

Geography 2017 (Outside Delhi)**SET I****Time allowed : 3 hours****Maximum marks : 70**

1. State the two groups of factors which affect the profitability of mining. [$\frac{1}{2} + \frac{1}{2} = 1$]

Answer : Several factors affecting the profitability of mining operations are :

(i) Richness or Grade of the Ore, (ii) Size of Deposit, (iii) Method of Mining, (iv) Accessibility, (v) Stage of Industrial Development

2. Which country of the world has the highest road density ? [1]

Answer : Japan. With respect to country size/area, Japan has highest road density and is 327 km length of roads per 100 sq. km area.

3. Name any two garrison (cantonment) towns of India. [$\frac{1}{2} + \frac{1}{2} = 1$]

Answer : Main cantonment towns of India are :

(i) Ambala, (ii) Jalandhar, (iii) Mhow, (iv) Babina and (v) Udhampur.

4. Why is West Asia the least developed in rail facilities ? Explain one reason. [1]

Answer : West Asia is the least developed in terms of rail facilities because of vast deserts and sparsely populated regions.

5. Examine the twin environmental problems that have emerged in the 'Indira Gandhi Canal Command Area'. [1]

Answer : Due to intensive irrigation and excessive use of water has led to the emergence of problems of water logging and soil salinity and both these have adverse effect on soil fertility and agricultural productivity.

6. Classify minerals on the basis of chemical and physical properties. [$\frac{1}{2} + \frac{1}{2} = 1$]

Answer : Minerals are divided into groups on the basis of chemical and physical properties. These are :

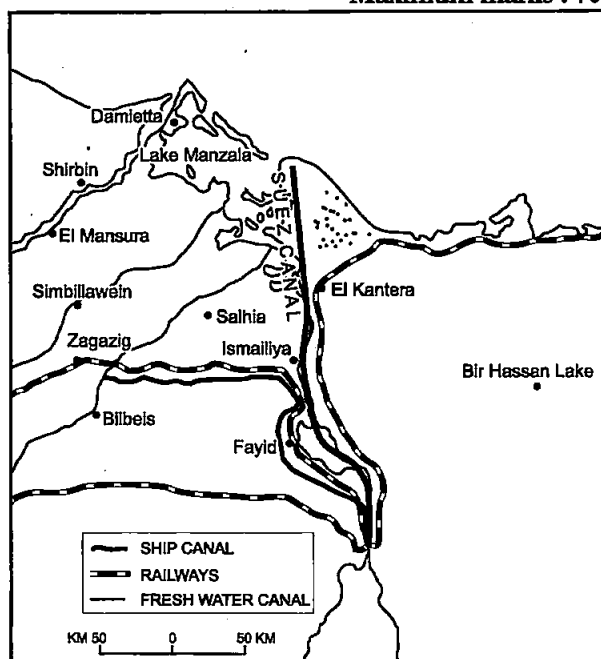
(i) Metallic and (ii) Non-Metallic minerals.

Examples of metallic minerals are iron, copper, gold, silver and non-metallic minerals are salt, coal, copper etc.

7. How can you help in improving the quality of water in your locality ? [1]

Answer : Quality of water suffers from large scale of pollution almost throughout the country. In the populated locality, we can avoid dumping all waste matter into water and into our rivers.

8. Study the map given below carefully and answer the questions that follow : [3]



- 8.1. Identify and name the canal shown in the map.

- 8.2. Write any four characteristics of this canal.

Answer :

- 8.1. The canal shown in map is Suez Canal, constructed in 1869 between Port Said and Port Suez in Egypt.

- 8.2. The main characteristics of this canal are :

- (i) It gives Europe a new gateway to the Indian ocean and reduces sea-route distance between Liverpool and Colombo by 6400 km compared to Cape of Good Hope route.
- (ii) It is a sea level canal without locks which is 130 km long and 11 to 15 meter deep.
- (iii) About 100 ships travel daily and each ship takes around 10-12 hours to cross the canal.
- (iv) As the tolls are heavy, some find it cheaper to go by the longer Cape Route whenever the consequent delay is not important.
- (v) A navigable fresh canal also follows from Nile.

9. Describe any three characteristics of chain stores in the world. [$3 \times 1 = 3$]

Answer : The distinctive features of multiple shops are as under :

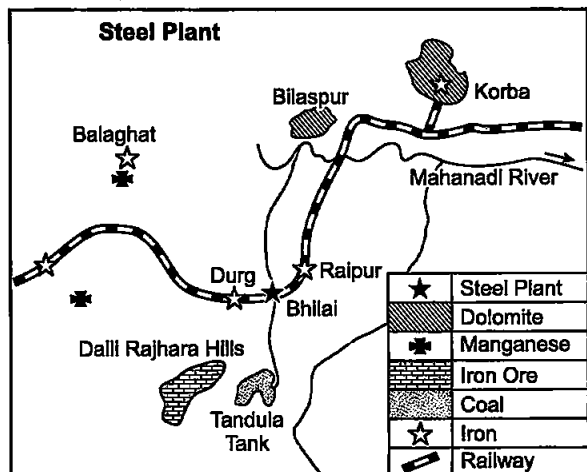
- (i) Chain stores are able to purchase merchandise most economically to their specification.
- (ii) They often direct the manufacturers. They employ highly skilled specialists.

(iii) The main objective of the chain stores is to establish direct contact with the consumers by eliminating middlemen.

(iv) They operate under centralised control and are horizontally integrated.

(v) The layout of these shops is simple and similar. They have the ability to experiment in one store and apply the results to many.

10. Study the diagram given below and answer the questions that follow : [3 × 1 = 3]



10.1. Identify and name the steel plant given above. In which state this plant located ?

10.2. Which is the main source of power for this steel plant ? Which rail route provides transport facilities to this plant ?

10.3. What are the major sources of Iron ore and water for this steel plant ?

Answer :

10.1 Steel plant is “Bhilai” and located in Chhattisgarh State.

10.2 Main power source is “Korba Thermal Power Station”. The rail route connecting to this plant is Kolkata-Mumbai rail route.

10.3 Major source of rich Hemetite Iron Ore for this plant is “Dalli-Rajhara range” of mines. The water source is “Tandula Tank”.

11. “There is no consensus on what exactly defines a village or a town.” Analyse the statement by using different criteria. [3]

Answer : We all live in cluster of houses which can be called as village or a town. It is widely accepted that settlements can be differentiated in terms of rural (village) and urban (town), but there is no consensus on what exactly defines a village or a town.

Although population size is an important criterion, it is not a universal criteria since many villages in densely populated countries in like India and China

have population exceeding than some towns of Europe and USA.

In certain countries, urban settlements are defined on the economic basis. For example, in India, towns are called urban towns cities when it has 75% of its work force engaged in non-agricultural activities, whereas in some western countries an urban area is if more than 50% of the economically productive population are engaged in non-agricultural pursuits.

12. “Nature provides opportunities and humans make use of these and slowly nature gets humanised and starts bearing the imprints of human endeavour.” Justify the statement. [3]

Answer : When the human being makes use of opportunities provided by nature, it starts bearing the imprints of human endeavour and this situation is known as humanisation of nature. Human beings interact with their physical environment with the help of technology. Technology indicates the level of cultural development of society. Knowledge about nature is extremely important to develop technology and advanced technology loosens the shackles of environment on human beings. In the early stages of their interaction with their natural environment humans were greatly influenced by it. They adapted to the dictates of nature. This is so because the level of technology was very low and the stage of human social development was also primitive. They create possibilities with the resources obtained from the environment. The human activities create the cultural landscape. The imprints of human activities are created everywhere; health resorts on highlands, huge urban sprawls, fields, orchards and pastures in plains and rolling hills, ports on the coasts, oceanic routes on the oceanic surface and satellites in the space.

13. “Indiscriminate use of water by increasing population and industrial expansion has led to degradation of the water quality considerably in India.” Explain the values that can help in maintaining the quality of water. [3]

Answer : Indiscriminate use of water by increasing population and industrial expansion has led to degradation of the quality of water considerably. Values that can help in maintaining the quality of water are :

(i) Judicious/optimum use of water; controlling population and recycle and reuse of water; Watershed Management and Rainwater Harvesting.

(ii) Haryali is the watershed development started by the government of India for the same reason.

(iii) Industries which are located on the river banks should be monitored for the waste disposals. They should not be throwing the waste in the river.

- 14. Mention any four major objectives of the New Industrial Policy, 1991 of India. Describe the role of globalisation in achieving these objectives.**

[2 + 3 = 5]

Answer : Major objectives of India's New Industrial Policy 1991 are as follows :

- (i) The New Industrial Policy, 1991 seeks to liberate the industry from the shackles of licensing system.
- (ii) Maintain a sustained growth in productivity.
- (iii) Encourage foreign participation in India's industrial development.
- (iv) Gainful employment and attain international competitiveness.

The process of globalisation includes opening up of world trade, development of advanced means of communication, internationalization of financial markets, growing importance of MNCs, population migrations and increased mobility of persons, goods, capital, data and ideas. It refers to the integration of economies of the world through uninhibited trade and financial flows, as also through mutual exchange of technology and knowledge. It also contains free inter-country movement of labour. This implies opening up the economy to foreign direct investment by providing facilities to foreign companies to invest in different fields of economic activity in India, removing constraints and obstacles to the entry of MNCs, allowing Indian companies to enter into foreign collaborations and also encouraging them to set up joint ventures abroad; carrying out massive import liberalisation programs by switching over from quantitative restrictions to tariffs and import duties, therefore globalisation has been identified with the policy reforms of 1991 in India.

- 15. "The size of a territory and per capita income are not directly related to human development." Support the statement with examples.** [5]

Answer : Yes, it is true that the size of territory and per capita income are not directly related to human development.

- (i) Growth of economy and productivity is generally assessed with the help of gross national product and per capital income.
- (ii) There are few rich and developed states like Maharashtra, Punjab, Haryana, Gujarat and Delhi have per capita income more than ₹ 4,000/month.
- (iii) Poverty is reflected in poor quality of life. Hundreds of people suffer malnutrition, deprivation, illiteracy and consequent low level of human development. It does not depend upon the size of territory.

(iv) Often Smaller Countries have done better than larger ones in human development. Similarly, relatively poorer nations have been ranked higher than richer neighbours in terms of human development.

For example Sri Lanka, Trinidad and Tobago have a higher rank than India in the human development index despite having smaller economies. Similarly, within India, Kerala performs much better than Punjab and Gujarat in human development despite having lower per capita income.

(v) Some large states like Odisha, Bihar, MP, UP and Tamilnadu have more than 50% population below poverty line while Delhi is much smaller areawise but is a prosperous state.

- 16. How is migration a response to the uneven distribution of opportunities over a space ? Explain the economic consequences of migration in India.** [2 + 3 = 5]

Answer : Migration is a response to the uneven distribution of opportunities because of the following reasons :

(i) In India many people live in rural areas and they migrate to urban areas mainly due to poverty, high population pressure on land, lack of basic infrastructural facilities like health, education, etc. This proves that migration is responsible for the uneven distribution over space.

(ii) People tend to move from place of low opportunities and less safety to a place which has more opportunities and safe.

Economic Consequences :

(i) People migrating send remittance to their families at home and add to economic prosperity. Remittance from international migrants is one of the major sources of foreign exchange. In 2002, India received US \$11 billion as remittances from international migrants.

(ii) Remittance are used for food, repayment of debts, treatment, marriages, children education, agricultural development, construction of houses, etc. Thousands of poor villages of many states works as live blood for economy.

(iii) Punjab, Kerala and Tamil Nadu receive very significant amount from their international migrants. Internal Migrants play an important role in the growth of economy of the source area.

- 17. "In modern times international trade is the basis of the world economy." Support the statement with examples.** [5]

Answer : Trade is the base of world economy. The exchange of surplus goods between different countries is called international trade. It is the

index of economic development of the country. The countries which export the commodities earn foreign exchange. Developed countries are major trading countries. It also helps to raise the standards of living of the people of developing countries. Some densely populated countries have to import raw materials to meet their demands for their economic and industrial development. Such countries are Japan, Sri Lanka and other countries. The actual tonnage of goods traded makes up the volume. However, services traded cannot be measured in tonnage. Therefore, the total value of goods and services traded is considered to be the volume of trade. The total volume of world trade has been steadily rising over the past decades. Trade of primary products was dominant in the beginning of the last century. Later manufactured goods gained prominence and currently, though the manufacturing sector commands the bulk of the global trade, service sector which includes travel, transportation and other commercial services have been showing an upward trend.

18. Review any five measures adopted to solve the problems of Indian agriculture. [5 × 1 = 5]

Answer : Measures adopted to solve the problems are :

(i) Indian agriculture is totally dependent on monsoon. The crop production in the cultivated land is directly dependent on rainfall. Excessive rainfall causes flood and less rainfall causes drought conditions. For expansion of irrigation dams, rivers and canals have played a crucial role enhancing agriculture output in country.

(ii) The yield of the crops in country is low in comparison to international level. Output of most of the crops such as rice, wheat, cotton and oil seeds in India is much lower than that of USA, Russia, Japan. Use of modern agricultural technologies such as high yield variety of seeds, chemical fertilisers, pesticides and farm machinery are introduced in India.

(iii) The inputs of modern agriculture are very expensive for the farmers to afford. So government is supporting them by introducing the facilities like farmer loans, machinery loans at very low interest rates.

(iv) A large number of farmers produce crops for self consumption. These farmers do not have enough land and resources to produce more than their requirement. Government is encouraging them to use high yield seeds, fertilisers and provide it in competitive rates.

(v) New seed varieties of wheat (Mexico) and rice (Philippines) known as high yielding varieties (HYVs)

were available for cultivation by mid-1960s. India took advantage of this and introduced package technology comprising HYVs, along with chemical fertilisers in irrigated areas of Punjab, Haryana, Western Uttar Pradesh, Andhra Pradesh and Gujarat.

19. Classify intensive subsistence agriculture into two categories practised in the world. How are they different from each other ? Explain.

[1 + 4 = 5]

Answer : Basically, there are two types of intensive subsistence agriculture :

Intensive subsistence agriculture dominated by Wet paddy cultivation : This type of agriculture is characterised by dominance of the rice crop.

Intensive subsistence agriculture dominated by Non Paddy crops : This type of agriculture is characterised mainly by wheat.

Paddy	Non-Paddy
(i) Rice is the dominant crop.	Wheat, Soyabean, Barley and Sorghum are the main crops.
(ii) Land holdings are very small due to high density of population.	Land holdings are big.
(iii) Labour is supplied by the farmer and his family members.	Machinery is deployed for cultivation of non-paddy crops.
(iv) Fertility of soil is maintained by using farm manure.	Fertilisers, pesticides are highly used for increasing soil fertility.

20. Classify means of communication on the basis of scale and quality into two categories. Explain any two characteristics of each category.

[1 + 4 = 5]

Answer : Classification of means of communication on the basis of scale and quality :

Personal Communication System :

(i) It is the most effective and advanced one and widely used in urban areas.

(ii) It enables the user to establish direct connect through Email to get access to world of knowledge and information.

(iii) It is used for e-commerce and carrying out monetary transaction.

(iv) It is a huge central warehouse of data, with detailed information on various items.

(Letters, Telephone, Fax, Email, Internet, etc).

Mass Communication System :

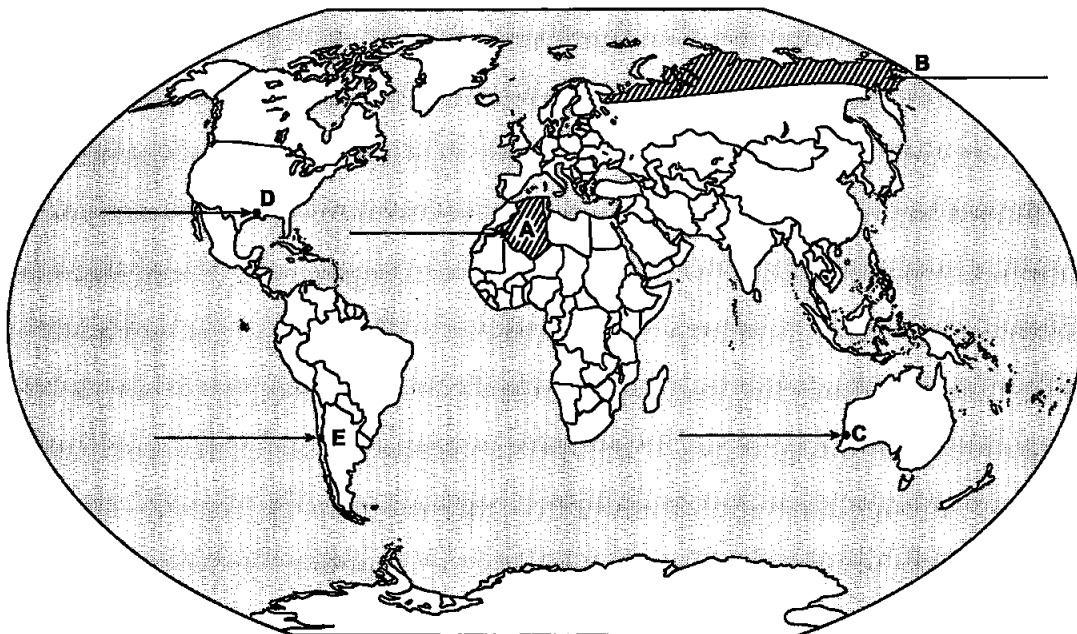
(i) Radio broadcasting started in India in 1923 by the Radio club of Bombay and changed the socio-cultural life of people.

(ii) Television broadcasting emerged as the most effective audio visual medium for information and educating masses.

(iii) Use of satellite and synoptic view of larger area for economic and strategic reasons.

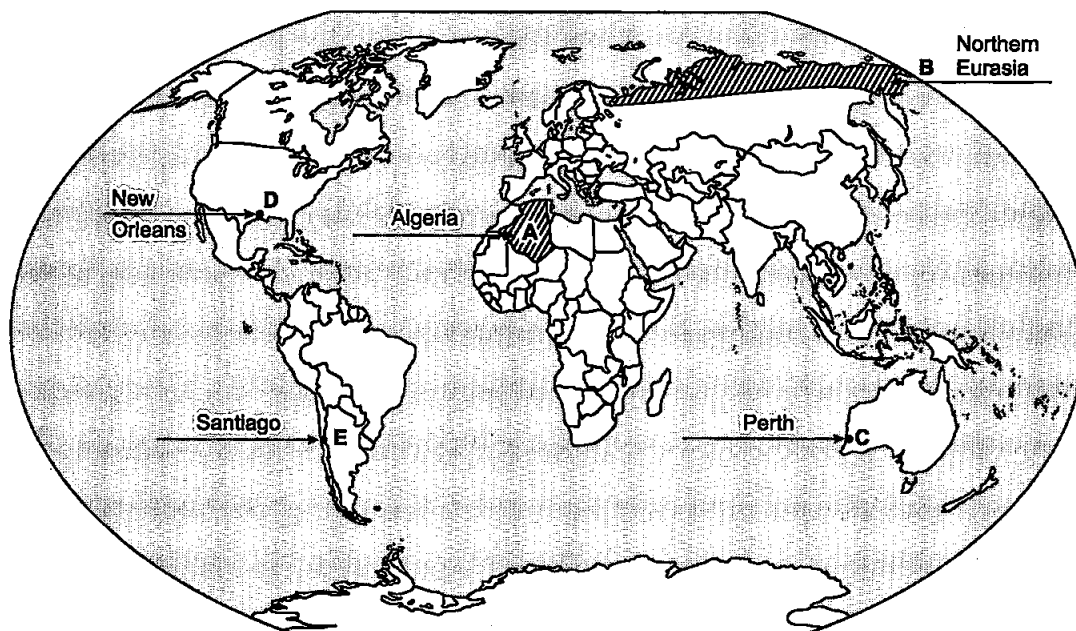
(Radio, Television, Cinema, Satellite, Newspaper, Magazine and Books, Seminar and Conference, etc.).

21. Identify the five geographical features shown on the given political outline map of the world as A, B, C, D and E and write their correct names on the lines marked near them with the help of the following information : [5 × 1 = 5]



- (A) A large country of Africa in terms of area
 (B) A major area of subsistence gathering
 (C) The terminal station of a 'Transcontinental Railway'
 (D) A major seaport
 (E) An international airport

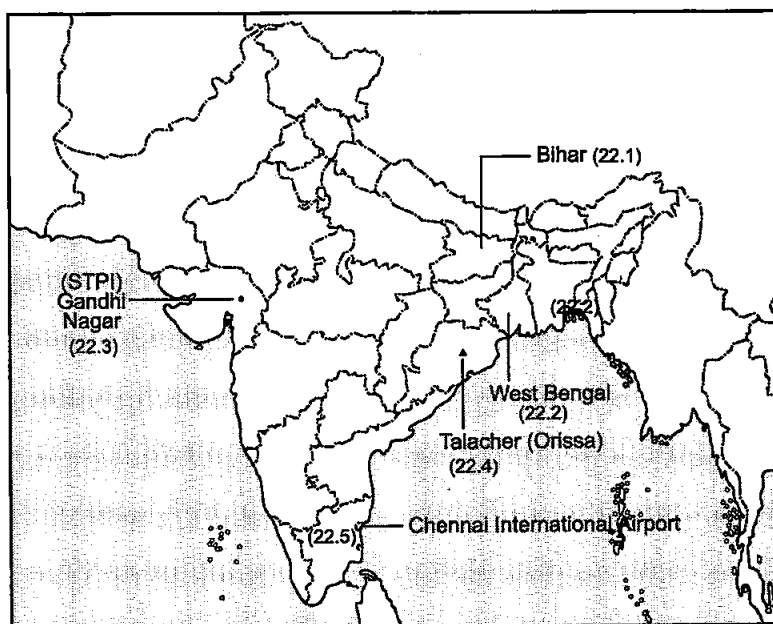
Answer :



22. Locate and label the following features with appropriate symbols on the given outline political map of India : [5 × 1 = 5]

- 22.1. The state having the highest density of population according to census 2011.
 22.2. The leading rice producing state.
 22.3. The software technology park located in Gujarat.
 22.4. The major coalfield located in Odisha.
 22.5. An international airport located in Tamil Nadu.

Answer :



Geography 2017 (Outside Delhi)

SET II

Time allowed : 3 hours

Maximum marks : 70

Note : Except for the following questions, all the remaining questions have been asked in previous set.

1. What are the two types of Intensive subsistence agriculture ? [1]

Answer : It is of the following two types :

- (i) Intensive subsistence agriculture dominated by wet paddy cultivation.
- (ii) Intensive subsistence agriculture dominated by crops other than paddy.

2. Which country has the largest rail network in Africa ? [1]

Answer : South Africa, with 18,000 km of railways has the densest rail network because of the gold, copper and diamond activities.

3. Name any two towns of India, initially developed as mining towns. [$\frac{1}{2} + \frac{1}{2} = 1$]

Answer : Raniganj, Jharia, Digboi and Singrauli were all developed as mining towns initially.

9. Describe any three characteristics of agro-based industries in the world. [$3 \times 1 = 3$]

Answer : Agro-based industries are those industries which obtains raw materials from agricultural activities. Cotton textile, jute textile, silk, sugar, vegetable oil and paper industry are main industries of agro-based group of industries.

Its characteristics are :

- (i) Agro-based industries are part of small scale industry which needs very nominal investment.
- (ii) Major agro processing industries are food processing industries.
- (iii) Most crucial factor is the availability of the raw materials. It should be available within a radius of 60 kms. In addition, water, power and other infrastructure facilities like access to road, railways, ports and airports as well as the markets for the products have to be ensured.

15. What is meant by human development ? Classify countries into four groups on the basis of the human development scores earned by them. Explain one feature of each group. [$1+2+2=5$]

Answer : Human Development : The concept of human development was introduced by Dr. Mahbub-

ul-Haq. Dr. Haq has described human development as development that enlarges people's choices and improves their lives. People's choices are not fixed but keep on changing. The basic goal of development is to create conditions where people can live meaningful lives. A meaningful life is not just a long one. It must be a life with some purpose. This means that people must be healthy, be able to develop their talents, participate in society and be free to achieve their goals.

Countries can be classified into four groups on the basis of the human development scores earned by them.

Level of Development Score in Development Index

(i) Very High	Above 0.808
(ii) High	Between 0.700 up to 0.507
(iii) Medium	Between 0.556 up to 0.699
(iv) Low	Below 0.555

1. Countries which are classified under High Human Index or Very High Human Index have a score of over 0.8; this group includes 57 countries. These countries provide higher human development through proper investment in people and good governance.

2. Countries which are classified under High Human Index also include a good number of countries who provide appropriate human development through investment in right areas.

3. Countries with Medium Human Index have more than 50 countries who have emerged after the Second World War. Some were former colonies while others appeared after the Soviet Union collapsed. They have a high social diversity however, they have faced social or political instability and uprising in history.

4. About 32 countries record Low Level of Human Development because they have been going through political turmoil.

18. Explain the importance of five non-conventional sources of energy with suitable examples. [5]

Answer : Importance of non-conventional sources of energy are :

(i) Solar Energy : Sun rays tapped in photovoltaic cells can be converted into energy, known as solar energy. The two effective processes considered to be very effective to tap solar energy are photovoltaics and solar thermal technology. It is cost competitive, environment friendly and easy to construct. It is generally used more in appliances like heaters, crop dryers, cookers, etc. The Western part of India has greater potential for the development of solar energy in Gujarat and Rajasthan.

(ii) Wind Energy : Wind energy is absolutely pollution free, inexhaustible source of energy. The mechanism of energy conversion from blowing

wind is simple. The kinetic energy of wind, through turbines is converted into electrical energy. The permanent wind systems such as the trade winds, westerlies and seasonal winds like monsoon have been used as source of energy. Besides these, local winds, land and sea breezes can also be used to produce electricity. India, already has started generating wind energy. It has an ambitious programme to install 250 wind-driven turbines with a total capacity of 45 megawatts, in Rajasthan, Gujarat, Maharashtra and Karnataka, favourable conditions for wind energy exists.

(iii) Tidal and Wave Energy : Ocean currents are the store-house of infinite energy. Since the beginning of seventeenth and eighteenth century, persistent efforts were made to create a more efficient energy system from the ceaseless tidal waves and ocean current. Large tidal waves are known to occur along the west coast of India. Hence, India has great potential for the development of tidal energy along the coasts but so far these have not yet been utilised.

(iv) Geothermal Energy : When the magma from the interior of earth, comes out on the surface, tremendous heat is released. This heat energy can successfully be tapped and converted to electrical energy. Apart from this, the hot water that gushes out through the geyser wells (hot wells) is also used in the generation of thermal energy. It is popularly known as geothermal energy. This energy is now considered to be one of the key energy sources which can be developed as an alternate source. The hot springs and geysers are being used since medieval period. In India, a geothermal energy plant has been commissioned at Manikaran in Himachal Pradesh.

(v) Bio-energy : Bio-energy refers to energy derived from biological products which includes agricultural residues, municipal, industrial and other wastes. Bio energy is a potential source of energy conversion. It can be converted into electrical energy, heat energy or gas for cooking. It will also process the waste and garbage and produce energy. One such project converting municipal waste into energy is Okhla in Delhi.

19. Analyse the significance and growth of service sector in the modern economic development of the world. [5]

Answer : (i) Services are provided to individual consumers who can afford to pay for them. For example gardener, launderers and barber do primarily physical labour. Teachers, lawyers, physicians, musicians and others perform mental labour.

(ii) Many services have now been regulated.

Making and maintaining highways and bridges, maintaining fire fighting departments and supplying or supervising education.

(iii) Customer care is among the important services often supervised or performed by governments or companies.

(iv) Professional services are primarily healthcare,

engineering, law and management. The location of recreational and entertainment services depends on the market.

(v) In modern times, Service sector has grown at a very fast speed all over the world. Economy of most of the developed countries is based on the earnings of service sectors.

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Geography 2017 (Outside Delhi)

SET III

Time allowed : 3 hours

Maximum marks : 70

Note : Except for the following questions, all the remaining questions have been asked in previous set.

1. Mention any two main regions of commercial dairy farming. [$\frac{1}{2} + \frac{1}{2} = 1$]

Answer : The main regions for dairy farming on commercial basis in the world are :

(i) The largest is North-Western Europe.

(ii) Canada and North-Eastern USA.

(iii) South-Eastern Australia, New Zealand and Tasmania.

2. Which inland waterway of the world is most heavily used ? [1]

Answer : Rhine Waterways.

3. Name any two towns of India, initially developed as educational centres. [$\frac{1}{2} + \frac{1}{2} = 1$]

Answer : Some towns of India were initially developed as education as their primary function are : Roorkee, Varanasi, Aligarh, Pilani, etc.

9. Describe any three features of open-cast mining. [3]

Answer : Features of open-cast mining are :

(i) This is the cheapest and easiest method of mining and is used for mining those minerals which occur close to the surface.

(ii) The overhead costs such as safety precaution and equipment is relatively low.

(iii) The output is both large and rapid.

15. Classify the population of the world on the basis of their residence into two groups. How are they different from each other ? Explain. [1+4=5]

Answer : The division of population into rural and urban is based on the residence.

Rural Population	Urban Population
(i) The population living in a village is known as rural population.	The population living in towns and cities is known as urban population.
(ii) It supports small size population.	Urban population is engaged in secondary and tertiary activities.

(iii) Rural population is mostly engaged in agricultural and other primary occupation.

Urban population is engaged in secondary and tertiary activities.

(iv) Share of the rural population is 55% of the whole population of the world.

Share of the urban population is 45% of the whole population of the world.

This division is necessary because rural and urban lifestyles differ from each other in terms of their livelihood and social conditions.

18. What was the main aim of the 'Tribal Sub-Plan' introduced in 1974 in Bharmaur area ? Review its contribution in the development of the Bharmaur region. [1+4=5]

Answer : The process of development of tribal area of Bharmaur started in 1970s when Gaddis were included among 'scheduled tribes'. Under the Fifth Five Year Plan, the tribal sub-plan was introduced in 1974 and Bharmaur was designated as one of the five Integrated Tribal Development Projects (ITDP) in Himachal Pradesh. This area development plan was aimed at improving the quality of life of the Gaddis and narrowing the gap in the level of development between Bharmaur and other areas of Himachal Pradesh. This plan laid, the highest priority on development of transport, communications, agriculture and allied activities, social and community services. The most significant contribution of tribal sub plan in Bharmaur region is the development of infrastructure in terms of schools, health care facilities, potable water, roads, communications and electricity. But the villages located along the river Ravi in Holi and Khani areas are the main beneficiaries of infrastructural development. The female literacy rate in the region increased from 1.88 per cent in 1971 to 65 per cent in 2011. Traditionally, the Gaddis had subsistence agricultural-cum-pastoral economy having emphasis on food grains and livestock

production. But during the last three decades of twentieth century, the cultivation of pulses and other cash crops has increased in Bharmaur region. But the crop cultivation is still done with traditional technology. The declining importance of pastoralism in the economy of the region can be gauged from the fact that at present only about one-tenth of the total households practise transhumance.

19. **Classify trading centres into two categories. How are they different from each other ? Explain.**

[1+4=5]

Answer : Classification of trading center :

(i) Rural Marketing Centres :

1. Rural marketing centres cater to nearby settlements.

2. These are quasi-urban centres.
3. They serve as trading centres of the most rudimentary type.
4. Here personal and professional services are not well developed. These form local collecting and distributing centres. Most of these have mandis (wholesale markets) and also retailing areas.

(ii) Urban Marketing Centres :

1. Urban marketing centres have more widely specialized urban services.
2. They provide ordinary goods and services.
3. Urban centres offer manufactured goods or finished products.
4. Service of educational institution and professionals such as teachers, lawyers, consultants, physicians, dentists and veterinary doctors are available.

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Geography 2017 (Delhi)

SET I

Time allowed : 3 hours

Maximum marks : 70

1. **Which are the two major types of settlements according to their shape found in the world ?**

[$\frac{1}{2} + \frac{1}{2} = 1$]

Answer : Two major types of settlements according to their shape found in the world are :

(i) Compact settlement and (ii) Dispersed settlement.

2. **Name the state of India having the least share of population according to the Census 2011. [1]**

Answer : According to census 2011 of all states, having least share of population is "Sikkim".

3. **What is the major function of the National Highways Authority of India ? [1]**

Answer : Major function of the 'National Highway Authority of India (NHAI)' is operation, maintenance and development of highway throughout India.

4. **Why does gathering have little chance of becoming important at the global level ? Explain one reason. [1]**

Answer : In early stage of human civilisation, they were greatly influenced by nature around them and were living on Gathering. Thus, the primitive man was completely dependent on natural environment.

With the passage of time, human started understanding their environment, hence going back to gathering has very little chance.

5. **How is 'node' different from 'link' in transport system ? [1]**

Answer : Difference between "node" and "link" are :

- (i) A "Node" is the meeting point of two or more routes.
- (ii) A "Link" is a road that joins that nodes.

6. **Classify rainfed farming on the basis of adequacy of soil moisture during cropping season. [1]**

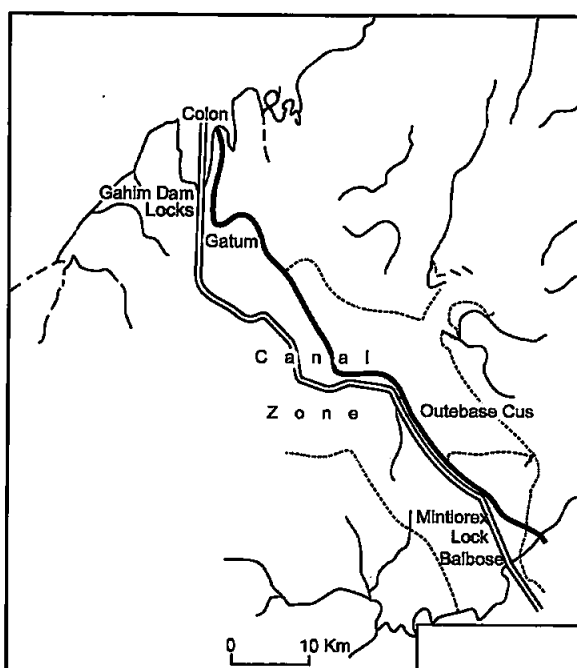
Answer : Rainfed farming is classified to "Dryland Farming" and "Wetland Farming". Farming in areas with less than 75 cm annual rainfall is known as dry land farming and areas receiving more than 75 cm are called wet land or rainfed agriculture.

7. **'The Volga is one of the most developed inland water-ways in Russia'. Justify. [1]**

Answer : The Volga Inland waterways of Russia, is very famous waterway because :

- (i) It connects various industrial regions of Russia.
- (ii) It connects various navigable canals.

8. **Study the map given below carefully and answer the questions that follow : [1+2=3]**



(8.1) Identify and name the canal shown in the map.

(8.2) State any four features of this canal.

Answer :

(8.1) Panama canal is shown in the map.

(8.2) Main features of 'Panama Canal' are :

(i) It connects Atlantic and Pacific oceans.

(ii) Canal is constructed across Panama Isthmus between Republic of Panama and Colon (USA) and its total length is 77 km.

(iii) It involves deep sea cutting.

(iv) It has six locks system.

(v) It shortened the distance between east and west coast of USA.

9. Describe any three features of Konkan Railway. [3]

Answer : Main features of Konkan Railways :

(i) Construction of Konkan railways is one of the biggest achievements of Indian Railway, as it is built in toughest terrain between Arabian Sea and Western Ghats.

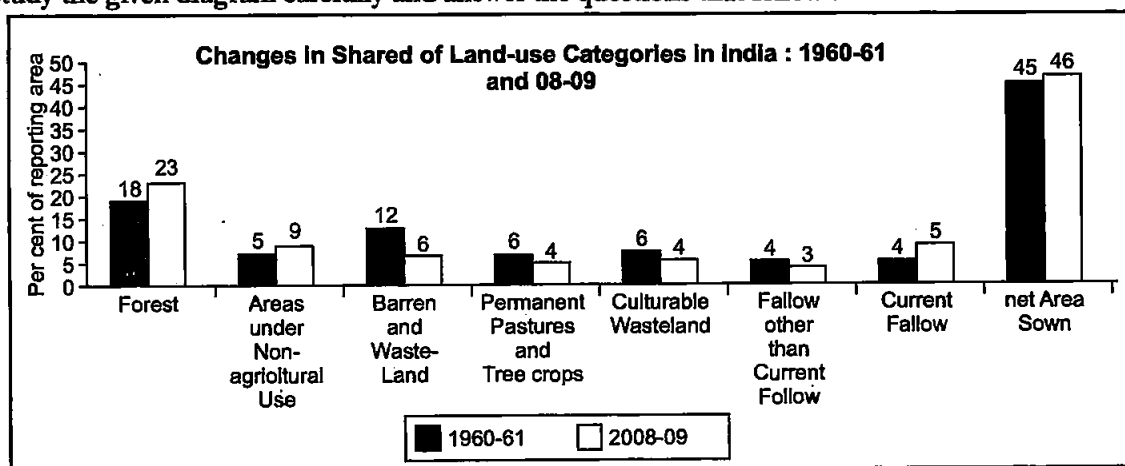
(ii) This line is 760 km long.

(iii) It crosses small and big 146 rivers, 2000 bridges approximately and 91 tunnels on the Ghat Mountains.

(iv) Asia's largest Rail Tunnel lies in this route.

(vi) It connects Roha in Maharashtra to Mangalore in Karnataka.

10. Study the given diagram carefully and answer the questions that follow :



10.1. Which land use category has shown the highest increasing trend ? What percentage in reporting area has increased in that category, during the given period ?

10.2. Explain any two reasons responsible for the increasing trend in that category. [3]

Answer :

10.1. Highest increasing trend is "Areas under non-agricultural use". This increase in terms of percentage is 5 : 9 or 80%.

10.2. Reasons for increase in use of areas under non-agricultural use :

(i) Changing structure of the Indian economy is increasingly dependent on the industrial and service sector's contribution for development. To increase it new ventures and industries are built.

(ii) Expansion of industrial and service sector was emphasised upon.

(iii) Expansion of related infrastructural facilities for the development of the area to put it to other use.

(iv) Expansion of area under urban and rural settlements specially in housing sectors also increases the trend.

(v) It is expanding at the expense of waste lands and agricultural lands.

11. Explain the three basic differences between rural and urban settlements in India. [3 × 1 = 3]

Answer : The basic difference between rural and urban settlements in India :

(i) Rural settlements derive their life support from land based primary activities while urban settlements depend on processing of raw materials and various services.

(ii) Cities act as nodes of economic growth. They provide goods and services to both urban and rural centres.

(iii) Rural settlements supply food and raw materials while urban areas provide services.

(iv) Both settlements differ in social relationship, attitude and outlook.

12. "Nature and humans are inseparable elements". Justify the statement with suitable examples.

[3 × 1 = 3]

Answer : Nature and humans are inseparable elements because :

(i) The earth is the home of mankind. It may be in different forms. All types of life supports are provided by nature. They directly depend on nature.

(ii) Nature and humans are inseparable and should be seen holistically. Human beings are directly dependent on nature for various resources which sustain them.

(iii) Physical features are described in metaphors using symbols from the human anatomy. These features include face of earth, nose of glacier, eye of storm, mouth of river, neck of isthmus, profile of soil etc.

13. "Air pollution is very harmful to flora, fauna and property." Explain any three values which can help in maintaining pollution free air to some extent. [3 × 1 = 3]

Answer : Air pollution is very harmful to flora, fauna and property. Flora and fauna are the plants and animal life around us. The main reason behind air pollution is combustion of coal, petrol, diesel, solid waste disposal and industrial wastage. By air pollution, the quantity of oxides of sulphur, oxides of nitrogen, carbon monoxide, hydrocarbon, ammonia exceeds normal acceptable limits in the air we breathe, thus causing infections and diseases.

We can maintain pollution free air through :

- (i) Air becomes polluted when its normal composition is disturbed either by nature or by man or by both. Since air pollution is harmful for environment and mankind, it is our responsibility to save air from pollution by using less pollutant type elements.
- (ii) Awareness about the harmful effects of pollution should be spread everywhere.
- (iii) People should feel duty bound to save air.
- (iv) People must follow rules for saving air and environment.
- (v) We must use ecofriendly non-conventional sources of energy (solar, bio-gas and wind energy) as conventional energy production from source like coal, oil and gas are harmful.
- (vi) People should use public transport as far as possible against individual transport (private cars) to avoid air pollution.

14. Describe the way of life of nomadic herders in the world. [5 × 1 = 5]

Answer : Way of life of nomadic herders in the world are :

- (i) Animals are the life of herders. They rely on them for everything including food, clothing, shelter, tools and transport.
- (ii) They move from one place to another place with their livestock and move in search of two vital necessities, fodder and water.
- (iii) They follow well defined territory. They move according to the season. For example, Lapps of Tundra region migrate towards the North in the summer season and towards Southern coniferous forest belts in winter.

(iv) Nomadism is associated with these three distinct regions :

1. Core region which is from Atlantic shores of North Africa eastward to Arabian Peninsula into Mongolia and Central China.

2. Second is Tundra region of Eurasia.

3. Third is southern hemisphere south-west Africa to Madagascar.

(v) In mountainous regions they practice transhumance.

15. Why do large scale industries choose different locations ? Explain any four factors which influence the industrial location. [1 + 4 = 5]

Answer : Industries are established for production of various item with a view that they want to earn profit by reducing costs. Therefore, industries are located at points where cost of production is lowest. Factors influencing industrial locations :

- (i) These are established in such area where supply of raw materials is easily available.
- (ii) Industries want good market to sell their products. Hence, they choose a place where access of market is available.
- (iii) Availability of trouble free labour is another factor for establishment of industry, where labour is easily available at low cost.
- (iv) Industries need continuous supply of energy, i.e., electricity, diesel, CNG etc.
- (v) Every industry needs transportation to carry their product from one place to other hence, road/ railway are available at nearest place.
- (vi) Similarly, industry needs trouble free communication services to receive and place various orders.

16. Explain any five factors responsible for the development of 'Mumbai-Pune industrial region'. [5]

Answer : Mumbai-Pune Industrial Region : This region extends from Thane to Pune and in adjoining districts of Nasik and Sholapur. In addition, industries have grown at a rapid pace in Kolaba, Ahmednagar, Satara, Sangli. Major factors responsible for the development of "Mumbai-Pune industrial region."

- (i) Favourable climatic conditions for the development of cotton textile industry. Since cotton was cultivated in the black soil area of Narmada and Tapi basin.
- (ii) Opening of the Suez canal in 1869 providing impetus for its growth.
- (iii) Availability of port facility for export-import and communication link with the peninsular hinter

land made the Mumbai as Hub of cotton export centre of India.

(iv) The electricity was available as the hydel power was developed in Western Ghats.

(v) Availability of labour in the region.

(vi) With Mumbai-high petroleum fields, favoured the growth of refineries and petrochemicals.

(vii) Growth and development of various other industries e.g., engineering goods, pharmaceutical and chemical industries, electricals and electronics, software, ship building came up in the region.

17. "90 percent of the world population lives in about 10 percent of its total land area, whereas remaining 10 percent population resides in the 90 percent of its land area." Support the statement with suitable examples. [5]

Answer : 90% of the world population lives in about 10% of its total land area, whereas remaining 10% population has spread over 90% of land area. The reasons are :

(i) Density of population is high in river valleys due to water availability through rivers and canals. The soil and water makes the land usable for agriculture.

(ii) The plains are densely populated while hilly areas and deserts are sparsely populated because of uneven terrain.

(iii) Population also depends on climatic conditions. Hot, cold and dry climates have sparse populations example : Tundra region is very cold all the time with snow, these are less populated, in deserts due to acute scarcity of water and without agriculture the area remains sparse populated. But areas of moderate climate have dense population.

(iv) Areas such as Gangatic plains, deltas, north Indian plain have higher proportion of population because of fertile soil with possibility of agriculture.

(v) Development of transport network, industrialisation and urbanisation are some important socio-economic and historical factors which influence the distribution of population.

18. "An uneven distribution of population suggests a close relationship between population and physical and socio-economic factors." Support the statement with suitable examples. [5]

Answer : An uneven distribution of population suggests a close relationship between population and physical and socio-economic factors.

(i) **Physical factors :** Among the physical factors, reliefs, climate and availability of water are main factors. Because of these factors northern areas of

India have higher density of population than the interior districts of Central India Plateau and southern India.

(ii) **Socio-economic Factors :** Evolution of settled agricultural development and agriculture, development of transport network and urbanization are socio-economic factor influencing the distribution of population.

The moderate density of population is seen in Odisha, Assam, Gujarat, Andhra Pradesh, Tamilnadu etc., due to newly developed canal network and possibility of agriculture, industrial development and favourable climate to some extent.

19. What is human development ? Analyse the four pillars of human development. [1 + 4 = 5]

Answer : Human development is a process that enlarges people's choices and improves their life. A meaningful life is not just a long one. It must be a life with some purpose. This means that people must be healthy, be able to develop their talents, participate in society and be free to achieve their goals.

Four pillars of human developments are :

(i) **Equity :** Equity means making equal access to opportunities available to everybody. The opportunities available to people must be equal irrespective of their gender, race, income and the caste.

(ii) **Sustainability :** It refers to continuity in the available opportunities. This means each generation must have same opportunities. Therefore, we must use our environmental, financial and human resources in such a way that our future generations are not deprived of these opportunities.

(iii) **Productivity :** It means human labour productivity of work. It must be enriched by building capabilities in people. In fact, people of a country are its real wealth.

(iv) **Empowerment :** It refers to have power to make choices. Such power comes from increasing freedom and capabilities. Good governance and people oriented policies are required to empower people. The empowerment of socially and economically disadvantaged group is of special importance.

20. "Scarcity of water on account of its increased demand, possesses possibility the greatest demand in India." Analyse the statement. [5]

Answer : Increasing demand for water is a challenge of India. The reasons are :

(i) India has a large population and resources are very limited. Groundwater level is depleting due to excessive take off of water for domestic or agricultural use.

(ii) Rising demand of water for increasing population. Since water is limited and increasing population need water for daily necessities, it is creating problem.

(iii) There is rapid industrial growth and every industry needs water hence demand is increasing.

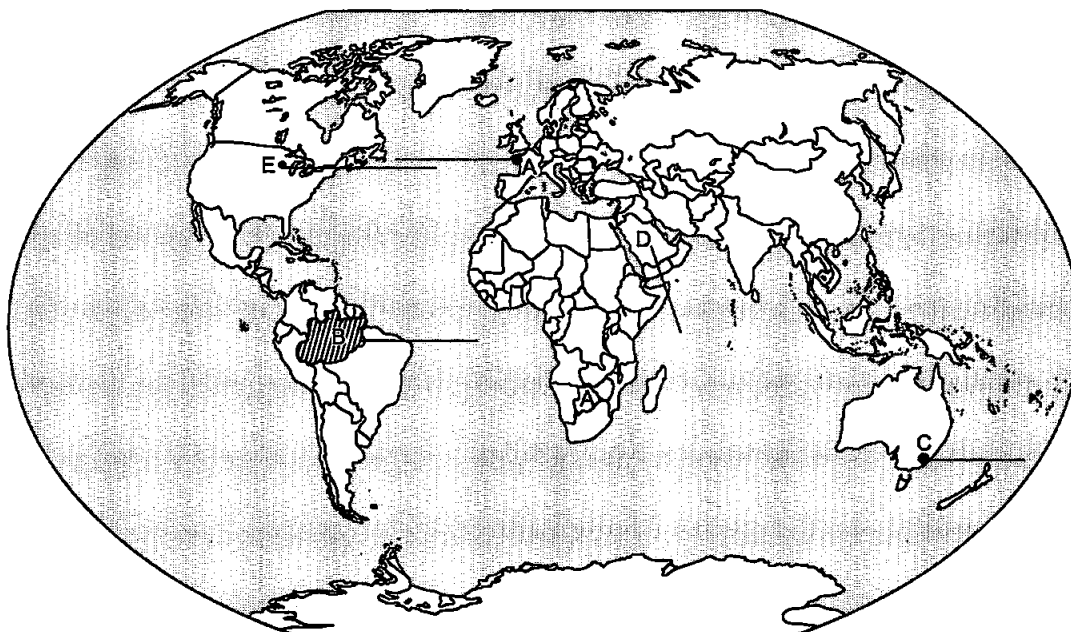
(iv) More water is required for irrigation to increase agricultural production as rainfall is highly variable.

(v) Urbanisation and modern lifestyle has increased the demand as present days houses are equipped with showers and bathtub. Every house has their own car and they use water to clean/wash their car daily.

(vi) Water pollution has added to water shortage since Indian cities are not having sufficient/proper waste water treatment plant.

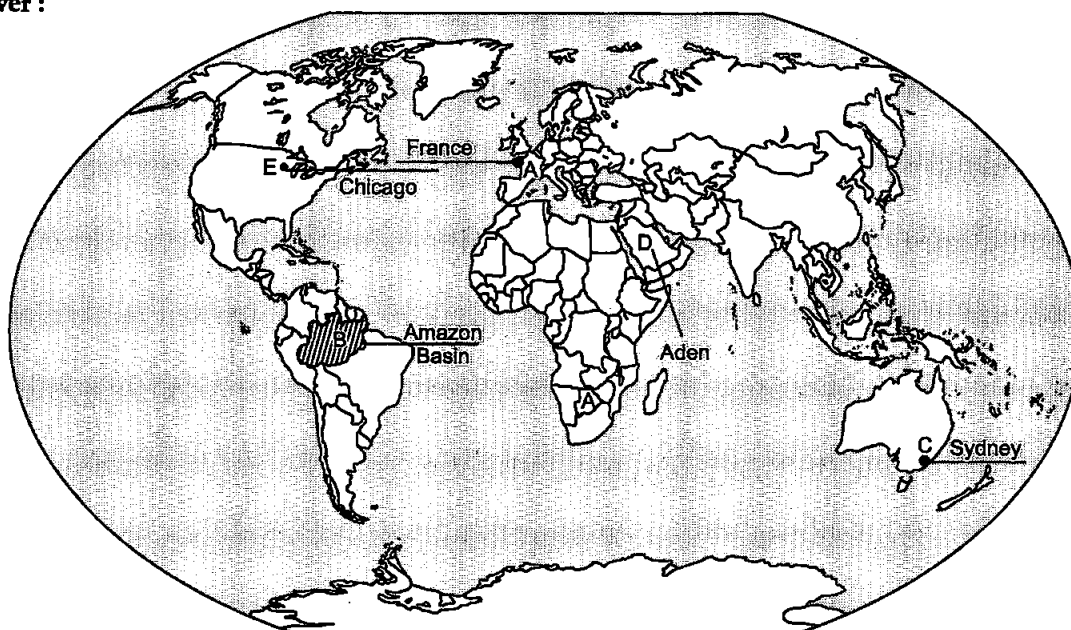
21. Identify the five geographical features shown on the political outline map of the world as A, B, C, D and E and write their correct names on the lines marked near them with the help of following information :

[5]



- (A) A large country of Europe in area.
- (B) An area of subsistence gathering.
- (C) The terminal station of a 'trans-continental railway'.
- (D) A major sea-port.
- (E) An international airport.

Answer :



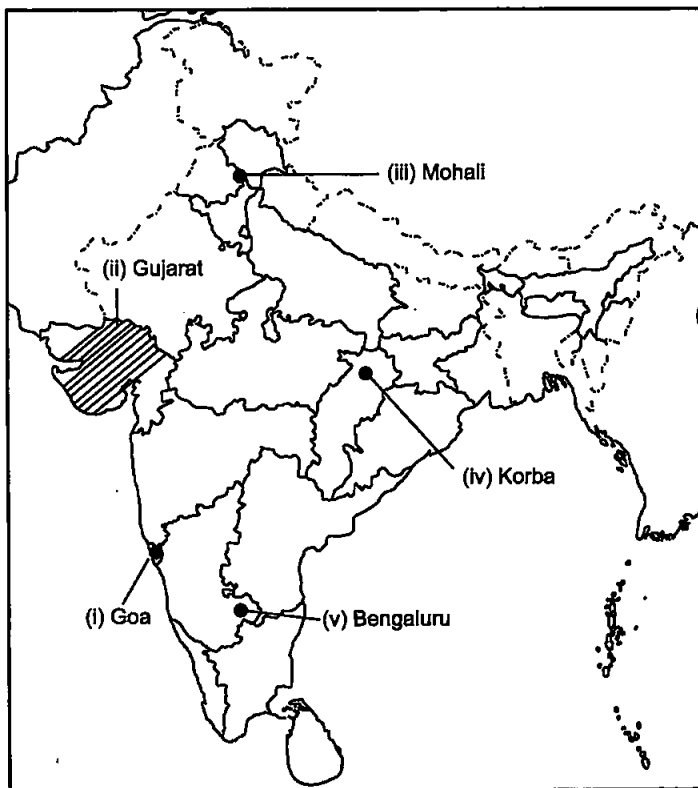
22. Locate the label the following features with approximate symbols on the given political outline map of India :

[5]

India :

- (i) The most urbanized state (2011).
- (ii) The leading cotton producing state.
- (iii) The Software Technology Park located in Punjab STPI Incubation Centre.
- (iv) The major coal field located in Chhattisgarh.
- (v) The international airport located in Karnataka.

Answer :



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SET II

Time allowed : 3 hours

Maximum marks : 70

Note : Except for the following questions, all the remaining questions have been asked in previous set.

1. Which form of rural settlement pattern develops along roads, railway-lines, rivers and canals in the world ? [1]

Answer : Linear pattern form of rural settlement develops along roads, railway lines, rivers and canals in the world.

2. Which stream of migration recorded the highest number of migrants at the level of intra-state migration in India ? [1]

Answer : The highest number of migrants at the level of intra-state migration in India is 'Rural to Rural'.

3. Which is the apex body responsible to improve the quality of roads at national level in India ? [1]

Answer : The National Highway Authority of India (NHAI) with its head office in New Delhi, is the apex body for highways.

11. Distinguish between clustered and semiclustered rural settlements of India, stating three points of distinction. [3]

Answer : The basic differences between Clustered and Semi-clustered rural settlement of India are :

Clustered Rural Settlements :

- (i) The clustered rural settlement is a compact built up area of houses.
- (ii) Such type of settlements are found in fertile alluvial plains.
- (iii) People live in the compact villages for security or defense reason.

Semi clustered Rural Settlements :

- (i) They may result from tendency of clustering in a restricted area of dispersed settlements.
- (ii) Such settlements are wide spread in the Gujarat plains and in some parts of Rajasthan.
- (iii) One or more sections of society choose to live a little away from the main cluster.

14. What are the two types of subsistence agriculture practised in different countries of the world ? Describe the main features of these types.

[1 + 4 = 5]

Answer : Farming is practised in various ways across the world depending upon the geographical condition, demand of produce, labour and level of technology. Farming can be classified into two main types :

(i) Primitive subsistence agriculture and (ii) Intensive subsistence agriculture.

Main features of primitive subsistence agriculture :

1. It is also called shifting agriculture and burn/Jhuming/Milpa/Ladang.
2. It is widely practised by tribes in Africa, South and Central America, South-east Asia.
3. The vegetation are cleared by fire and ashes added to soil fertility. In these areas of heavy rainfall quick regeneration of vegetation takes place.
4. After the soil loses its fertility, land is abandoned and cultivator moves to a new plot.

Main features of intensive subsistence agriculture :

1. It is practised in densely populated regions of monsoon in Asia.
2. Land holdings are small.
3. Farmers use simple tools and more labour including whole family members.
4. Climate with large number of sunshine days and fertile soil by using farm yard manure permits growing more than one crop annually on the same plot.
5. The crops grown in such fields are rice, wheat, maize, pulses and oil seeds.

16. Explain any five factors responsible for the development of 'Hugli industrial region'. [5]

Answer : The development of "Hugli industrial region", includes areas around river Hugli in West Bengal.

The main reasons of development of this belt :

- (i) This region is spread in narrow belt from Bansbaria and Naihati in North to Birla Nagar in South along Hugli river in 100 km distance.

(ii) The river Hugli offered the best site for the development of Inland river port as nucleus to these industries. It also has better connectivity of roads, railways, seaports and airports.

(iii) Opening of coal field of Damodar valley.

(iv) Number of Jute mills in the proximity from where large quantity of jute products are exported.

(v) Availability of cheap labour in the surrounding areas.

17. What is the meaning of density of population ? Examine the four geographical factors that influence the distribution of population in the world with suitable examples. [1 + 4 = 5]

Answer : Meaning of Population Density : The ratio between the number of people to the size of the land/area of state. The number of people inhabiting per unit of land is called population density. As per census 2011, Bihar is most densely populated state with 1106 persons per square km, followed by West Bengal with 1028 persons. Arunachal Pradesh has least density with only 17 person per sq. km.

Geographical factors that influence the populations distribution in the world :

(i) **Relief :** Relief is the most important factor influencing and distribution of population. High mountains, rugged terrains and some of plateaus restrict human settlement. Many parts of the Himalayas, Rockies and Andes are without any population.

(ii) **Climate :** Excessive heat, cold, dryness or wetness restrict human population. Hence areas with normal climate are more dense. Apart from human health, climate affects agriculture as adverse weather conditions result in crop failure.

(iii) **Soil :** Areas of fertile soil permit high concentration of population because it forms the base for high agricultural activities.

(iv) **Natural resources :** Due to availability of natural resources, industries grow up, hence area becomes populated.

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SET III

Time allowed : 3 hours

Note : Except for the following questions, all the remaining questions have been asked in previous set.

1. Write any two features of rectangular rural settlement pattern in the world. [1]
Answer : The features of rectangular rural settlements pattern are :
(i) Roads cut each other at right angles.
(ii) They are found in plains and valleys.
2. Which state of India has the highest percentage of population below poverty line ? [1]

Maximum marks : 70

Answer : Odisha (Orissa) is the state of India which has highest percentage of population below poverty line.

3. Which type of roads provides maximum links in India ? [1]

Answer : Rural roads and districts roads provide maximum links in India.

11. Explain any three points of distinction between 'Hamleted rural settlements' and 'Dispersed rural settlements' of India. [3]

Answer :

Hamleted Rural Settlements	Dispersed Rural Settlements
(i) They are fragmented into many units.	They are isolated settlements.
(ii) This segmentation is motivated by social and ethnic factors.	Extreme dispersion of settlement is caused by terrain and land resources.
(iii) Such settlements are found in Northern plains etc.	Such settlements are found in the Himalayan Mountains and in Kerala etc.

14. Describe any five features of plantation agriculture practised in different regions of the world. [5]

Answer : Main features of plantation agriculture practised in different regions in the world :

- (i) Plantation agriculture was introduced in the tropical lands by Europeans and North Americans primarily in the colonies ruled by them.
- (ii) Plantation crops are coffee, tea, banana, sugarcane, pine apples etc.
- (iii) Estate for plantation are of very large size, sometimes running into the thousands of hectares.
- (iv) It requires large capital investments, managerial and technical support and scientific method of cultivation.
- (v) The labour are supplied by local people at cheaper rates while technical and skilled assistance comes from temperate lands.
- (vi) Cheap transport is required to link the estates with factories and markets for export of products.

16. Explain any five factors responsible for the development of 'Gujarat industrial region'. [5]

Answer : Gujarat Industrial Region : The nucleus of this region lies between Ahmedabad-Vadodara as a result is also known as Ahmedabad-Vadodara industrial region. The main features of growth of this region are :

- (i) This region extends upto Valsad and Surat in the south and Jamnagar in the west.
- (ii) This region is associated with cotton growing tracts with location of textile industries.
- (iii) With discovery of oil and gas in Gulf of Khambhat area led to the establishment of various

oil refineries and petrochemicals around Ankleshwar, Vadodara and Jam Nagar.

(iv) Kandla port provides the basic infrastructure for import and exports.

(v) Development of other heavy and basic chemicals, dyes, pesticides, engineering machinery, textile machinery, pharmaceuticals and dairy products have developed in this region.

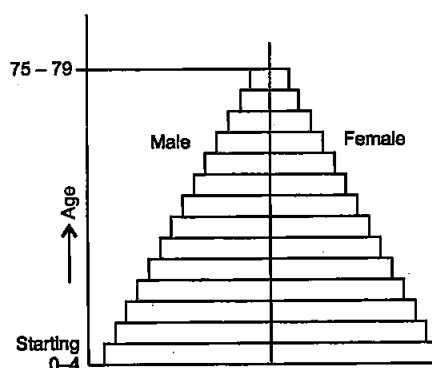
(vi) Surat has best diamond cutting and processing units in the world.

(vii) Due to better roads and highways, transport facilities are available in plenty.

17. What is age structure ? Interpret with example the triangular shaped age-sex pyramid. [5]

Answer : Age structure is the number of people of different age group.

- (i) Generally the population is categorised into three broad age groups : (a) children, (b) adults and (c) aged.



- (ii) Most countries of Africa, Asia and Latin America have high birth rate and they have large size population in the lower age group. Countries having low birth rate and high life expectancy have more people in old age groups.

(iii) If we draw a triangular shaped pyramid having wide base and taper top this is a typical diagram to show age and sex structure of populations. The base and apex represent youngest and oldest age groups respectively.

(iv) This triangular pyramid is typical of less developed countries like Nigeria in Africa, Bangladesh in Asia and Mexico in south America.

(v) Wide base means high birth rates.

(vi) Tapered top indicates high death rates.