Class 10th Geography

Chapter : 6

Regional Geography of India

Textual Questions And Answers

Q1. Give a brief introduction to India.

Ans: India is one of the leading countries of Asia. It lies in the northern hemisphere of the world. It is one of the largest democratic nations. The most noticeable characteristic of India is its diversity which is seen in its physical features, race, culture, language, religion, social customs, dress, food habits, etc. India has snow-capped mountain ranges of the Himalayas as well as the sandy deserts of Rajasthan. Floods occur frequently in many parts of the country while some other parts suffer great hardship due to drought.

The northern part of India lies in the temperate region while the southern part lies in the tropical region. India has lofty mountains and peaks and at the same time it has extensive plains and plateaus. In other words, Indian landmass is characterised by varied landforms such as mountains, hills, plateaus, plains, floodplains, etc. Similarly, one can notice great diversity in race, language and religion. Indians belong to a variety of racial groups such as Austro-Asiatic, Mongoloids, Aryan

and Dravidian groups of people. Hinduism, Islam, Christianity, Buddhism, Sikhism, Jainism, etc. flourish in this country. Despite these diversities, one can see a spirit of national unity in the country. This unity is brought about by common physical landforms, monsoon climate, modern transport and communication system, trade and commerce, national freedom struggle movement, and a unified administration growth in recent years.

Q2. Discuss the characteristics relating to India's location and size.

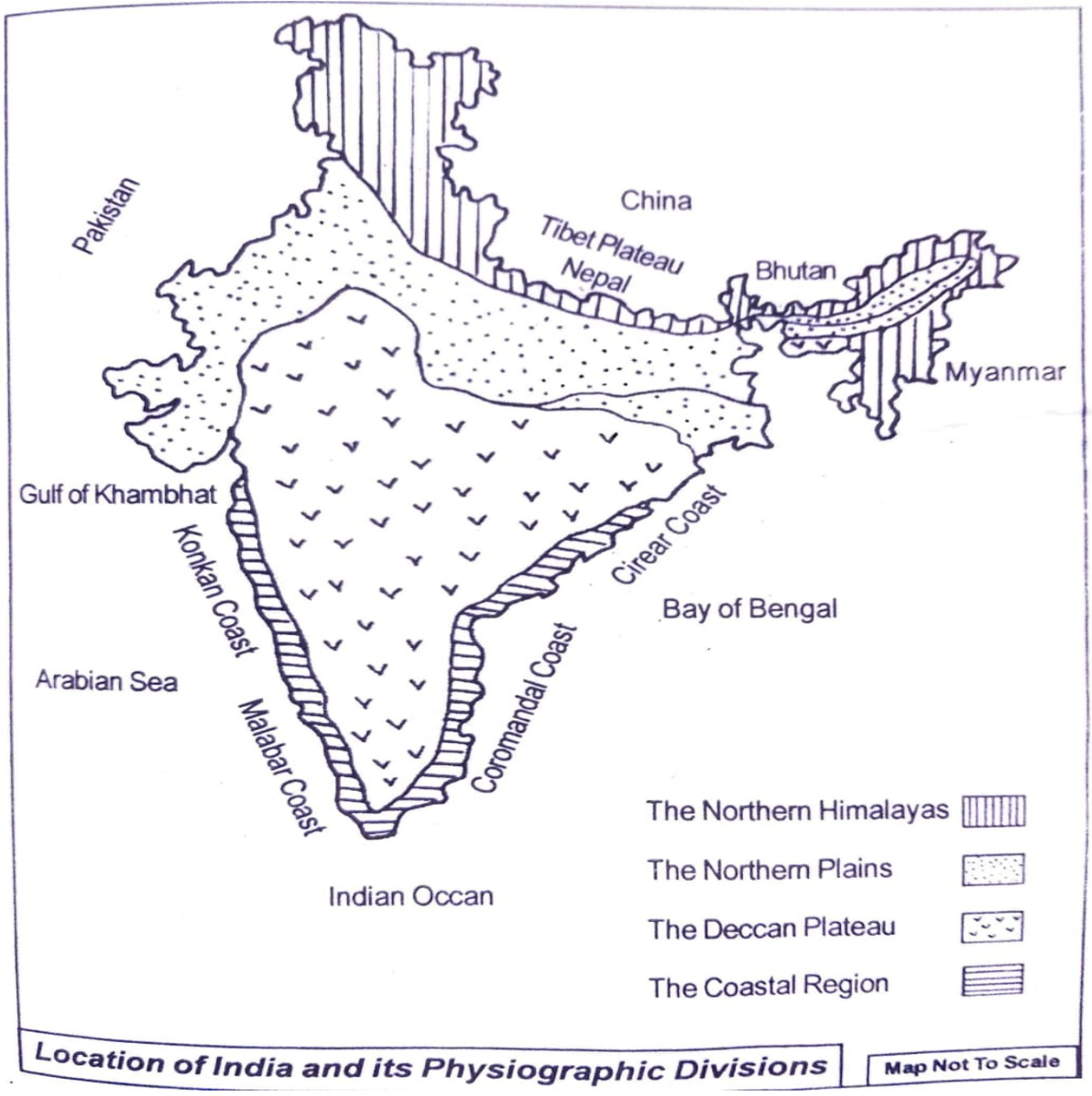
Ans: India is situated in the southern part of the continent of Asia India is surrounded by the Himalayas and China in the north, the Indian Ocean and Sri Lanka in the south, the Bay of Bengal and Myanmar in the east and the Arabian Sea and Pakistan in the west. It extends from Kashmir in the north to Kanniyakumari in the south and from Arunachal Pradesh in the east to Saurashtra in the west. India lies between 8°4 28 N 37°17 53 N lines of latitudes and 68°7 33 E and 97°24 47 lines of longitudes. The Tropic of Cancer divides the country into northern and southern halves.

The northern part lies in the temperate climatic zone while the southern part falls under tropical zone. The north to south length of India is 3,214 km while the east-west length is about 2,933 km. It has a total coastline of 6,100 km while its landline boundary length is over 15,200 km. It shares a common boundary with Pakistan, China, Nepal, Bhutan, Myanmar and

Bangladesh. The total geographical area of India is 32,87,263 million sq.km. which makes it the 7th largest country in the world. India's share in the total land area of the world is only 2.2%. Today, India consists of 28 states and 7 union territories.

Q3. Into how many physiographic divisions India can be divided? Discuss with diagrams.

Ans: India is marked by several physiographic diversities. The main physiography of India consists of mountains, hills, river, valleys, plains, plateaus, etc. About 10.7% of India's total land area is covered by mountains, 18.6% by hills and hillocks, 27.7% by plateaus and 4.3% by plains. On the basis of physiographic characteristics, India can be divided into four divisions :



Q4. Describe the physiographic divisions of India.

Ans: India can be divided into the following four physiographic divisions on the basis of its physiographic characteristics :

(i) The Northern Himalayas : The Himalayan region of India lies in the northern part of India and it extends from Nanga Parbat in Kashmir to Arunachal Pradesh in the east covering a distance of 2,500 km. It has an average widht of 240 km to 500 km. The total geographical area of the Himalayas were formed during the Tertiary period

and are a result of nearly 7 million years of mountains building process. The Himalayas consists of three parallel ranges running from east to west, namely the higher Himalayas, the lesser Himalayas and the outer Himalayas. Among these three ranges, the higher Himalayas have an average height is 4,000 m. Its widht varies from 60 to 80 km. The adjacent ranges of lesser Himalayas are the outer Himalayas. The average height of this range is 1,000 m.

(ii) The Northern Plains : The northern plain lies between the Himalayas in the north and the Deccan plateau in the south. It extends from Assam in the east to the Indo-Pakistan border in the west with a length of 2,400 km and width ranging from 240 km to 320 km. This vast plain is known as Indo-Ganga-Brahmaputra plain. The northern plain can be divided into five parts :
(a) Western plain;

(b) Punjab-Haryana plain;

(c) North Bengal plain;

(d) North Bengal plain.

(e) Brahmaputra.

The three main rivers, namely the Indus, the Ganges and the Brahmaputra with their innumerable tributaries together created this vast plain. Among these rivers, the most important river is Ganges which originates from the Gangotri glacier of the higher Himalayas while the

Brahmaputra originates from a glacier called Chema-yu-Dung located in the Tibetan plateau of China. The most important tributaries of the Ganges are Alakananda, (Yamuna), Ram Ganga, Gomti, Ghagra, Gandak, Son, Kishi, etc. while the main tributaries of the Brahmaputra are Subansuri, Jia Bharali, Dhansiri (north), Dhansiri (south), Puthimari, Manas, Burhi Dihing, Disang, Dikhow, Kapili, Krishnai, etc. The important tributaries of Indus are Sutlej, Beas and Ravi rivers. Towards the west of the central plain, there is a small desert named the Thar desert. The entire plain is very fertile and highly suitable for agriculture. Hence, this region is thickly populated.

(iii) The Deccan plateau : is situated to the south of the north Indian plain. This plateau mostly consists of the old hard rocks. The Vindhya. Satpura, Mahadev and Mahakal mountains divide the whole region into northern and southern parts. The northern part is less extensive and extends from the Vindhya-Satpura ranges to Cape Comorin. The Deccan plateau on the whole slopes towards the east and so most of the rivers of this region such as Mahanadi, Godavari, Krishna, Pennar and Kaveri flow eastwards into the Bay of Bengal while Narmada and Tapti flow towards west and empty themselves in the Gulf of Combay (Khambhat).

(iv) The coastal region : There is a strip of coast of India. The narrow strip of area lying between the western coast of India. The narrow strip of area lying between the Western Coastal plain. Its northern part is called Konkan Coast while the southern part is known as

Malabar Coast. The area lying between the Eastern Ghats and the Bay of Bengal is known as the Eastern Coastal plain. The southern part of this coast is called Coromandal Coast while the northern part is known as Northern Circars. The eastern coastal region is watered by rivers such as Godavari, Mahanadi, Krishna and (Kaveri). It is not as fertile as the western coastal plain. The rivers of this area have deltas.

Q5. Describe briefly the climatic characteristics of India.

Ans: The climate of a place is greatly influenced by various factors such as the size of the country, distance from the equator, nearness to the sea, differences in elevation, natural vegetation, winds, etc. The climate of India is also much influenced by these elements of nature. On the whole, the climate conditions of India are characterised by the following features :

(i) Varied climate : India is a very vast country with varied physiographic features such as mountains, hills, river valleys, plains, plateaus, coastal regions, etc. India has snow-capped mountainous regions, regions with desert conditions, places that receive very high amount of rain, etc. Thus, India is marked by various types of climate.

(ii) Different climatic situation between north and south : The Tropic of Cancer which runs across the middle of India, divides the country into northern and southern parts. The northern part falls in the temperate climate zone while the southern part has tropical climate.

Hence, the southern part of India is relatively warmer than the northern part.

(iii) Difference in attitude : Different places in India are situated at different levels from the sea level. One of the factors that greatly influence the climate of a place is the height from the sea level. That is why, Agra and Darjeeling enjoy different types of climate although both are located on the same latitude.

(iv) Effect of monsoon : One of the chief features of the climate of India is the influence of monsoon on the climate of the whole country. India gets most of its rains due to the south-west monsoon winds which blow from the Arabian Sea during summer. These are moisture laden winds and so they bring a great deal of rain to most parts of India. In winter, north-east monsoon winds bring rain to some parts of India.

(v) Effect of Himalayas : The climate of India is also greatly influenced by the presence of the Himalayas on the northern side. The Himalayas block the cold winds from Central Asia and this has insulated India from the extreme cold weather that most central Asian countries experience. Secondly, the Himalayan ranges in the north and north-east block the moisture laden winds coming from the Bay of Bengal and thereby bring about a great deal of rain to the country.

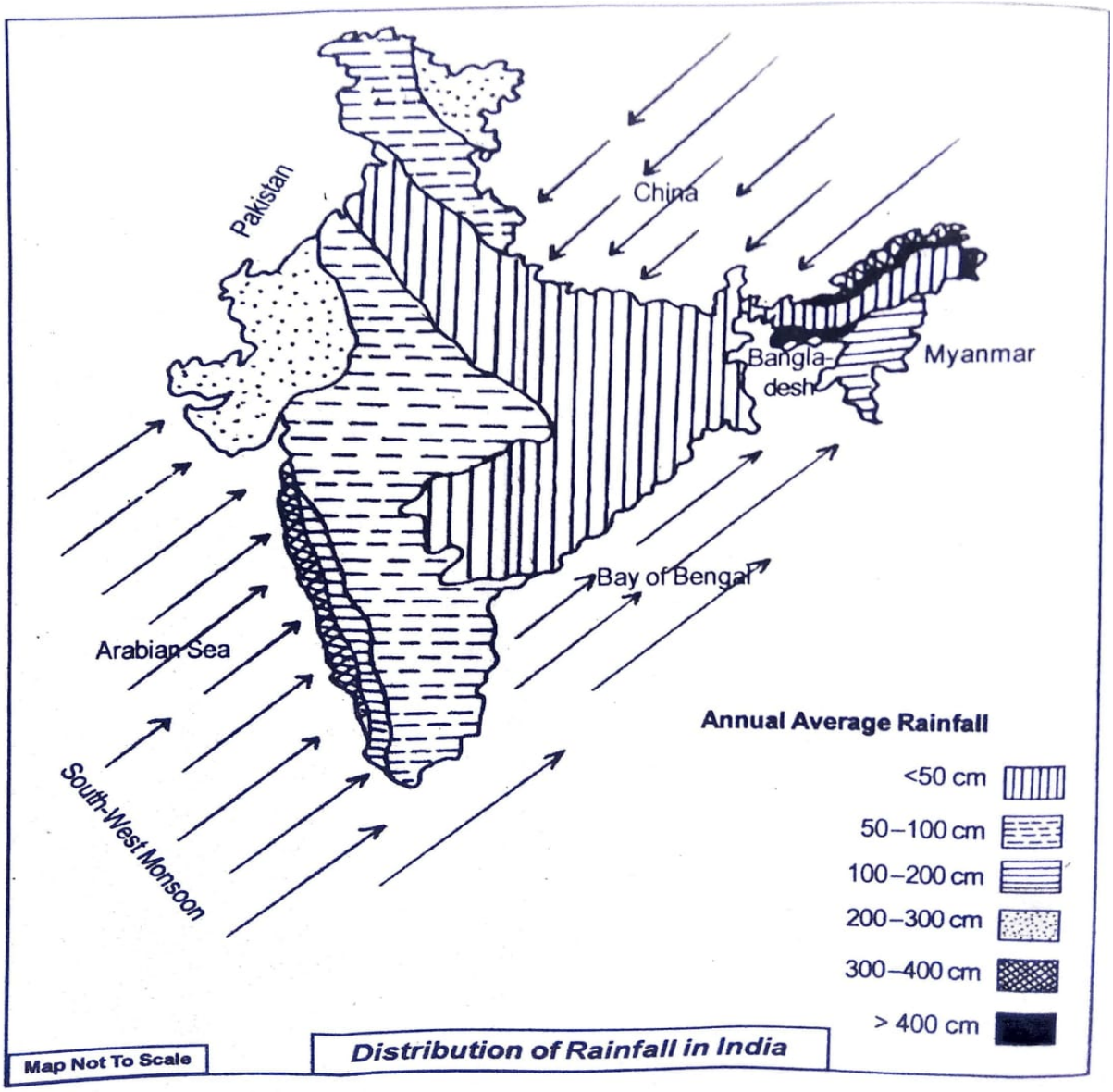
Q6. Explain how the monsoons affect the climate of India.

Ans: One of the unique features of the climate of India is the influence of the monsoons on India. In fact, it is considered to be the most significant factor that determines the climatic conditions of India. The monsoon winds named south-west monsoon winds bring rain to India during summer. These winds from the Arabian Sea move towards the Indian subcontinent during summer. Since they blow over the oceans, they carry enormous amount of moisture. As their flow is blocked by the Western Ghats situated on the western side of the country, these winds rise up, condense and then fall down as rain in the areas facing the western Ghats, these winds flow over the Bay of Bengal moving towards Assam and the North-east.

Since there are no mountain ranges here, these winds come directly to the Meghalaya plateau which force them to rise up and condense. As a result, this region gets heavy rainfall during summer. The Cherrapunji region of Meghalaya gets the highest rainfall in the world (1250 cm of rainfall annually). Thereafter, the winds cross the Meghalaya plateau and enter Assam and its neighboring states. They then move further north and get obstructed by the foothills of the Himalayas. Therefore, this region too gets abundant rain.

During winter, the north-east monsoon winds coming from Central Asia enter India through the mountain gaps of the Himalayan ranges. Since these winds are dry and cold, they do not bring rain to the north-east states. As these winds move towards south, they fly over the Bay

of Bengal carrying in the process a bit of moisture which falls down as rain over the Coromandal coast.



Q7. What are the major soil types found in India? Give short description of each type of soil.

Ans: Soil constitutes one of the important elements of physical environment. The development of agriculture, human settlement, mineral content, etc. of a place are greatly influenced by the type of soil. Different types of soil are found in different parts of India. On the basis of the nature of the soil are found in different parts of India.

On the basis of the nature of the soil, we can find six categories of soil in India :

(i) Mountain soils : Mountain soils are normally found on hills and mountain ranges. The glaciers deposit a lot of sediments and these form glacial soils at the foothills of the mountains. Coniferous forests tend to grow in such soil. As a result of the decomposition of leaves and mixed with soil, the soil becomes acidic. This type of soil is called podzol. The mountain soils are not very fertile. In the foothills of the mountains only rocky soils are found and little vegetation grows over this type of soil.

(ii) Soils of the Indo-Ganga-Brahmaputra plain : The Indo-Ganga-Brahmaputra region has alluvial soil. The alluvial soil is formed by the deposition of silt by the rivers.

Two types of alluvial soils, namely new alluvial soil and old alluvial soil can be seen. New alluvial soil is found in the flood plains as well as on the river banks. These soils are free from salts and are extremely fertile due to humus content. The river valleys of Punjab, Haryana, Utter Pradesh, Bihar, Bihar, Orissa, West Bengal and Assam have this type of soil. On the other hand, the old alluvial soil is relatively hard. As a result of chemical transformation and solidification process, these soils lose their fertility. Therefore, the use of fertilizers is necessary to regain their fertility. This type of soil is found in the plains of Punjab, Uttar Pradesh and Assam.

(iii) Desert soils : The desert soils are found in the Thar desert region of Rajasthan, Saurastra and Rann of Kutch. Desert soils are formed due to various processes of weathering. These soils are composed of a mixture of sand and rock materials and have a high content of nitrogen and less amount of organic matters. Hence, this type of soil is not fertile. In some places, desert soil is free from salt and in those regions cultivation is possible with the help of irrigation. Wheat, barley, etc. are cultivated in such soil.

(iv) Lava soil : The soils formed out of the lava deposits are known as lava soils. Lava soils are also called black soils. This type of soil is found in Maharashtra, western part of Madhya Pradesh, Gujarat and neighboring areas of Andhra Pradesh. One of the qualities of this soil is that they are able to retain moisture and hence suitable for agriculture. This type of soil is ideal for the cultivation of cotton, hence it is also known as cotton soil.

(v) Soils of Deccan plateau : The soils of Deccan plateau were formed as a result of weathering of the old Archaean and Cambrian rocks of the Deccan plateau. These soils are unable to retain water and so are not very good for agriculture by adding fertilizers. Laterite soil is also found in the Deccan. This is a hard and reddish type of soil. Such soils have high content of iron and aluminum. It is found in the Malabar coast and in the eastern parts of Chotanagpur plateau. The laterite type of soil is also found in the Nilgiri hills and Western Ghats. Laterite soils are best suited for the cultivation of tea and coffee.

(vi) Coastal soils : Riverine soils are found in the delta regions of the east coast of India. The sea waves normally deposit sand clay materials along the coastal regions forming coastal soils. Coastal soils being sandy soils are not very good for agriculture. Some alluvial soils and red laterite soils are also found in the coastal regions of Kerala and Karnataka.

Q8. What are the different vegetation types found in India? Mention them on a map.

Ans: The different vegetation types found in India are :

(i) Evergreen vegetation

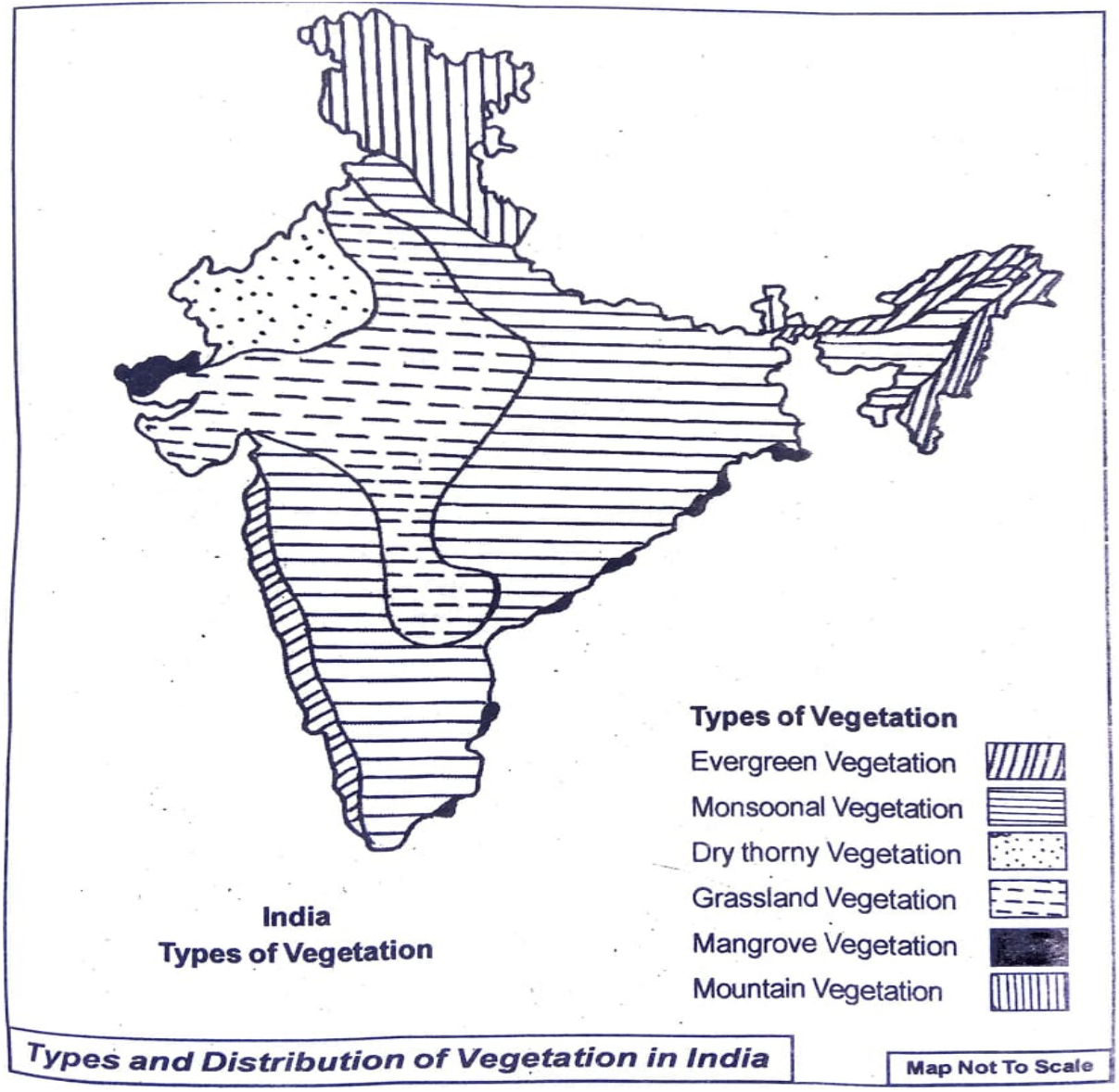
(ii) Monsoonal vegetation

(iii) Dry thorny vegetation

(iv) Grassland vegetation

(v) Mangrove vegetation

(vi) Mountain vegetation



Q9. Describe the types of vegetation of India.

Ans: India is a land of diversity. India's physiography, climate, soil, temperature conditions, rainfall, etc. vary from place to place. Similarly, the natural vegetation also varies from region to region. On the basis of certain characteristics of the vegetation, the following six types of vegetation can be found in India.

(i) Evergreen vegetation : Evergreen vegetation is found in regions having an average annual rainfall of more than 200 cm and temperature between 25°C and 27°C.

The trees of evergreen forests are characterised by great height. Besides tall trees, cane, bamboo, ferns and various kinds of creepers are most commonly seen here. The valuable trees of this type of forests are sisum, sandal, rubber, etc. Evergreen forests are found in the western slopes of the Western Ghats, Himalayan foothills of Arunachal Pradesh, Upper Assam region, hills of Manipur and Mizoram and in the Andaman islands.

(ii) Monsoonal vegetation : The most prevalent type of vegetation found in India is the monsoonal vegetation. This type of vegetation is found in regions having an average annual rainfall between 100 cm and 200 cm and temperature of around 27°C. Most trees of this type shed their leaves in winter. The important trees of monsoonal forests are sal, teak, siris, sisu, simul and varieties of bamboo, etc. This type of forests are found in Assam, West Bengal, Bihar, Uttar Pradesh, Himachal Pradesh, some parts of Haryana, Madhya Pradesh, Tamil Nadu, Western Ghats, Eastern Ghats and the eastern parts of the Deccan plateau, humid areas of the south Indian states, the Andaman and Nicobar Islands, etc.

(iii) Dry thorny vegetation : Dry thorny vegetation grows in the regions where average annual rainfall is less than 50 cm and temperature is normally high. Since the soil is sandy and water content in soil is less, the trees have thorny leaves to check evapotranspiration. The western part of the Thar desert of Rajasthan and south-western parts of Punjab have this type of vegetation. The major

trees of dry lands and desert regions include acacia, different varieties of cactus, date, palm, etc.

(iv) Grassland vegetation : Extensive grasslands like Praire of North America and Savannah of Africa are not found in India. However, small grasslands are found in areas having an average annual rainfall between 50 cm and 100 cm. Such grasslands are found in Punjab, eastern part of Rajasthan, plains of Uttar Pradesh, central parts of Andhra Pradesh, Karnataka and some as thatche, cane, reed, etc. can also be found in the west and waterlogged areas of the Terai region of the Himalayan foothills. Some of the trees grown in this region are khoir, simul, etc.

(v) Mangrove vegetation : Mangrove vegetation is found in the coastal delta regions. This type of vegetation is found mainly in the coastal areas of the Gulf of Kutch, Sundarbans of West Bengal (the delta regions of the Ganga-Brahmaputra), in the delta regions of Mahanadi, Godavari, Krishna and Kaveri rivers. The main trees found in this region are sundari, date, palm, coconut and bushy plants.

(vi) Mountain vegetation : Hilltops and mountains have different types of vegetation. There are varieties of vegetation at different heights of the mountains. The Himalayan foothills having an elevation of 1,000 m are covered with thick monsoonal forests. To the north of the monsoonal forests, one can find coniferous trees which are situated between 1,000 m and 2,000 m. Such forests are found in the Himalayan regions of Kashmir,

Himachal Pradesh, Uttar Pradesh, etc. In the north-eastern hill regions, we can see the coniferous forests. At the altitudes between 1600 and 3,000 m, many varieties of coniferous trees are found. Beyond this elevation, the regions have Alpine type of forests.

Q10. Write a short note on the growth of population in India.

Ans: India is the second most populous country in the world with a population of 102.7 crores as per the census of 2001. India has nearly 16% of the world's total population while she possesses only 2.2% of the total land area of the world. One of the noticeable features of Indian population is that it has been growing at a rapid rate since the beginning of the 20th century. In fact, India's population was just 23.84 cores in 1901 which increased to 102.7 crores in 2001. Another noticeable aspect of this growth pattern is that the increase in population in the decade between 1991 and 2001 was far greater than those of the previous decades.

In 1991, the population of India was 84.63 crores reached to 102.7 crores in 2001--- an increase of 18.07 crores within ten years. It is also to be noted that the growth pattern of the Indian population showed a downward trend in the decade between 1911 and 1921. The population of India in 1911 was around 25.21 crores while the population size in 1921 was just 25.13 crores showing a slight negative growth. Ever since 1921, the Indian population has been growing at an alarming rate. Today, the growth rate of Indian population is over 1.7%

while the world's average growth rate of population is only 1.2%. The main causes of this high population growth rate in India have been the increase in birth rate, decrease in death rate due to better medical facilities, marriage of girls at an early age, migration from other countries, etc.

Years	Population (Crores)
1901	23.84
1911	25.21
1921	25.13
1941	31.86
1951	36.11
1961	43.92
1971	54.82
1981	68.33
1991	84.63
2001	102.70

Q11. "Population distribution is not uniform in all places of India". --- Explain.

Ans: India is the second most populous country in the world with a population of 102.7 crores according to 2001 census. The average density of population of India is 324 persons per sq. km. However, this density of population varies from place to place. For example, Delhi has a density of population 6,352 persons per sq. km. (2001 census) while Arunachal Pradesh has only 13 persons per sq. km. Uttar Pradesh has over 16.6 crores of people while Lakshadweep has about 60,000 people only. Thus, we see that the population distribution is not

even in India. The primary reasons for the uneven distribution of population in India are :

(i) Difference in relief conditions : The size of population of a place is greatly affected by the relief conditions of the place. The river valleys with alluvial plains have high population because of the possibility of agriculture, human settlement and better transport and communication facilities. On the other hand, hilly regions with little scope for agriculture and transport facilities have less population.

(ii) Variation in climate : Climate exerts a great impact on the population distribution. Desert regions of Rajasthan have low population while Ganga plain has high population mainly because of the difference in climate. Extreme hot and cold climatic conditions and no rainfall discourage human settlement and economic activities in the plains of Rajasthan.

(iii) Influence of soil : Scope for agriculture depends on soil conditions. The alluvial soil of the river valleys and the black soil of Deccan plateau are ideal for cultivation of rice and wheat respectively. Hence, these regions are thickly populated. The mountain soil is not very good for agriculture. Hence, the population density is thin in the mountainous region.

(iv) Influence of rivers : Rivers valleys have high population distribution mainly because of the availability of water for domestic and industrial purposes. Such regions are also best suited for the development of

agriculture which in turn encourages human settlement. That is why river valleys are considered to be cradles of civilization.

(v) Presence of minerals : Availability of mineral resources help the industrialisation of an area. Industrialisation brings about a lot of job opportunities. Hence, the major industrial regions of India are thickly populated.

(vi) Religious influence : Religious places like Varanasi, Mathura, Haridwar, Puri, etc. have thick population as many people like to settle in such holy places.

(vii) Transport and communication facilities : The population distribution is quite high in places that have better or modern transport and communication facilities. This is one of the major reasons for the presence of high population in towns and cities as compared to rural areas.

Q12. Discuss how population density varies in India.

Ans: One of the features of Indian population is its uneven population distribution. Certain regions of India are thickly populated while other areas are thinly populated. But if we look at India as a whole, the average density of the population is 324 persons per sq. km, i.e. 324 persons live on per sq. km while Arunachal Pradesh has only 13 persons per sq.km. Uttar Pradesh with a population of 16.6 crores is the most populous state of India while the total population of Lakshadweep

islands adds up to just 60,000 people. Some of the densely populated states and union territories of India are West Bengal, Delhi, Chandigarh, Kerala, Daman and Due, Pondicherry (present Puducherry), etc. The areas that have a low density of population are Himachal Pradesh, Jammu and Kashmir, Meghalaya, Nagaland, Manipur, Sikkim, Arunachal Pradesh, Mizoram and Andaman and Nicobar islands. The factors that cause differences in the density of population of India are :

(i) Relief conditions

(ii) Variations in climate

(iii) Soil differences

(iv) Availability of transport and communication

(v) State of economic and industrial development, etc.

Q.13. Give a description of urban population of India and also present data on urban population growth in some major cities of the country.

Ans: The density of population in the towns and cities of India is quite high. Easy transportation facilities, high industrial development, urban facilities, better employment opportunities, etc. encourage people to settle down in cities and towns. Thus, a good number of Indian population lives in the urban centres. The urban population of India was 25.7% according to 1991

census. In other words, 74.3% of the Indian population lives in the rural areas. Along with the general increase in the size of the population of India, the urban population has also been increasing at a rapid rate. A cursory look at the growth of cities and townships in India during the last few decades will substantiate this point. In 198 there were about 3,245 towns and cities in India which number rose to 3,768 in 1991.

Today, there are 13 cities with over one million population. The most populous cities of India are Mumbai, Kolkata, Delhi and Chennai. According to 1991 census, the population Mumbai was 125.71 million which was followed by Kolkata with a population of 109.16 million. The size of the urban population in almost all the states has been increasing at a rapid rate as a result of the economic advancement achieved by India. The industrial development and economic growth achieved by India during the recent decades has boosted the growth of her towns and in 1991 this number went up to 87. Guwahati is the largest town in Assam. According to 1991 census, the population of Guwahati was 5.84 lakhs. About 23.5% of the total urban population of Assam lives in the city of Guwahati alone.The first ten cities of India on population size :

Cities	Population as per 1991 census (in million)
1. Mumbai	125.71
2. Kolkata	109.16
3. Delhi	83.75
4. Chennai	53.61
5. Hyderabad	42.80
6. Bangalore	40.86
7. Ahmedabad	32.97
8. Pune	24.85
9. Kanpur	21.11
10. Nagpur	16.61

Q14. Describe the characteristics of the major agricultural regions of India.

Ans: Agriculture plays a major role in the economy of India. More than two-thirds of the people of the country depend on agriculture for their livelihood. It supplies food to more than one billion people of India. It is a source of foreign exchange as well as supports numerous agro-based industries. Thus, agriculture constitutes one of the pillars of our national economy. On the basis of the cultivation, India can be divided into the following agricultural regions :

(i) Fruits and vegetables region : This region extends from Kashmir to north-east India. The north-western part gets an annual rainfall of 60 cm and the eastern part receives around 200 cm of rainfall. Both the regions have ideal temperature for the growth of fruit trees. The main fruits grown in this region are apples, peach, cherries, plum, apricot, oranges, etc. Vegetables like potatoes, chillies, etc. are also grown here.

(ii) Rice-jute-tea region : India is one of the main rice producing regions of India include Assam, Arunachal Pradesh, Tripura, Meghalaya, West Bengal, Orissa, Northern and Eastern Bihar and the Terai region of Uttar Pradesh. This region has an abundance of fertile river valleys which are best suited for the cultivation of rice. Tea is largely grown in the Upper Brahmaputra valley of Assam, Tripura and North Bengal. Jute is grown in Assam, the Ganga plain, the delta region and the eastern coastal region of India. Besides rice, jute and tea, other crops, such as mustard, pulses and fruits like coconut, jackfruit, pineapple, mango, orange, etc. are also grown in this region.

(iii) Wheat and sugar cane region : This agricultural zone includes northern part of Bihar, Uttar Pradesh, Punjab, Haryana, western part of Madhya Pradesh, northern part of Rajasthan, etc. This region gets moderate rainfall and so the shortfall in rainfall is met by irrigation. The major crops cultivated in this region are wheat and sugar cane. Rice is also grown in some places of this region. Wheat and sugar cane are grown in Uttar Pradesh, plains of Bihar and northern bank of the Ganges. Wheat is extensively cultivated in Ganga-Yamuna doab region, plains of Punjab, Haryana and northern Rajasthan. Besides these two crops, some other crops such as maize and pulses are also grown in this region.

(iv) Millets and oilseeds region : This agricultural region includes the Karnataka plateau, parts of Tamil Nadu, southern parts of Andhra Pradesh and eastern part of

Kerala. This region gets scanty rainfall ranging from 75 cm to 125 cm annually. The main crops grown include millets such as bajra, ragi, jowar and oil seeds such as groundnut, mustard and other pulses. Besides these, fruits such as mangoes and bananas are extensively grown here.

(v) Maize and coarse crop region : This region includes western Rajasthan, the semi-arid regions of Gujarat and the desert regions of western India. The eastern part contains some areas of alluvial soils, while the western part is mostly dry and sandy. This region gets an annual rainfall of 50 cm. Wheat and ragi crops are grown in the Mewar plateau while maize is grown in the western part of this region. Cotton, sugar cane, rice, bajra, etc. are also grown on a smaller scale in some parts of this agricultural zone.

(vi) Cotton region : The Deccan plateau is highly suited for the cultivated of cotton. The river valleys of the region are covered by black soil which is ideal for the cultivation of cotton. This region is mainly spread over Gujarat and Maharashtra. As this region falls in the rain shadow area of the Western Ghats, it gets little rain. Although cotton is the main crop of this region, yet other crops like jowar, bajra, gram, sugar cane, wheat, etc. are also cultivated.

(vii) Spices and plantation crop region : This region covers most parts of the coastal plains of the east and west, the Andaman and Nicobar islands and the Lakshadweep Islands. This region gets over 250 cm of

annual rainfall. The main items produced here are coffee, rubber, tapioca, pepper and cardamom. Rice is also cultivated in certain parts.

Q15. Locate the major industrial regions of India in a map and describe each of them briefly.

Ans : India is considered to be one of the fast rising industrialised nations of the world. Her economic progress has been brought about mainly as a result of the industrial development achieved by her during the last few decades. On the basis of the industrial development, the whole of India can be divided into the following industrial regions :

(i) Hoogly industrial region : This industrial region is situated in the region of Hooghly and Kolkata city. The major industrial centres of this industrial region are Naihati, Jagatdal, Shamnagar, Tribeni, Belur, Liluah, Andul, etc. This region was the centre of jute and engineering industries once upon a time. But, unfortunately both industries suffered after the partition of India due to lack raw-materials. Labour unrest, power supply problem, lack of capital, etc. in present times have also been detrimental to industrial growth.

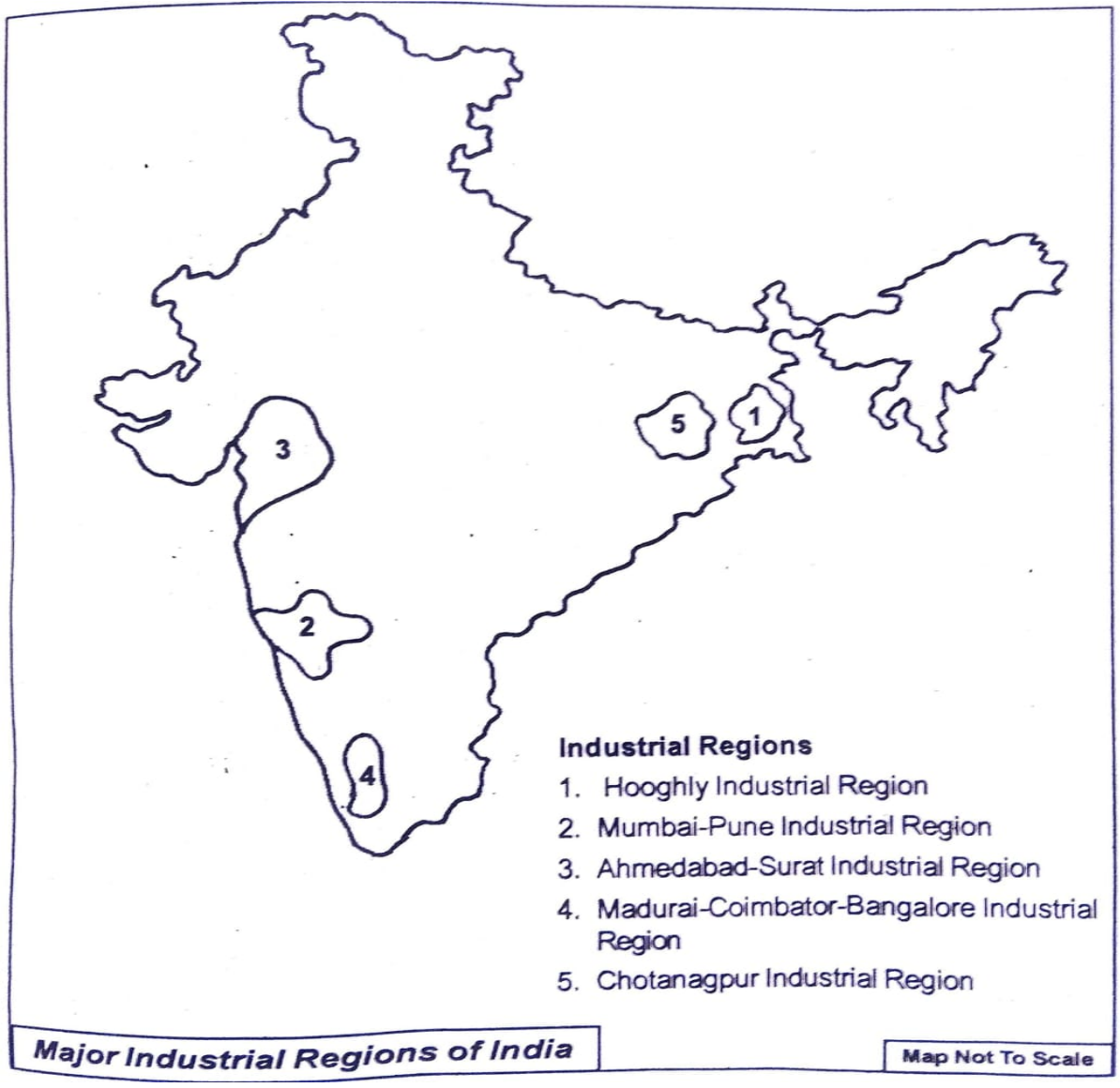
(ii) Mumbai-Pune industrial region : The Mumbai-Pune industrial region is the centre of cotton textile industry in India. The important industrial centres of this region are Mumbai, Vile Parle, Thane, Bhandup and Pune. With the discovery of oil at Bombay High in the recent past, industrial, etc. have come up here. Today, Pune has

become a major chemical and machinery producing centre of India. With good capital inflow and enough labour industry has greatly diversified here.

(iii) Ahmedabad-Surat industrial region : This industrial region surrounding Ahmedabad and Surat in Gujarat becoming famous for industries such as petrochemical, fertilizer, synthetic fibre, diamond and chemical producing industries. Today, the focus is more on chemical industries rather than cotton textiles due to the availability of natural oil and gas.

(iv) Madurai-Coimbatore-Bangalore industrial region : This is the most industrially advanced region of South India. The region is noted for the presence of various types of cotton textile industries. A good number of government controlled industries like machine tools industry, Indian telephone industry, aeronautical industry, etc. are also located in this region.

(v) Chotanagpur industrial region : The Chotanagpur region has gown as a result of the mining and metal industries. The availability of coal and iron ore has made this region a centre of iron ore has made this region a centre of iron and steel industries in the country. Besides these industries, engineering and chemical industries have also developed here.



Q16. Write short notes on the following :

(a) The north Indian plain region.

(b) Importance of agriculture in Indian economy.

(c) Monsoon vegetations.

(d) Monsoons and rainfall in India.

(e) Causes of population growth in India.

(f) Causes responsible for uneven distribution of population in India.

(g) Lava soils.

(h) Hooghly industrial region.

(i) Characteristics of the north India rivers.

(j) Characteristics of the south Indian rivers.

(k) Indian islands.

(l) The Himalayan mountain region.

Ans : (a) The north Indian plain region : Do your self.

(b) Importance of agriculture in Indian economy : Agriculture constitutes one of the main pillars of Indian economy. Nearly two-thirds of the Indian population is dependent on agriculture for their livelihood. It provides raw-materials for several agro-based industries. These industries not only boost industrial production but also provide employment opportunities to thousands of people in the country and thereby reduce economic poverty and the problem of unemployment. It contributes substantially to national income by various forms of taxes and revenues to the government. The production of agricultural machinery, fertilizer, pesticides, etc. greatly boosts industrial production which in turn adds to the national income. India earns a great deal of foreign exchange by the way of export of agricultural produce

particularly spices, tea, raw-cotton, etc. It feeds over a billion people of this country. Today, India saves a lot of national income by producing sufficient amount of food stuff within the country. Thus, agriculture has a significant role in the overall economic development in Indian economy.

(c) Monsoon vegetation : Do your self.

(d) Monsoons and rainfall in India : Do your self.

(e) Causes of population growth in India : Do your self.

(f) Causes responsible for uneven distribution of population in India : Do your self.

(g) Lava soils : The soils formed directly as a result of the cooling of the molten materials from volcanoes are known as lava soils. In other words. these are soils formed out of the lava deposits. Lava soils are also called black soils. The chief characteristics of this type of soil are :

(i) It has the capacity to retain moisture.

(ii) It is black in colour and is volcanic in origin.

(iii) It is ideal for the cultivation of cotton.
This soil is also known as cotton soil. In India, this type of soil found in Maharashtra, western part of Madhya Pradesh, Gujarat and neighbouring areas of Andhra Pradesh.

(h) Hooghly industrial region :Do your self.

(i) Characteristics of the north Indian rivers : The main north Indian rivers are the Indus, the Ganges and the Brahmaputra. Their chief characteristics are :
(i) The Ganges originates from the Gongotri glacier of the Higher Himalayas. The Brahmaputra originates from the Chema-yu-Dung glacier of China.

(ii) The north Indian rivers are quite young and have been formed in the recent past.

(iii) They all are quite long.

(iv) They carry an enormous amount of water and slit.

(v) The north Indian rivers have distinct upper, middle and lower courses.

(vi) These rivers change their course frequently.

(vii) They cause floods frequently causing huge destruction.

(viii) The river basins of these rivers are very fertile and hence thickly populated.

(ix) These rivers have large deltas.

(x) Many towns and cities are established on their banks.

(xi) They are highly useful for power generation and irrigation.

(j) Characteristics of the south Indian rivers : The important south Indian rivers are Narmada, Tapti, Mahanadi, Godavari, Krishna and Kaveri. Narmada and Tapti flow westwards and empty themselves into the Gulf of (Khambhat) while all other Deccan rivers flow eastwards and empty themselves in the Bay of Bengal. The important characteristics of these rivers are :

(i) The rivers of the Deccan originate in plateaus and low hills of the region. They are fed by rains. Therefore, most of these rivers are seasonal and become dry during the dry season.

(ii) These rivers are much older than their counterparts in the north.

(iii) These rivers are relatively shorter in length.

(iv) They carry less water and sediments than the northern rivers. (v) There are no distinct upper, middle and lower courses.

(vi) These rivers do not change their courses.

(vii) The river valleys created by the Deccan rivers are not very suitable for agriculture.

(viii) The river basins of the Deccan rivers are not very suitable for agriculture.

(ix) These have small deltas or no deltas.

(x) These are highly suitable for power generation.

(xi) Only few towns are situated on the banks of the Deccan rivers.

(k) Indian islands : The two island groups of India are the Lakshadweep Islands group that lies in the Arabian Sea and the Andaman and Nicobar Islands group which lies in the Bay of Bengal. The Lakshadweep island group consists of 25 islands and these islands are situated quite close to the state of Kerala.

Its total geographical area is only 32 sq.km and the capital is Kavaratti. The average height of the Lakshadweep Islands from the sea level is as low as 3 to 5 meters. On the other hand, the Andaman and Nicobar Islands group consists of 215 islands. These Islands are situated far away from the east coast of India in the Bay of Bengal. This island group has a length of 590 km. and a width of 58 km. Its total geographical area is 8,249 sq.km. Its height from the sea level is not more than 5 meters.

The capital of this island group is Port Blair. Most of the islands of the above mentioned island groups are small and uninhabited. Both of these island groups have their own geographical, economic and socio-cultural features. The Lakshadweep islands are coral in nature while the Andaman and Nicobar islands are volcanic in origin.

(I) The Himalayan mountain region : The Himalayan ranges extend from the Indus valley in the west to the Brahmaputra valley in the east covering a distance of 2,500 km. Most of the northern rivers such as the Ganges and the Brahmaputra originate from the Himalayas. The Himalayas consist of three parallel ranges, namely the Greater Himalayas or Himadri, the Middle Himalayas or Himachal and the Outer Himalayas or Siwaliks. The Greater Himalayas contains some of the highest peaks of the world such as Mt Everest, Kanchenjunga, Nanda Devi, etc.

To the south of the Greater Himalayas run the middle ranges and these ranges are known as Lesser Himalayas. Many of the important hill stations such as Dalhousie, Nainital, Dehradun, Darjeeling, etc. are situated on these ranges. To the south of Lesser Himalayas lie the Outer Himalayas. This is known as Siwaliks. The Outer Himalayan ranges are not very high and are characterised by thick forests and tea gardens. The eastern ranges of the Himalayas are known as Purvanchal which consist of several hills such as Patkai, Bum, Naga, Jaintia, Khasi, Garo hills, etc.

The western branch of the Himalayas extend from the north-west to the Arabian Sea. This part consists of ranges such as Hindukush, Safed Koch, Sulaiman, Kirthar, Zanskar ranges, etc. They separate India from Afghanistan and are not as high as their eastern counterparts. These ranges are noted for their mountain passes such as Khyber, Kurram, Gomal, Tochi and Bolan passes.