TEST - 8

Social Geography (population Density & Distribution, Racial, Linguistic Groups & Major Tribes)	7 th term 1	Unit 3. Population and Settlement
	8 th term 2	Unit 1 Migration and Urbanisation
	9 th book	Unit 6 – Man & Environment
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3. Population and Settlement

Introduction

Population Geography is a study of demographic phenomena which includes natality, morality, growth rates etc., through both space and time. Increase (or) decrease in population indicates population distribution and growth. The study of movements and mobility of population is called migration. Among the human people from place to place the ancient origin is grouped under major races such us language and religion.

The Races

Race has been defined as a biological grouping within the human species. The race is a group of people with more (or) less permanent distinguishing characteristics that are inherited. The most widely found human racial types are based on visual traits such as head shape, facial features nose shape, eye shape and colour, skin colour, stature, blood groups etc.,The major world Human races are

- ü Caucasoid (European)
- ü Negroid (African)
- ü Mongoloid (Asiatic)
- ü Australoid (Australian)

1. Causasoid: The Caucasoid is known as European race. This group is the one with fair skin and dark brown eyes, wavy hair and narrow nose. The Caucasoid are also found in Eurasia.
2. Negroid: Negroid have the dark eyes, Black skin, black wooly hair, wide nose, long head, and thick lips. They are living in different parts of Africa.
3. Mongoloids: The mongoloid race is commonly known as the Asian-American race. The mongoloid have the light yellow to brown skin, straight hair, flat face, broad head and medium nose. Such people are found in Asia and Arctic region
4. Australoids: Australoids have wide nose, curly hair dark skin, and short in height. They are living in Australia and Asia.

Races of India

India is said to be one of the cradle lands of human civilization. The ancient Indus valley civilization in India was believed to have been of Dravidian origin in northern India. The Dravidian people were pushed south when the Indo-Aryan came in later. South India was dominated by the three Dravidian kingdoms of the chera, the cholas, and the pandyas. The Dravidian languages are Tamil, Telugu, kannada, Malayalam and Tulu almost all the Dravidians live in the southern part of India.

Religion: Religion means a particular system of faith and worship, which brings human being with human society. Religion, is a symbol of group identity and a cultural rallying point.

Classification of Religion

a. Universalizing Religions: Christianity, Islam and Buddhism.
b. Ethnic Religions: Judaism, Hiduism and Japanese Shintoism.
c. Tribal or Traditional Religions: Animism, Shamanism and Shaman.

Religion	Place of worship
Buddhism	Vihara
Christianity	Church
Hinduism	Temple
Islam	Mosque
Jainism	Basadi
Juadism	Synagogue
Zoroqstrianism	Agiyari

Language: Language is a great force of socialization. Language, either in the written or oral form, is the most common type of communication. Language promotes the transmission of ideas and the functioning of political, economic, social and religious systems.

Languages of India: India has many languages and culture. Each state has its own language though the national language is Hindi, 22 major language were spoken by about 97 percent population of the country. India follows,kashmiri Urdu Punjabi, Hindi Rajasthani, Gujarati, Bengali and Assamese etc., these language are followed in North India. The main language of the Dravidian family are Tamil, Telugu, Kannada, Malayalam etc., These languages are mainly spoken in southern India.

       Today usage of language has changed. It is often used as communicational skill. With the different means of communication and fast moving world advancement in technology helps in understanding of different languages very easily with easy access to electronic media along with its pronunciations. These technologies have really brought the world closer.

Date	Event
11th July	World population day
21st February	International mother language day
Third Sunday in January every year	World Religious day
21st May	The World cultural diversity day

Settlement

       Settlement is a place where people live and interact through activities such as agriculture, trading and entertainment. A rural settlement is a community, involved

predominantly in primary activities such as agriculture, lumbering, fishing and mining. An urban settlement engages in predominantly in secondary and tertiary activities, such as industries, trade and banking. There is often a correlation between the functions, size of population and population density.

A rural settlement tends to have a small population and low population density. Urban settlement often has a large population size and high population density. Site and situation refers to the location of the actual settlement. The initial choice of a site for a settlement depends on how it is useful for meeting our daily needs, like water supply, availability of farmland, building material and fuel etc.,

Old House Types

In the early periods of human settlement, houses were built using local materials. The form of the house was closely related to the environment. In the agricultural regions, houses were built with mud walls and the roof was made of stalks of paddy (or) other crops of grass (or) thatch. Local wood was used to provide frame for the roof. Such old houses had wide verandahs and an open air circulation. The size of the house depended on the economic status of its inhabitants.

Patterns of Settlements: Settlements also be classified into Compact settlements and Dispersed settlement

Compact settlements

Compact settlement is also known as nucleated settlement. In this type large a number of houses are built very close to each other such settlement develop along the river valleys and fertile plains, In India compact settlements are found in the northern plains and the coastal plains of peninsular India.

Dispersed Settlements

Dispersed settlements are generally found in the areas of extreme climate, hilly tracts, thick forests, grasslands, areas of extensive cultivation. In these settlements, houses are spaced far apart and after interspersed with fields. In India this type of human settlement is found in the northern kosi tract, the Ganga delta ,theThar Desert of Rajasthan and the foot hills of Himalayas and the Niligris.

A hierarchy of settlements

Rural settlement: Rural settlements are predominantly located near water bodies such as rivers, lakes, and springs where water can be easily available. People choose to settle near fertile lands suitable for agriculture, along with the provision of other basic needs. Hence, they prefer to live near low lying river valleys and coastal plains suited for cultivation. The availability of building materials like wood, stone and clay near settlements is another advantage, for settlements to be built.

Factors Influencing Rural Settlement

  ü   Nature of topography
  ü   Local weather Condition
  ü   Soil and water resources
  ü   Social organisation
  ü   Economic condition

Pattern of Rural Settlement

The pattern of settlement has been defined as the relationship between a house or building to another. A rural settlement pattern is a function of relief, climate, water supply and socio-economic factor. It is broadly classified under the following patterns, such as Linear, Rectangular, Circular, Star like pattern etc.,In a Linear settlement, houses are arranged along the either side of a road,railway line, river (or) canal,the edge of a valley,etc., e.g. the Himalayas the Alps, the Rockies.

Linear settlement: The rectangular settlements are almost straight, meeting each other at right angles. Such a settlement is found in plain areas (or) intermontane plain. E.g.,Sutlej. Houses built around a central area are known as Circular pattern of settlements. Such settlement develop around lakes and tanks. The Star like pattern of settlement develops on the sites and places where several roads converge and houses spread out along the sides of roads in all directions.e.g. The Indo – Ganga plains of Punjab and Haryana

Wet Point Settlement: A wet point is a site with reliable supply of water from wells, tank, river, spring (or) pond in an area.

Dry Point Settlement: A dry Point settlement is located in low-lying areas in the regions of excessive dampness. Dry point settlements are not affected by flooding, due to the landscape and the source of water. Such settlements are found in the coastal plains of Kerala and deltas along the east coast of India.

Urban Settlements: The settlements in which most of the people are engaged in secondary and tertiary activities are known as urban settlements. In other words, urban is related to cities and towns. The word urban is often used in terms of town, city, mega city, conurbation, megalopolis.

Classification of Urban Settlements: The definition of urban area varies from ourcountry to another. Some of the common bases of classification are
  ü   Size of population
  ü   Occupational structure
  ü   Administration

·   Town: Town is a general name for an urban place, usually a settlement meeting a prescribed minimum population threshold. Population more than 5000 people. Based on

the function that cities perform they can be classified into the following types of towns, such as administrative, cantonment, academic etc.,

- City: The term City is generally applied to large urban places with no strict definitions to separate if from smaller town. City is a nucleated settlement which multifunctional in character, including an established central business district. In India an urban place with more than one lakh population is considered as a city (Population more than 1,00,000).

- Mega city: A mega city is a very large city typically with a population of more than 10 million people. A mega city can be a single metropolitan area. E.g. Canton, Tokyo, Delhi, Mumbai are some of the examples of megacities.

- Megalopolis: The word megalopolis is given for a large conurbation, when two or more large cities whose total population exceeds ten million. The region made up of cities between Boston and Washington D.C is a well-known megalopolis. In India, Kolkata is the largest urban area which is a megalopolis. Gandhinagar, Surat, Vadodara, Rajput in Gujarat are the important megalopolis cities in India.

- Conurbation: A Conurbation is a region comprising of a number of cities, large town, and other urban areas that through population growth and physical expansion have merged to form one continuous urban (or) industrially developed area. West Midland in England, the Ruhr in Germany, Randstad in the Netherlands are example of conurbations. Mumbai in Maharashtra, Gurgaon, Faridabad in Haryana, Noida in Uttar Pradesh are the conurbation cities of India.

- Satellite Town: A satellite town is a town designed to house the over population of a major city, but is located well beyond the limits of that city. Satellite towns are generally located outside the rural urban fringe. In India most satellite towns are purely residential in character. Satellite towns occasionally present a look of twin towns such as Dehri and Dalmianager in Rohtas district of Bihar. They may be connected with roads. For e.g. Patna, Barauni, Varanasi and Hajipur.

- Smart City: In an urban region, a city which is very much advanced in terms of infrastructure, real estate, communication and market availability is called a Smart City. The first ten smart cities of India are Bhubaneshwar, Pune, Jaipur, Surat, Ludhiana, Kochi, Ahmedabad, Solapur, New Delhi and Udaipur. Tamil Nadu has 12 major cities to be transformed as smart cities. They are Chennai, Madurai, Tirunelveli, Tiruchirappalli ,Thanjavur, Tiruppur, Salem, Vellore, Coimbatore, Thoothukudi, Dindugul and Erode.

Rural	Urban
Rural areas have predominantly primary activities (agriculture)	Urban areas have domination of secondary and tertiary activities (Industries)
Sparsely populated	Densely populated
Villages and hamlet	Cities and towns
Agriculture works	Non Agricultural works
Simple and relaxed life	Fast and complicated life

8th term 2
Unit 1 - Migration and Urbanisation

Introduction

Rajesh and Suresh were new students joined in a school. They were allotted to Section –' A' in VIII standard. The class teacher and other students of the class welcomed them. Teacher said, " You are going to have two new friends today. So, you all introduce yourselves to others; say your name and place from where you are coming, okay". They started from the first bench. Rajesh and Suresh were sitting in the second bench. Rajesh had a turn to introduce himself. He said, " I am Rajesh, as my mother has been transferred to this school, we migrated from Chennai to Krishnagiri". Now Suresh had a turn to introduce himself. He said, " I am Suresh, coming from the Village called Pudupatti, it is five kilometres away from the school; Madam, Please tell me the meaning of ' migration the word used by Rajesh". The teacher said, " yes, from this lesson you are going to learn in detail about it".

Migration

Migration has been defined differently by different experts. In general, migration is defined as the permanent or semi permanent change of residence of an individual or group of people over a significant distance. So, the term
migration refers to the movement of people from one place to another.

United Nations Organization Definition: Migration is a form of geographical mobility of population between a geographical unit to another, generally involving a permanent change of residence.

One of the most important aspects of social science is "Human Migration".It has maintained a close relation with mankind from its earliest stage. Migration is one of the most important dynamic human activities from the very beginning of human life. During the early days, people moved from one place to another in search of food. When most of the people ceased to live in forest and adopted civilized life, they developed relationship with domesticated animals and fertile land. As a result, mobility of mankind changed considerably. They almost left the nomadic life and started to live in permanent settlements. At this stage, people continued to move from one region to another in search of fertile land for cultivation. Afterwards, the nature of mobility frequently changed over a period of time.

Factors of Migration

There are a number of factors which are responsible for the migration of humanpopulation. These factors can be grouped under the heads of favourable and unfavourable factors. The favourable factors which attract people towards a location are called pull factors. The unfavourable factors which make the people to move out from a location are called push factors.

The various causes which are responsible for human migration is categorized under five groups as follows.

a) Ecological or Natural Causes of Migration

The causes operate under this category are natural ones. They include volcanic eruption, earthquake, flood, drought etc. These events force the people to leave their native places and settle in the new areas. The conditions like theavailability of water resources, areas free from hazards, pollution etc., attract the migrants.

b) Economic causes of Migration

Economy is one of the most important causes of human migration from one area to another. Various economic causes determine the level and direction of migration. The availability of fertile agricultural land, employment opportunities, development of technology etc., are some of the economic causes that attract the migration. The mass poverty and unemployment force the people to move outfrom their native places to the places where the better employment opportunities are available.

Pull Factors	Push Factors
Natural Causes	
Least hazard prone zones	Hazard prone zones
Favourable climate	Climate change (including extreme weather events)
Abundance of natural resources and minerals (e.g.water,oil,uranium)	Crop failure and scarcity of food
Economic Cause	
Potential for employment	Unemployment
Socio-cultural Cause	
Unification	Family conflicts
Demographic Cause	
Under population	Over population
Political Causes	
Political security	War, civil, unrest
Independence and freedom	Safety and security concerns (ethnic, religious, racial or cultural persecution
Affordable and accessible urban services (including healthcare, education, utilities and transport)	Inadequate or limited urban services and infrastructure (including healthcare, education, utilities, transport and water)

Share of Regions in World Population and International Migrants by Origin – 2017

S.No	Name of the	Total	Percentage of Global	International Migrants by	Percentage of

	Region	Population	Population	origin	International Migrants
1	Africa	1,256,268	16.6	36,266	14.1
2	Asia	4,504,428	59.7	105,684	41.0
3	Europe	742,074	9.8	61,191	23.7
4	Latin America and the Caribbean	645,593	8.6	37,720	14.6
5	Northern America	361,208	4.8	4,413	1.7
6	Oceania	40,691	0.5	1,880	0.7
7	Unknown	n/a	n/a	10,560	4.1
8	World	7,550,262	100.0	257,715	100.0

c) Socio-cultural causes of Migration

Socio-cultural causes also play some roles in the process of migration. Migration of women after marriage and migration associated with pilgrimage are based on the socio-cultural customs

d) Demographic causes of Migration

In demographic sense, the population composition like age and sex, over population and under population are the major causes of migration. It is well known fact that adults are more migratory than any other age-groups.Women mostly migrate after their marriage. Generally over population is considered as a push factor and under population to be pull factor in the context of migration

Female migrants outnumber male migrants in Europe, Northern America, Oceania and Latin America and the Caribbean, while in Africa and Asia, particularly Western Asia, migrants are predominantly men. (International Migration Report, 2017).

e) Political causes of Migration

Various political causes like colonization, wars, government policies etc. have always been playing important role in human migration from time to time. Wars have been one of the significant causes of migration since ancient time.

Types of Migration
Migration can be classified in several ways.It is usually categorized as follows

In 2017, India was the largest country of origin of international migrants (17 million), followed by Mexico (13 million) (International Migration Report, 2017).

a) Based on the movement associated with administrative limits

(i) Internal migration:The movement of people within a country is known as internal migration. Further, the internal migration is classified into four categories on the basis of the place of origin and destination of migrants. Ruralto Urban Migration is the movement of population from rural areas to growing towns and cities mainly in search of employment,education and recreation facilities. Urban toUrban Migration is the migration between one urban centre to the other like in search of higher salaries. Rural to Rural Migration is driven by fertile land for cultivation and other sociological factors like Marriage etc. Urban toRural Migration is the movement from urban

centres to rural areas to get rid-off the urban problems and returning to native places after retirement from jobs. Rural to urban migration is the most common one.

(ii) International migration– Migration that occurs across the national boundaries are known as international migration.

b) Based on the willingness of the migrants for migration

(i) Voluntary migration:If the migration takes place on person's free will, initiative and desire to live in a better place and to improve their financial status, the migration is said to be voluntary.

(ii) Involuntary or forced migration:If the migration takes place against the will of migrants, the migration is termed as involuntary migration. The push factors like war may force the people to emigrate from a place is of this type.

c) Based on the duration of stay of migrants in the place of destination

(i) Short term migration: In this kind of migration, the migrants stay outside only for a short duration before returning to the place of origin. The duration may be from a few days to few months.

(ii) Long term migration: It is a kind of migration in which the migrants stay outside at least for a few years.

(iii) Seasonal migration:In this type of migration usually a group of people migrates from their native places during a particular season and returns after end of that season. People migrating to hill stations during summer and the migration of agricultural workers during sowing seasons belong to this category. Transhumance is an another example of seasonal migration.

The number of international migrants worldwide has continued to grow rapidly in recent years, reaching 258 million in 2017, up from 220 million in 2010 and 173 million in 2000 (International Migration Report, 2017).

Consequences of Migration

Migration affects both the areas of origin of migration and the areas of destination. The following are the major consequences of migration.

a) Demographic consequences: It changes age and sex composition of population. Migration of females after their marriage leads to decline in sex ratio in the source regions and increase the sex ratio in the regions of destinations. The migration of male workers in search of jobs decreases the independent population of the source regions which increases the dependency ratio.

b) Social consequences: The migration of people from different regions towards an urban area leads to the formation of plural society
It helps the people to come out of narrow mindedness and people become generous.

c) Economic consequences: The migration of more people from over populated to under populated regions results the imbalance of the resource-population ratio. In some cases, the regions of over and under population may become the regions of optimum population. Migration may influence the occupational structure of the population of an area. Through this it will certainly affect the economy of the regions also. Brain drain is a consequence of migration. Brain drain refers to the migration in which skilled people from economically backward countries move to developed countries in search of better opportunities. Eventually, this leads to backwardness in source regions. This is called as "backwash effect".

d) Environmental consequences: Large scale movement of people from rural to urban areas causes overcrowding in cities and puts heavy pressure on resources. It leads to rapid growth of cities. The over population in urban areas leads to the pollution of air, water and soil. Scarcity of drinking water, lack of space for housing, traffic congestions and poor drainage are the common environmental problems prevail in urban areas. The lack of space for housing and the rising of land cost lead to the formation of slums.

Urbanisation

Urbanisation refers to the process in which there is an increase in the proportion of population living in towns and cities.

Causes of Urbanisation

Urbanisation is driven by three factors: natural population growth, rural to urban migration and the reclassification of rural areas into urban areas. Present day urbanisation includes changes in demographics, land cover, economic processes and characteristics of geographic area.

In 2007, for the first time in history, the global urban population exceeded the global rural population and the world population has remained predominantly urban thereafter. (World Urbanisation Prospects, 2014 Revision, Highlights).

Origin and Growth of World Urbanisation

The process of urbanisation in the world has a long history.

Ancient Period: The urban centres started developing during the pre-historic period (before 10000 years). During this period primitive man started domestication of plants and animals. It was the period of development of permanent settlements. The river valley regions of the Egypt, Greece and India gave rise to agrarian communities which eventually formed the urban communities and urban centres. The excess production of food grains was the major reason for urbanisation. Ur and Babylon in Mesopotamia, Thebes and Alexandria in Egypt, Athens in Greece, Harappa and Mohenjodaro in India were noted prehistoric cities of the world.

In ancient period the increase in the number and size of urban centres occurred during the two great colonizing periods of the Greeks and Romans. During the beginning of the 7th century itself many cities were found near the Aegean Sea. During the Greek colonizing period, the expansion of trade promoted the growth of towns and cities

India, China and Nigeria – together are expected to account for 35 % of the growth in the world's urban population between 2018 and 2050. India is projected to add 416 million urban dwellers, China 255 million and Nigeria 189 million(World Urbanisation Prospects, 2018, Key facts)

Medieval Period: It refers to the period after the 11th century. During this period, the European countries, increased their overseas trade which played an important role in the revival of European towns and cities after a period of low development. At the end of the thirteenth century, Paris, London, Geneva, Milan and Venice were the important cities found in Europe.

Modern Period: This period starts from 17th century. It marks the third phase of development in urbanisation. The industrial revolution in the19th century accelerated the growth of towns and cities. The Europeans with urban civilization gave birth to a large number of new towns in North America and Soviet Union. The modern means of transport and communication, the development of new trade routes during 19th century had strengthened the trade centres and urban areas. The latest development in urbanisation was noticed in the continent of Africa. Before 1930, Africa had towns only on its coasts but now it has 50 towns with population exceeding 1,00,000. Major cities in Africa are Cairo, Nairobi, Mombasa, Bulawayo, Duala, Abidian, Logos, Accra, Addis Abba, Leopoldville, Luanda, Cape Town, Natal, Pretoria etc. Thus, in modern age, the accelerating urbanisation is resulting in a redistribution of population throughout the world.

In 1950, 30% of the world's population was urban, and by 2050, 68 % of the world's population is projected to be urban (World Urbanisation Prospects, 2018, Key facts).

World Urbanisation

S.No	Name of the Region	Urban Population in %
1	North America	82
2	Latin America and Caribbean	81
3	Europe	74
4	Oceania	68
5	Oceania	50
6	Africa	43
World Average		55

World Top Five Cities

S.No	Name of the city	Population in Million
1	Tokyo (Japan)	37
2	Delhi (India)	29
3	Shanghai (China)	26
4	Mexico city (Mexico)	22
5	Sao Paulo (Brazil)	22

Consequences of Urbanisation

a) Housing and Slums: There is a lack of space for housing and a marked reduction in the quality of housing in the urban areas due to increase in population. This problem may increase in the years to come. Rapid rate of urbanisation results the development of slums.

b) Over Crowding: Over-crowding leads to unhealthy environment in the urban areas. It also the cause of many diseases and riots.

c) Water supply, Drainage and Sanitation: No city has round the clock water supply inthe world. Drainage situation is equally bad. The removal of garbage is a Himalayan task for urban local bodies.

d) Transportation and Traffic: Absence of planned and adequate arrangements for traffic and transport is another problem in urban centres. The increasing number of two wheelers and cars make the traffic problem worse. They cause air pollution as well.

e) Pollution: Towns and cities are the major polluters of environment. Several cities discharge their entire sewage and industrial effluents untreated into the nearby rivers. Industries in and around the urban centres pollute the atmosphere with smoke and toxic gases

6. Man and Environment

Early man depended entirely on nature for food, clothing and shelter. Man has enjoyed a dominant position over the other living organisms around him because of his erect posture, hands and intelligence. From the paleolithic period to the neolithic period, man has invented and developed the wheel, fire, tools and patterns of agriculture and housing to his comfort, which led him to improve the standard of living making himself technologically advanced. Thus, modern man modified the environment where he multiplied in numbers to increase population and has always extended his territories, leading to the exploitation of natural resources.

Classification of Environment:Environment is generally classified as

   a.   Natural environment
   b.   Human environment and
   c.   Man made environment

a.   Natural environment: Earlier, we have learnt about the natural components of environment such as lithosphere, atmosphere, hydrosphere and biosphere. In this chapter, we will study about the human and man-made components in a detailed manner.

b.   Human Environment: Human environment is defined as the interaction between man as an individual, with his family, occupation and society. It is also related to various cultural aspects such as education, religion, economics and politics.

c.   Man-made environment: Man-made environment has been created by man himself for the purpose of fulfilling his needs and to make his life more convenient and easy. For example, building, transport, park, industrie, monument, etc. To bring an equilibrium between man and the environment, man has to study the distribution of population, availability of resources, development in technology, alternate means of fulfilling the increasing demand created by the growing population and other man-made features.

Population

Can you imagine a world without human beings? Humanbeings are important to develop the economy and society. The Latin word 'populus' means 'people'. Population is the total number of people living together in a particular place at the given point of time.

Population Growth

'It is easy to add but difficult to maintain'

Population is a dynamic phenomenon where the number, distribution and composition are constantly changing. Human population increases as babies are born and decreases as people die. For most of human history, births have only slightly exceeded deaths every year. As a result, human population grow slowly. About the time of Industrial Revolution, it began to increase rapidly.

Natural increaseof population is the difference between the birth rate and death rate. In fact population is always increasing but only in very rare cases it may decrease through natural or man-made disasters such as famine, landslides, earthquakes, tsunami, epidemics, extreme weather conditions and war.

Population changerefers to an increase or decrease in the population of an area influenced by the number of births, deaths and migration. The population of the world doubled from 500 million in 1650 to 1000 million in1850.The projected population for 2025 and 2050 is about 8 billion and 9 billion respectively.

Population growthrefers to an increase in the number of people who reside in a particular area during a particular period. Population increases when there are more births and immigration. It decreases when there are more deaths and emigration. Population growth, can be calculated asPopulation growth = (Birth rate + Immigration) - (Death rate + Emigration).

The important features associated with the population studies in Tamil Nadu are as follows:

S. No	Term	Definition	Data for Tamil Nadu
1.	Birth Rate	Indicates the number of live births per 1000 people in a year	15.4% (2014)
2.	Population Growth	The average annual growth of population	15.6% (2011)
3.	Population Density	The average number of people per square kilometer	555/ Km2 (2011)
4.	Total Fertility Rate	The average number of children born per woman during her child bearing years (usually ages 15 to 44)	1.6 Birth Per Woman (2016)
5.	Infant Mortality	The number of deaths under one year of age for every 1000 live births in a year	17 per 1000 live births (2016)
6.	Life Expectancy at Birth	The average number of years an individual is expected to live	70.6 years (2010-14)
7.	Literacy Rate	The percentage of people in a given population who can read and write a language	80.09% (2011)

| 8. | Sex Ratio | The number of females for 1000 males in a given population | 996:1000 (2011) |

Distribution of Population

Population distribution refers to the way in which people are spread out across the earth's surface. The world population is not uniformly distributed, owing to the following factors.

A. Physical Factors: Physical factors include temperature, rainfall, soil, relief, water, and natural vegetation, distribution of minerals and availability of energy resources.

B. Historical Factors: Regions with historical importance (river valley civilizations), war and constant invasions fall under historical factors responsible for population distribution.

Density of population

Density of population refers to the number of people living per square kilometer. An area is said to be sparsely populated when it has a large area with less number of people. Similarly, smaller the area with a large number of people, it is said to be densely populated.

$$\text{Population Density} = \frac{\text{Total Population}}{\text{Total land area}}$$

The world's population density is divided into three main groups.

• Areas of high density (above 50 people per sq.km) - East Asia, South Asia, North West Europe & Eastern North America.
• Areas of moderate density (10 to 50 people per sq.km) - The sub tropical regions like Angola, Congo, Nigeria and Zambia in Africa.
• Areas of low density (less than 10 people per sq.km) - Central Africa, Western Australia, Northern Russia, Canada, etc…

Migration

Migration is defined as the permanent or semi-permanent change of home of an individual or a group of people over a significant distance from their place of origin.The causes of migration may be physical (climate, drought, flood, earthquake, volcanic eruption, epidemics etc.), social inequalities, economic opportunities, technology, education, cultural clashes, war or political issues. There are two types of migration:

1. **Internal Migration:** The movement of people within a country i.e. between states, districts, villages, etc is called as Internal migration.
2. **International Migration:** The movement of people from one country to another, across international borders is called as International migration.

Push and pull factors of migration

Push factors are those factors which force people to move to new areas to live, while pull factors are those factors that attract migrants to a new location. Given below are some of the push and pull factors of migration.

Push Factors of migration	Pull factors of migration
• Insufficient jobs and few opportunities	• Better job opportunities
• Primitive conditions	• Better living conditions
• Desertification	• Fertile land
• Slavery or forced labour	• Socio economic independence
• Poor medical care	• Better health care
• Death threats	• Security
• Pollution	• Clean environment
• Poor infrastructural facilities	• Better infrastructural facilities
• Bullying	• Education
• Natural Disasters	• Living Stability
• War	• Industry
• Lack of political or religious freedom	• Political and religious freedom

Human settlements

A settlement can be described as any temporary or permanent unit area where people live, work and lead an organized life. It may be a city, town, village or other agglomeration of buildings. During the early days, man preferred tree branches, caves, pits or even rock cuts as his shelter. As days passed by, man slowly learnt the art of domesticating animals and cultivating food crops. The evolution of farming took place along four major river basins i.e. the Nile, Indus, Hwang Ho, Euphrates - Tigris. Man built huts and mud houses. Slowly settlements came into existence. A settlement generally consisted of a cluster of houses, places of worship and a place of burial. Later, small settlements developed into villages. Several villages together formed a town. Bigger towns developed into cities. Settlements were formed in different shapes, sizes and locations.

Classification of settlements

On the basis of occupation, settlements may be classified as rural and urban settlements.

Rural Settlements

Any settlement where most of the people are engaged in primary activities like agriculture, forestry, mining and fishery is known as a rural settlement. Most of the world's settlements are rural, that are mostly stable and permanent. The most important and unique feature of rural settlements is the vast, open spaces with green, pollution-free environment.

Patterns of rural settlements:

- Rectangular pattern: Rectangular pattern of settlements are found in plain areas or valleys. The roads are rectangular and cut each other at right angles.

- Linear pattern: In a linear pattern, the houses are located along a road, railway line and along the edge of the river valley or along a levee.

- Circular or semicircular pattern: The pattern of settlement that is found around the lakes, ponds and sea coasts are called circular or semi circular pattern.

- Star like pattern: Where several metalled or unmetalled roads converge, star shaped settlements develop. In the star shaped settlements, houses are spread out along the sides of roads in all directions.

- Triangular pattern: Triangular patterns of rural settlement generally develop at the confluence of rivers.

- T-Shaped, Y-Shaped, Cross-Shaped or Cruciform settlements: T-shaped settlements develop at tri-junctions of the roads (T), while Y-shaped settlements emerge as the places where two roads converge with the third one. Cruciform settlements develop on the cross-roads which extend in all four directions.

- Nebular pattern: The arrangement of roads is almost circular which ends at the central location or nucleus of the settlement around the house of the main landlord of the village or around a mosque, temple or church.

Urban Settlements

Urban is the term related to cities and towns where people are primarily engaged in non-agricultural activities, such as secondary, tertiary and quaternary activities. The common characteristic feature of an urban unit is that they are compact, congested and liable to a large number of population. They comprise of mostly man-made structures that fulfill the requirements of a society's administrative, cultural, residential and religious functions. The factors responsible for urbanization are better employment opportunities, suitable conditions for business, education, transport, etc.

Classification of Urban Settlements

Urban centres are classified as towns, cites, metropolitan cities, mega cities, conurbation, etc., depending on the size and services available and functions rendered to it.

- Town: A town is generally larger than a village, but smaller than a city. It has a population of less than 1 lakh. E.g.: Arakkonam near Chennai

- City: Cities are much larger than towns and have a greater number of economic functions. The population in cities are estimated to be more than 1 lakh. E.g.: Coimbatore

- Metropolitan cities: Cities accommodating population between 10 lakhs and 50 lakhs are metropolitan cities. E.g.: Madurai

- Megacities: Cities with more than 50 lakh population are called Megacities. E.g.: Greater Chennai

- Conurbation: A conurbation is a region comprising of a number of cities, large towns and other urban areas. E.g.: Delhi conurbation

Economic Activities

Economic activities are those efforts or actions that involve production, distribution and consumption of commodities and services at all levels within a region. Types of Economic Activities

Primary Activities: Primary Activities pertain to the extraction of raw materials from the earth's surface. For example: food gathering, hunting, lumbering, fishing, cattle rearing, mining and agriculture.

Secondary Activities: Secondary Activities transform raw materials into finished goods. For example: Iron and Steel industries, automobile manufacturing etc.

Tertiary Activities: Activities which by themselves do not produce goods, but support the process of production are called tertiary activities. For example: Transport, communication, banking, storage and trade.

Quaternary Activities: The activities related to Research and Development, as well as knowledge are called Quaternary activities. For e.g. Services like consultation, education and banking,

Quinary Activities: The activities that focus on the creation, rearrangement and interpretation of new and existing ideas are called quinary activities. It includes the highest levels of decision making in a society or economy. E.g.: Senior business executives, scientists and policy makers in the Government.

Environmental Issues: Environment is the basic life support system that provides air, water, food and land to all living organisms. But human beings degrade the environment through rapid industrialization.

Human life will be at risk if they don't live in harmony with the environment. Environmental problems are not limited to the local, regional and national level, but there are several global issues. Scientific and technological revolutions has given a lot of facilities to mankind, but at the same time it is responsible for the depletion of resources. Thus, several environmental problems have emerged. Some of the environmental issues that we are going to learn are:

1. Deforestation,
2. Pollution such as air, water ,noise, etc,
3. Urbanization,
4. Fracking,
5. Waste disposal

Deforestation: Deforestation is the cutting down of trees permanently by the people to clear forests in order to make the land available for other uses.

Effects of Deforestation: Deforestation results in many effects like floods and droughts, loss of soil fertility, air pollution, extinction of species, global warming, spread of deserts, depletion of water resource, melting of ice caps and glaciers, rise in sea level and depletion of ozone layer.

The United Nations Conference on Environment and Development (UNCED) by name Earth Summit Conference held at Rio de Janeiro, Brazil, on June 1992 concluded that all member countries should reduce their emission of carbon dioxide, methane and other green house gases thought to be responsible for global warming.

Conservation of forests

i. Conservation of forests can be done through the regulation of cutting of trees.

ii. Control over forest fire: Through regular monitoring and controlling the movement of the people forest fire can be prevented.

iii. Reforestation and afforestation: Reforestation involves the replanting or regeneration of areas of forest which have previously been damaged or destroyed. Sometimes forests are able to regenerate naturally. Afforestation is the process of planting trees or sowing seeds on barren land devoid of any trees to create a forest.The term afforestation should not be confused with reforestation, which is the process of specifically planting native trees into a forest that has decreasing number of trees. While reforestation is increasing the number of trees of an existing forest, afforestation is the creation of a new forest.

iv. Proper use of forest products: We depend on forests for our survival from the air we breathe, to the wood we use. Besides providing habitats for animals and livelihoods for humans, forest products are one of the most essential things in our day to day life. Therefore we must use forest products properly.

v. Sustainable forest management: The use of forest and forest lands in a way and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill the global levels should not cause damage to other eco systems. Forest Management seeks to achieve a balance between the society's increasing demands for forest products, its benefits and the preservation of forest health and diversity too. This balance is critical to the survival of forests and to the prosperity of forest dependent communities.

Pollution

Environmental pollution occurs when pollutants contaminate the natural surroundings. Pollution disturbs the balance of our eco system affecting our normal life styles and gives rise to human illnesses and global warming. The word 'pollute' means to degrade or to make dirty. Pollution is thus, an unfavourable modification of the natural world, caused entirely or partly due to direct or indirect actions of human beings. There are many types of pollution degrading the environment. They are

1. Air pollution
2. Water pollution
3. Land pollution
4. Noise pollution
5. Light pollution

A. Air pollution

Due to some human activities or natural processes, the amount of solid wastes or concentration of gases, other than oxygen increases in air. Air thus becomes polluted and this process is called air pollution. The pollutants are generally grouped as natural and manmade. The natural pollutants are volcanic eruptions, wind erosion, pollen disposal, evaporation of organic compounds and radioactive elements etc.,

Natural air pollution does not occur in abundance and also creates a little impact on the environment. But, manmade pollutants like vehicular emission, industrial wastes, smoke from thermal power plants and refineries badly affect the environment. The main pathological effects caused by air pollutants, particularly oxides of sulphur, nitrogen and carbon-di-oxide, include respiratory disorders, jaundice, irritation of eyes and throat, headache, cancer and even death.

Ozone Depletion: Ozone layer is depleted by the pollutants like CFCs, HFCs, methyle bromide, etc. Due to the depletion of ozone layer, UV rays fall on the earth's surface, warming

the earth surface and leads to impervious diseases like skin cancer, blindness, loss of plankton etc.,

Ozone layer: Ozone is a poisonous gas made up of molecules consisting of three oxygen atoms (O3). This gas is extremely rare in the atmosphere, representing just three out of every 10 million molecules. The ozone layer is not really a layer at all, but has become known as such because most ozone particles are scattered between 19 and 30 kilometre up in the earth's atmosphere, in a region called the stratosphere. Ozone layer in the atmosphere absorbs most of the harmful ultraviolet radiation from the sun. It also screens out the deadly UV-C radiation the ozone shield is this essential to protect life.

B. Water Pollution:

Water pollution is any chemical, physical or biological change in the quality of water that has a harmful effect on any living thing that drinks or uses or lives in it. The water bodies including ponds, lakes, rivers, ground water and oceans are contaminated by the chemical wastes from industries, domestic wastes and sewage etc.

Major water pollutants

a. The disease – Causing agents; bacteria, viruses, protozoa and parasitic worms that enter sewage – systems and untreated waste.
b. Oxygen demanding bacteria: Wastes that can be decomposed by oxygen requiring bacteria.
c. Water soluble inorganic pollutants: Acids, Salt and toxic metals.
d. Organic compounds: Oil, plastics and pesticides in the water.

Our role in conserving water;

1. Do not dump in or around rivers. Clean up rivers that have a lot of trash in and around them.
2. Never dispose of cooking fats and oils by pouring them down the sink.
3. In the bathroom, take short showers and draw less water for baths. When you buy a new toilet, purchase a low flow model (1.6 gallons or less per flush). Check your toilet for "silent" leaks by placing a little food coloring in the tank and see if it leaks into the bowl.
4. Turn off water while brushing teeth, washing, gardening and shaving.
5. Keep a gallon of drinking water in the refrigerator, rather than running the tap for cold water. Run your washing machine with a full load of clothes. Wash with warm water instead of hot water, rinse with cold water instead of warm water.

Causes of Water Pollution: Main pathological problems caused due to water pollution include diarrhoea, liver cirrhosis, lung cancer, kidney diseases, paralysis, chronic pain, bone deformities, cancer and even death and so on.

C. Land Pollution

Land pollution is contaminating the land surface of the earth through dumping of urban waste matter. It arises from the breakage of underground storage tanks, application of pesticides and percolation of contaminated surface water, oil and fuel dumping, leaching of wastes from landfills or direct discharge of industrial wastes to the soil.

Preventive Measures

1. Things used for domestic purposes can be reused and recycled.
2. Organic waste matter should be disposed off far away from the settlements.
3. Inorganic wastes can be separated, reclaimed and recycled.

D. Noise Pollution

Noise pollution is basically a problem of urban areas, industrial areas, transport areas due to bombardment, traffic etc. It has an impact on the habitat of animals migration and health of inhabitants. E.g. Chandipur Missile Launching Centre has created migration of sea birds. Hearing loss, hypertension, stress and mental illness are the major health hazards that human beings face.

The control measures of noise pollution

1. Development of green belt vegetation.
2. Installation of decibel meters along highways and in places of public gatherings.
3. Planting trees along the compound wall to protect houses.

E. Light pollution

Light pollution is an unwanted consequence of outdoor lighting and includes such effects as sky glow, light trespass and glare. It is caused by streetlights, parking lot lights, floodlights, signs, sports field lighting decorative and landscape lights. It affects the environment, energy resources, wildlife, humans and astronomy research.

Urbanization

Urbanization refers to the process of increase in urban population and urban areas in a country.

Problems of urbanization

As the town expands, it mounts more pressure on transport system, water supplies, sewage and profuse disposal. The overall development creates problems like air pollution, water pollution, traffic congestion and noise pollution etc., This disturbed environment affects the human beings as mental illness, heart troubles, breathing problems etc.

Fracking:

The modern technology applied to extract oil and gas while fracturing the rocks artificially with the use of pressurized liquid is called fracking. Fracking fluid is a mixture of water, sand and thickening agents. The first successful implementation of the process was done in 1950.Methane is one of the most important chemicals used in fracking process. It is estimated that four percent of methane escapes into the atmosphere during extraction. Methane is 25 times stronger than carbon di-oxide in terms of trapping heat. The spills of this gas is detrimental to the air quality of the surrounding fracking sites. Pollutants decrease the availability of clean air for workers and local residents.

Other Environmental Concerns

Fracking not only pollutes water and air but also pollutes the soil. The oil spills during fracking can harm the soil and the surrounding vegetation. The use of high pressure at the time of oil extraction and the storage of waste water on site may cause earthquakes.

Waste disposal

Things become waste when their purpose of consumption is over. Wastes can be classified into five types, which are commonly found around the house. These include liquid waste, solid rubbish, organic waste, recyclable rubbish and hazardous waste like e-waste.

How to dispose of waste:

- Do not litter your surroundings. Use a proper waste bin to store your wastes.
- People should practise to segregate degradable and non-degradable wastes and should dispose them in proper coloured bins. Wastage is generally classified into three types. They are

  1. Wet Waste: Which comes from the kitchen/cooking/food, etc.
  2. Dry Recyclable Waste: Such as newspapers, cardboard, packing plastics, bottles, cans, etc., should go to a different bin.
  3. Rejected Waste: Which does not belong to the above two categories, including bio waste like diapers and bandages, etc..

Sewage sludge is produced by waste water treatment processes. Due to rapid urbanization, there has been an increase in municipal waste water. Common disposal practices of sewage should be send to sewage treatment plant through proper drainage pipes.

Electronic Waste (e-waste):

It can be defined as any electrical goods, devices or components that you no longer want or have already thrown away. For example, computers, televisions, mobiles and fax machines. This waste can take many years to break down, if at all and can contain toxic chemicals such as mercury, lead and lithium that leach into the ground and cause illness. Even short-term exposure to high levels of lead can result in vomiting and diarrhea. Instead

of sending e-waste to the dump, components from electronics can be reused to make new products.

Sustainable Development

Humans on earth are facing many problems, such as pollution, climatic changes, poverty, war and uneven distribution of resources. These problems directly affect the survival of mankind. Therefore to sustain mankind, we have to educate people on what sustainable development is.In 1987, the Brundtland Commission cited the definition of sustainability.

"Sustainable development is development that meets the needs of the present without compromising the ability of future generation to meet their own needs".For sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social aspects and environmental protection. These elements are interconnected and are crucial for the well-being of individuals and societies. To achieve true sustainability, we need to balance the economic,social and environmental factors of sustainability in equal harmony.

Social Sustainability

The ability of a social system such as a country, family or organization to function at a defined level of social well-being and harmony is called social sustainability. Problems like war, endemic poverty, widespread injustice and low education rates are symptoms of a system in socially unsustainable. The balancing capacity of a government in maintaining peaceful existence towards other countries and at the same time providing the requirements of its citizens without affecting the environment creates social sustainability.

Economic Sustainability

The people on earth consume far more than what is their fair share.

1. The economic sustainability is successfully implemented through strong Public Distribution System.
2. Economic sustainability ensures that our economic growth maintains a healthy balance with our ecosystem.

Environmental Sustainability

Environmental sustainability is the ability of the environment to support a defined level of environmental quality and natural resource extraction rates forever to mankind. Unnecessary disturbances to the environment should be avoided whenever possible.

Why is sustainability important?

The excessive usages of natural and manmade resources deplete its availability for the future generation. We need to look after our planet, our resources and our people to ensure that we can hand over our planet to our children to live in true sustainability. Hence

conservation and awareness are the two important terms that can bring sustainability to our living. When we use the word sustainability to mean maintain, it means to maintain it forever. This is because our actions have a lasting effect on the environment and we should protect it for our future generations.

How to help the value of sustainability grow among students?

1. Lifestyle: Your lifestyle is your choice and you can change it. For example, when you go to the grocery store, make sure you always carry a cloth bag. This way the shopkeeper does not have to give you many plastic bags.

2. Fixing: If your watch or a toy or a camera is broken or not working, try getting it fixed before you buy yourself a new one.

3. Recycle: Try and be conscious about the things around you. When you consume something, see if you can re-use it later.

4. Needs vsWants : Before you buy something, ask yourself the question- do I NEED this or do I WANT it?Remember sustainability begins with you. So act locally and think globally.

Case Study

The Mangroves of Palk Bay towards Sustainable Development

The sections above have discussed environmental degradation and climate change along with the concept of sustainable development. The connection between environment protection and restoration and sustainable development has also been presented. As an example, the case of the Mangroves of Palk Bay will help demonstrate these concepts in more practical terms.

Palk Bay is the area located roughly between Kodiakkarai or Point Calimere and Rameshwaram Island in Tamil Nadu on the southeastern coast of India. Palk Bay is home to mangrove ecosystems or tidal swamps. Characterised by plants and trees that can withstand high salinity, these swamps are rich in biodiversity. The Mangrove trees themselves, offer coastal protection by checking erosion. Erosion affects not just the coastline, but also coral reefs. The tangled roots of mangrove trees help retain and trap loose soil and thereby protect coral reefs and seaweed meadows from siltation. Coral reefs are important ecosystems in maintaining healthy fish population. Mangrove forests also help fish population by providing space which act as nurseries for juvenile fish.

In the recent decades, the mangroves of Palk Bay have been heavily degraded due to the Tsunami of 2004, land encroachment, rapid urbanisation, cattle grazing and agriculture. The degradation of mangroves resulted in the reduction of nursery space for juvenile fish, impacting fish populations in the region and as a result,the livelihood of the fishing communities of the region.

Given the scale of the problem, solutions needed to be multipronged and involve multiple stakeholders. Local communities, government and civic organisations all came together not just to conserve the remaining mangroves, but also to restore it. Saplings of native species of plants and trees are being grown, planted and cared for. Live colonies of coral from the Gulf of Mannar Biosphere Reserve are being transplanted to Palk Bay. The existing mangroves and the region are being mapped and the way land is used around the mangrove is being studied.

The local communities are actively involved in the conservation and restoration of the mangroves. Education and awareness programmes about mangrove ecosystem are being undertaken.

Along with awareness programmes, the communities are also being provided with livelihood training, so they can earn an income in more ways than just fishing. All of these efforts are on-going. The health of the mangroves are improving and as it does, the fish population will improve in quality and quantity, improving the lives of the communities. As one can see, sustainable solutions take the needs of the people into consideration and the environment because both are interconnected.
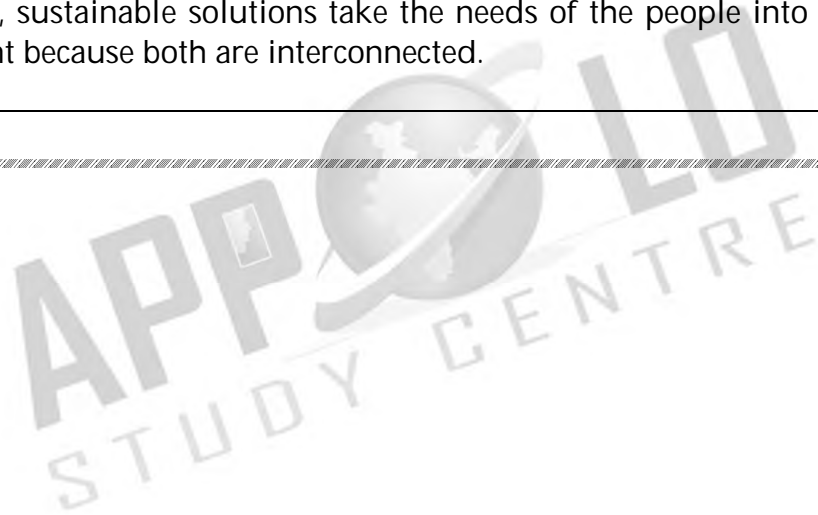
1. POPULATION GEOGRAPHY

Introduction

- Do you know that 3, 60, 000 persons born every day in the world? Four births take place every second in the world. 'Professor Stephen Hawking thinks the human species will have to populate a new planet within 100 years if it is to survive,' the BBC confirmed.

- 'With climate change, overdue asteroid strikes, epidemics and population growth, our own planet is increasingly precarious,' the news outlet continued.

- Human being is an important element of the environment and is probably the latest occupant of the earth, as its evolution took place less than two million years ago. Although distribution and growth of human population are influenced greatly by the physical environment, they have tremendous capacity to modify the physical environment.

- Demography is the statistical study of human population. It includes the study of size, structure and distribution of population as well as changes in time and location in response to birth, migration, aging and death. 'Population explosion' is one of the greatest challenges that we are facing today.

Distribution of world population

- People have inhabited the earth for several thousands of years, but for a long period of time, their numbers remained limited. It is only during last few hundred years that human population has increased at an alarming rate. Population is spread unevenly across the continents. Only a few areas support large concentration of people while vast areas support the factors influencing the distribution few people. A large number of factors influence the distribution and growth of population over the earth's surface.

The factors influencing the distribution of population

1. Relief

- Rugged mountains pose various obstacles such as unsuitable conditions for the construction of rail-roads and highways, unfavorable conditions for agricultural crops because of short growing season, lack of cultivable land and snowy winters do not encourage large settlement areas. Hence, the mountainous areas support a few people. On the other hand, a large concentration of population is found in the fertile lowlands such as the Ganges and Brahmaputra in India, Hwang-Ho in China and plains of North-Western Europe and the USA. This is mainly due to flat level land which is fertile, favorable conditions for agriculture, long growing seasons and suitable condition for the settlement.

2. Accessibility

- Areas with well-developed transport infrastructure and links through road, rail, shipping, canals and air are likely to be more densely populated than areas which are poorly connected with transport network.

- In earlier times, in the absence of water transport, all islands remained virtually uninhabited. One of the reasons why mountains are not inhabited by people is lack of accessibility.

3. Adequate water supply

- Population distribution is affected very much by the presence or absence of water in any region. Water supply is essential for human survival and development. Areas which have sufficient water tend to have denser population than areas which are dry or suffer from regular drought. Well watered regions of the Great Northern plains of India are densely populated whereas drought prone areas of Sahara are sparsely populated.

4. Soil

- Fertile alluvial soils of river valleys throughout the world have encouraged dense settlement of population because they support Agricultural activities. The high density of population in parts of East and South-East Asia is dependent mainly on fertile soil. For example, dense population is found in the Ganges valley of India, in Indus valley of Pakistan and Hwang-Ho valley of China. On the other hand, desert soil of Sahara region is sparsely populated.

5. Economic and political factors

- Unfavorable economic condition, unemployment, religious intolerance, conflicts and wars do not favour more population.

The patterns of Population Distribution

- The analysis of the pattern of population distribution and density is fundamental to the study of demographic characteristics of any area. The population distribution refers to the way the people are spread over the earth's surface. The population distribution is uneven worldwide. Ten most populous countries of the world together make up nearly 60% of the world's population.

Density of Population

- Absolute numbers do not give any indication of the impact of population on the land and its resources. The number of persons living per unit of land areas gives a better picture. This is expressed in the form of density of population per sq.km of land area.

  Density of population = <u>Total population</u>
  Total area of the country

- It is obtained by dividing the total land area by the total population, the quotient being the number of people per square kilometer. Compared with simple arithmetic density, physiological or nutritional density is a more refined method of calculating man-land ratios.
- Physiological or Nutritional density is the ratio between total population and total cropped area. The total arable land in the world is 13.3% and the nutritional density of the world is 325 per sq.km of land. The total percentage of arable land is 48.83 in India and its nutritional density is 753 per sq.km of land. Singapore has the highest nutritional density of population of 440,998 per sq.km of land the world. The areas of density of population can be divided into three as follows:

1. High density areas of population

- Fertile plains with favorable climate and highly industrialised and urbanised areas are generally densely populated. There are four major areas of high density of population with more than 100 persons per sq.km. Areas include:

    a. Eastern Asia, including china, Japan and Republic of Korea.
    b. Southern Asia, comprising India, Bangladesh and Sri Lanka.
    c. North-Eastern part of the United States of America.
    d. Central and North-Western Europe. Of the four regions given, the first two i.e. Eastern Asia and South Asia have high density of population due to favourable environmental conditions such as favourable climate, fertile soil and large areas of plains which encourage the growth of agriculture. The plains and river valleys of India and China are densely populated. In the last two groups i.e. North Eastern United States of America and North – Western Europe which are densely populated due to the concentration of manufacturing industries.

HOTS

- Why has Singapore the highest physiological/nutritional density of population in the world?

2. Moderate density areas of population

- The areas of moderate density of population have between 10 and 80 persons per sq.km. The areas of moderate density of population include Central part of the United States of America, Tropical Western Africa, Western blocks of Russia, Eastern Europe, Deccan Plateau of India, Central China, Southern portion of the Plateau of Mexico, North-Eastern Brazil and Central Chile, The above areas are characterized by the well-developed agricultural activities, favorable climate, fertile soils, fishing, etc.,.

3. Low density areas of population

- About half the area of the world has population less than 10 persons per sq.km. Certain vast areas remain completely uninhabited. The main areas are

    a. Amazon forest region of South America and Congo forest region of Africa.
    b. Arctic area of Canada, Greenland and the Polar regions.
    c. Great deserts of the world i.e. Sahara, Kalahari, Arabia, Great desert of Australia, Atacama Desert of South America, desert regions of Western United States and Thar Desert of India.
    d. High mountainous regions in all continents.
    e. Antarctica.

- Australia with an average density of population of 2 persons per sq.km is one of the most sparsely populated countries of the world. However, inhabitants of these areas have high standard of living. The reasons for low density of population are

  a. Bad and unfavorable Environment conditions for human settlement.
  b. Lack of economic activities.
  c. Lack of transport and communication.
  d. Government policy.

Terms related population

1. Population: A group of individuals of the same species occupying a particular geographic area.

2. People: The members of a particular nation, community, or ethnic group.

3. Crude Birth rate (Natality Rate): Number of live births per thousand people in a year.

4. Crude Death Rate (Mortality Rate): Number of deaths per thousand people in a year.

5. Net Migration Rate: the formula for net migration rate is simple:

$$N = 1000 \times (I - E) / P$$

N= net migration rate
E= number of people emigrating out of the country
I= number of people immigrating into the country
P= the estimated mid-year population

6. Fertility Rate: is the number of live births expected per 1000 women in their life times in a specified geographic area and for a specific point in time, usually a calendar year. Niger has the highest fertility rate of 6.49 while Singapore has the lowest fertility rate of 0.83. Can you guess why there is variation between these countries?

7. Dependency ratio: Number of dependents in a population divided by the number of working age people. It's a calculation which groups those aged under 15 with those over 65 years as the 'dependants' and classifying those aged 15-64 years as 'the working-age population'.

8. Growth Rate: = CBR – CDR +/- Net Migration Rate/ 1000

South Sudan has the highest population growth rate of 3.83% in 2017.

9. Rate of Natural Increase (RNI) = CBR-CDR (No Migration) CBR>CDR = ↑ population RNI usually expressed as % e.g., 2% = 2/100 = 20/1000 RNI ≠ population growth if migration significant 10. Adult Literacy Rate: The Adult literacy index (ALI) is a statistical measure used to determine how many adults can read and write in a certain area or nation. Adult literacy is one of the factors in measuring the Human Development Index (HDI) of each nation, along with life expectancy, education, and standard of living. Burkina faso has the lowest literacy rate of 21.8% (2015). How does literacy rate affect the standard of living of a country? 11. Life expectancy rate: Life expectancy equals the average number of years a person born in a given country is expected to live. As of 2015, the country with the highest life expectancy is Monaco at 89.52 years; the country with the lowest is Chad at 49.81

Growth of world population

- After the introduction of agriculture about 8,000 to 12,000 years ago, the size of population was small, roughly 8 million. In the first century (C.E) 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 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 birth rate and provided a stage for accelerated population growth.

- The current world population of 7.6 billion is expected to reach 8.6 billion in 2030, 9.8 billion in 2050 and 11.2 billion in 2100, according to a new United Nations report being launched. With roughly 83 million people being added to the world's population every year, the upward trend in population size is expected to continue, even assuming that fertility levels will continue to decline.

- The current world population, according to UN Department of Economic and Social Affairs, Feb, 2019, is 7,685,036,620.

- The new projections include some notable findings at the country level. China (with 1.4 billion inhabitants) and India (1.3 billion inhabitants) remain the two most populous countries, comprising 19% and 18% of the total global population respectively. In roughly seven years, or around 2024, the population of India is expected to surpass that of China.

- Among the ten largest countries worldwide, Nigeria is growing the most rapidly. Consequently, the population of Nigeria, currently the world's 7th largest, is projected to surpass that of the United States and become the third largest country in the world shortly before 2050.

- Most of the global increase is attributable to a small number of countries.

- From 2017 to 2050, it is expected that half of the world's population growth will be concentrated in just nine countries: India, Nigeria, Congo, Pakistan, Ethiopia, the United Republic of Tanzania, the United States of America, Uganda and Indonesia (ordered by their expected contribution to total growth).

- The group of 47 least developed countries (LDCs) continues to have a relatively high level of fertility, which stood at 4.3 births per woman in 2010-2015. As a result, the population of these countries has been growing rapidly, at around 2.4 % per year. Although this rate of increase is expected to slow significantly over the coming decades, the combined population of the LDCs, roughly one billion in 2017, is projected to increase by 33 % between 2017 and 2030, world population will reach 9.7 billion in 2050.

- Similarly, Africa continues to experience high rates of population growth. Between 2017 and 2050, the populations of 26 African countries are projected to expand to at least double their current size.

- The concentration of global population growth in the poorest countries presents a considerable challenge to governments in implementing the 2030 Agenda for Sustainable Development, which seeks to end poverty and hunger, expand and update health and education systems, achieve gender equality and women's empowerment, reduce inequality and ensure that no one is left behind.

- Population in the world is currently (2019) growing at a rate of around 1.09% per year (down from 1.12% in 2017 and 1.14% in 2016). It is estimated to reach 1% by 2023, less than 0.5% by 2052, and 0.25% in 2076. In 2100, it should be only 0.09% or an addition of only 10 million people to a total population of 11.2 billion. World population will, therefore, continue to grow in the 21st century.

Doubling Time of population

- Doubling time is the amount of time it takes for a given quantity of population to double in size at a constant growth rate. We can find the doubling time for a population undergoing exponential growth by using the Rule of 70. It is because the population of a country becomes double in 70 years if the growth rate is 1%. Thus, we divide 70 by the growth rate and we get the doubling time of population growth rate. For example if the growth rate is 2.08, divide 70 by 2.08 and we get 33.6 years as the doubling time of population.

- World population has doubled in 40 years from 1959 (3 billion) to 1999 (6 billion). It is now estimated that it will take another nearly 40 years to increase by another 50% to become 9 billion by 2037. The latest world population projections indicate that world population will reach 10 billion persons in the year 2055 and 11 billion in the year 2088.

World Population Milestones

- According to the United Nations, the 6 billion figures were reached on October 12, 1999 (celebrated as the Day of 6 Billion). World population reached 7 Billion on October 31, 2011. The current world population is 7.7 billion as of Feb 2019 according to the most recent United Nations estimates. The United Nations projects world population to reach 8 billion in 2023 and 10 billion in the year 2056.]

Regional division on the basis of growth rate

- On the basis of the growth rate of population the world can be divided into the following three types of areas:

1. Areas of Low Growth Rate

- Developed countries like US, Canada, Japan, Australia, New Zealand and countries of western Europe have a low growth rate of population in these countries is due to low birth rates and low death rates. The difference between the birth rate and the death rate in these countries is the lowest.

2. Areas of Moderate Growth Rate

- This category includes the developing countries like Pakistan, Afghanistan, Brazil, Bolivia, Mongolia, Indonesia and many other Africa and South American countries, where the growth rate of nearly 2 % is also included among these countries though the growth rate here has started declining.

3. Areas of High Growth Rate

- Countries like Mexico, Iran, Colombia, Venezuela, Peru, Libya, Algeria, Sudan, Kenya and Kuwait make this category. In fact, most of the African countries with a growth rate of 3% fall in this category.

Population Concepts

i. Over population: situation whereby the population is considered too large for the available resources.

ii. Under – population: a situation where the population is less than the available resources of a country.

iii. Optimum – population: a situation where the number of people that can be supported is the same as the available resources.

FACT FILE

India - Population
- The current population of India is 1,363,413,725 as of Feb 19, 2019, based on the latest United Nations estimates.
- India population is 17.74% of the total world population.
- India ranks number 2 in the list of countries (and dependencies) by population.
- The population density in India is 455 per Km2.
- 33.6 % of the population is urban (460,249,853 people in 2019)

Composition of Population

- Composition of Population includes sex ratio, literacy rate, age pyramids etc.

Sex Ratio

- The sex ratio is the ratio of males to females in a population.

FACT FILE

Qatar-315 Males per 100 females (2019)

With an astounding ratio of 315 males to a 100 females, Qatar holds the number one spot among countries with the highest male to female ratio in the world in 2018.

- As of 2014, the global sex ratio at birth is estimated at 107 boys to 100 girls (1000 boys per 934 girls).

The sex ratio of India is 933 females for every 1000 males according to 2011.

- Kerala has the highest sex ratio in the country with 1084 females for 1000 males followed by Puducherry with 1037 females for 1000 males and Tamil Nadu with 996 females for 1000 males.

Do you know?

Cisgender (often abbreviated to simply cis) is a term for people whose gender identity matches the sex that they were assigned at birth. It is the opposite of the term transgender.

What Are Population Age Pyramids?

- Population pyramids are graphical representations of the age and sex of a population. For this reason, population pyramids are also referred to as age-sex pyramids. We refer to these graphs as pyramids because they are usually shaped like triangles and population pyramids also take other shapes. Population pyramids usually have males on the left side and females on the right. There is also a vertical line in the middle of the graph that separates the males from the females.

FACT FILE

Latvia, country with the highest sex ratio in the world.

Latvia is a former Soviet Union country and experienced a great decline in male population during World War two. By 2015, there were 84.8 males for every 100 females. The proportion of the female was 54.10% of the total population. Men in Latvia have a high mortality rate due to issues such as alcoholism, smoking, and careless car driving. Around 80% of suicides in Latvia are committed by men, often because of unemployment and unrealized financial goals. Women enjoy a longer life expectancy living 11 years more than men.

Literacy Rate

- Total number of literate persons in a given age group, expressed as a percentage of the total population in that age group.

- Literacy rates continue to rise from one generation to the next. Yet according to new data from the UNESCO Institute for Statistics, there are still 750 million illiterate adults, two-thirds of whom are women. These numbers are a stark reminder of the work ahead to meet Sustainable Development Goals (SDGs) 4 and 5 and the Education 2030 targets.

Literacy rate variations between states in India

India's literacy rate is at 74.04%. Kerala has achieved a literacy rate of 93.91%. Bihar is the least literate state in India, with a literacy of 63.82%. Several other social indicators of the two states are correlated with these rates, such as life expectancy at birth (71.61 for males and 75 for females in Kerala, 65.66 for males and 64.79 for females in Bihar), infant mortality per 1,000 live births (10 in Kerala, 61 in Bihar), birth rate per 1,000 people (16.9 in Kerala, 30.9 in Bihar) and death rate per 1,000 people (6.4 in Kerala, 7.9 in Bihar).

Six Indian states account for about 70% of all illiterates in India: Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, Andhra Pradesh and West Bengal. Slightly less than half of all Indian illiterates (48.12%) are in the six Hindi-speaking states of Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Jharkhand and Chhattisgarh.

Age - Sex pyramids

- There are three types of Age - Sex pyramids: expansive, constrictive, and stationary

- Expansive Age - Sex pyramids depict populations that have a larger percentage of people in younger age groups. Populations with this shape usually have high fertility rates with lower life expectancies. Many third world countries have expansive Age - Sex pyramids. Such a population pyramid is a characteristic of newly developing countries such as Afghanistan, Bangladesh, Kenya, and some countries of Latin America.

- Constrictive Age - Sex pyramids are named so because they are constricted at the bottom. There are a lower percentage of younger people. Constrictive Age - Sex pyramids show declining birth rates, since each succeeding age group is getting smaller and smaller. The United States has a constrictive Age - Sex pyramid.

Tripura Literacy success

Presently Tripura has the highest literacy rate in India, 94.65 percent. According to the 2011 census, literacy level was 93.91 percent in Kerala and 91.58 percent in Mizoram, among the most literate states in the country. The national literacy rate, according to the 2011 census, was 74.04 percent. The Tripura success story is attributed to the involvement of local government bodies, including Gram panchayats, NGOs and local clubs under the close supervision of the State Literacy Mission Authority (SLMA) headed by the chief minister. Tripura attained 87.75 percent literacy in the 2011 census, from the 12th position in the 2001 census to the 4th position in the 2011 census. Among projects implemented by the state government to increase literacy in the state are

- 10,000 anganwadi centres have 100 percentenrollment.
- Policy of no fail till class VIII to prevent children from dropping out.
- Midday meals in all schools with an eclectic menu for all days of the week to attract more students.
- No tuition fee in government colleges.

The holistic education system, implemented with equal interest in Agartala, remote areas and the tribal autonomic areas makes sure that people in Tripura do not just become literate but educated, officials emphasized. One pointer to the government's interest in education is the near-total absence of child labor in Tripura.

Stationary Age-sex pyramids

- Stationary Age - Sex pyramids are those that show a somewhat equal proportion of the population in each age group. There is not a decrease or increase in population; it is stable. Austria has a stationary

Age - Sex pyramid.

The Purpose of the Age - Sex Pyramid

- The purpose of making this Age - Sex pyramid is to find out the comparison between the number of men and women, the number of workers, and the structure of the population in a country quickly. In addition, the creation of the Age - Sex Pyramid also has a purpose to assist the government in taking development policies.

Migration

- Migration means the movement of people from one place to the other. It is an important control of population growth after fertility and mortality. Migration of people into an area from outside is called immigration or in-migration while movement out of an area to other regions is called emigration or out-migration.

- Immigration leads to an increased growth rate of population, emigration lowers the growth rate of population in the source region. Mexico's emigration problem is a unique one, with more than 98% of all Mexican migrants living in the U.S.A, the country with

which Mexico shares a border that runs 3110 km in length. The Mexican emigration rate increased substantially since the 1960s and, with more than 11% of Mexicans living abroad, Mexico is the country with the largest number of emigrants in the world. According to estimates from the UN 2015 report, in 2013, the United States, Germany and Russia had the largest number of immigrants of any country, while Tuvalu and Tokelau had the lowest immigrant.

Types of migration
1 Net Migration

· Net Migration is the difference between immigration (in-migration) and emigration (out-migration).

· Positive value of net migration is that more people coming in and population growth, for example, 44% of North America and 88% of Europe. Negative value of migration is more people coming out and population decline.

2 International Migrations

· Emigration is an indicator of economic and or social failures of a society. It is a crossing of a national boundary. It is easier to control and monitor. There are laws to control or inhibit these movements. Between 2 million and 3 million people emigrate each year. Between 1965 and 2000, 175 million people have migrated: it accounts for 3% of the global population.

3 Internal Migrations

· It occurs within a country. It is crossing of population within domestic jurisdictional boundaries. It is the movement of people between states or provinces. There is little government control over internal migration.

4 Local Migrations

· Local migrations are the migration of the people within state or district. No state boundaries are crossed in the local migration. It happens for several reasons such as buying a new house in the same town or city, difficult to research since they are usually missed in census data. It is based on change of income or lifestyle. Americans change residence every 5 to 7 years.

5 Voluntary migrations

· Voluntary migrations are where the migrant makes the decision to move. Most migration is voluntary.

6 Involuntary migrations

- It is a forced migration in which the migrant has no role in the decision-making process. It includes mostly slavery. It is estimated that about 11 million African slaves were brought to the Americas between 1519 and 1867. In 1860, there were close to 4 million slaves in the United States. People involve in the involuntary migration are refugees due to military conscription, children of migrants, people in the situations of divorce or separation.

Brain Drain

- Brain drain is related to educationally specific selective migrations. Some countries are losing the most educated segment of their population. It can be both a benefit for the receiving country and a problem to the country of origin.

- Receiving country: it is getting highly qualified labor which is contributing to the economy right away. It promotes economic growth in strategic sectors: science and technology. It does not have to pay education and health costs, for example, 30% of Mexicans with a PhD are in the US.

- Country of origin: Education and health costs are not paid back to the country of origin. It is losing potential leaders and talent: Between 15 and 40% of a graduating class in Canada will move to the US. It has long term impact on economic growth. It has the possibility of getting remittances. Many brain drain migrants have skills which they can't use at home: The resources and technology may not be available there. The specific labor market is not big enough.

Causes of Migration

- We can divide factors causing migrations into two groups of factors as push and pull Factors.

- Push and Pull factors Push and pull factors are those factors which either forcefully push people into migration or attract them. A push factor is forceful, and a factor which relates to the country from which a person migrates. A pull factor is something concerning the country to which a person migrates. It is generally a benefit that attracts people to a certain place. Push and Pull factors are usually considered as north and south poles on a magnet.

- Push Factors: Not enough jobs, few opportunities, desertification, famine/ drought, political fear/ persecution, poor medical care, loss of wealth, natural disasters, death threats, slavery, pollutions, poor housing, landlords, bullying and poor chances of finding courtship

- Pull Factors: job opportunities, better living conditions, political and or religious freedom, enjoyment, education, better medical care, security, family links, industry, better chances of finding courtship.

Overpopulation

- Overpopulation is the state whereby the human population rises to an extent exceeding the carrying capacity of the ecological setting. In an overpopulated environment, the numbers of people might be more than the available essential materials for survival such as transport, water, shelter, food or social amenities. This regularly contributes to environmental deterioration, worsening in the quality of life, or even the disintegration of the population. Due to immigration, the decline in mortality rates, medical breakthroughs, and increased birth rates, populations will always increase and eventually gives rise to overpopulation.

Impacts of Overpopulation

- Overpopulation thus contributes to some of the most compelling environmental problems which encompass:

1. Depletion of Natural Resources

- As human population keeps on increasing, exhaustible natural resources such as arable land, coral reefs, fresh water, fossil fuels, and forests continue to drop sharply. This creates competitive demands on the vital life-sustaining resources and contributes to an incredible decline in the quality of life.

2. Accelerated Habitat Loss

- The increased loss of the ecosystems including wetlands, wildlife, rainforests, coral reefs, aquatic life forms, and grasslands are highly influenced by overpopulation. For example, rainforests originally covered 14% of the entire earth's surface. Today, rainforest only cover about 6% of the earth's surface and scientists' project it may even become less in the next four decades judged by the current rate of vegetation removal, logging, and deforestation. Besides, due to environmental pollution, 30% of the ocean reefs have been lost because of acidification and global warming since 1980. Also, more than half of the original wetlands have been lost.

3. Amplified Climate Change and Global Warming

- The more the number of people, the more the number of vehicles and industries would be. Furthermore, more population tends to increased use of energy sources such as coal and firewood which contributes to increased greenhouse gas emissions.

- Hence, because of the accumulation of human generated greenhouse gases and carbon footprint in the atmosphere, the planet has continued to witness amplified global warming and climate change. The effects of climate change and global warming are resulting in extreme hunger, drought, flooding, and loss of habitat.

4. Loss of Biodiversity

- Overpopulation has caused encroachment into frontier forests and destruction of natural ecosystems that has led to the mass extinction of species. The number of threatened species persists to multiply in number whereas some have completely gone extinct. This is because of human activities such as acidifying water, over exploitation of natural resources, pollution, over fishing, poaching, and destruction of natural systems which are necessary for the survival of different species.

5. Decrease of fresh water

- The unrelenting nature of overpopulation on the earth has destroyed most of the world's fresh systems. Most of the lakes, streams, rivers and ground water making up fresh water have been polluted. According to the global outlook of water resources, these activities influenced by over population have only left less than 1% of the planet's fresh water readily accessible for human utilization.

- Water vulnerability is already affecting many overpopulated nations, especially in some developing countries, as the demands for water tend to be more than the accessible water. Millions of fish species from freshwater ecosystems are on the verge of extinction. Thus, as human inhabitants rise in number, so will the problem of quality freshwater accessibility.

6. Lower Life Expectancy and Diminished Quality of Life

- Overpopulation lowers the standards of living since it creates stress on the vital resources for survival and increases the difficulty of accessing the consistent supply of quality food, water, energy, health, security and shelter. Consequently, it makes the poor to become poorer, and they often opt for poor living conditions to survive.

- Eventually, it gives rise to lower life expectancy. The situation is serious in developing nations such as southern Asia and sub-Saharan Africa where most of the poor populations submit to inadequate and poor diets.

7. Rise in Unemployment, Crime Rate, and Violence

- In overpopulated nations, the available jobs are fewer than the overall job seeking population. This contributes to high levels of unemployment. In turn, lack of unemployment leads to elevated crime rates because of theft, drug cartels, and militia groups which are exploited as options for attaining basic resources and necessities such as food, good living standards, and wealth. Violence and conflicts arise when people start competing for the available limited resources.

8. Increased Intensive Farming

- As population has grown over the years, farming practices have evolved to produce enough food to feed larger numbers of people. However, intensive farming methods also cause damage to local ecosystems and the land, which may pose problems in the future.

Measures to control overpopulation

- Here are some unique solutions to overpopulation:

1. Creating Awareness Campaigns

- Using both social and mainstream media, we can clearly tell people around the world the truth about overpopulation crises and what must be done to solve them the right way.

2. Promotion of adopting child

- Adoptions become a consideration for family planning, particularly among socially conscientious communities. And today, it has become a de-facto solution for people who are interested in starting a family, yet having concerns about overpopulation.

3. Aiming for Single-Child Families

- According to statistics, hundreds of thousands of people are being added to the planet every day, which is an unsustainable rate. Hence, it is need of hour we should aim for single-child families.

4. National Security issue

- Over populated countries should treat population boom as an issue of national security. As you can see, similar to food insecurity and climate change, uncontrolled and rapid population growth can be a national security threat in a way that it results to instability.

5. Changing Social Norms

- Some couple chooses not to have children and we have to respect their decision. This way we will be able to help curb the problem of overpopulation.

6. Providing Tax Benefits or Concessions

- Governments of various countries can come up with various regulations and policies related to tax exemption to help solve overpopulation. For example, they can waive certain parts of income tax or lower income tax rates for couples who have one or two children.

Introduction

An interesting traditional Chinese custom says that a husband should carry his bride over a pan of burning coals before crossing the threshold of their home as husband and wife. According to tradition, the ritual ensures that the wife will have an easy and successful labour. Fire walking is also performed by some Chinese people as a means to prevent natural disaster'. 'In Cypriot culture, do not give white lilies as they are used at funerals. It is polite to finish everything on your plate. If you have not finished eating, cross your knife and fork on your plate with the fork over the knife'. It indicates you have finished eating by laying your knife and fork parallel across the right side of your plate'. Do you know some interesting custom practiced in our culture?

- Culture is the total way of life that characterizes a group of people. There are thousands of cultures existing today and each contributes to global diversity. There are so many ways that people can be culturally different. Specifically, a culture consists of numerous cultural components that vary from one culture group to the other. Some of the cultural parameters are religion, language, architecture, cuisine, technology, music, dress, gender roles, law, education, government, agriculture, economy, sport, values, and many more.

Culture Region

- A culture region is a portion of Earth that has common cultural elements and has distinct cultural authority from other regions. Any number of cultural components may be used to define culture regions. A map of world religions, for example, includes a shaded area in South Asia where Hinduism is dominant.

- Culture regions differ greatly in size. Some are exceedingly large, like the Islamic culture region that encompasses millions of square km of North Africa and Southwest Asia. Some are very small, like Spanish Harlem, which encompasses about three square km of Manhattan. Many others are of intermediate size, like the Corn Belt, which occupies a portion of the mid-western United States.

Cultural Diffusion

- Cultural diffusion is the spread of cultural beliefs and social activities from out group of people to another. Mixing of world culture through different ethnicities, religions and nationalities has only increases with advanced communication, transport and technology.

Cultural Landscape

- Cultural Landscapes have been defined by the World Heritage Committee as "cultural properties representing the combined works of nature and of man".

- The World Heritage Committee has identified and adopted three categories of cultural landscape. The three categories extracted from the Committee's Operational Guidelines, are as follows:

  (i) "A landscape designed and created intentionally by man".
  (ii) An "organically evolved landscape" which may be a "relict (or fossil) landscape" or a "continuing landscape";
  (iii) An "associative cultural landscape" which may be valued because of the "religious, artistic or cultural associations of the natural element".

Cultural Interaction

- Cultural interaction focuses on the relationships that often exist between cultural components that characterize a given community. Different factors interact with each other and give rise to prevalent trait.

- What language do you speak? What dress do you wear? What food do you like? What is the structure of the house you live in? For the above question by searching the answer we can learn the culture of a human society.

- Culture shapes our identity and influences our behaviours. Culture refers to the sharing language, beliefs, values, norms, behaviors and material objects, which are passed from one generation to the next generation. Cultural geography is the branch of human geography which deals about the areal organization of various cultural aspects in relation to total environment. Some of the cultural aspects are as follows:

Language

- Language plays great force in socialization and historical transmission, which is the primary instrument for transmitting culture. Human can bind any group of people through the network of interaction. Languages are in written or oral form. India (780) has the world's second highest number of languages, after Papua New Guinea (839).

Customs

- Custom in law is the established pattern of behavior that can be objectively verified within a particular social setting. A claim can be carried out in defense of what has always been done and accepted by law. It becomes characteristic of the group of people performing the act.

- Habit is a similar word which is adopted by an individual and it has been adopted by most of the people of the ethnic group or society.

Norms

- Norms refers to attitude and behaviours that are considered normal, typical or average within the group. Cultural norms are the standards we live by. They are the shared expectations and rules that guide behaviour of people within social groups. Cultural norms are learned and reinforced from parents, friends, teachers and others while growing up in a society. Norms often differ across cultures, contributing to cross-cultural misunderstandings.

Values

- Values refer to intangible quality or beliefs accepted and endorsed by a society. A culture's values are its ideas about what is good, right, fair, and just. Sociologists disagree, however, on how to conceptualize values. Conflict theory focuses on how values differ between groups within a culture, while functionalism focuses on the shared values within a culture.

Cultural Heritage u

- Cultural Heritage is an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values. Cultural Heritage is often expressed as either Intangible or Tangible Cultural Heritage. As part of human activity Cultural Heritage produces tangible representations of the value systems, beliefs, traditions and lifestyles. As an essential part of culture as a whole, Cultural Heritage, contains these visible and tangible traces form antiquity to the recent past.

Cultural Heritage types

- Cultural Heritage can be distinguished in: Built Environment (Buildings, Townscapes, and Archaeological remains), Natural Environment (Rural landscapes, Coasts and shorelines, agricultural heritage) and Artefacts (Books & Documents, Objects, and Pictures).

Cultural diversity

- Cultural diversity refers to having different cultures, respect to each other differences. Cultural diversity is important; because of work place and show increasingly consist of various cultural, racial and ethnic groups. We can learn from one another but first we must have a level of understanding. Cultural diversity exists in many countries around the world, but it can be challenging and, at times, problematic. Through this lesson, you will learn how to define cultural diversity and explore some of the ways in which it influences society.

Cultural Traits

- A cultural trait is a characteristic of human action that's acquired by people socially and transmitted via various modes of communication. Cultural traits are things that allow for a part of one culture to be transmitted to another. There are millions of culture traits, a

trait can be an object, a technique, a belief or an attitude. Culture traits are interrelated with each other, their collective function forms culture complex.

Cultural Realms of the World

- Cultural realm refers to a type of cultural region. Cultural region is a continuous geographical area characterized by cultural homogeneity. It may be classified into three categories as macro, meso and micro region. Cultural realm is classified based on the attitude, religious belief, language, racial group, technological development, etc. There are twelve Cultural realms in the modern world. Let us discuss some of them briefly.

Occidental Realm

- Occidental culture is the culture of the European society. It is influenced, to a great extent, by Christianity. It has regional modifications on the basis of varying levels of industrialisation, political and economic thought, colonisation, commercialisation, urbanisation, and development of transport system, land development of social, political and economic institutions.
- In many parts of the occidental culture, the impact of non-religious factors, particularly the effect of modernisation, is so great that the religious values are sidelined. Post-industrial Europe is fast emerging as a society where traditional values are nearly abandoned. The occidental culture covers a vast area. It is further divided into six sub-regions considering the impact of regional environment.

    (i) West European is the most industrialised and urbanised culture.

    (ii) Continental European culture is influenced by different political and economic thoughts, while Christianity remains an important influence.

    (iii) Mediterranean Europe includes countries lying to the south of the Alps. It is the region of dominance of Christianity.

    (iv)Anglo-American and

    (v) Australian cultural realms are practically the offspring's of west European culture. Both are inhabited by migrants from west Europe. There are only some regional differences.

    (vi)Latin American culture is very similar to the Mediterranean culture. It is the only region of occidental culture which lies in the tropics and is underdeveloped. It became a part of the occidental culture as a result of conversion of tribes into Christianity. The colonial languages, Spanish and Portuguese, have become the state languages. Regional architecture has been influenced by the Spanish and Portuguese styles. Practically all countries maintain economic, cultural and social ties with the Mediterranean countries.

Islamic Cultural Realm

- The Islamic Cultural Realm is influenced by Islamic values. It covers a vast geographical area from Morocco in the west to Pakistan in the east. The population is sparsely distributed due to inhospitable environment. The coasts, river basins and oases have been the cradles of Arabian culture in this realm. The British call it the Middle-East while the

Germans call it a region of oriental culture. This cultural realm lies between the traditional Indian culture in the east and the modernised European culture in the west.

- Islamic culture is highly orthodox and based on traditional beliefs, the impact of which can be seen in high female illiteracy rates. These countries have very high per capita incomes, but the level of modernisation is very low.

Indie Cultural Realm

- Indie Cultural Realm is the culture of the Indian sub-continent. Baker called it a sub-continental culture, while D. Stamp used the term paddy culture. This cultural realm is well-defined; it lies between Himalayas in the north, Indian Ocean in the south and Hindukush Mountains in the west.

- This cultural realm is characterized by joint family, village community, caste system, semi-feudal land relations, subsistence agriculture, paddy farming, seasonal climate changes and agricultural season coming at the same time all over the region. The culture of this region is greatly influenced by Vedic values. Though the region is inhabited by various communities, the social system has the hidden impact of Vedic cultural values.

East Asian Culture

- This culture is basically a Buddhist culture with regional modifications. True Buddhist culture can be seen in South Korea and Japan. Even these two countries have felt the impact of industrialisation, urbanisation and modernisation. The culture of mainland China has modified the Buddhist system. This culture was adopted after the Second World War.

South-East Asian Culture

- It is a transitional culture lying at a place where different cultures have intermingled. Dominance of Buddhism can be seen in Myanmar, Thailand and Vietnam. Influence of Christianity can be seen in the Philippines and of Indie culture over islands of Indonesia. The Islamic influence is evident in Malaysia and the Indonesian islands. No other region has such peculiarities.

Meso-African Culture

- This culture is also known as the Negro culture. It principally includes tropical Africa. Similar cultural systems can be seen among the American Red Indians, Latin American tribes, Australian aboriginals and several tribes of Asia-Pacific region.

- Historian Toynbee has used the term 'marginalised culture' for these traditional culture units. Some geographers even include Eskimos under this cultural realm. Thus, it is a widely scattered cultural realm characterised by marginalised and relatively isolated communities.

Major Culture Hearths

- Areas from which important culture traits, including ideas, technology, and social structures, are originated.

Folk Culture

- Culture traits that are traditional, no longer widely practiced by a large number of people, and generally isolated in small, often rural, areas.

Races

- The race is a group of people with more or less permanent distinguishing characteristics. There are skin colour and hair colour to which persons concerned attach certain interpretations. Objectives and scientific classification are the division of mankind in to racial groups should be done on the basis of measurable physical features and qualities inherited from a common ancestor. The important features on the basis of which the races are identified and classified include skin colour, stature, shape of head, face, nose, eye, type of hair, and blood group. Human races are classified in to four broad groups:

    1. Negroid, 2. Caucasoid, 3.Mongoloid and 4.Australoid.

HOTS
If human being originated from one point, Africa and spread to rest of the world, how could they become different races?

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1. The Negroid

- They are usually called as "black race". They have the darkest skin tone than other races, and other common characteristics are the slopped forehead, thick lips, wide nose, and dark hairs. They are living in Sub-Sahara Africa.

2. The Mongoloid

- They have the folding eye lids, almond shaped eyes, yellowish skin tone, and V shaped cheeks. Native Americans and Eskimo are also classified as Mongoloid. Compared to the other races, they have the least body hair, least body odour, and smallest limb ratio. Their facial structure is likely to adapt cold mild wind. They are living in East Asia.

3. The Caucasoid

- The Caucasoid is known as "white people" characterised by the pointy nose, vertical forehead, pinkish/orange skin tone, visible brow ridge, and colorful eyes/hair. Some believe that their light skin tone is meant to receive more sunlight due to Europe's climate. Some believe that their nose structure is meant to keep the nose moisture from getting dried by the wind. They are living in Europe and Middle East.

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4. Australoid Race

· They have visible eye ridge, wide nose, curly hair, dark skin tone, and short in height. Some believe that their visible ridge helps them to eat stiff foods. They are living in Australia and Papua New Guinea.

Characteristic of Major Races

Feature	Caucasoid	Monogoloid	Negroid
Skin colour	Pale reddish white to olive brown.	Saffron to yellow brown, reddish brown.	Brown to black brown yellow brown.
Stature	Medium to tall.	Medium tall to medium short	Tall to very short.
Face	Narrow to medium broad, tends to high no prognathism.	Medium broad to very broad malars high and flat tends to medium.	Medium broad to narrow tends to medium high strong prognathism.
Head form	Long-broad and short medium, high-very high	Medium height, predominantly broad.	Predominantly long low height.
Hair colour	Light blonde to dark brown, straight to wavy.	Brown to brown black, straight.	Brown black light curl and wooly.
Body build	Linear to lateral slender to refuge.	Tend to be lateral, some linearity evident.	Tend to be linear and muscular.
Nose	Usually high, narrow to medium broad.	Low to medium form, medium broad.	Low, medium to very broad.
Blood group	more A than B	High in B	High is Rh(D)
Eye	Colour: light blue to dark brown, lateral eye –fold occasional.	Colour: brown to dark brown, medial epicanthic fold very common.	Colour: brown to brown block, vertical eye-fold common.

Ethnicity

· Ethnicity is a concept referring to a shared culture and a way of life. This can be reflected in language, religion, material culture such as clothing and cuisine, and cultural products such as music and art. Ethnicity is often a major source of social cohesion and social conflict. The world is home to thousands of different ethnic groups, from the Han Chinese (the largest ethnic group in the world) to the smallest indigenous groups, some of which include only a few dozen people. Almost all of these groups possess a shared

history, language, religion, and culture, which provide group members with a common identity.

- India is a unique country with great diversity in ethnicities, race, religion, language, culture, cuisine and in every other aspect of the human society. Indian civilization is one of the oldest in the world and primarily consists of the Indo-Aryans of North India and the Dravidians of South India, the people of the Indus Valley Civilization while the former migrated to the country at about 1800 BC. As India has such a diverse cultural demographic, it makes sense that the country is also.

Dravidians

The Dravidian people are any native speakers of the Dravidian languages in the Indian Subcontinent. Almost all the Dravidians live in the southern part of India. The five major ethnic groups of Dravidian people in India are Tamil, Telugu, Kannada, Malayalam, and Tulu.

The ancient Indus Valley civilization in India was believed to have been of Dravidian origin in northern India, but then the Dravidian people were pushed south when the Indo- Aryans came in and the Kuru Kingdom in northern Indian arose. Later South India was dominated by the three Dravidian kingdoms of the Cheras, Cholas, and the Pandyas. These three kingdoms have been shown to sponsor the growth of literature, music, and the arts and to have done extensive trading. The three kingdoms also supported and were tolerant of Buddhism, Jainism, and Hinduism. The major languages spoken by the Dravidian people are Tamil, Telugu, Kannada, Malayalam, and Brahui.

Do you know?

Arabic script Brahui is the only Dravidian language which is not known to have been written in a Brahmi based script, instead, it has been written in the Arabic script since the second half of the 20th century in Iran Pakistan and Afghanistan.

Religion

- Religion is not a vague fear or unknown powers not the child of terror, but rather a relation of all the members of a community to a power that has the good of the community at heart and protects its law and moral order. Religion produces a distinct attitude towards life which affects the further development of the society. Indeed most cultural situations show the mutual interaction between religion and socio-economic and politico-cultural factors.

Classification of religion

- Religion may be classified based on the belief in god. Monotheistic: the followers of monotheism believe in a single god (Islam, Christianity). Polytheistic: the followers of polytheism believe in many gods (Hinduism). Another classification is on the basis of areas of origin such as Eastern religion, Western religion, far Eastern religion, African religion, Indian religion, etc. Geographers generally classify religions into following;

- Universalizing religions – Christianity, Islam, and Buddhism.
- Ethnic religions – Hinduism, Shintoism (Japan), Chinese faiths, Judaism.
- Tribal or traditional religions – animism, shamanism, secular (non-religious and atheists).

Major religions of the world

· Major religions of the world are classified based on the followers. They are Christianity, Islam, Hinduism, Buddhism, and Judaism. Other important religions include Chinese folk religions, Sikhism, Confucianism, Shintoism etc.

· Christianity is a universal religion which has the largest number of followers in the world. They are spread in Europe, Anglo America, Latin America, Africa, Asia and Oceania. Its sacred book is "Bible". Islam is the second largest religion of the world. The largest concentration of the Islam is in the South West Asia, Central Asia, South Asia and South East Asia Followed by the North Africa. Shia and Sunni are its two main sects. Its sacred book is Kuran.

· Hinduism is the oldest ethnic religion of the world which was founded about 3000 B.C (B.C.E) in India. Today it has over 8 million followers in the world but main concentration is in India and Nepal. Nearly 99 percent of the total Hindu population is concentrated in south Asia. Its sacred books include the Vedas, the Upanishads, the Epics, the Ramayana and Mahabharata, and the Bhagavad Gita. Buddhism is also one of the oldest religions of India which was founded by Lord Buddha around 525 B.C (B.C.E). Its spread in several Asian countries (China, Myanmar, India, Srilanka, japan, Mangolia, Korea and South East Asian countries) due to its liberal philosophy. Its two main sects are Hinayana and Mahayana.

· Judaism is the oldest Monotheistic faith which is regarded as the parent of Christianity. It originates 4000 years ago in the Middle East. At present it has about 14 million followers living in U.S.A, Europe and Asia. Chinese religions include two main beliefs called Confucianism and tao-ism. Confucianism was established by Confucious (551-479 B.C (BCE)). Taoism was established by Lao Tse (604-517 B.C (BCE)).

· Jainism is also born in India as a reaction to orthodox Hinduism. It was founded by Lord Mahavir who was a Contemporary of Lord Buddha. Its followers are mostly concentrated in India. It is an offshoot of Hinduism which was established in the 15th century by Guru Nanak. It remained confined to Punjab state and has accepted Gurumukhi as its language.

Tribal Religions

· Tribal religions are the special forms of ethnic religion. The tribal people are generally in the Neolithic stage of social development. Tribal people are strikingly different and diverse in their culture, social and economic life. They cherish their own distinct and have

maintained a close relationship to the land and natural environment. Most of them live according to their traditions and are engaged in food gathering, hunting, fishing, primitive agriculture etc, there are about 300 million indigenous people worldwide, constituting about four percent of the total population of the world living in more than sixty countries.

Do you know?
The percentage of tribal to total population is as high as over 90 percent in Greenland, 66 percent in Bolivia and 40 percent in Peru. In India share of tribal people to total population is 8.2 percent.

· Sometimes the tribal people are being termed as the fourth world. The first – second and third world believed that "the land belongs to the people" whereas the fourth world believes that "the people belongs to the land

Tribal Distribution in world

· Sme major tribal group of the world particularly who are living and struggling

1. Equatorial Forest region: Pigmy, Semang, Sakai, Boro, Papuan, etc.

2. Grasslands: Masai, Kyrghizs, etc.

3. Tropical deserts: Bedowin, Bushman, Aborigines etc.

4. Mountainous region: Bhotia, gujjar, Naga etc.

5. Monsoon regions: Gonds, Santhals, Todas, Bhils, etc.

6. Arctic cold regions: Eskimo, Lapp, Alute, Chukchi etc.

Pigmies

· The pigmies are Negroid people and are also called Negrillos. They are the nearest approximation of human being to animal. They are short stature, flat nosed, wooly haired, long headed and black people. The average height of men and women are found 150cm. So they are also called dwarf. The pigmies are those who live in scattered parts of tropical Central Africa. They are found in many sub-groups in the equatorial forest region of Africa mainly in Congo basin 3ºN and 3ºS latitudes along both sides of the equator. In addition some groups of Pigmies are also found in the forests of Philippines and New Guinea.

Masai

· The Masai of east Africa belong to the pastoral society and are known as the best and most typical cattle herders not only of Africa but also of the world. Masai people are tall

and slender with ling feet, hands and fingers. Their skin colour ranges from light chocolate to dark brown. They have high and long head, thin face and nose. Their lips are less thick than that of Negroid people. Masai occupy the interior plateau of the equatorial Africa. The territory of the Masai lies between 1ºN and 6ºS latitudes and covers all the rift valleys in this region.

Bedouin

- In Arabic, Bedouin means desert dwellers. The Bedouins are most important among the tribal of South West-Asia and North Africa. They are pastoral nomads and keep camel, sheep, goats, horse etc. The Bedouins occupy the desert areas of the Arabian Peninsula including Saudi Arabia, Yemen, Oman, Syria and Jordan. The Bedouins belongs to the mixture of Mediterranean and Armenian races. They are medium stature people with long narrow face, prominent nose, dark eyes and hair. Their complexion is wheatish to pale.

Bushman

- Bushman is the tribal people of Kalahari Desert in southern Africa who are still engaged in hunting and gathering economics. They are on constant run for both food and water. Their homeland Kalahari Desert lies in Botswana, Namibia and southern Angola. The bushman territory is a wide plateau about 2000 meters above the sea level with sub-tropical climate. The bushman are including in the Negroid stock. They are very short in stature and have long head, short and flat ears, and yellowish brown complexion. On the whole the Negroid characteristics prevail among the Bushman.

Eskimos

- Eskimos also called Inuits are tribes of tundra cold region in Canadian northland, Alaska, Greenland and north-eastern Siberian coastal region. The Eskimos are Mongoloid race. The main physical characteristics of the Eskimos are short stature, Flat narrow face, small snub nose, yellow –brown complexion and coarse straight black hair. Hunting and fishing are the main occupations of the Eskimos. They live in igloo and practice hunting way known as Maupak. The Eskimos wear clothes of caribous or reindeers skin and other furs.

- Eskimos are migratory by nature and construct ice houses called Igloos. For travelling on ice shield the Eskimos use sledge which is usually built either of whale bone or of wood whichever is available. It is drawn by two or more dogs, caribous or rain deer.

Tribal in India

- India is the home to large number of indigenous people, who are still untouched by the lifestyle of the modern world. With more than 84.4 million, India has the largest population of the tribal people in the world. These tribal people also known as the adivasis are the poorest in the country, which are still dependent on haunting, agriculture

and fishing. Some of the major tribal groups in India include Gonds, Santhals, Khasis, Angamis, Bhils, Bhutias and Great Andamanese. All these tribal people have their own culture, tradition, language and lifestyle. There are more than 50 tribal groups in India. Most of the tribal belong basically to the Negrito, Australoid and Mongoloid racial stocks.

Bhils

- Bhils are popularly known as the bow men of Rajasthan. They are the most widely distributed tribal groups in India. They form the largest tribe of the whole South Asia. Bhils are mainly divided into two main groups the central or pure bills and eastern or Rajput Bhils.

Gonds

- The Gonds are the tribal community mostly found in the Gond forests of the central India. They are one of the largest tribal groups in the world. Gonds have been largely influenced by the Hindus and for the long time have been practicing the Hindus culture and traditions.

Santhals

- Santhals are the third largest tribe in India. They are mostly found in the states of West Bengal, Bihar, Odisha, Jharkhand and Assam. They belong to the pre- Aryan period and have been the great fighters from the time of the British.

Munda

- Munda tribe mainly inhabit in the region of Jharkhand, although they are well spread in the states of West Bengal, Chhattisgarh, Odisha and Bihar. Munda generally means headman of the village. Hunting is the main occupation of the Mundas tribe.

Khasi

- Khasi tribe is mainly found in the KhasiJaintia hills in Meghalaya and in the states of Punjab, Uttar Pradesh, Manipur, West Bengal and Jammu and Kashmir. They form the large part of the population in the state of Meghalaya.

Angami

- Angami tribe belongs to the extreme north eastern part of the country, in the state of Nagaland. The total population of the Angamis is around 12 million. They are quite popular for their woodcraft and artwork. Sekrenyi is the main festival celebrated among the Angamis in Nagaland.

Bhutia

- Bhutia tribes are of the Tibetan origin. They migrated to Sikkim around 16th century. In the northern part of the Sikkim they are known as the Lachenpas and Lachungpas. Bhutias forms 14% of the total population of Sikkim. Losar and Losoong are the main festivals celebrated among the Bhutia tribes.

The Sentinelese tribe, the most dangerous tribe in the world!

Located far into Andaman and Nicobar Islands, the Bay of Bengal in the Indian Ocean, North Sentinel Island is one of the most isolated places on earth. This remote island is home to the Sentinelese tribe, the most dangerous tribe in the world. The Sentinelese is hunter-gatherers, as agriculture is not known to them. Their diet consists mainly of coconuts and fish that can be found in the shallow waters around their shores. The Sentinelese would be described as Stone Age people. The women wear fibre strings tied around their waists, necks and heads. The men also wear necklaces and headbands, but with a thicker waist belt. The men carry spears, bows and arrows. Sometimes the Sentinelese appeared to make friendly gestures at others they would take the gifts into the forest and then fire arrows at the contact party. The population of North Sentinel Island is estimated at 250 individuals. The Sentinelese does not want help from outsiders.

Chenchu

- Chenchu inhabit in the Nallamalai hills, which have been the part of the Nagarjuna Segar Tiger Sanctuary for centuries in Andhra Pradesh, India. They are mainly found in the districts of Mahabubnagar, Nalgonda, Praksham, Guntur, and Kurnool.

Great Andamanese

- Great Andamanese is the Negrito tribe inhabitant in the Andaman group of Islands. They form the largest population among the other tribes found in these islands. According to the census the population of Great Andamanese is now limited to few individuals.

Tribals in Tamil Nadu

- Tribes of Tamil Nadu are concentrated mainly in the district of Nilgiris. Of all the distinct tribes, the Kodas, the Thodas, the Irulas, the Kurumbas and the Badagas form the larger groups, who mainly had a pastoral existence. Other tribes include, Kattunayakan and Paliyan amongst others.

- According to census 2011, tribal population in Tamil Nadu is 7, 94,697. There are around 38 tribes and sub-tribes in Tamil Nadu. The tribal people are predominantly farmers and cultivators and they are much dependent on the forest lands.

- Toda: Men from the family of the tribes are occupied in milking and grazing their large herds of buffaloes. Their settlements are known as 'Munds'. They do not worship any god and their consciousness is cosmic. They live in Nilgiris. Today, there are about a thousand Todas left.

- Badaga: The Badagas belong to the backward class and are not classified as tribal. They are an agricultural community, dwelling in the higher plateau of the Nilgiris district in the state of Tamil Nadu. They are engaged in tea cultivation and potato growing. They form the largest group of tribes and boast a rich oral tradition of Folk tales, songs and poetry. These tribes are Hindu and belong to the Shiva sect.

- Kota: The Kotas are mainly concentrated in the Tiruchigadi area in the Nilagiri hills. They are distinguished by their colorful Folk dances and are basically musicians, who play at Badaa funerals. They are mainly engaged in producing handicrafts. These tribes of Tamil Nadu are expert iron smiths, potters and carpenters. In order to maintain distance and status in society, the Kotas implement elaborate tattoos.

- Kurumbas: The Kurumbas tribes of this state inhabit the intermediate valleys and forests in Villages and were known for their black magic and witchcraft in the past. Their way of living today has changed from their original gathering and hunting existence to working in Coffee and Tea plantations as laborers. Kurumbas are perhaps the only main caste in southern India that has a specialized and distinctive Kurumbas Language.

- Irula: The Irula tribes of Tamil Nadu occupy the lower slopes and forests at the base of the Nilgiri Hills. They constitute the second largest group of tribes after the Badagas and are similar to the Kurumbas in many ways. This tribe produces honey, fruits, herbs, roots, gum, dyes etc., and trades them with the people in the plains. In the recent times the Irulas help in catching snakes and collect the snake venom.

- Paliyan: They are of the food gathering communities of Tamil Nadu. It is believed that the Paliyan originally belonged to the Palani hills. They are distributed in the districts of Madurai, Tanjavour, Pudukkottai, Tirunelveli and Coimbatore.

Language

- Language is an identification mark for different cultures. Because language is essential to communication, it strongly influences the sort of political, social and economic we create. As a result, economic and religious system frequently follows patterns of language distribution and political borders quite often parallel linguistic boundaries. In modern times linguistic diffusion has been facilitated by trade, tourism, media and international

organizations. It has helped in the development of the linguistic pluralism. The greatest linguistic diversity is attributed to heterogeneous societies.

Do you know?
Tamil is one of the longest-surviving classical languages in the world. The earliest period of Tamil literature, Sangam literature, is dated from 300 BC (BCE) – AD (CE) 300. It has the oldest extant literature among Dravidian languages.

Major linguistic Families of the World

- The classification of languages by origin and historical development is known as a genetic classification. The languages which are the descendants of common ancestral language are called proto – language.

- G.L. Trage has classified the languages of the world into 7 linguistic phylum and 30 linguistic families. Linguistic families are further classified in to sub families of languages, which denote major languages.

    - 1.Indo-European - a. Indo-Iranian, b. Latin or Romantic, c. Germanic, d. Balto – Slavic, e. Celtic, f. Hellenic
    - Sino-Tibetan - a. Chinese, b. Tibetan, c. Burman
    - Afro-Asiatic – a. Semitic, b. Egyptian, c. Cushitic, d. Chadic
    - African – a. Niger – Congo (Atlantic, Voltaic, Benu-Nagar)
        b. Sudanic (Chari-Nile, Saharan,)
        c. Click Languages (Khoisan)
    - Ural-Altaic - a. Finno-Igric, b. Turkic, c. Mangolic, d. Tunguzic
    - Dravidian- malayo – Polynesian- - a. Dravidian, b. Malayan, c. Melanesian, d. Micronesian, e. Polynesian, f. Austro- Asiatic.
    - Palaeo Asiatic- a.Yukaghir

Do you know?
As many as half of the world's 7,000 languages are expected to be extinct by the end of this century; it is estimated that one language dies out every 14 days.

Major Languages of India

- India has a rich Linguistic heritage and has heterogeneous ethnic and social groups, which have their own languages and dialects. According to census of India 1961, there were 187 languages spoken by various sections of Indian society. 23 major languages were spoken by about 97 percent population of the country. 22 languages excluding English are mentioned in the eighth schedule of the constitution of India as follows; Kashmiri, Punjabi, Hindi, Urdu, Bengali, Assamese, Guajarati, Marathi, Kannada, Tamil, Telugu, Malayalam, Sindhi, Sanskrit, Oriya, Nepali, Kongani, Manipuri, Bodo, Dogri, Maithili and Santali of these languages, 14 were initially included in the Constitution. Subsequently, Sindhi was added in 1967 by 21st constitutional amendment act; Konkani, Manipuri and Nepali were added in 1992 by 71st Constitutional Amendment Act; and

Bodo, Dogri, Maithili and Santali were added in 2003 by 92nd Constitutional Amendment Act. Indian Languages belong mainly to four linguistic families

- Austric – Munda, Mon-Khmer
- Dravidan – Tamil, Telugu, Kannada, Malayalam, Gondi, kurukh, orean, etc.
- Sino- Tibetan- Bodo, Karen, Manipuri, etc.
- Indo - Aryan – Hindi, Urdu, Sans.

Dialect

- A distinct linguistic form peculiar to a region or social group but which nevertheless, can be understood by speakers of other forms of the same language. The two main types of dialects are the geographic dialect, spoken by the people of the same area or locality, and the social dialect used by people of the same social class, educational level or occupational group.

Major dialects in India

- More than 40 languages or dialects in India are considered to be endangered and are believed to be heading towards extinction as only a few thousand people speak them officials said.

- According to a report of the census Directorate, there are 22 scheduled languages and 100 non –scheduled languages in India. The scheduled languages are 11 from Andaman and Nicobar, Seven from Manipur and Four from Himachal Pradesh. There are 42 languages spoken by less than 10,000 people. Some other languages also are in endangered position in India.

Major dialects in Tamil Nadu

- Tamil is an interesting language with a range of native dialects. The language has several charming improvisations in different regions of the state. Many people are familiar with the old and familiar dialects of Tamil such as Chennai, Coimbatore, Madurai and Tirunelveli

UNESCO'S five levels of language risk:
Safe: Widely spoken
Vulnerable: Not spoken by children outside the home (600 languages)
Definitely endangered: Children not speaking (646 languages)
Severely endangered: Only spoken by oldest generations (527 languages)
Critically endangered: Spoken by only a few members of the oldest generation, often semi-speakers (577 languages)

Political Geography - Concept of Nation and State
Nation

- A nation is a group of people who see themselves as a cohesive and coherent unit based on shared cultural or historical criteria. Nations are socially constructed units, not given by nature. Their existence, definition, and members can change dramatically based on circumstances. Nations in some ways can be thought of as "imagined communities" that are bound together by notions of unity that can pivot around religion, ethnic identity, language, cultural practice and so forth.

State

- A State is an independent, sovereign government exercising control over a certain spatially defined and bounded area, whose borders are usually clearly defined and internationally recognized by other states.

> Do you know?
> Vaishali was established as a republic by the 6th century B.C (BCE), prior to the birth of Gautama Buddha in 563 B.C (BCE), making it the world's first republic.

Nation-State

- The nation state is a system of organization defined by geography, politics and culture. The nation is cultural identity that is shared by the people, and the state is the governing administration. A nation state must have a shared national identity, physical borders, and a single government.

- A nation-state is a political unit with a well-defined territory, inhabited by a people who are well-organised, possess sufficient powers and consider them to be a nation by virtue of certain binding factors which may be emotional and which are reflected in law and governance.

Frontiers and Boundaries

- Frontiers: International frontiers and boundaries separate land, rivers and lakes subject to different sovereignties. In 1900 frontiers had almost disappeared and had been replaced by boundaries that are lines. A Frontier is a politico geographical area, lying beyond defined borders of a political unit into which expansion could take place.

Types of Boundaries

- Boundaries can be classified according to their relationship with the cultural landscape. Some boundaries were established prior to the permanent occupation of areas by the present inhabitants. In some cases patterns of settlement were already developing so that the boundary ultimately established has a different relationship to the cultural realities of the area involved. This classification is known as the functional or genetic classification of boundaries.

Different between Frontier and Boundary

Frontier	Boundary
1. Natural	1. Mostly Anthropogenic.
2. Areal Concept	2. Linear Concept.
3. Frontiers have no political dispute.	3. Boundaries vary often disputable by the rival nations.
4. Frontiers generally have mountainous area, desert, marshes, etc. Thus, inhabitable.	4. But boundaries have no such criteria.
5. Frontiers are dynamic.	5. Boundaries are static because once fixed, they hardly change.

Boundaries: A boundary is a line demarcating the recognised limit of an established political unit, administrative region or geographical region e. g a state, country or district.

Do you know?
China has the maximum number of neighbors touching its border. The 14 countries touching its border are: India, Pakistan, Afghanistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, Russia, North Korea, Vietnam, Laos, Myanmar, Bhutan and Nepal

Do you know?
Canada, the world's second largest country, shares the longest international land border with the United States. The Canada- US land border is 8,893 km long.

Genetic Classification of the boundaries

1. Antecedent Boundaries
The boundaries drawn before the cultural-political realm.

Such boundaries were non-contentious.
E .g, N. Africa and the state boundaries of USA.

2. The Subsequent Boundaries
When the cultural realms are fully developed & political boundaries are contentious.

Such boundaries are irregular or amorphic boundaries.
E.g. the countries of Europe.

3. Superimposed Boundaries

When a political boundary divides a homogenous cultural region and across the boundary the people with similar ethnicity are found.
E.g. Pok

4. Relict Boundaries

Historical boundaries which only exist in the books.

E .g. Persia, the boundary between east & West Germany.

Geopolitics: Global Strategic views

- The study of the way a country's size, position, etc, influence its power and its relationships with other countries. Political activity is influenced by the physical features of a country or area of the world. Geo politics is concerned with how geographical factors including territory, population, strategic location, and natural resources endowments as modified by economics and technology affect the relations between states and the struggle forward domination. It is battle between land power and sea power which is going to lead the world continents by one.

- Mackinder described the political history of the world as continuous struggle between land and sea powers. According to him, the Columbian era of sea powers, which gave Europe its pivotal position for four centuries is coming to an end. And in the struggle between land and sea powers, the ultimate victory is going to be of one possessing land powers. He divided the earth into 3 tiers.

1) The Heartland - area of interior and Arctic drainage in the Eastern Europe, covered by mountains on three sides and Arctic in north. This is a natural fortress on earth, inaccessible to sea powers.

2) The Inner or Marginal Crescent - area of Europe and Asia adjoining the Heartland and Africa, north of Sahara.

3) The Outer or Insular Crescent - It includes North and South America, Africa (south of Sahara) and Australia. Besides, it also includes the Great Britain and Japan because of their insularity from Eurasia.

- According to Mackinder, one with control over Heartland will be in an unstoppable position to rule the world. Heartland, with its agricultural and industrial resources would conquer the inner crescent and Outer crescent would follow later. He conceptualized his theory as:

Who rules East Europe commands the Heartland.

Who rules Heartland commands World Island.

Who rules World Island commands the World.

- Mackinder later argued that key to control Heartland lays in Eastern Europe, reflecting a powerful strand of pre and post- Versailles geographical thinking concerning the news to separate the powerful states of Germany and Russia by the creation of 'buffer states'.

- Influence - His theory was put to test during the World War II when the Heartland could become the power center of the world if either Germany unites with Russia or China or Japan thrashes Russia. But the shattering defeat of Germany turned Heartland into a power vacuum.

- The area highlighted in red is the heartland, blue is rim land and the encircled area is the world island.

- The heartland is inaccessible from top because North Sea, Norwegian Sea, Barents Sea, Kara Sea, Laptev Sea, East Siberian Sea are all frozen throughout the year. The hearland is inaccessible from the bottom because of Middle Eastern desert, Iranian Plateau, Himalayas, Plateau's of Tibet and Siberian mountains. This makes heartland immune to any conquests from any other side than Eastern Europe.

- The only gateway to the heartland is through Eastern Europe. So, protecting one gateway would be far easier than protecting the whole land. Moreover, the heartland was self-sufficient with most of the resources and wasn't dependent on trade from outside world.

- So, Mackinder believed that the one who controls the heartland would be able to control the Rimland and as a result the world-Island, and the one, who rules the world Island, would rule the world. Although this theory made sense at that time (1904), when there was no significant aviation and naval power, it does not make much sense now.

Century Geopolitics of the multipolar world order

- To put it succinctly, the unipolar world is characterized by the US' predominant hegemony in a wide variety of spheres, whether exercised directly through unilateral initiatives or indirectly ("Lead From Behind") through its regional and institutional partners. The Multipolar forces in the world are working to replace the US-led international order with a diversified array of multiple stakeholders in order to bring balance to International Affairs. Importantly, they seek to do this through progressively reforming international institutions such as the UN, IMF, World Bank, and others, as well as creating their own counterparts to some of them like the BRICS New Development Bank or outright forming entirely new and unprecedented organizations like the SCO.

- One of the latest proposals has been to broaden the BRICS format through what has now been called the "BRICS-Plus" strategy, which essentially seeks to have each of the five member states encourage multilateral cooperation between each other's respective regional integration organizations. As Russian Valdai Club expert YaroslavLissovolik describes it, this could see Mercosur, the SADC, and the Eurasian Economic Union, SCO, SAARC, and ASEAN all cooperating with one another in changing the world order.

Missile Defense Shield, Prompt Global Strike, and the Naval Race

- The basis of American control over the world is through economic means as enforced by military ones. In certain cases, though, the US is unable to directly attack its rivals such as Russia and China without suffering unacceptable damage through a nuclear second strike, ergo why Washington is pushing to build anti-missile installations all around Eurasia in order to ring in these Great Powers and diminish their most credible deterrent capability. Complementary with this are the US' space weapons, whether based in this theatre (X37-B and the policy of "Prompt Global Strike") or directed towards it (anti-satellite weapons, whether kinetic such as missiles or non-kinetic like lasers).

- Neither the US' missile shields nor its space-related weaponry are sufficient enough for ensuring that the country is defended from submarine-launched ballistic missiles, which form a crucial component of any country's nuclear triad. This explains why there's an ongoing naval race across the world as the US seeks to ensure its dominance in the high seas in the face of rising competition from Russia, China, and others. The global ocean is also important for another reason as well, and this one relates back to the economic basis of American dominance over the world. China depends on the international waterways for the vast majority of its trade, which makes it inordinately vulnerable to any US efforts to block certain chokepoints such as the Strait of Malacca and Suez Canal.

OBOR's Global Reorganization

- Understanding the sudden systemic-shaking consequences that any hostile action like this could inflict for China's domestic socio-economic stability, the People's Republic prudently foresaw the need to pioneer ambitious trans-continental trade routes to its crucial European partner, as well as secure the Sea Lines Of Communication (SLOC) along its existing maritime ones in order to safeguard its access to the growing economics of Africa. The latter are exceptionally important nowadays because their growth is expected to allow Beijing to relieve itself of its industrial overproduction so long as it can succeed in building up these marketplaces and stabilizing them. As for the Western Hemisphere, China wants to increase its soft presence here as a means of competing with the US and asymmetrically countering America's moves in the South China Sea.

- Altogether, the above stratagem explains the essence of China's One Belt One Road (OBOR) global vision of New Silk Road connectivity, which is designed to transform the world's trading networks so as to facilitate the transition from a unipolar American-led international order to a diversified Multipolar one safeguarded by a host of Great Powers. It also, however, provides the blueprint for how the US will oppose the greatest threat thus far to its worldwide hegemony, as all that Washington has to do is encourage identity-centric Hybrid Wars in the geostrategic transit states along these corridors in order to disrupt, control, or influence them in ways which remove their Multipolar game-changing impact.

Geopolitics and the New World Order

- The global elite–leading academics, intellectuals, foreign policy analysts, foundation heads and corporate power brokers, as well as many Western leaders–may largely have

forgotten about it. But what we're witnessing now is geography's revenge in the East-West struggle for control of the buffer state of Ukraine, in the post–Arab Spring fracturing of artificial Middle Eastern states into ethnic and sectarian fiefs and in the unprecedented arms race being undertaken by East Asian states as they dispute potentially resource-rich waters. Technology hasn't negated geography it has only made it more precious and claustrophobic.

- Whereas the West has come to think about international relations in terms of laws and multinational agreements, most of the rest of the world still thinks in terms of deserts, mountain ranges, all-weather ports and tracts of land and water. The world is back to the maps of elementary school as a starting point for an understanding of history, culture, religion and ethnicity–not to mention power struggles over trade routes and natural resources.

- Europe's modern era is supposed to be about the European Union triumphing over the bonds of blood and ethnicity, building a system of laws from Iberia to the Black Sea–and eventually from Lisbon to Moscow. But the E.U.'s long financial crisis has weakened its political influence in Central and Eastern Europe. And while its democratic ideals have been appealing to many in Ukraine, the dictates of geography make it nearly impossible for that nation to reorient itself entirely toward the West.

- Russia is still big, and Russia is still autocratic after all it remains a sprawling and insecure land power that has enjoyed no cartographic impediments to invasion from French, Germans, Swedes, Lithuanians and Poles over the course of its history. The southern Crimean Peninsula is still heavily ethnic Russian, and it is the home of Russia's Black Sea fleet, providing Russia's only outlet to the Mediterranean.

- In short, Russia will use every geographical and linguistic advantage to weaken Ukraine as a state. Ukraine is simply located too far east, and is too spatially exposed to Russia, for it ever to be in the interests of any government in Moscow–democratic or not–to allow Ukraine's complete alignment with the West.

- To live in a world where geography is respected and not ignored is to understand the constraints. Many obstacles simply cannot be overcome. That is why the greatest statesmen work near the edges of what is possible. Geography establishes the broad parameters– only within its bounds doe's human agency have a chance to succeed.
- While our foreign policy must be morally based, the analysis behind it must be cold-blooded, with geography as its starting point. In geopolitics, the past never dies and there is no modern world.