**

- Higher density where irrigated / rivers
- Higher density where more rain (in northern Punjab)
- Lower density where less rainfall
- Lower density in deserts.
Study Fig. 8, a map of population density of Pakistan.

Fig. 8

Q. 6. With reference to Fig. 5, describe and explain the distribution of areas of population density more than 200 per square kilometer.

Ans. Description
North East and Central Punjab
Valleys of the 4 rivers east of River Indus
Central NWFP
Vale of Peshawar
Central Sindh

Explanation
Rural urban migration and reasons
High birth rates
Employment in urban areas.

Q. 7. With reference to Fig. 5, why is there a low population density in area X up to the present day.

Ans. Arid Climate / no rivers / lack of water.
Mountainous interior. Poor soil for farming. Lack of communication.
Lack of government investment. Lack of jobs. Lack of industry

**Life Expectancy**<br>The number of years a person is expected to live at the time of his or her birth is called life expectancy.

Q.1. Suggest reasons for the changes in life expectancy shown in this table.

<table>
<thead>
<tr>
<th>Years</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>38 years</td>
</tr>
<tr>
<td>1985</td>
<td>45 years</td>
</tr>
<tr>
<td>2000</td>
<td>50 years</td>
</tr>
</tbody>
</table>

Ans. Improved medical facilities<br>Number of hospitals, Medical Colleges and Doctors has increased<br>Availability of fresh water<br>Improvement in diet<br>Better sanitation facilities<br>Low infant mortality rate (The no. of deaths per thousand babies within one year of birth)<br>Vaccination programmes<br>Advancement in surgery<br>Better transport system for the movement of doctors.

**Dependent Population**<br>Those who depend on others known as dependent population.

Q.1. Study the table shows how the percentage of each of the three age groups, A, B and C, is changing. What problems are caused by the changes shown in this table.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Chang taking place</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 0 - 14 years</td>
<td>Increasing</td>
</tr>
<tr>
<td>B 15 - 64 years</td>
<td>Decreasing</td>
</tr>
<tr>
<td>C 65 years and over</td>
<td>Increasing</td>
</tr>
</tbody>
</table>

Ans. Dependency ratio increasing<br>Child labor may increase<br>Shortage of food<br>More jobs will be needed as 0 - 14 group<br>Not enough schools<br>Not enough teachers<br>Not enough facilities for elderly people<br>More pensions are needed for old age people.
**Literacy**

The ability to read and write is called literacy.

**Q.1. In 1995 male illiteracy was 50% and female illiteracy was 76%. Why is illiteracy so high?**
**Ans.** Pakistan is a poor country / lack of money
Lack of schools / colleges in rural areas
Schooling is not free / parents cannot afford to pay for schooling
Private schools are very expensive
Insufficient teachers / not enough teacher training colleges
Most of the population in rural areas
Many in rural areas do not value education
Some landlords do not allow tenants to send children to school
Many people in remote areas are nomads / semi-nomadic.

**Q.2. Give two reasons why female illiteracy is higher than male illiteracy.**
**Ans.** Traditional attitudes in rural areas and women’s place in the home
Fewer girls given schooling
Lack of girls school in rural areas
Families spend money on boy’s education rather than girl’s
Less number of teachers in school in rural areas.

**Q.3. State two ways in which the high illiteracy rate affects industrial growth.**
**Ans.** Illiterate workers may produce low quality goods
Illiterate worker more difficult to train
Lack of skilled operators
Lack of skilled management
Illiterate bosses fail to plan properly
Discourages investors
May need to import skilled labor / expensive
Illiterate workers provide cheap manual labor.