1. Choose the right answer from the four alternatives given below.

(i) The Tropic of Cancer does not pass through

(a) Rajasthan (b) Odisha

(c) Chhattisgarh (d) Tripura

(ii) The easternmost longitude of India is

(a) 97° 25′ E (b) 68° 7′ E

(c) 77° 6′ E (d) 82° 32′ E

(iii) Uttarakhand, Uttar Pradesh, Bihar, West Bengal and Sikkim have common frontiers with

(a) China (b) Bhutan

(c) Nepal (d) Myanmar

(iv) If you intend to visit Kavarati during your summer vacations, which one of the following Union Territories of India will you be going to

(a) Puducherry (b) Lakshadweep

(c) Andaman and Nicobar (d) Daman and Diu

(v) My friend hails from a country which does not share a land boundary with India. Identify the country.

(a) Bhutan (b) Tajikistan

(c) Bangladesh (d) Nepal

Answer:

(i) The Tropic of Cancer does not pass through – **(b) Odisha**.

(ii) The easternmost longitude of India is **– (a) 97° 25′ E**.

(iii) Uttarakhand, Uttar Pradesh, Bihar, West Bengal and Sikkim have common frontiers with **(c) Nepal**.

(iv) Kavarati is situated in the union territory of **(b) Lakshadweep**.

(v) (b) Tajikistan does not share a land boundary with India.

2. Answer the following questions briefly.

(i) Name the group of islands lying in the Arabian Sea.

(ii) Name the countries which are larger than India.

(iii) Which island group of India lies to its south-east?

(iv) Which island countries are our southern neighbours?

Answer

(i): India lies in the Northern hemisphere, with the mainland extending between latitudes 8°4'N and 37°6'N and longitudes 68°7'E and 97°25'E. The Tropic of Cancer (23° 30'N) divides the country into almost two equal parts, where the Lakshadweep islands lie in the Arabian Sea to the south-west of the mainland, and the Andaman and Nicobar islands lie in the Bay of Bengal to the south-east of the mainland.

(ii): The countries which are larger than India are Russia, Canada, the U.S.A, China, Brazil and Australia. Russia is the largest of all countries, with an area of 17.09 million sq.km, while India has an area of 3.28 million sq.km.

(iii): The Andaman and Nicobar islands lie to the south-east of India in the Bay of Bengal. India has a land boundary of about 15,200 km. The total length of the coastline, including the islands of Andaman and Nicobar and Lakshadweep, is 7,516.6 km.

(iv): The island countries that are our southern neighbours are Sri Lanka and the Maldives. Maldives Islands are situated to the south of the Lakshadweep Islands, whereas Sri Lanka is separated from India by a narrow channel of sea formed by the Palk Strait and the Gulf of Mannar.

3. The sun rises two hours earlier in Arunachal Pradesh as compared to Gujarat in the west, but the watches show the same time. How does this happen?

Answer:

The latitudinal and longitudinal extent of India is about 30°. The east-west extent is smaller than the north-south extent. There is a time lag of two hours from Gujarat to Arunachal Pradesh. As Arunachal Pradesh lies on the eastern side of India, the sun rises here earlier when compared to Gujarat. The time along the Standard Meridian of India (82°30'E) passing through Mirzapur (in Uttar Pradesh) is taken as the standard time for the whole country. The latitudinal extent influences the duration of day and night as one moves from south to north. Therefore, the watches show the same time in all parts of the country.

4. The central location of India at the head of the Indian Ocean is considered of great significance. Why?

Answer:

India is a southward extension of the Asian continent and is located in a central position between East and West Asia. The Indian Ocean provides a strategic central location to India, as it connects the East Asian countries with Europe in the West. The Deccan Peninsula also protrudes into the Indian Ocean, thus helping India establish close contact with West Asia, Africa and Europe from the western coast and with Southeast and East Asia from the eastern coast. There is no other country like India in the world which has a long coastline on the Indian Ocean and thus, justifying the naming of an ocean after it.

EXERCISE

PAGE NO: 15

1. Choose the right answer from the four alternatives given below.

(i) A landmass bounded by the sea on three sides is referred to as

(a) Coast

(b) Island

(c) Peninsula

(d) None of the above

Answer: (c)

(ii) Mountain ranges in the eastern part of India forming its boundary with Myanmar are collectively called

(a) Himachal

(b) Uttarakhand

(c) Purvachal

(d) None of the above

Answer: (c)

(iii) The western coastal strip, south of Goa is referred to as

(a) Coromandel

(b) Konkan

(c) Kannad

(d) Northern Circar

Answer: (c)

(iv) The highest peak in the Eastern Ghats is

(a) Anai Mudi

(b) Kanchenjunga

(c) Mahendragiri

(d) Khasi

Answer: C

2. Answer the following questions briefly.

(i) What is the bhabar?

Answer:

The northern plains are generally described as flatlands, with no variations in their relief. However, that is not true. These vast plains also have diverse relief features. According to the variations in relief features, the northern plains can be divided into four regions. The rivers, after descending from the mountains, deposit pebbles in a narrow belt of about 8 to 16 km in width lying parallel to the slopes of the Shiwaliks. This region is known as bhabar.

(ii) Name the three major divisions of the Himalayas from north to south.

Answer:

1. The northernmost range is known as The Great or Inner Himalayas or Himadri.
2. Himachal or Lesser Himalaya.
3. Outer Himalayas or Shiwaliks.

(iii) Which plateau lies between the Aravali and the Vindhya ranges?

Answer:

The Malwa plateau lies between Aravali and Vindhya ranges.

(iv) Name the island group of India having a coral origin.

Answer:

The Lakshadweep Islands is the island group of India having a coral origin.

3. Distinguish between

(i) Bhangar and Khadar

Answer:

Bhangar

1. Lies above flood plains of the river.
2. Older alluvium or old soil and forms the largest part of the northern plains.

Khadar

1. It is a newer, younger deposit of flood plains. It is renewed every year.

(ii) the Western Ghats and the Eastern Ghats

Answer:

The Western Ghats

1. Lie parallel to the Western Coast.

2. They are continuous and can be crossed through passes only.
3. The Western Ghats' average elevation is 900 – 1600 metres.
4. The Western Ghats cause orographic rain by facing the rain-bearing moist winds to rise along the western slopes of the Ghats.
5. The height of the Western Ghats progressively increases from north to south.

The Eastern Ghats

1. Lies parallel to the Eastern Coast.
2. They are discontinuous and irregular.
3. The Eastern Ghats are dissected by rivers flowing into the Bay of Bengal.
4. The Eastern Ghats average elevation is 600 metres.

4. Which are the major physiographic divisions of India? Contrast the relief of the Himalayan region with that of the Peninsular plateau

Answer:

The major physiographic divisions of India are

1. The Himalayan Mountains
2. The Northern Plains
3. The Peninsular Plateau
4. The Indian Desert
5. The Coastal Plains
6. The Islands

Contrast the relief of Himalayan region and Peninsular Plateau

Geologically, the Peninsular Plateau constitutes one of the ancient landmasses on the earth's surface. It was supposed to be one of the most stable land blocks. The Himalayas are the most recent landforms. From the viewpoint of geology, Himalayan mountains form an unstable zone. The whole mountain system of Himalaya represents a very youthful topography with high peaks, deep valleys and fast-flowing rivers. The northern plains are formed of alluvial deposits. The peninsular plateau is composed of igneous and metamorphic rocks with gently rising hills and wide valleys.

5. Give an account of the Northern Plains of India.

Answer:

The Northern Plains are the most recent landforms. The northern plains are formed of alluvial deposits. The northern plain has been formed by the interplay of the three major river systems, namely — the Indus, the Ganga and the Brahmaputra, along with their tributaries. This plain is formed of alluvial soil. The deposition of alluvium in a vast basin lying at the foothills of the Himalaya over millions of years formed this fertile plain. It spreads over an area of 7 lakh sq. km. The plain being about 2400 km long and 240 to 320 km broad, is a densely populated physiographic division. With a rich soil cover combined with an adequate water supply and favourable climate, it is agriculturally a productive part of India. The Northern Plain is broadly divided into three sections. The Western part of the Northern Plain is referred to as the Punjab Plains. Formed by the Indus and its tributaries, the larger part of this plain lies in Pakistan. The Indus and its tributaries — the Jhelum, the Chenab, the Ravi, the Beas and the Satluj all originate in the Himalaya. This section of the plain is dominated by the doabs. The Ganga plain extends between Ghaggar and Teesta rivers. It is spread over the northern states of Haryana, Delhi, U.P., Bihar and partly Jharkhand. The Ganga plains also extend towards Bengal to it's east. Further east, in Assam lies the Brahmaputra plain. The northern plains are generally

described as flatlands with no variations in their relief. However, this is not exactly true. These vast plains also have diverse relief features. According to the variations in relief features, the Northern plains can be divided into four regions. The rivers, after descending from the mountains, deposit pebbles in a narrow belt of about 8 to 16 km in width lying parallel to the slopes of the Shiwaliks. This region is known as bhabar. All the streams disappear in this bhabar belt. South of this belt, the streams and rivers re-emerge and create a wet, swampy and marshy region known as terai. This was once a thickly forested region, full of wildlife.

6. Write short notes on the following.

(i) The Indian Desert

Answer:

The Indian desert lies towards the western margins of the Aravali Hills. It is an undulating sandy plain covered with sand dunes. This region receives very low rainfall. The average rainfall is below 150 mm per year. It has an arid climate with low vegetation cover. Streams appear during the rainy season. Soon after they disappear into the sand as they do not have enough water to reach the sea. Luni is the only large river in this region.

(ii) The Central Highlands

Answer:

Central Highlands and the Deccan Plateau. The part of the Peninsular plateau lying to the north of the Narmada river, covering a major area of the Malwa plateau, is known as the Central Highlands. The Central Highlands are wider in the west but narrower in the east. The eastward extensions of this plateau are locally known as the Bundelkhand and Baghelkhand. The Chotanagpur plateau marks the further eastward extension, drained by the Damodar river.

(iii) The Island groups of India

Answer:

Lakshadweep Islands

The Lakshadweep group of islands is composed of small coral islands. Earlier they were known as Laccadive, Minicoy and Amindive. In 1973, these were re-named as Lakshadweep. It covers a small area of 32 sq km. The Kavaratti Island is the administrative headquarters of Lakshadweep. This island group has a great diversity of flora and fauna. The Pitti island, which is uninhabited, has a bird sanctuary.

Andaman and Nicobar Islands

The elongated chain of islands located in the Bay of Bengal extending from north to south. These are the Andaman and Nicobar islands. They are bigger in size and are more numerous and scattered. The entire group of islands is divided into two broad categories – The Andaman in the north and the Nicobar in the south. It is believed that these islands are an elevated portion of submarine mountains. These island groups are of great strategic importance for the country. There is a great diversity of flora and fauna in this group of islands too. These islands lie close to the equator and experience equatorial climate, and have thick forest cover.

EXERCISE PAGE NO.23

1. Choose the right answer from the four alternatives given below.

(i) In which of the following states is the Wular lake located?

(a) Rajasthan (b) Punjab (c) Uttar Pradesh (d) Jammu and Kashmir

Answer:

Jammu and Kashmir

(ii) The river Narmada has its source at

(a) Satpura (b) Amarkantak (c) Brahmagiri (d) Slopes of the Western Ghat

Answer:

Amarkantak

(iii) Which one of the following lakes is a saltwater lake?

(a) Sambhar (b) Wular (c) Dal (d) Gobind Sagar

Answer:

Sambhar

(iv) Which one of the following is the longest river in Peninsular India?

(a) Narmada (b) Godavari (c) Krishna (d) Mahanadi

Answer:

Godavari

(v) Which one amongst the following rivers flows through a rift valley?

(a) Mahanadi (b) Krishna (c) Tungabhadra (d) Tapi

Answer:

Tapi

2. Answer the following questions briefly.

(i) What is meant by a water divide? Give an example.

Answer:

Any elevated area, such as a mountain or an upland, which separates two drainage basins is called an upland. Such an upland is also known as a water divide. For example, the water divide between the Indus and the Ganga River Systems.

(ii) Which is the largest river basin in India?

Answer:

The Ganga River Basin is the largest river basin in India.

(iii) Where do the rivers Indus and Ganga have their origin?

Answer:

Indus River origin – Near Manasarovar Lake, Tibet

Ganga River origin – Gangotri glacier in Uttaranchal

(iv) Name the two headstreams of the Ganga. Where do they meet to form the Ganga?

Answer:

The two headstreams of the Ganga are Alaknanda and Bhagirathi. They both meet to form Ganga at Devprayag.

(v) Why does the Brahmaputra in its Tibetan part have less silt, despite a longer course?

Answer:

In Tibet, the river carries a smaller volume of water and less silt, as it is a cold and dry area. In India, it passes through a region of high rainfall. Hence, the river carries a large volume of water and a considerable amount of silt.

(vi) Which two Peninsular rivers flow through a trough?

Answer:

Narmada and Tapi are the two Peninsular rivers that flow through a trough.

(vii) State some economic benefits of rivers and lakes.

Answer:

Rivers have been of fundamental importance throughout human history. Water from rivers is a basic natural resource, essential for various human activities. Therefore, riverbanks have attracted settlers from ancient times. Using rivers for irrigation, navigation and hydropower generation is of special significance — particularly to a country like India, where agriculture is the major source of livelihood for the majority of its population.

3. Below are given names of a few lakes of India. Group them under two categories – natural and created by human beings. (a) Wular (b) Dal (c) Nainital (d) Bhimtal (e) Gobind Sagar (f) Loktak (g) Barapani (h) Chilika (i) Sambhar (j) Rana Pratap Sagar (k) Nizam Sagar (l) Pulicat (m) Nagarjuna Sagar (n) Hirakund

Answer:

Natural Lakes

1. Wular
2. Dal

3. Nainital
4. Bhimtal
5. Loktal
6. Chilika
7. Pulicat
8. Sambhar
9. Barapani

Human-made Lakes

1. Gobind Sagar
2. Rana Pratap Sagar
3. Nizam Sagar
4. Nagarjuan Sagar
5. Hirakud

4. Discuss the significant difference between the Himalayan and the Peninsular rivers.

Answer:

Himalayan Rivers

1. These are perennial rivers.
2. Receive water from Rain and Snowfall.

Peninsular Rivers

1. These are seasonal rivers.
2. Dependent on rainfall. During dry seasons, the rivers get dried up.

5. Compare the east-flowing and the west-flowing rivers of the Peninsular plateau.

Answer:

West flowing rivers

1. There are only 2 long West flowing rivers – Narmada and Tapi.
2. They flow into the Arabian Sea.
3. They have a lesser number of tributaries.
4. Form estuaries.
5. Carry lesser sediments.

East flowing rivers:

1. Many major rivers, Mahanadi, Cauvery, Godavari, Krishna, etc.
2. They flow into the Bay of Bengal.
3. Have many tributaries.
4. Forms Deltas.
5. Carry larger sediments than West flowing rivers.

6. Why are rivers important for the country's economy?

Answer:

Rivers have been of fundamental importance throughout human history. Water from rivers is a basic natural resource, essential for various human activities. Therefore, riverbanks have attracted settlers from ancient times. These settlements have now become big cities. Using rivers for irrigation, navigation, and hydropower generation are of special significance — particularly to a country like India, where agriculture is the major source of livelihood for the majority of its population.

EXERCISE

PAGE NO: 39

1. Choose the correct answer from the four alternatives given below.

(i) Which one of the following places receives the highest rainfall in the world?

(a) Silchar

(b) Mawsynram

(c) Cherrapunji

(d) Guwahati

Answer:

Mawsynram

(ii) The wind blowing in the northern plains in summer is known as:

(a) Kaal Baisakhi

(b) Loo

(c) Trade Winds

(d) None of the above

Answer:

Loo

(iii) Which one of the following causes rainfall during winters in the northwestern part of India?

(a) Cyclonic depression

(b) Retreating monsoon

(c) Western disturbances

(d) Southwest monsoon

Answer:

Western disturbances

(iv) Monsoon arrives in India approximately in:

(a) Early May

(b) Early July

(c) Early June

(d) Early August

Answer:

Early June

(v) Which one of the following characterises the cold-weather season in India?

(a) Warm days and warm nights

(b) Warm days and cold nights

(c) Cool days and cold nights

(d) Cold days and warm nights

Answer:

Warm days and cold nights.

2. Answer the following questions briefly.

(i) What are the factors affecting the climate of India?

Answer:

The factors affecting the climate of India are

1. Latitude

2. Altitude

3. Pressure and Winds

(ii) Why does India have a monsoon type of climate?

Answer:

The climate of India is described as the ‘monsoon’ type. Monsoon refers to the seasonal reversal in the wind direction during a year.
The monsoon type of climate is characterised by a distinct seasonal pattern. The weather conditions greatly change from one season to the other. These changes are particularly noticeable in the interior parts of the country. The coastal areas do not experience much variation in temperature, though there is variation in the rainfall pattern.
Four main seasons can be identified in India – the cold weather season, the hot weather season, the advancing monsoon and the retreating monsoon with some regional variations.
The climate of India is strongly influenced by monsoon winds. The duration of the monsoon is between 100-120 days from early June to mid-September.

(iii) Which part of India does experience the highest diurnal range of temperature and why?

Answer:

The regions experiencing this phenomenon are in the northwestern part of India. The reason behind this effect is the Thar desert. Moreover, this region does not have an ocean to moderate the temperature.

(iv) Which winds account for rainfall along the Malabar Coast?

Answer:

Southwest monsoon winds are responsible for rainfall along the Malabar Coast.

(v) What are Jet streams, and how do they affect the climate of India?

Answer:

Jet Streams are a narrow belt of high altitude (above 12,000 m) westerly winds in the troposphere. Their speed varies from about 110 km/h in summer to about 184 km/h in winter. A number of separate jet streams have been identified. The most constant is the mid-latitude and subtropical jet stream. They cause depression during the monsoon season.

(vi) Define monsoons. What do you understand by "break" in monsoon?

Answer:

Breaks in monsoon are related to the movement of the monsoon trough. For various reasons, the trough and its axis keep on moving northward or southward, which determines the spatial distribution of rainfall. When the axis of the monsoon trough lies over the plains, rainfall is good in these parts. On the other hand, whenever the axis shifts closer to the Himalayas, there are longer dry spells in the plains, and widespread rain occurs in the mountainous catchment areas of the Himalayan rivers.

(vii) Why is the monsoon considered a unifying bond?

Answer:

The unifying influence of the monsoon on the Indian subcontinent is quite perceptible. The seasonal alteration of the wind systems and the associated weather conditions provide a rhythmic cycle of seasons. Even the uncertainties of rain and uneven distribution are very much typical of the monsoons. The Indian landscape, its animal and plant life, its entire agricultural calendar and the life of the people (including their festivities) revolve around this phenomenon. Year after year, the people of India, from north to south and from east to west, eagerly await the arrival of the monsoon. These monsoon winds bind the whole country by providing water to set agricultural activities in motion. The river valleys which carry this water also unite as a single river valley unit.

3. Why does the rainfall decrease from the east to the west in Northern India?

Answer:

As they move in that direction, the winds lose the moisture content. Hence, the reason for the reduction in rainfall.

4. Give reasons as to why.

(i) Seasonal reversal of wind direction takes place over the Indian subcontinent?

Answer:

1. Seasonal change in wind direction due to pressure difference.

2. El Nino plays a major role.

(ii) The bulk of rainfall in India is concentrated over a few months.

Answer:

Rainfall is dependent on the South West Monsoon winds; it rapidly progresses and covers large swathes of the country by July.

(iii) The Tamil Nadu coast receives winter rainfall.

Answer:

It is because of North-East monsoon winds.

(iv) The delta region of the eastern coast is frequently struck by cyclones.

Answer:

The Bay of Bengal faces frequent pressure changes.

(v) Parts of Rajasthan, Gujarat and the leeward side of the Western Ghats are drought-prone.

Answer:

Because they fall in the rain shadow region of the Aravali Mountains.

5. Describe the regional variations in the climatic conditions of India with the help of suitable examples

Answer:

1. The cold weather season begins in mid-November in northern India and stays till February. December and January are the coldest months in the northern part of India. The temperature decreases from south to north. The average temperature of Chennai, on the eastern coast, is between 24°-25° Celsius, while in the northern plains, it ranges between 10°C and 15° Celsius. Days are warm, and nights are cold. Frost is common in the north, and the higher slopes of the Himalayas experience snowfall
2. In March, the highest temperature is about 38° Celsius, recorded on the Deccan plateau. In April, temperatures in Gujarat and Madhya Pradesh are around 42° Celsius. In May, the temperature of 45° Celsius is common in the northwestern parts of the country. In peninsular India, temperatures remain lower due to the moderating influence of the oceans.

6. Discuss the mechanisms of the monsoon.

Answer:

(a) The differential heating and cooling of land and water create a low pressure on the landmass of India while the seas around experience comparatively high pressure.

(b) The shift of the position of Inter Tropical Convergence Zone (ITCZ) in summer over the Ganga Plain. (This is the equatorial trough, normally positioned about 5°N of the equator. It is also known as the monsoon trough during the monsoon season.)

(c) The presence of the high-pressure area, east of Madagascar, approximately at 20°S over the Indian Ocean. The intensity and position of this high-pressure area affect the Indian Monsoon.

(d) The Tibetan Plateau gets intensely heated during summer, which results in strong vertical air currents and the formation of low pressure over the plateau at about 9 km above sea level.

(e) The movement of the westerly jet stream to the north of the Himalayas and the presence of the tropical easterly jet stream over the Indian peninsula during summer.

7. Give an account of weather conditions and characteristics of the cold season.

Answer:

The cold weather season begins in mid-November in northern India and stays till February. December and January are the coldest months in the northern part of India. The temperature decreases as we go from the south to the north. The average temperature in Chennai, on the eastern coast, is between 24°-25° Celsius. At the same time, in the northern plains, it ranges between 10°C and 15° Celsius. Here, the days are warm, and the nights are cold. Frost is common in the north, and the higher slopes of the Himalayas experience snowfall. During this season, the northeast trade winds prevail over the country. They blow from land to sea, and hence, for the most part of the country, it is a dry season. Some amount of rainfall occurs on the Tamil Nadu coast from these winds as here they blow from sea to land. In the northern part of the country, a feeble high-pressure region develops, with light winds moving outwards from this area. Influenced by the relief, these winds blow through the Ganga Valley from the west and the northwest. The weather is normally marked by clear sky, low temperatures and low humidity and feeble, variable winds. A characteristic feature of the cold weather season over the northern plains is the inflow of cyclonic disturbances from the west and the northwest. These low-pressure systems originate over the Mediterranean Sea and western Asia and move into India along with the westerly flow. They cause much-needed winter rains over the plains and snowfall in the mountains. Although the total amount of winter rainfall (locally known as ‘Mahawat’) is small, they are of immense importance for the cultivation of ‘rabi’ crops. The peninsular region does not have a well-defined cold season. There is hardly any noticeable seasonal change in temperature patterns during winters due to the moderating influence of the sea.

8. Give the characteristics and effects of the monsoon rainfall in India.

Answer:

The Monsoon, unlike the trades, is not a steady wind but is pulsating in nature, affected by different atmospheric conditions encountered by it on its way over the warm tropical seas. The duration of the monsoon is between 100-120 days from early June to mid-September. Around the time of its arrival, the normal rainfall increases suddenly and constantly continues for several days. This is known as the ‘burst’ of the monsoon and can be distinguished from the pre-monsoon showers. The monsoon arrives at the southern tip of the Indian peninsula, generally by the first week of June. Subsequently, it proceeds into two: the Arabian Sea branch and the Bay of Bengal branch. The Arabian Sea branch reaches Mumbai about ten days later on approximately the 10th of June. This is a fairly rapid advance. The Bay of Bengal branch also advances rapidly and arrives in Assam in the first week of June. The lofty mountains cause the monsoon winds to deflect towards the west over the Ganga Plains. By mid-June, the Arabian Sea branch of the monsoon arrives over Saurashtra-Kachchh and the central part of the country. The Arabian Sea and the Bay of Bengal branches of the monsoon merge over the northwestern part of the Ganga Plains. Delhi generally receives the monsoon showers from the Bay of Bengal branch by the end of June (tentative date is 29th of June). By the first week of July, western Uttar Pradesh, Punjab, Haryana and eastern Rajasthan experience the monsoon. By mid-July, the monsoon reaches Himachal Pradesh and the rest of the country.

EXERCISE

PAGE NO: 51

1. Choose the right answer from the four alternatives given below:

(i) Which of the following types of vegetation does rubber belong to?

(a) Tundra, (b) Himalayan, (c) Tidal, (d) Tropical Evergreen

Answer: (d) Tropical Evergreen

(ii) Cinchona trees are found in areas of rainfall more than

(a) 100 cm, (b) 70 cm, (c) 50 cm, (d) less than 50 cm

Answer: (a) 100 cm

(iii) In which of the following state is the Simlipal bio-reserve located?

(a) Punjab, (b) Delhi, (c) Odisha, (d) West Bengal

Answer: (c) Odisha

(iv) Which one of the following bio-reserves of India is not included in the world network of bio reserves?

(a) Manas, (b) Gulf of Mannar, (c) Nilgiri, (d) Nanda Devi

Answer: (a) Manas

2. Answer the following questions briefly.

(i) What factors are responsible for the distribution of plants and animals in India?

Answer:

Climatic conditions:

1. Temperature
2. Humidity
3. Photoperiod
4. Precipitation

Relief:

1. Land
2. Soil

(ii) What is a bio-reserve? Give two examples.

Answer:

Bio-reserves are protected areas. This is done to protect natural vegetation, wildlife and the environment.

Examples:

1. Sunderbans
2. Gulf of Mannar

(iii) Name two animals having habitats in the tropical and montane types of vegetation.

Answer:

Tropical:

Tiger, Elephant.

Montane:

Snow Leopard

3. Distinguish between

(i) Flora and Fauna

Answer:

The plant species of a particular region is called flora, and the animal species of a particular region is called fauna.

(ii) Tropical evergreen and deciduous forests

Answer:

Tropical Evergreen Forests:

1. They are called rainforests.
2. No definite time for trees to shed leaves.
3. Rainfall is more than 200 cm.

Tropical Deciduous Forests:

1. They are called monsoon forests.
2. Trees shed leaves for about six to eight weeks in the dry summer.
3. The rainfall range is between 200 cm to 70 cm.

4. Name different types of vegetation found in India and describe the vegetation of high altitudes.

Answer:

The different types of vegetation found in India are listed below:

1. Tropical evergreen forests
2. Tropical deciduous forests
3. Tropical thorn forests and scrubs
4. Montane forests

5. Mangrove forests

The characteristics of vegetation in high altitudes are as follows:

1. Alpine vegetation is found in altitudes above 3600 m.
2. Trees in these areas are junipers, birches and pines.

5. Several species of plants and animals are endangered in India. Why?

Answer:

The reasons are as follows:

1. Increasing population
2. Pollution
3. Deforestation
4. Hunting by poachers.

6. Why has India a rich heritage of flora and fauna?

Answer:

1. India is a country with diverse relief features
2. Availability of different types of soil
3. Variation in climatic conditions

EXERCISE

PAGE NO: 61

1. Choose the right answer from the four alternatives given below.

(i) Migrations change the number, distribution and composition of the population in

(a) the area of departure

(b) the area of arrival

(c) both the area of arrival and departure

(d) None of the above

Answer:

Both the area of arrival and departure.

(ii) A large proportion of children in a population is a result of

(a) high birth rates

(b) high life expectancies

(c) high death rates

(d) more married couples

Answer:

High birth rates.

(iii) The magnitude of population growth refers to

(a) the total population of area

(b) the number of persons added each year

(c) the rate at which the population increases

(d) the number of females per thousand males

Answer:

the number of persons added each year

(iv) According to the Census, a “literate” person is one who

(a) can read and write his/her name

(b) can read and write any language

(c) is 7 years old and can read and write any language with understanding

(d) knows the 3 'R's (reading, writing, arithmetic)

Answer:

Is 7 years old and can read and write any language with understanding.

2. Answer the following questions briefly.

(i) Why is the rate of population growth in India declining since 1981?

Answer:

The decline is due to greater awareness and usage of birth control measures.

(ii) Discuss the major components of population growth.

Answer:

1. Birth rate
2. Death rate
3. Migration

(iii) Define age structure, death rate and birth rate.

Answer:

Age structure: Refers to the number of people in different age groups in that population.

Death Rate: The number of deaths per thousand persons in a year.

Birth Rate: The number of live births per thousand persons in a year.

(iv) How is migration a determinant factor of population change?

Answer:

Because it changes the demographics of a country.

3. Distinguish between population growth and population change.

Answer:

Population growth:

1. Increase in the number of inhabitants of a region during a specific time period.
2. Birth rate and migration are the major causes of population growth.

Population change:

1. During a specific time period, it is the change in the distribution, composition or size of the population.

2. Birth rate, migration, and emigration are the major causes of population change.

4. What is the relation between occupational structure and development?

Answer:

The higher percentage of the population involved in primary occupations like agriculture, animal husbandry, forestry and fishing implies a less developed country.

We see more development in countries where people move into secondary occupations like manufacturing.

A high percentage of the population involved in a tertiary occupation like banking, commerce, transport, and administration implies a highly developed country.

5. What are the advantages of having a healthy population?

Answer:

1. It will make the nation strong in all spheres
2. It will help in creating a developed and prosperous nation
3. It will help in economic growth.
4. The nation can compete globally with all other nations in any sphere of requirement.

6. What are the significant features of the National Population Policy 2000?

Answer:

Recognising that the planning of families would improve individual health and welfare, the Government of India initiated a comprehensive Family Planning Programme in 1952. The Family Welfare Programme has sought to promote responsible and planned parenthood on a voluntary basis. The National Population Policy (NDP) 2000 is a culmination of years of planned efforts. The NPP 2000 provides a policy framework for imparting free and compulsory school education up to 14 years of age, reducing the infant mortality rate to below 30 per 1000 live births, achieving universal immunisation of children against all vaccine-preventable diseases, promoting delayed marriage for girls and making family welfare a people-centred programme.