

# Social Edge

A Textbook of Social Studies

GRADE **7**



## History

# 1. The Regional Kingdoms-1

### Exercise

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- A.** 1. (b)      2. (b)      3. (b)      4. (a)      5. (a)
- B.** 1. Chandellas      2. Tarain      3. Gopala      4. Pallavas  
5. *ur*
- C.** 1. The Rajputs themselves claimed to be descendants of the **kshatriyas** or **warrior class** of Vedic times. According to them, they were 'surya-vanshi' (belonging to the sun family) or 'chandra-vanshi' (belonging to the moon family). Some Rajputs clans also considered themselves to be part of the fire family (agni-kula) which they believed was born out of a sacrificial fire.
2. Like Ghazni, Ghor was a small kingdom in present-day Afghanistan. Mahmud of Ghazni had defeated the ruler of Ghor and had made him his vassal. After Mahmud's death, however, the Ghaznavids became weak. Taking advantage of this, **Muizzudin Muhammad** or **Muhammad Ghori** made Ghor independent once again. He also annexed all Ghaznavid territories.
3. Kannauj was the most important city in North India. Its location was such that whoever held Kannauj could control the resources (minerals, agriculture, trade) of the entire Ganga valley. Since the eighth century, the Palas, Gurjara-Pratiharas and Rashtrakutas were engaged in a tripartite struggle to control the town. This struggle lasted for over two centuries and weakened all the three dynasties.
4. The Rashtrakuta kings were patrons of art, architecture and literature. The famous Kailasa Temple at Ellora and the rock-cut caves at Elephanta were carved during their reign. They also encouraged the growth of regional languages, especially Kannada.
5. The Cholas also made excellent images of gods and goddesses, either of stone or bronze, of which the latter being more popular. The bronze image of Lord Shiva as Nataraja—Lord of Dance, is one of the finest specimens of Chola art.
- D.** 1. In 1191 Battle of Tarain, Prithvi Raj Chauhan defeated Muhammad Ghori. While in 1192, Muhammad Ghori's army was better prepared. Prithviraj appealed to the neighbouring kings for help. Some Rajput rulers came to his help but he was defeated and captured and his territories were occupied.
2. **Rajaraja Chola (985-1016)** : Rajaraja Chola, or Rajaraja I, was a brilliant commander. He defeated the Pandyas and the Cheras. He also



built a strong navy to control trade along the coastal areas. The Chola fleet captured parts of Ceylon (Sri Lanka) and the Maldiv Islands.

**Rajendra Chola (1016-1044) :** Rajendra Chola, Rajaraja's son, succeeded his father to the throne and made the empire even more powerful. His army defeated the Cheras, the Chalukyas and marched as far north as modern-day West Bengal, where he defeated the Palas. After this victory, Rajendra Chola adopted the title 'Gangaikondachola' which means one who has conquered places up to the River Ganga. He also built a new capital near Tanjore and called it 'Gangaikondacholapuram'.

### 3. Administration of Cholas

The Chola kingdom was divided into provinces called mandalams, which were administered after by the governors. Each mandalam was further divided into numerous valanadus, each of which consisted of a number of villages, called nadu or kurram. It was the lowest unit. There were also many towns or nagarams such as Tanjore, Kanchi and Puhar.

**Village Assemblies :** Local self-government was a special feature of Chola administration.

Villages were free to look after their own affairs. Each village had two assemblies—the *ur* and the *sabha*, where the former was the general assembly while the latter was a gathering of all male adults. These assemblies also had many sub-committees which looked after all affairs of the village such as settlement of disputes, measurement of land under cultivation, calculation of tax and its collection, sharing of water, building and repairing water tanks and irrigation canals and so on.

### 4. Yadavas of Devagiri :

Bhillama founded the Yadava kingdom in the twelfth century. Soon, the Yadavas consolidated themselves in the region between the Narmada and Godavari rivers. A flourishing trade made the kingdom rich and prosperous. In the fourteenth century, the Khilji rulers annexed their territories.

**Chalukyas of Kalyani :** The Chalukyas of Kalyani were also known as the Later Chalukyas or the Western Chalukyas. Vikramanka was the greatest ruler. He and his successors built many temples at Badami, Aihole and Pattadakal.

**Kakatiyas of Warangal :** The Kakatiya kingdom lay between the Godavari and Krishna rivers. They ruled in the twelfth and thirteenth centuries. The Kakatiya rulers were followers of Shaivism, though Jainism and Vaishnavism also flourished. They patronized Sanskrit and Telugu. In the early fourteenth century, the kingdom was conquered by the Delhi sultans.

**Hoysalas of Dwarasamudra :** The Hoysalas ruled the region covered by present-day Karnataka. Vishnuvardhan was the most powerful king. Ultimately, this kingdom too was absorbed into the Delhi Sultanate.

E. Do it yourself.

F. Do it yourself.

G. Do it yourself.



## 2. The Regional Kingdoms-2

### Exercise

- A. 1. (b)      2. (d)      3. (b)      4. (b)      5. (b)
- B. 1. During the latter half of the Delhi Sultanate, the sultans became weak, a number of small provinces broke away and became independent. The kingdoms of Vijayanagar and Bahmani were two such powerful regional kingdoms.
2. The Sisodias ruled over Mewar. Rana Hamir and Rana Kumbha made the kingdom very strong. The greatest ruler of Mewar was Rana Sanga. He defeated the ruler of Malwa and annexed parts of his territories. In 1527, Babur defeated him in the Battle of Khanua.
3. During the reign of Firoz Shah Tughluq, Malik Sarwar was the governor of Jaunpur. Taking advantage of Timur's invasion in 1398, he declared his independence and started the Sharqi Dynasty. The most powerful Sharqi ruler was Ibrahim Shah Sharqi. In 1484, Bahlul Lodi won over Jaunpur.
4. Harihara and Bukka Rai were the feudatories in the Kakatiyas of Warangal. They established Vijayanagar Empire. When the kingdom of Warangal was overrun by Ghiyas-ud-din Tughluq in 1323, the brothers shifted base to Kampili and entered into the service of the local rulers. The brothers were taken captive when the Tughluqs conquered Kampili. They were later sent to South India to crush the local rebellions. After some time, they rebelled against Muhammad-bin Tughluq and declared their independence. They built Vijayanagar (City of Victory) and made it their capital.
5. The later kings of Bahmani kingdom were weak. This led the governors to declare their independence. By 1527, the kingdom had split up into five independent sultanates.
- (i) Ahmadnagar—ruled by the Nizam Shahis
  - (ii) Bijapur—ruled by the Adil Shahis
  - (iii) Golconda—ruled by the Qutb Shahis
  - (iv) Berar—ruled by the Imad Shahis
  - (v) Bidar—ruled by the Barid Shahis

- C. 1. Zain-ul-Abidin was called the Akbar of Kashmir because he practised religious tolerance and patronized education and learning besides encouraging agriculture and new arts and crafts. In the late sixteenth century, the Mughals annexed Kashmir.
2. Krishnadeva Raya was the greatest ruler of the Vijayanagar Empire. He defeated the Bahmani sultan, the king of Orissa (Odisha) and also annexed the Raichur Doab, a very fertile area between the Krishna and the Tungabhadra rivers. His empire covered the whole of South India. The king encouraged trade and commerce and established trading links with the Portuguese, the English and the Dutch. He also paid great attention to agriculture. He built many tanks, dams and canals for irrigation.
3. Firoz Shah was a learned man and was interested in science. He was a good poet and was well-versed in Persian, Arabic, Turkish, Telugu, Kannada and Marathi. He encouraged learned men to migrate to his court. As a result, Deccan became the cultural centre of India. Mahmud was a patron of learning. He was well-versed in mathematics and literature and encouraged the growth of Urdu. Many scholars from Persia came to the Bahmani court. He also built a magnificent madrasah in Bidar. Many students from different parts of India and abroad came to this madrasah to study. The madrasah also had a library which had over three thousand manuscripts.
4. (a) **Rajput kingdoms of the period** : The Tomars of Delhi, Chauhans of Rajasthan, Solankis of Gujarat, Paramaras of malwa, Gahadavalas of Kannauj and Chandellas of Bundelkhand were powerful Rajput kingdoms of this period.
- (b) **Administration Divisions of Vijayanagar Empire** : The king was the supreme authority who was assisted by a council of ministers. The empire was divided into mandalams (provinces), each headed by a governor, nadus (districts), sthalas (sub-districts) and gramas (villages). Local self-government decayed during this period. Village administration became feudal in nature and administrative posts also became hereditary. The king increasingly became independent on feudal lords.
- D. Do it yourself.  
E. Do it yourself.  
F. Do it yourself.



### 3. The Delhi Sultanate

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#### Exercise

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- A. 1. (c)      2. (d)      3. (d)      4. (b)      5. (a)
- B. 1. Ghiyas-ud-din Balban      2. Kharaj      3. Timur  
4. Qazi      5. Ibrahim, Babur
- C. 1. Raziya Sultan was the first and only female ruler of Delhi Sultanate. Raziya's reign was short and full of problems. The nobles opposed her because they disliked taking orders from a woman and she taking decisions without consulting them. They plotted and deposed her in 1240. Soon afterwards, she died.
2. He introduced the Persian customs of *sijdah* and *paibos* or *zaminbos*. People were against this as they felt such customs were reserved for God alone.
3. Ala-ud-din introduced system of *Chehra*, an identity card system for every soldier and *Dagh* was to brand horses to be used specifically for wars.
4. The sultan felt that he would be able to control and administer the empire better from Daulatabad since it was located in the centre of the empire.
5. The sultan's court was very ceremonial where 'Sijdah' and 'Paibos' were performed. The sultan sat on a throne built on a raised platform while the princes, ministers, heads of different departments, ambassadors from foreign countries, and other officials were provided fixed places to stand. Officials reported matters to the sultan while the scribes recorded his orders.
- D. 1. The most valuable sources of information for this period are accounts of travellers and court chroniclers. Ibn Batuta and Marco Polo visited India and wrote about the conditions of the time. Zia-ud-din Barani, Shams-i-Siraj Afif and Minhaj-us-Siraj have given a detailed account of court proceedings and details about the personal and public life of the sultans. Other important sources are coins, inscriptions and monuments.
2. Shams-ud-din Iltutmish succeeded Qutb-ud-din Aibak. He is called the real founder of Sultanate because he faced many problems but dealt with them strongly and put down the rebellions within the empire. He also protected the north-west frontiers of the Sultanate against possible Mongol invasions. In the east, he expanded his empire up to Bengal.

3. Ala-ud-din introduced a market control policy. He lowered the prices of all essential items such as food grains, cooking oil, sugar, cloth, etc. Shopowners were asked to charge the fixed rates. He also appointed special officials to keep a check on the shopowners. Whoever was caught charging even a little extra or cheating with weights was severely punished. This idea of making goods cheaper was probably introduced because Ala-ud-din wanted to pay his soldiers a low salary. It allowed him to maintain a large army on limited resources.
4. In 1329, Muhammad-bin Tughluq introduced a token currency. There was a shortage of silver during this period, so he decided to mint coins of brass and copper for everyday use. These coins had the same value as pure silver coins. They could also be exchanged for silver coins, at any time, from the royal treasury.

But the sultan failed to check the illegal minting of coins. The design of the coins was simple enough to be copied by ordinary craftspeople. As brass and copper were easily available and much cheaper than silver, people bought brass and copper in bulk and started minting coins at home. The kingdom was flooded with forged coins and the money lost its value. This resulted in trade suffering as foreign merchants refused to accept these coins. The sultan had to give silver coins in exchange of even forged coins. The treasury thus became empty. The experiment was soon withdrawn.

- E. Do it yourself.                      F. Do it yourself.  
G. Do it yourself.



## 4. Medieval Period

### Exercise

- A. 1. (c)      2. (c)      3. (a)      4. (c)      5. (d)
- B. 1. His autobiography is called Tuzuk-i-Baburi or Baburnama. Here, Babur has described the physical features, climate, animals, birds, flowers, fruits and the life of the people and the places he visited. He has also written about his own life in detail.
2. Humayun faced many problems from the start. First, the kingdom was still without a proper system of administration. Second, his ambitious brothers were dissatisfied with the territories that they were given.
3. Sher Shah was a capable general and a gifted administrator. Besides reforming the civil, military and land revenue administration, he introduced a new currency, a silver coin called the 'rupia'. He also reduced custom duties and built an excellent network of roads,

including the Grand Trunk Road. All these measures encouraged trade.

4. Jahangir provided stability to the Mughal Empire. He continued with the secular policies of Akbar, maintained friendly relations with the Rajputs, married into Rajput families and awarded high posts to deserving Rajput chiefs.

Just like Akbar, Jahangir was a people's ruler who cared for his subjects and looked after their well-being. It is said that he installed a Chain of Justice outside his palace. Whoever had a complaint or a grievance against any public official could ring the bell and speak directly to the emperor.

- C. 1. In 1526, Babur faced Ibrahim Lodi in the First Battle of Panipat. Though Lodi army was many times bigger than that of Babur's, the invader had a battle-hardened cavalry and an efficient artillery. He defeated Ibrahim Lodi and conquered Delhi and Agra. The next year, he defeated Rana Sanga of Mewar at Khanua. Two years later, he defeated the Afghan chiefs at Ghaghara. These three battles firmly established Babur's rule in northern India.

2. Shah Jahan's reign witnessed many revolts. The Bundela Rajputs of Bundelkhand revolted but were subdued easily. It was followed by a revolt in the Deccan. Shah Jahan invaded the Deccan and annexed Ahmadnagar in 1633. Bijapur and Golconda signed a peace treaty with him and agreed to pay an annual tribute.

After consolidating his position in the Deccan, Shah Jahan sent an army to Balkh and Badakshan in Central Asia so as to add Timur's capital of Samarkand to his empire but this campaign failed. He also failed to recover Kandahar from the ruler of Persia.

### 3. Central Administration

The king headed both the civil and military administration. He was assisted by many officials such as :

- ◆ The wazir was the prime minister.
- ◆ The qazi was the chief judge.
- ◆ The diwan was the head of the revenue department.
- ◆ The mir bakshi looked after the military.
- ◆ The khan-i-saman attended to the needs of the royal household.
- ◆ The sadr-i-sadur kept a record of grants and donations made by the king.

### Provincial Administration

The empire was divided into subas or provinces. Each suba was headed by a governor, called 'subadar'. He served as a link between his province and the ruler. Each suba was divided into sarkars or districts and each sarkar into many parganas. A pargana consisted of many villages.

The 'kotwal' looked after town administration. His office was called the 'kotwali', a term that is in use even today. He performed both police and civil duties. He maintained law and order and caught criminals. He maintained a list of people living in his area and kept a check on weights and measures.

4. Akbar carried out many reforms in the land revenue system. His revenue minister Raja Todar Mal, introduced a land revenue system which came to be known as Todar Mal's bandobast.

Under the new system, land was properly measured. Earlier, it used to be measured with a rope but the rope shrunk when it was dry and stretched when it was wet. Hence, the measurements changed. Todar Mal used a new measuring device, a rod made of bamboo reeds joined together by iron rings. Now land could be measured very accurately.

**D.** Do it yourself.

**E.** Across (→)

1. SIKHS

3. HUMAYUN

5. PANIPAT

8. HALDIGHATI

**Down** (↓)

2. KHURRAM

4. JAJIYA

6. RUPIA

7. ZAT

**F.** Do it yourself.

**G.** Do it yourself.

**H.** Do it yourself.

**I.** Do it yourself.



## 5. Different Religious Beliefs

### Exercise

- A.** 1. (c)      2. (a)      3. (c)      4. (c)      5. (c)  
6. (d)
- B.** 1. (c)      2. (e)      3. (d)      4. (f)      5. (a)  
6. (b)
- C.** 1. Bhakti movement became popular in South India through the efforts of the Alvar and Nayanar saints. They preached the path of surrendering oneself to god. They came from different castes and followed different professions. These saint-poets travelled from place to place, singing hymns in praise of different gods. The Chola kings built temples at places visited by these saints.
2. Shankaracharya believed that there is no difference between the soul of god and the soul of human beings and the only way of salvation was through knowledge. Ramanuja taught people to put themselves

completely in the hands of god, and that by loving god and doing good deeds alone could the soul be saved. He considered bhakti to be more important than knowledge.

3. Guru Nanak Dev insisted on three principles which have the essence of life. These are as follows :
  - ◆ 'Naam Japo' or meditate
  - ◆ 'Kirt Karo' or work hard and earn your livelihood by honest means
  - ◆ 'Vand Chhako' or share your earnings with those less fortunate than you.
4. **Khanqah** : It was the place where the sufi saints lived. Here devotees of all religions came to seek the blessings of the saint. Very often, kings and nobles also visited the Khanqahs. Some people attributed miraculous to the sufi saints and believed that they could cure illness and predict the future.

**Sama** : Music and dance sessions held at Khanqahs are called 'sama'. Poems composed by the saints and their disciples were recited here.

#### D. 1. **Teachings of the Bhakti Saints**

- ◆ Selfless love and devotion are the means to come close to god. Purity of mind and heart is important. Closeness to god cannot be gained through ceremonies, sacrifices and rituals or by giving up the world.
- ◆ God did not create high or low caste people. Nor did he create Hindus and Muslims. All human beings are equal. So they should be tolerant of one another.
- ◆ Share the pain of others and try to lessen it as helping fellow human beings is the true form of bhakti.
- ◆ Knowledge is an essential part of bhakti which is to be gained through a guru (teacher).
- ◆ A devotee can express bhakti through devotional music.

#### **Teachings of the Sufi Saints**

- ◆ God is supreme and one must worship him through love and devotion. Meditation and chanting of god's name (zikr) is very important.
- ◆ Respect all religions. Different religions preach different ways of reaching god.
- ◆ Follow a guru (pir) who would show the correct path.
- ◆ One can come close to god through devotional music. Khwaja Muin-ud-din Chishti, in particular, gave importance to musical gatherings.
- ◆ Lead a simple life. Keep yourself free from greed.
- ◆ Help those in need.



The similarities between them are :

- (a) Devotion to God
  - (b) Compassion for all
  - (c) Equality for all
  - (d) Music, poetry and dance
2. Kabir believed in the unity of god. Though he called him by different names, such as Ram, Hari, Rahim, Allah and so on, God for him was One, the Supreme Reality. He emphasized faith in god's will. Kabir was against idol-worship, taking dips in holy rivers, performing rituals, going on pilgrimages and other such outward forms of worship. He attacked the Brahmins and the qazis for their superstitions. He laid stress on purity of character and conduct, and leading a simple life which was dedicated to bhakti. He also preached ahimsa and asked people not to kill animals for food.
3. In the hymns composed by him, he preached true devotion to god as the only path to salvation. As he said, a guru can lead people on to the path of bhakti. He rejected caste and class differences and preached equality.
4. **Chishti Silsilah** : The Chishti silsilah became popular in India during the thirteenth and fourteenth centuries. One of the first great saints of this silsilah was Khwaja Muin-ud-din Chishti. His dargah at Ajmer has been a famous centre of pilgrimage since medieval times. The 'Urs' festival is still held there every year.
- Suhrawardi Silsilah** : Sheikh Baha-ud-din Zakariya was the first great saint of the Suhrawardi silsilah. Shah Alam Bukhari and Sheikh Shihab-ud-din Suhrawardi were other important saints of this silsilah.

E. Do it yourself.

F. Do it yourself.

G. Do it yourself.

H. Do it yourself.



## 6. The Growth of Regional Cultures

### Exercise

- A. 1. (b)    2. (c)    3. (b)    4. (c)    5. (b)
- B. 1. Modern Indo-Aryan (mostly North Indian) languages began to emerged in the ninth and tenth centuries. Odia and Bengali in the east, Marathi in the west, and Hindi and related languages in central India started coming up around this time only. They developed from Prakrit

which itself had developed from Sanskrit. Prakrit was used by Mahavira and the Buddha to give their sermons about 2500 years ago.

2. Urdu was known as the camp language because it originated in the army camps of the Mughals.
  3. The main centres of the Rajasthani style were Bundi, Bikaner, Mewar, Jodhpur, Kota and Kishangarh. The painters painted religious and mythological scenes, especially stories of Lord Krishna and Radha, hunting and nature scenes, and interesting episodes from Hindu epics. The style flourished from the late fourteenth till the late eighteenth century.
  4. The term is derived from the word 'katha', which means story. The 'kathakars' were a caste of storytellers who were attached to temples. They told stories in praise of God using gestures and songs. Thus, Kathak was initially a devotional art form.
  5. Two distinctive features of the temples of Bengal are :
    - (a) They were generally four-roofed structures with four triangular roofs which converged at a point.
    - (b) The outer walls of these temples are covered with terracotta tiles which have scenes from the epics.
- C.
1. Tulsidas and Surdas were famous Hindi poets. Tulsidas wrote the Ramcharitmanas. The collection of Surdas's poetry is titled Sur Sagar. Chandbardai's Prithviraj-Raso is considered one of the earliest works in Hindi literature. Prem Vatika by Raskhan and Satsai by Bihari are notable works in Hindi. Malik Muhammad Jayasi's Padmavat is an important literary work in Awadhi.
  2. Amir Khusrau wrote in Persian. The *Ramayana*, the *Mahabharata*, the *Bhagwad Gita* and the Upanishads were translated into Persian. Books in Arabic and Turkish were also translated into Persian. Abul Fazl wrote Akbar's biography called the *Akbarnama*. A part of it is called the *Ain-i-Akbari*. Jahangir's memoirs are called *Tuzuk-i-Jahangiri*. Abdul Hamid Lahori wrote the *Padshahnamah*. Many dictionaries in Persian were also compiled in this period.
  3. Mughal miniatures are very beautiful. The painters used bright colours such as red and peacock blue. The themes of paintings are very varied such as scenes of the royal court, royal hunts, nature scenes (animals, flowers and birds), battles, scenes depicting everyday life, themes from mythology and episodes from Persian classics and Hindu epics. Some painters were expert at painting portraits of kings and queens. Skilled painters also decorated books with beautiful miniatures.
  4. The rulers of Gwalior and Jaunpur were great patrons of music. Raja Man Singh Tomar of Gwalior was also fond of music. He wrote the

musical work, Man Kautuhal (curiosities of Raja Man). Two works on music, *Ghunya-ul-Munyas* and *Sangeet Siromani* were compiled in Jaunpur. Sultan Husain Shah Sharqi of Jaunpur took great interest in music and created many new ragas. A distinctive music style developed in the kingdom of Kashmir. Music also prospered in Gujarat and Malwa.

5. **Music During Mughal Period** : During Mughal period, music prospered with the arrival of Turks. New musical instruments such as the rabab and the sarangi; were introduced by the Turks of India. Amir Khusrau was a famous poet and musician. He combined Persian and Indian melodies and produced several new ragas. He invented the sitar and the dholak and also popularised a new form of music called qawwalis. The Bhakti and Sufi saints popularized group singing. The Bhakti saints used devotional music to spread their message. The Sufis organized musical gatherings in which both the common people and skilled musicians participated. Mirabai and Chaitanya expressed their bhakti through devotional songs. Guru Nanak's disciple, Mardana, also popularized devotional singing.

#### **Literature and Painting in Medieval Bengal**

**Literature** : Many Sanskrit classics were translated into Bengali. Sultan Alauddin Husain and Nusrat Shah were patrons of cultural activities. The former engaged scholars to translate the *Ramayana* and the *Mahabharata* into Bengali. Maladhar Basu, a famous poet, translated the *Bhagavat Purana* into Bengali. He also compiled Sri-Krishna-Vijaya.

**Painting** : Hundreds of illustrated manuscripts from the Husain Shahi period have been found. These paintings resemble the paintings of the Sultanate period.

D. Do it yourself.

E. **Down** (↓)

- |            |             |
|------------|-------------|
| 1. KOTA    | 2. KAMBAN   |
| 3. QAWWALI | 5. JAHANGIR |
| 7. BISHAN  | 8. KATHAK   |

**Across** (→)

- |              |             |
|--------------|-------------|
| 4. NAVRATNAS | 6. GHALIB   |
| 9. KIRTANA   | 10. KALHANA |

F. Do it yourself.



## 7. Political Formations in the Eighteenth Century

### Exercise

- A. 1. (d)      2. (c)      3. (a)      4. (b)      5. (a)
- B. 1. Muhammad Shah      2. misls      3. Purandhar, Shivaji  
4. Ashtapradhan
- C. 1. **The Sayyid brother** - Abdullah Khan Barah and Husain Ali Khan Barah were known as the king-makers since they chose who was to be made king. In 1719, they removed Farrukhsiyar from the throne. Within a year, they placed and remove two more rulers from the throne.
2. The significance of Kangha and Kara for teh Sikhs are :
- (a) **Kangha (comb)** : It is a symbol of cleanliness. Just as when we comb our hair, we take out the broken strands of hair, similarly we should comb out the bad thoughts from our mind.
- (b) **Kara (Bracelet)** : It acts as a reminder to stop a person when he raises his hand to do anything wrong.
3. Haider Ali (1761-82) and his son, Tipu Sultan (1782-99) made Mysore (now Mysuru) very powerful in the second half of the eighteenth century. Both Haider Ali and Tipu modernized the army and introduced new and efficient weapons. With the help of the French, Haider Ali established a modern arsenal at Dindigul. Tipu was known as the 'Tiger of Mysore'. He even made efforts to build a modern navy.
4. The two conditions that Shivaji agreed to the treaty of Purandhar are :
- (a) To surrender 23 forts to Aurangzeb.  
(b) To meet Aurangzeb at his court.
5. Maratha power was at its greatest under Balaji Baji Rao. He shifted the capital from Satara to Poona (now Pune). During his reign, the Maratha armies reached as far as Punjab and Rajasthan in the north and Bengal and Orissa (Odisha) in the east. The kingdoms of Mysore and Hyderabad were forced to hand over territories and pay tribute. Under Balaji Baji Rao, Maratha power was at its greatest.
- D. 1. The Marathas emerged as a powerful force under Shivaji. He captured a lot of territory and challenged the authority of Aurangzeb. He also reformed the revenue and military administration. Shivaji's soldiers were highly disciplined and well-trained. The infantry and the cavalry were the main divisions of the army. In addition, Shivaji controlled a

number of forts. Special officers were appointed to look after them. Shivaji also had a navy to guard the coast.

2. The term Peshwa means chiefminister. After Shivaji's death, the Peshwas became powerful and controlled the Maratha Empire from 1713 to 1761. Balaji captured territories from the Mughals. He also got the right to collect taxes from six provinces. Baji Rao I conquered Malwa, Southern Gujarat and parts of Bundelkhand. He also defeated the Nizam of Hyderabad. Balaji, Baji Rao forced the kingdom of Mysore and Hyderabad to hand over territories and pay an annual tribute.
3. (a) **Sawai Raja Jai Singh** : Sawai Raja Jai Singh of Amber was the most enlightened Rajput ruler of this period. He encouraged the teaching and learning of science. He founded the city of Jaipur and made it his capital. He was also interested in astronomy and built many observatories.  
(b) **Sikh Misls** : In the second half of the eighteenth century, the Sikhs were organised into 12 political groups called misls. Each misl had a leader and controlled a specific area. Towards the end of the eighteenth century, the leader of the Sukerchakia misl, Maharaja Ranjit Singh united all the misls and established a powerful kingdom in Punjab.  
(c) **Ashtapradhan** : Shivaji, besides being a fearless soldier, was also a successful administrator. His council of eight ministers, called the ashtapradhan, advised him. The word comes from Sanskrit and means 'important eight'. These eight ministers were as follows :
  - ◆ Peshwa (head of the council and incharge of general administration)
  - ◆ Senapati (commander-in-chief of the army)
  - ◆ Nyayadhish (incharge of justice)
  - ◆ Amatya or Majumdar (incharge of finance)
  - ◆ Pant Sachiv (General Secretary)
  - ◆ Sumanta (incharge of foreign affairs)
  - ◆ Mantri (head of intelligence)
  - ◆ Dandadhyaksha (incharge of religious matters)

E. Do it yourself.

F. Do it yourself.



## 8. The Earth's Environment

### Exercise

A. 1. (b)      2. (c)      3. (b)      4. (b)      5. (c)

B. 1. 100      2. water cycle      3. Greek, life  
4. human beings

C. 1. **Environment** : We live on the planet earth. It has favourable conditions to ensure the existence of life. It is the home of human beings and other living organisms. These favourable living conditions make up its environment.

The word environment come from the French word 'environer' which means 'to surround'. It refers to all the external conditions in which an organism lives. It describes everything, such as places, things, people, nature, etc. besides including things created by human beings.

2. **Ecosystem** : All organisms, belonging to both the plant and animal kingdoms, interact with each other and so, are interdependent on one another. They also interact with their physical environment. This complex system of interactions between the organisms and their physical environment in a particular area makes up an ecosystem. The size of the ecosystem varies greatly. It may be as large as the rainforests, deserts, grasslands, rivers, lakes or as small as a pond.

3. **Urbanization** : The mass movement of people from rural areas to urban areas *i.e.*, cities and towns is called urbanization. This is the process in which population in cities and towns increases. Due to urbanization. The demand of public utilities in urban areas like housing, sanitation water, health and education increases.

D. 1. **Importance of Ecosystem**

- (a) It promotes various food chains and food webs.
- (b) It provides habitat to wild plants and animals.
- (c) It involves in the recycling of nutrients between biotic and abiotic components.

2. In 1973, the villagers in the Alaknanda river valley of Uttarakhand protested against the indiscriminate cutting down of trees. They did so by hugging the trees in order to save them from being cut down. This movement became famous as the Chipko Movement.

3. When the human disturbances in the environment are less, nature can easily repair and maintain it. But when the exploitation is on a large scale, nature is unable to repair it. This creates problems for nature as well as for humans.

Today, the whole world is facing various problems due to technological and scientific development on one hand and overpopulation, urbanization and industrialization on the other. This is the result of unplanned and unwise use of technology and has led to environmental pollution.

4. A perfect balance is needed between the natural and human environment. A number of organizations along with scientists, technologists and planners are working to solve the environmental problems facing the world.

The balance in nature can be maintained only if the humans learn to live and use the environment in a harmonious way.

- E.
1. Geography deals with the various components of the environment. It also studies the interrelationship between human beings and their environment. On the basis of origin, the geographical elements can be broadly classified into two groups—natural elements and human-made elements.

2. The natural environment consists of biotic and abiotic components. The various components of natural environment are dependent upon each other.

Human-made environment is the one that is created by humans. It consists of industries, agriculture, means of transportation, etc.

3. Earlier, humans settled in the fertile plains of the river valleys and cultivated land. They domesticated animals and used fire for warmth and protection. The invention of the wheel, surplus food production and exchange of surplus goods with others helped them to progress.

With time, humans started processing various raw materials to meet their needs. The Industrial Revolution in Europe gave rise to large-scale production of goods. The means of transport and communication improved and the world became a global village. Thus, many changes occurred in our environment, which were mostly due to natural processes and human activities.

4. Today, the whole world is facing various problems due to technological and scientific development on one hand and overpopulation, urbanization and industrialization on the other. This is the result of unplanned and unwise use of technology and has led to environmental pollution.

A perfect balance is needed between the natural and human environment. A number of organizations along with scientists, technologists and planners are working to solve the environmental problems facing the world.

The balance in nature can be maintained only if the humans learn to live and use the environment in a harmonious way.

F. Do it yourself.

G. Do it yourself.



## 9. Inside the Earth

### Exercise

---

- A.** 1. (c)      2. (d)      3. (b)      4. (d)      5. (a)
- B.** 1. 5.5g per cubic cm.      2. crust      3. marble  
4. beginning, end
- C.** 1. F      2. F      3. T      4. F
- D.** 1. (d)      2. (c)      3. (a)      4. (b)
- E.** 1. **Crust :** (i) It is the outermost layer of the earth.  
(ii) It's average density is about 3.0 g per cubic cm.  
(iii) It is also called lithosphere.  
**Core :** (i) It is the innermost layer of the earth.  
(ii) It's average density ranges between 5.0 g and 13.0 g per cubic cm.  
(iii) It is also called barysphere.
2. **Rocks :** Rocks are made up of minerals. They do not possess definite chemical composition.  
**Minerals :** Minerals are solid substances which have a definite chemical composition. These occur in nature and are found in rocks.
3. **Sial :** The continental crust which is made up of silica (si) and alumina (al) is called sial.  
**Sima :** The oceanic crust which is made up of silica (si) and magnesium (ma) is called sima.
4. **Intrusive Rocks :** Intrusive igneous rocks are the ones that cool below the surface of the earth. As rate of cooling is slow inside the earth, the crystals formed are large. Examples of such rocks are granite and dolerite.  
**Extrusive Rocks :** Extrusive igneous rocks are the ones that cool on the surface of the earth. These rocks are also known as volcanic rocks. As they cool rapidly, the crystals are fine-grained. Basalt is an example of such a rock. The Deccan plateau of India is made up of basalt rocks.
- F.** 1. The main types of rocks are :  
(i) Igneous rocks : For example, granite  
(ii) Sedimentary rocks : for example, coal  
(iii) Metamorphic rocks : For example, marble
2. The word 'igneous' has been formed from the Latin word '*ignis*' meaning 'fire'. When a volcano erupts, it spews out molten magma. This magma cools down and solidifies to form igneous rocks. Since these rocks were the first to be formed, they are also known as primary rocks. These are of two types—intrusive igneous rocks and extrusive igneous rocks.



3. The metamorphic rocks are actually igneous or sedimentary rocks which have been changed due to excessive heat and extreme pressure inside the earth. Excessive heat and extreme pressure changes the original properties of rocks such as their hardness, colour, texture and mineral composition. Such changed rocks are called metamorphic rocks.

#### 4. Uses of Rocks and Minerals

- ◆ Soil is formed from rocks.
- ◆ Ancient humans made tools and weapons from rocks.
- ◆ Rocks are widely used in the construction of houses, roads and buildings.
- ◆ Minerals like coal and petroleum provide the sources of power.
- ◆ Chemicals found in some sedimentary rocks are used to make fertilizers.

G. 1. **Structure of the Earth** : On the basis of varying density and physical and chemical properties of rocks, the earth can be divided into three concentric layers—crust, mantle and core. These are detailed as follows :

##### **Crust**

- ◆ The crust, also called the lithosphere, is the solid outermost layer.
- ◆ It is a relatively thin layer. Its average density is about 3.0 g per cubic cm. Its upper part is called continental crust (about 35 km thick) while its lower part is called oceanic crust (about 5 km thick).
- ◆ The continental crust is made up of silica (si) and alumina (al), and so it is also called sial. The oceanic crust is made up of silica (si) and magnesium (ma), and therefore also called sima.

##### **Mantle**

- ◆ Just beneath the crust lies a layer called the mantle. It is 2,900 km thick.
- ◆ It is made up of dense and heavy materials, such as iron and magnesium.
- ◆ Its average density ranges between 3.5 g to 5.5 g per cubic cm.

##### **Core**

- ◆ The core lies below the mantle and around the centre of the earth. It is also called barysphere.
- ◆ Its average radius is about 3,500 km.
- ◆ It is made up of heavy metals, such as nickel and iron. Therefore, it is also called nife ('ni' stands for nickel and 'fe' for iron).

#### 2. **Mantle**

- ◆ Just beneath the crust lies a layer called the mantle. It is 2,900 km thick.

- ◆ It is made up of dense and heavy materials, such as iron and magnesium.
- ◆ Its average density ranges between 3.5 g to 5.5 g per cubic cm.
- ◆ Its temperature is very high. This layer contains magma.

**Core**

- ◆ The core lies below the mantle and around the centre of the earth. It is also called barysphere.
- ◆ Its average radius is about 3,500 km.
- ◆ It is made up of heavy metals, such as nickel and iron. Therefore, it is also called nife ('ni' stands for nickel and 'fe' for iron).
- ◆ Its average density ranges between 5.0 g and 13.0 g per cubic cm.
- ◆ Its temperature varies between 2,200°C and 5,000°C.

3. **Characteristics of Sedimentary Rocks :** These are as follows :

- ◆ These rocks are softer than igneous rocks.
- ◆ These have horizontal layers, arranged one above the other.
- ◆ These are mostly formed under water and have marks of waves and mud-cracks.
- ◆ These contain remains of animals and plants, called fossils, between the layers.
- ◆ Coal, sandstone and limestone are examples of such rocks.

4. The rock cycle takes place in the following ways :

- ◆ The hot and molten magma cools down to form igneous rocks.
- ◆ These igneous rocks are exposed to different agents of weathering and erosion on the earth's surface and break up into rock fragments.
- ◆ The broken rock fragments are transported and deposited in basins to form sedimentary rocks.
- ◆ The leftover igneous rocks and the newly formed sedimentary rocks are subjected to excessive heat and intense pressure and change into metamorphic rocks with passage of time.
- ◆ The sedimentary and metamorphic rocks are buried in the earth again and melt to form magma.
- ◆ The magma again cools down and forms igneous rocks.

H. Do it yourself.

I. **Across (→)**

1. SLATE

4. COAL

6. MARBLE

7. SANDSTONE

**Down (↓)**

2. LIMESTONE

3. BASALT

5. GRANITE

7. SALT

J. Do it yourself.



# 10. Our Changing Earth

## Exercise

---

- A.** 1. (a)      2. (c)      3. (d)      4. (a)      5. (d)
- B.** 1. Continental drift      2. 6, 20      3. margins      4. epicentre
- C.** 1. (c)      2. (a)      3. (d)      4. (b)
- D.** 1. A volcano is a circular opening, called vent, through which hot molten materials erupt suddenly. The vent is connected to the earth's interior by a narrow pipe. Sometimes, the opening can be a long crack, which is called fissure.  
The volcanic cone or mountain is formed when the erupted materials accumulate around the vent. A funnel-shaped hollow at the top of the cone is called crater.
2. **Dormant Volcanoes :** Dormant volcanoes are volcanoes that have become quiet after erupting. They do not show any indication of eruption in the near future. Such volcanoes are also called sleeping volcanoes. Vesuvius in Italy is a dormant volcano.  
Extinct Volcanoes : Extinct volcanoes have not erupted for hundreds of years and there is no possibility of any eruption in future also. Such volcanoes are also called dead volcanoes.  
Kilimanjaro in Africa and Rainier in USA are extinct volcanoes.
3. The place where an earthquake originates is called focus while the epicentre is the point on the earth's surface vertically above the focus. From the focus, the vibrations of an earthquake spread out as concentric waves. The intensity of an earthquake is maximum near the epicentre.
4. Seismology is the science that deals with earthquakes while the seismologists are the earthquake scientists.
- E.** 1. Extinct volcanoes have not erupted for hundreds of years and there is no possibility of any eruption in future also. Such volcanoes are also called dead volcanoes.
2. Seismograph is used to record earthquake tremors.
3. In 1912, a German meteorologist, Alfred Wegener tried to explain the present-day distribution of continents and oceans. He proposed that millions of years ago, all the landmasses were joined together into a supercontinent called the Pangaea. He formulated that the Pangaea broke and a horizontal displacement of the continents took place. This is known as Wegener's Theory of Continental Drift.
4. A number of factors, such as volcanic eruptions, movement of the lithospheric plates or even bomb explosions may cause the surface of

the earth to shake. This shaking of the earth's surface is called an earthquake.

5. The main earthquakes belts on earth are as follows :

**Circum-Pacific Belt :** The Circum-Pacific belt lies on the coastal margins of North America, South America and east Asia. This belt coincides with the Pacific Ring of Fire. These regions account for about 65 per cent of the total earthquakes of the world.

**Mid-Continental Belt :** The Mid-Continental belt includes the Alpine mountains, Mediterranean Sea, northern and eastern Africa and the Himalayas. About 25 per cent of the seismic events are recorded here.

**Mid-Atlantic Ridge Belt :** The Mid-Atlantic Ridge belt includes the Mid-Atlantic ridge and the adjoining islands. It has moderate earthquakes which are caused by the movement of the lithospheric plates in opposite directions.

F. 1. Wegener's theory was improved upon by the idea of sea-floor spreading. The new concept is called Plate Tectonics. It says :

- ◆ The earth's crust is made up of plates, called lithospheric or tectonic plates.
  - ◆ There are six major and 20 minor plates, all of which float independent of each other.
  - ◆ The plates are continuously moving.
  - ◆ The rate of movement of the plates is extremely slow, about a few millimetres each year.
  - ◆ The energy needed to move these plates is produced by the internal heat of the earth.
  - ◆ The surface area of the plates is very large as compared to their thickness.
  - ◆ Tectonic activities, such as earthquakes and vulcanicity, occur along the plate margins.
2. The different types of movements of the plates are due to the various forces acting on it. On the basis of their source of origin, these forces are divided into two broad categories :
- ◆ Endogenic forces are the forces which originate from within the earth.
  - ◆ Exogenic forces are the forces which originate on the surface of the earth.
3. Most of the world's active volcanoes are found in a circular belt around the Pacific Ocean known as the 'Pacific Ring of Fire'. It coincides with the edge of the lithospheric plates.
- The second belt of volcanoes is found along the Mediterranean Sea and is called the Mid-World Mountain belt. It has mostly dormant and extinct volcanoes.

Mt. Fujiyama in Japan is one of the world's most beautiful volcanic mountain. The Deccan plateau of India was probably formed due to fissure eruption.

**4. Types of Earthquake Waves :** As per the mode of travel, earthquake waves are classified into three main types :

**Primary Waves :** The primary waves (P waves) or push waves arrive first as they are the fastest. These waves usually travel at a speed of about six km per second. These waves cause relatively small displacements.

**Secondary Waves :** The secondary waves (S waves) or shake waves arrive next as their rate of movement is less than that of the P waves. These waves produce a strong shaking action but they do not pass through liquids.

**5.** The reasons for the Bhuj earthquake were :

- (a) Sea-floor spreading of the Indian Ocean at the rate of five cm per year.
- (b) Gradual northward movement of the Indian plate.
- (c) The reactivated faults below the surface in the kachchh region.

**G.** Do it yourself.

**H.** Do it yourself.



## 11. Composition and Structure of the Atmosphere

### Exercise

- A.** 1. (d)      2. (d)      3. (c)      4. (a)      5. (b)
- B.** 1. earth's surface      2. mixture      3. carbon dioxide  
4. stratosphere
- C.** 1. F      2. T      3. T      4. F
- D.** 1. (c)      2. (d)      3. (a)      4. (b)
- E.** 1. **Air and atmosphere :** Air is a mixture of gases, water vapour, dust particles and smoke. It is the constant pressure of gases, that we feel all around us but cannot see. While atmosphere is the envelope of air which surrounds the earth. It consists of a mixture of colourless, odourless and tasteless gases.
2. **Troposphere**
- ◆ The troposphere is the lowest layer and is closest to the earth's surface.

- ◆ It extends upto a height of about eight km near the poles and about 18 km over the equator.
- ◆ The temperature in this layer decreases with increasing altitude. It decreases roughly at the rate of 1°C per 165 m of ascent. This is called normal lapse rate.
- ◆ Water vapour and dust particles are found in this layer only.
- ◆ All weather phenomena like the formation of clouds, fog, frost, dew, thunder, lightning, precipitation, etc., occur in this layer.

#### **Exosphere**

- ◆ The exosphere is the uppermost layer.
- ◆ The density of air is very low and it is in a rarefied form.
- ◆ Very light gases, such as hydrogen and helium, are found in this layer.
- ◆ The temperatures increases with height and may reach upto 4,500°C.
- ◆ The exosphere merges gradually into outer space.

### **3. Stratosphere**

- ◆ The stratosphere lies above the troposphere. Its extends to about 50 km above the mean sea level.
- ◆ It is almost free from all types of weather phenomena.
- ◆ Clouds are almost absent and it has very little dust or water vapour.
- ◆ The movement of air is almost horizontal.

#### **Mesosphere**

- ◆ The mesosphere lies above the stratosphere. It extends from about 50 km to about 80 km above the mean sea level.
- ◆ Here, the temperature decreases with height and reaches about -100°C at 80 km.
- ◆ It is the coldest layer in the atmosphere.
- ◆ Meteors, coming from outer space, burn up in this layer.

### **4. Thermosphere**

- ◆ The thermosphere lies above the mesosphere. It extends from about 80 km to about 400 km above the mean sea level.
- ◆ In this layer, the temperature increases rapidly with the increase in height. It reaches more than 1,500°C.
- ◆ One does not feel warm in this layer, as thin air holds little heat.
- ◆ The lower part of the thermosphere has ionized molecules and so, it is called ionosphere.
- ◆ This layer reflects low frequency radio waves back to earth and helps in long distance communication.

#### **Exosphere**

- ◆ The exosphere is the uppermost layer.
- ◆ The density of air is very low and it is in a rarefied form.

- ◆ Very light gases, such as hydrogen and helium, are found in this layer.
  - ◆ The temperatures increases with height and may reach upto 4,500°C.
  - ◆ The exosphere merges gradually into outer space.
- F.**
1. Carbon dioxide present in the atmosphere absorbs the earth's heat and prevents the earth from becoming too cold at night. This is known as the greenhouse effect.
  2. Different layers of the atmosphere are :
    - (a) **Troposphere** : It extends upto a height of about 8 km. near the poles and about 18 km over the equator.
    - (b) **Stratosphere** : It extends to about 50 km above the mean sea level.
    - (c) **Mesosphere** : It extends from about 50 km to about 80 km above the sea level.
    - (d) **Thermosphere** : It extends from about 80 km to about 400 km above the mean sea level.
    - (e) **Exosphere** : This is the outermost layer. It extends from about 600 km to 10,000 km above the earth.
  3. Troposphere is the layer which is very important for us because All weather phenomena like the formation of clouds, fog, frost, dew, thunder, lightning, precipitation, etc., occur in this layer. It protects us from the excessive heat of the sun during the day and keeps the earth's surface warm at night.
  4. The atmosphere is a relatively thin layer. Its exact thickness is unknown as there is no sharp boundary between the atmosphere and outer space. It is estimated that the upper limit of the atmosphere is at a height of about 10,000 km from the mean sea level.  
The earth's gravity holds the atmosphere to the earth. The total weight of the atmosphere is about 500 million tons. About 99 per cent of the total mass of the atmosphere is found within 32 km from the earth's surface. The air is denser near the earth's surface and gets thinner as one goes upwards.
- G.**
1. The main features of the composition of the atmosphere are as follows:
    - ◆ Air is a mixture of gases, water vapour, dust particles and smoke.
    - ◆ The two main gases in the atmosphere are nitrogen (about 78 per cent) and oxygen (about 21 per cent).
    - ◆ The other gases present in the atmosphere are carbon dioxide, helium, ozone, argon, hydrogen, etc. (about one per cent).
    - ◆ The lower layer of the atmosphere contains water vapour and dust particles.

- ◆ The amount of water vapour and dust particles varies at different times and different places.
  - ◆ Heavier gas, like oxygen, is mostly found in the lower layer. That is why mountaineers have to carry oxygen cylinders while climbing mountains.
2. Nitrogen is the most prevalent gas in the atmosphere. It is needed by plants for growth but they are not able to absorb nitrogen directly from the air. Bacteria present in the soil and roots absorb and change its form that can be used by plants. Atmospheric nitrogen is also used to manufacture chemical fertilizers.
- Oxygen is the most important gas as all living organisms need it to breathe and survive. During photosynthesis, green plants absorb carbon dioxide and release oxygen. This helps to maintain the level of oxygen in the air. Oxygen is also needed for combustion.
3. **Main feature of the troposphere**
- ◆ The troposphere is the lowest layer and is closest to the earth's surface.
  - ◆ It extends upto a height of about eight km near the poles and about 18 km over the equator.
  - ◆ The temperature in this layer decreases with increasing altitude. It decreases roughly at the rate of 1°C per 165 m of ascent. This is called normal lapse rate.
  - ◆ Water vapour and dust particles are found in this layer only.
  - ◆ All weather phenomena like the formation of clouds, fog, frost, dew, thunder, lightning, precipitation, etc., occur in this layer.
  - ◆ It protects us from the excessive heat of the sun during the day and keeps the earth's surface warm at night.
  - ◆ It has about 90 per cent of the air in the atmosphere.
4. **Significance of the Atmosphere**
- ◆ The lower layer of the atmosphere has life-giving oxygen, which is needed for breathing.
  - ◆ Nitrogen and carbon dioxide are needed by plants for their growth.
  - ◆ It prevents the sun's harmful ultraviolet rays from reaching the earth's surface.
  - ◆ It softens the sun's glare during the day.
  - ◆ It acts like a greenhouse and controls the extremes of temperature during day and night.
  - ◆ Sound waves travel through air.
  - ◆ It shields us from meteors.
  - ◆ The change of weather and climate is due to the presence of the atmosphere.



- ◆ The presence of water vapour causes condensation and precipitation.

H. Do it yourself.

I. Do it yourself.

J. Do it yourself.



## 12. Weather and Climate

### Exercise

A. 1. (b)      2. (d)      3. (d)      4. (b)      5. (b)

B. 1. decreases      2. highest      3. wind vane  
4. transpiration

C. 1. **Weather** : Weather is the state of temperature, atmospheric pressure, winds, humidity, precipitation, etc., in the atmosphere at a given place and time.

**Climate** : Climate is the average overall condition of the temperature, atmospheric pressure, winds, humidity, precipitation, etc., over a large region for a long period of time. This way, climate is the average weather condition over a large area for a period of about 35 to 40 years.

2. **Insolation and Terrestrial radiation** : Solar radiation is the heat and light energy radiated by the sun. It is the main source of heat and light for us. But, only a very small part (about one in 200 million) of it reaches the earth's surface. It is called insolation. It varies from place to place and from time to time.

The earth's surface absorbs maximum solar radiation during the day. At night, this absorbed heat is radiated back. This is called terrestrial radiation.

3. **Absolute and relative humidity** : Humidity or absolute humidity is the actual amount of water vapour present in air. It is closely related to air temperature. The air is said to be saturated when the air holds the maximum amount of water vapour at a given temperature.

An important and useful way of expressing the level of humidity is relative humidity. It is the ratio between the actual amount of water vapour present in the air at a given temperature and the maximum capacity of the air to hold moisture at that temperature.

Relative humidity is always expressed in percentage while absolute humidity determines the amount of precipitation, relative humidity tells us about its possibility.

4. **Condensation** : As moist air rises upward, it becomes cool and the water vapour changes into small drops of water. This process is called

condensation. Condensation takes place around dust particles in the air.

Dew, fog and clouds the important forms of condensation. When small drops of water condenses around dust or smoke particles in the air, the mass is called cloud.

**Precipitation :** When small water drops join together, they grow in size and are unable to float in the air. Then they fall down as raindrops or flakes of snow. This is called precipitation. The main forms of precipitation are rain, drizzle, snow and hailstones.

Rainfall is the most important form of precipitation.

- D.**
1. The main elements of weather and climate are air temperature, air pressure, wind, humidity, precipitation etc.
  2. The solar radiation which passes through the atmosphere, before reaching the earth's surface, does not heat it much but is able to heat the earth's surface directly. The air over the earth's surface gets heated due to contact with the hot surface of the earth. This heat is further transmitted to the upper layers and the atmosphere is heated.
  3. Humidity or absolute humidity is the actual amount of water vapour present in air. It is closely related to air temperature. The air is said to be saturated when the air holds the maximum amount of water vapour at a given temperature.

An important and useful way of expressing the level of humidity is relative humidity. It is the ratio between the actual amount of water vapour present in the air at a given temperature and the maximum capacity of the air to hold moisture at that temperature.

4. Different forms of condensation are : dew, fog and clouds.  
Different forms of precipitation are : rain, drizzle, snow and hailstones.

- E.**
1. The atmospheric pressure varies from place to place and from time to time. The variations in the atmospheric pressure is due to the :
    - ◆ temperature of the air.
    - ◆ density of the air.
    - ◆ amount of moisture present in the air.
    - ◆ height of a place above the sea level.
  2. Main features of planetary winds are :
    - (a) Winds which blow constantly in a particular direction throughout the year are known as planetary winds.
    - (b) These are also known as prevailing winds are permanent winds.
    - (c) These winds originate due to the presence of permanent high pressure and low pressure belts on the surface of the earth.
    - (d) Main types of planetary winds are trade winds, the westerlies and the polar winds.

3. We know that atmosphere contains moisture which exists in solid, liquid and gaseous states. Its amount in the air varies from place to place and from time to time.
- ◆ The air has more moisture during the summer season than during the winter season.
  - ◆ The air in the equatorial region has more moisture than other regions of the world.
  - ◆ The amount of moisture is almost zero in the cold air of the polar regions during the winter months.
  - ◆ The amount of moisture decreases with the increase in height above the mean sea level.
4. Depending upon how warm and moist air cools, rainfall may occur in the following ways.

**Convictional Rainfall :** When air comes in contact with the hot surface of the earth, it gets heated, becomes light and rises up as air current. As this warm air reaches the upper layers of the atmosphere, it expands and loses heat. This leads to condensation and cumulus clouds are formed. These clouds produce sudden and heavy rainfall accompanied by thunder and lightning. This is convictional rainfall. Equatorial region experiences it everyday.

**Orographic Rainfall :** When a mountain or a hill comes in the path of moisture-laden winds, the moist air mass is forced to ascend along its slope. As the air mass rises upwards, it becomes cool and this is followed by condensation and precipitation. This is called orographic or relief rainfall. The windward side of the mountain gets more rainfall than the leeward side.

**Cyclonic Rainfall :** This rainfall is generally associated with cyclones in the tropical region and depressions in the temperate regions. In a cyclone, when warm and cold air mass meet, the lighter warm air mass is above the cold air mass. The boundary between the two is called front. Condensation takes place in the warm air mass and rainfall occurs along the path of the cyclone. This type of rainfall is common in the belt of the westerlies, especially during the winter season. It also known as frontal rainfall.

F. Do it yourself.

- G. 1. Climate      2. Climate      3. Weather      4. Weather  
5. Weather      6. Climate      7. Climate      8. Weather

H. Do it yourself.

I. Do it yourself. □

# 13.

# Water

## Exercise

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- A. 1. (b)      2. (a)      3. (b)      4. (d)      5. (a)
- B. 1. T      2. T      3. T      4. F
- C. 1. (d)      2. (c)      3. (a)      4. (b)
- D. 1. **Crest and trough** : The highest surface part of a wave is called the crest, while the lowest part is called as trough. The vertical distance between the crest and the trough is called as wave height, while the horizontal distance between the two adjacent crests troughs is called as the wave length.
2. **Waves and tides** : Waves are caused by the movement of particles of surface water because of the force of wind while, tides are created due to the gravitational pull of the Sun and the moon.  
Waves occurs almost all the time due to action of the wind while tides actually follow the apparent movement of the moon due to its closeness to the earth.
3. **Spring and neap tides** : Tides have two extreme positions. On Full Moon and New Moon, the sun, the moon and the earth are almost in a straight line. The sun and the moon together exert a combined gravitational pull. So, high tides are the highest and low tides are the lowest. This phenomenon is known as spring tide.  
On Half Moon day, the sun and the moon are at a right angle to the earth. So, the gravitational pull of the sun and the moon cancel each other out. This leads to a very small rise or fall in sea water and is known as neap tide.
4. **Current and drift** : The movement of ocean water from one part of the ocean to another is called an ocean current. It is the form of a stream, in a definite direction, on the ocean surface. Ocean currents are like rivers in the sea whose banks and beds are made up of sea water. The movement of current is visible on the ocean surface.  
The direction of the prevailing winds largely control the direction and movement of ocean currents. The general circulation of ocean currents in the Northern Hemisphere is clockwise and in the Southern Hemisphere anti-clockwise. Ocean currents, often narrow and swift, move at speeds of three to 10 km per hour. A very broad ocean current is called a drift.
- E. 1. Ocean water is saline due to the presence of a large amount of dissolved salts, most of which is sodium chloride or common salt. It is estimated that every 1,000 g of ocean water has 35 g of dissolved salts.

So, the average salinity is 35 per thousand but it varies from one part of the ocean to another. The Dead Sea in Asia has the highest salinity. In general, salinity decreases towards the equator due to heavy rainfall.

## 2. Effects of Ocean Currents

- ◆ Ocean currents have great influence on the climate and economic activities of the coastal areas. Some of them are as follows :
- ◆ Ocean currents influence the distribution of temperature over the globe. The warm and the cold currents increase or decrease the temperature of the coastal areas.
- ◆ Warm currents increase the moisture-bearing capacity of the wind, while cold currents decrease the same. Deserts are mostly found along the western side of the continents, along which cold currents flow.
- ◆ Warm currents help in keeping the seaport ice free, and thus help it to remain open throughout the year, even in higher latitudes.
- ◆ Mixing of cold and warm currents causes dense fog, which hampers navigation.
- ◆ The best fishing grounds of the world are found where warm and cold currents meet. Thus, areas around Newfoundland and Japan are rich in fish.
- ◆ Ocean currents help in navigation. A ship sailing along a current will go faster, thus saving time and fuel.
- ◆ Warm currents reduce the danger of icebergs for the sailing ships.

## 3. Currents of the Pacific Ocean

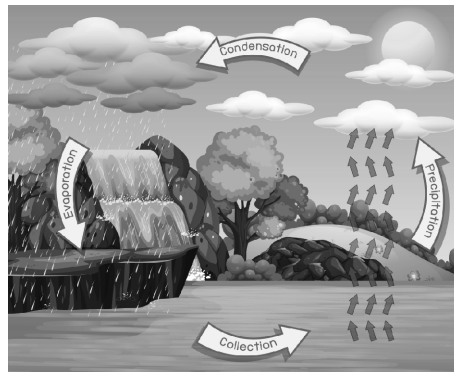
- (a) In the Northern Hemisphere
    - ◆ North Equatorial current (warm)
    - ◆ North Pacific current (warm)
    - ◆ Japan (Kuroshio) current (warm)
    - ◆ California current (cold)
  - (b) In the Southern Hemisphere
    - ◆ South Equatorial current (warm)
    - ◆ West Wind Drift (cold)
    - ◆ East Australian current (warm)
    - ◆ Peru current (cold)
4. Sometimes, huge oceanic waves are formed during storms. Such waves may also be generated due to earthquakes or volcanic eruptions. These waves can be as high as 20 to 30 m. They are called tsunamis. Tsunami occurs when a large mass of water is displaced. Its most common cause is an undersea earthquake which causes large areas of the sea floor to rise or subside. This generates huge waves with extremely long wave lengths.

In the coastal areas, a tsunami may appear as a huge wall of water coming towards the coast. With its tremendous energy, the fast moving waves can crush houses and other structures. Large objects such as ships may be pushed several kilometres inland. It causes most deaths due to drowning.

The entire tsunami affected area is threatened by diseases that spread through dirty water. This is due to the poisoning of freshwater supplies by saline water. It also causes enormous damage to mangroves, forests, coastal wetlands, coral reefs, rock formations, groundwater and plant biodiversity.

- F. 1. Water continuously moves from the earth's surface into the atmosphere and back again to the earth's surface. It reaches the atmosphere through evaporation in the form of water vapour. As it loses heat in the atmosphere, condensation takes place and water vapour is converted back into water drops. This leads to precipitation in the form of rain, snow or sleet.

Water, in the form of rain, falls on land and collects in ponds or flows as rivers or streams. The rivers carry the water back to the oceans. This never-ending movement of water is called hydrological cycle or water cycle which has no beginning or end.



Water cycle

2. Tides are caused by the gravitational pull of the moon and the sun on the surface of the earth. They actually follow the apparent movement of the moon due to its closeness to the earth.

Ocean currents develop due to the :

- ◆ direction of the prevailing winds.
- ◆ variation in the temperature of ocean water.
- ◆ variation in the density of ocean water.
- ◆ shape and position of the coast.
- ◆ rotation of the earth.

### 3. Importance of Tides

- ◆ Tides help to clear the sediments deposited by rivers on their beds which prevents siltation of harbours.
- ◆ Tides make some rivers navigable for ocean-going vessels. During a high tide, the depth of water at the mouth of some rivers increase which help the ships to reach the ports located on such rivers. The importance of the Kolkata port on River Hugli and the London port on River Thames is due to tides.
- ◆ During high tide, the saline sea water is spread out in the coastal fields and used to make common salt.
- ◆ The fishing industry is helped by the rhythm of tides. During high tide, fish come near the coast. The fishermen mostly sail out to the open sea during low tides and return to the coast with high tides.
- ◆ The energy of the tides is used to generate electricity. Tidal power stations have been set up in UK, Canada, France and Japan.

### 4. Effects of Ocean Currents

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- ◆ Warm currents reduce the danger of icebergs for the sailing ships.

G. Do it yourself.

H. Do it yourself.

I. Do it yourself.



## 14. Life in the Tropical and Subtropical Regions

### Exercise

- A. 1. (c)      2. (c)      3. (b)      4. (b)      5. (b)
- B. 1. Marañon river      2. shifting      3. Gangotri      4. monsoon
- C. 1. (c)      2. (a)      3. (d)      4. (b)
- D. 1. A major part of the Amazon basin lies in Brazil, between the Guiana highland in the north and the Brazilian highland in the south. A Spanish explorer, Vicente Yanez Pinzon was the first European to discover the Amazon river. The Amazon river originates in the Andes mountains and drains into the Atlantic Ocean. It is the most important river in South America. It is the second longest river in the world (6,280 km) and it discharges the largest volume of water.
2. The Amazon basin experiences an equatorial type of climate. It is characterized by hot and wet conditions throughout the year. The temperature is uniformly high. Due to bright sunlight and high relative humidity, the daytime temperature becomes oppressive and unbearable.
- The region receives rainfall (about 250 cm per year) which is well-distributed throughout the year. There is no dry season. Most of the rainfall is of convectional type. There is more rainfall in the afternoon than in any other part of the day. It is accompanied by thunder and lightning.
- Due to high temperatures and well-distributed rainfall throughout the year, the summer and winter seasons are not well-marked. There is little horizontal movement of air. This, when combined with high humidity, gives rise to sultry weather conditions.
3. One of the most extensive, flat and fertile plains in the world is in India. Lying to the south of the Himalayas, these plains extend from the Sutlej river in the west to the Brahmaputra river in the east.
- The Ganga-Brahmaputra basin comprises of the plains of the Ganga and the Brahmaputra rivers, the Himalayas and the Sundarban delta. It is made up of alluvium brought by the Ganga and the Brahmaputra rivers and their tributaries.
- E. 1. The hot and humid climate in the Amazon basin results in the rich growth of natural vegetation. The forests found here, called the evergreen equatorial forests, are the largest and thickest in the world. These forests are also known as selva in South America.
2. **Flora and Fauna of Amazon Basin :** The hot and humid climate in the Amazon basin results in the rich growth of natural vegetation. The



forests found here, called the evergreen equatorial forests, are the largest and thickest in the world. These forests are also known as selva in South America.

Ebony, palm, rubber and cane are the important trees found in the Amazon basin. These trees provide hardwood timber. Balsa, the lightest wood, is also found in these forests. It is widely used to make toys, rafts, models of aeroplanes, etc. Other products from the forests are cocoa, rubber, nuts, cork, gum, resins, quinine from the bark of the cinchona tree and wax from the carnauba palm tree.

The Amazon basin also has a rich variety of wildlife. There are mammals such as monkeys, jaguars, tapirs, pumas, anteaters, sloths, armadillos, etc. A large variety of birds, such as hummingbirds, toucans and many with brilliantly coloured plumages are found here. Various species of reptiles and snakes also live in these forests. The anaconda is an almost 10 m long snake. Giant turtles, alligators and crocodiles are found in the marshy regions. There are also a large variety of insects and fishes. The flesh-eating fish piranha is found in the Amazon river and its tributaries.

**Flora and Fauna of Ganga-Brahmaputra Basin :** The Ganga-Brahmaputra basin has mostly tropical deciduous forests. These yield valuable timber. Sal, peepal teak and bamboo are the important trees.

The delta region has mangrove forests. Coniferous forests are found in some parts of Uttarakhand, Arunachal Pradesh and Sikkim. A large part of these forests have been cleared to provide land for agriculture.

The forests are rich in wildlife. Elephants, tigers, rhinoceros, deer and monkeys are found here. There are many national parks and wildlife sanctuaries. In the delta region, the Royal Bengal tigers, crocodiles and alligators are found. A large variety of fishes, such as rohu, catla and hilsa, are also found.

3. Following factors help in the growth and development of agriculture in the Ganga-Brahmaputra basin :
- ◆ The climate is suitable for growing crops throughout the year.
  - ◆ Fertile alluvial soil deposited by the rivers flowing down from the mountains.
  - ◆ Perennial rivers provide enough water for irrigation.
  - ◆ The flat lowlands make farming easier. They are excellent for the development of an extensive roads and railways network.
  - ◆ It has led to the development of agro-based industries in this region.

- F. Do it yourself.  
H. Do it yourself.  
J. Do it yourself.

- G. Do it yourself.  
I. Do it yourself.



# 15. Life in the Deserts

## Exercise

A. 1. (b)      2. (a)      3. (c)      4. (b)      5. (c)

B. 1. Bedovins, Tvaregs      2. Kara koram, Zaskar

3. Mt Emi Koussi      4. snowland

C. 1. The Sahara, the largest desert in the world, covers a large part of north Africa. Extending from the Atlantic Ocean in the west upto the Red Sea in the east, it has an area of about 8.5 million sq km. Its east-west extent is about 5,500 km and north-south extent is about 1,900 km.

Atlas mountains are to the north-west of the Sahara while the desert merges into the Savanna grassland towards the south. The Sahara is spread across 11 countries, which are Morocco, Libya, Algeria, Egypt, Sudan, Tunisia, Chad, Mauritania, Mali, Niger and West Sahara.

2. It is located in the north and eastern parts of Jammu & Kashmir. Ladakh is made up of two words—‘La’ meaning ‘mountain pass’ and ‘Dak’ meaning ‘country’.

Ladakh was earlier a region in Jammu & Kashmir which became a Union Territory in 2019. The total area is about 45,110 sq km. The total population is about the three lakh.

The most striking features in Ladakh are the high mountains and aridity. This cold desert lies towards the north of the Great Himalayan range.

3. **Climatic Conditions of Ladakh :** Due to high altitude, the climate is cold and dry. As there is little or no atmospheric moisture and the air is thin, so the heat of the sun is intense. The day temperature during the summer season is just above 0°C, while the night temperature is about –25°C. Winters are extremely cold and the temperature goes below –40°C.

The Great Himalayan range acts as a barrier and does not let the moisture-laden clouds to enter the region. Thus, rainfall is as low as 10 cm every year. The summer season is almost dry and the supply of water is mostly through the melting snow on the higher altitudes.

**Climatic Conditions of Sahara :** The climate is very hot and extremely dry. Some of the highest temperatures in the world have been recorded here. Al-Azizia, in Libya, recorded the highest temperature of 57.7°C in 1922.

Here, the temperature rises and humidity decreases as one goes from north to south. The dry air keeps the sky cloudless and clear. So, the

temperature ranges from below freezing point on a winter night to more than 55°C on a summer afternoon. This heats up bare rocks and loose sand.

The amount of rainfall varies greatly from region to region and from year to year. Some areas have not received rainfall for many years.

- D.** 1. Near the oases, the people are cultivators and herdsmen, who lead a settled life, especially in the Nile valley in Egypt. They grow crops, such as wheat, rice, barley, maize, cotton, etc. These places are also centres of trade.

2. **Economic Activities of Sahara Desert :** Life in the desert is tough. The Bedouins and Tuaregs are nomadic tribes who rear goats, sheep and camels. These animals provide milk, meat and hides. Their hair is used to make clothes, mats, carpets and blankets.

Near the oases, the people are cultivators and herdsmen, who lead a settled life, especially in the Nile valley in Egypt. They grow crops, such as wheat, rice, barley, maize, cotton, etc. These places are also centres of trade.

Agriculture, local trading and herding is the basis of the economy. The camel, the most important animal, is used as a beast of burden besides providing milk, meat and fur-skin.

Recently, mineral oil has been discovered in Algeria, Libya and Egypt. This has changed the face of the economy. Other important minerals like natural gas, iron ore, copper and manganese are also found.

People's life in Sahara is undergoing changes. Many cities which have developed here have modern facilities such as hospitals, schools, cultural and religious centres, super highways, etc. Many parts of the Sahara desert are now accessible by aeroplanes. The tribal people are migrating to cities in order to lead a settled life.

**Economic Activities of Ladakh :** Crops are grown during the summer season to avoid frost. It is sown in May and harvested in September. Wheat is the main crop upto an altitude of 3,000 m above the sea level. Barley is also widely grown and an important crop. Agriculture is supplemented by horticulture and livestock rearing. Apples, strawberries, melons, apricots, mulberries, etc. are the important fruits grown. The vegetables grown are peas, potatoes, beans and turnips. Most of the work on the farms is done by women. They also manage small businesses and shops.

The extensive pastures on the mountain slopes are used for livestock rearing of yaks, sheep and goats. Yak is the beast of burden. It provides milk and its hair is used to make tents. The hair of sheep and goats are used to make woollen cloth. Pashmina from goats is the main source of income.

3. The government is making efforts to improve the economy and the lifestyle of the people. Some of them are :
- ◆ Tapping potential water resources for generating hydroelectricity.
  - ◆ Development of the tourism industry.
  - ◆ Improvement of transport and communication facilities.
  - ◆ Introduction and development of irrigation facilities.
  - ◆ Development of fodder production, as the animals have to be stall-fed during the long winter season.
  - ◆ Improvement in the local breed of livestock.
  - ◆ Planting traditional trees, like poplars and willows, to meet the demand of fuelwood.
- E. Do it yourself.

## Social and Political Life

# 16. Democracy

### Exercise

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- A. 1. (d)      2. (a)      3. (a)      4. (d)      5. (b)
- B. 1. If the government is elected and run directly by the people. It is called direct democracy.  
It is not practical to follow in countries with a large population like India.
2. Unlike the monarchies, in most democracies the head of the country (President) is also elected by the people. Such countries are called republics. So, India is a 'democratic republic' because it has both the government and the head of the state (President) elected by the people.
3. Village panchayats, democratic institutions at the local level, provide a forum for the people to discuss and decide on issues concerning their life in the village.  
A democratic set-up has many such institutions at various levels.
4. In a democracy, an important means for people to exercise their political power are elections. All adult men and women vote to elect their representatives. In doing so, they indirectly participate in the governance of the country.
5. Democracy is not just a form of government alone. It is also a form of society and a form of economy. Here, the values such as freedom, justice and human dignity are deeply embedded in the political system and the social and economic life of the people. The granting of the right to vote is not enough to establish democracy. For it to be really meaningful, it should have a democratic society and an economic democracy also. Only then can we call it a complete democracy.



## 17. Pillars of Democracy

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### Exercise

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- A.** 1. (c)      2. (c)      3. (b)      4. (d)      5. (c)
- B.** 1. Political                      2. tolerance    3. Violence    4. national
- C.** 1. Every citizen should be well-informed and socially responsive to make the right choices and to arrive at the right decisions. For this, they should be enlightened enough to make responsible decisions. Thus, political awareness is an important condition of democracy.
2. Public opinion, as a decision-making mechanism, plays a major role in a democracy. A democratic system grants people the right to formulate sound public opinion and express it properly which no democratic government can ignore. If any government ignores or suppresses it people can remove it in the next elections.
3. Political parties are the soul of democracy and so, they must have a national outlook. They should place national interest above everything else and should not stand for a particular religion, caste or region. Parties based on such narrow considerations may cause unrest among the people and even lead to fragmentation of the nation. National integration should be the goal of all parties.
- D.** 1. Intolerance destroys the very foundation of democracy. Just as an intolerant majority can damage the country's democratic structure, so also an intolerant minority can do the same. Unnecessary agitations, violent protests, *bandhs*, etc. are various forms of minority intolerance when they cripple public life and create roadblocks for the implementation of people-friendly government programmes. So, it is essential for a democracy to respect the freedom of the majority to run the government and the minority's freedom to express its opinions.
2. The citizens of the country need to be politically aware and disciplined for efficient functioning of a democratic government. Discipline means that the citizens should be aware of their rights and duties. They should be willing to fight for their rights, besides be equally willing to perform their duties.
- Violence or use of force has no place in a democracy. Persuasion and not coercion is the method of such a government. People should use persuasion to bring about change. This is possible only if the citizens are disciplined.
3. Human dignity is the core value of democracy. A society is democratic only if all its members are respected as human beings and with dignity. It is equally important to have economic parity in the society where none should starve and none should be denied the basic necessities of

life. If there is abundance on one hand and poverty on the other, there can be no true democracy. Thus, social and economic equality is an essential condition for the successful working of democracy.

E. Do it yourself.

F. Do it yourself.

G. Do it yourself.



## 18. State Government

### Exercise

- A. 1. (a)      2. (c)      3. (b)      4. (c)      5. (b)
- B. 1. F      2. F      3. T      4. T
- C. 1. Legislative council is called a permanent body because it cannot be dissolved.
2. Every state has a Legislative Assembly, also called the Vidhan Sabha. Its members are directly elected by the people from Assembly constituencies within the state. These territorial constituencies ensure proportional representation of the population in the Assembly. States with a large population have a proportionately larger Assembly. So, the most populous state of Uttar Pradesh has 404 members in the Legislative Assembly, while the thinly populated state of Sikkim has only 32 members.
3. The Governor of a state is the nominal head of the executive. He/She is appointed by the President and holds office for a term of five years. He/She can be removed by the President at any time. The term can be extended as well.
- To be eligible for the post of a Governor, a person must be a citizen of India and should have attained 35 years of age. He/She should not be a member of Parliament or State Legislature or hold any office of profit.
4. The Chief Secretary heads the civil service and the secretaries in charge of various departments work under her or him. They are assisted by Deputy Secretaries, Under Secretaries, Directors and Deputy Directors. The state is divided into administrative units called divisions, which are looked after by Divisional Commissioners. These in turn are divided into districts, administered by District Magistrates.
- D. 1. To become a member, a person needs to be a citizen of India and have her or his name on the voter's list of the state. He or She should not be below 30 years of age. He or She should also be mentally sound and financially not bankrupt.

2. The first step in the process of making a law is the introduction of bill or the draft of a proposed law either in the Legislative Assembly or in the Legislative Council of the state. It is discussed and amendments are made, if necessary, before it is put to vote. If the bill is passed, it is sent to the Governor for approval. It becomes an Act only after the Governor signs it. There are different types of bills. Money Bills and other financial bills can be introduced only in the Legislative Assembly.
3. The Governor also has certain discretionary powers such as making some decisions without consulting the Council of Ministers. If the ruling government has lost the confidence of the Legislative Assembly or the government machinery has broken down, he/she can recommend President's rule in the state. In such cases the Governor runs the state administration on the instructions of the President.
4. The main functions of a Chief Minister include the following :
  - ◆ To advise the Governor on the selection of the Council of Ministers and its size.
  - ◆ To preside over Cabinet meetings.
  - ◆ To distribute portfolios among ministers.
  - ◆ To appoint a Deputy Chief Minister, if needed.
  - ◆ To retain charge of some portfolios, if needed.
5. **Council of Ministers** : The total number of ministers, including the Chief Minister, cannot be more than 15 per cent of the total strength of the Legislative Assembly. Ministers are chosen by the Chief Minister from among the legislators. There are three categories of ministers—Cabinet Ministers, Ministers of State and Deputy Ministers. A Cabinet Minister holds the overall charge of one or more portfolios. He/She may be assisted by the Ministers of State or Deputy Ministers. The Cabinet makes all important decisions. The Council of Ministers is collectively responsible to the Legislative Assembly.
 

**Advocate-General** : The Advocate-General of the state gives advice to the Executive on legal matters and performs other legal functions assigned by the Governor. He/She is appointed by the Governor. Only a person qualified to be a High Court judge is eligible for the post. The Advocate-General can take part in the proceedings of the State Legislature but does not possess the right to vote. It is necessary for the smooth working of these bodies that all citizens cooperate in the administrative process.

- E. Do it yourself.
- F. Do it yourself.





## 19. Media and Democracy

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### Exercise

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- A. 1. (a)      2. (a)      3. (d)      4. (d)
- B. 1. The media is the main source of political information and public debate. As it passes on expert opinion to the public, it becomes a key to democracy in the hands of informed and participating citizens. It explains the flaws in the existing system to people and makes it easier for them to make intelligent decisions about public affairs. This way, it protects the democratic interests of the people.
2. **Objectives of the Media**
- ◆ The media is a watchdog of democratic values, for which it needs to fulfill some essential objectives. These are as follows :
  - ◆ Separation of news from opinion.
  - ◆ Separation of news and business interests of the newspaper. If the two get mixed up, it may interfere with the media's responsibility towards people at large.
  - ◆ Not to give one-sided account of events.
  - ◆ Give only reports that are based on facts.
- C. 1. The media has an enormous social responsibility. Besides providing an accurate and detailed account of events, it should also provide a platform or a forum for people to share their opinions, views and ideas. It should uphold the values of the society.
- Dealing with the power of information, some media firms may become centres of economic and political clout and power. In such cases, they may place their private interests above public interests. There is a need to regulate the media so that it gives priority to public interest. For this, the media has evolved a set of principles or code of conduct for itself.
2. It means not favouring one side or the other.
- D. Do it yourself.                      E. Do it yourself.
- F. Do it yourself.



## 20. Markets Around Us

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### Exercise

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- A. 1. (c)      2. (a)      3. (b)      4. (a)
- B. 1. Throughout human history, a market has been a place where sellers and buyers exchange goods for money. At that time, focus of

marketing was all about distributing goods and services and maximizing profits. The needs and wants of the customer were not taken into account. This is the difference between the traditional and the modern concept of marketing. Sensing, servicing and satisfying the needs and wants of customers in a more effective manner is a part of the modern concept of marketing.

2. Marketing, besides selling things, also involves many activities such as identifying buyers, finding out their preferences, persuading them to buy goods, negotiating the terms of sale, mode of delivery and terms of payment and aftersales services.
3. Retailers are engaged in retail trade. The producers supply goods directly to them who sell them to consumers. Here, no wholesaler is involved.

**Wholesalers :** The producers supply goods in bulk to the wholesalers who in turn directly sell these goods in small quantities to the ultimate consumers. Here, no retailer is involved.

- C. 1. Marketing, through traders, establishes a link between producers and consumers. Traders buy finished goods from the producers and sell them to the consumers. They also overcome two important barriers of trade, namely, the distance between the place of production and the place of consumption, and the time lag between production and consumption.

Marketing, besides selling things, also involves many activities such as identifying buyers, finding out their preferences, persuading them to buy goods, negotiating the terms of sale, mode of delivery and terms of payment and aftersales services.

2. **Benefits of Marketing :** The benefits of marketing are as follows :
  - ◆ It treats the customer as 'king', that is, as the most important person.
  - ◆ It helps in improving people's standard of living by offering a wide variety of goods and services.
  - ◆ It generates employment in the production and distribution sectors.
  - ◆ It lets the producers concentrate on production activities.
  - ◆ It helps in developing economic resources of the country.
  - ◆ It makes large-scale production of goods possible, which is very cost-effective.
  - ◆ It attempts to satisfy customer's needs by designing products as per the demands of the market.
3. When the producers sell their goods directly to the consumers, without any involvement of a middleman, it is an example of the direct channel. There are two types of direct channels— travelling salespersons and retail shops or showrooms.



2. Gender inequality is closely linked to other forms of social inequality. In principle, men and women are equal, with the same rights and duties. In practice, however, that is not so. Men generally earn more than women, they get better jobs, they make all important decisions in the family and have better positions of power in society. There are more boys than girls in school. There are many reasons for this. Girls are made to stay at home to do chores or look after younger brothers and sisters. They are also married off early and bear children at a young age.
3. There have been many movements focusing on giving women economic rights. A range of government programmes have been launched to increase economic opportunities for women. Things are changing for the better. Today there are more girls in schools. More and more women are coming out of homes to take up jobs or engage themselves in business or social work. This has helped many of them to be financially independent and self-confident. Women have also joined political bodies. Today women form about one-third of the elected representatives in the Panchayati Raj institutions in our country. It is a very significant achievement. They are also fighting for 33 per cent reservation in the Lok Sabha.
- D. Do it yourself.  
 E. Do it yourself.  
 F. Do it yourself.



## Half-Yearly Model Test Paper

(From Lessons 1-10)

- A. 1. (d)      2. (a)      3. (c)      4. (b)      5. (d)  
 B. 1. Ghiyas-ud-din Balban      2. Kharaj      3. Timur  
 4. Qazi      5. Ibrahim, babur  
 C. 1. (d)      2. (c)      3. (a)      4. (b)  
 D. 1. **Administration of Cholas**

The Chola kingdom was divided into provinces called mandalams, which were administered after by the governors. Each mandalam was further divided into numerous valanadus, each of which consisted of a number of villages, called nadu or kurrum. It was the lowest unit. There were also many towns or nagarams such as Tanjore, Kanchi and Puhar.

**Village Assemblies :** Local self-government was a special feature of Chola administration.

Villages were free to look after their own affairs. Each village had two assemblies—the *ur* and the *sabha*, where the former was the general assembly while the latter was a gathering of all male adults. These assemblies also had many sub-committees which looked after all affairs of the village such as settlement of disputes, measurement of land under cultivation, calculation of tax and its collection, sharing of water, building and repairing water tanks and irrigation canals and so on.

2. In the hymns composed by him, he preached true devotion to god as the only path to salvation. As he said, a guru can lead people on to the path of bhakti. He rejected caste and class differences and preached equality.
3. Two distinctive features of the temples of Bengal are :
  - (a) They were generally four-roofed structures with four triangular roofs which converged at a point.
  - (b) The outer walls of these temples are covered with terracotta tiles which have scenes from the epics.
4. The Sayyid brothers - Abdullah Khan Barah and Husain Ali Khan Barah were known as the king-makers since they chose who was to be made king. In 1719, they removed Farrukhsiyar from the throne. Within a year, they placed and remove two more rulers from the throne.
5. A number of factors, such as volcanic eruptions, movement of the lithospheric plates or even bomb explosions may cause the surface of the earth to shake. This shaking of the earth's surface is called an earthquake.



## Annual Model Test Paper

(From Lessons 11-21)

- |           |              |            |              |              |        |
|-----------|--------------|------------|--------------|--------------|--------|
| <b>A.</b> | 1. (c)       | 2. (a)     | 3. (c)       | 4. (b)       | 5. (c) |
| <b>B.</b> | 1. decreases | 2. highest | 3. Political | 4. tolerance |        |
|           | 5. Violence  |            |              |              |        |
| <b>C.</b> | 1. F         | 2. F       | 3. T         | 4. T         | 5. F   |

- D.** 1. Main features of planetary winds are :
- (a) Winds which blow constantly in a particular direction throughout the year are known as planetary winds.
  - (b) These are also known as prevailing winds are permanent winds.
  - (c) These winds originate due to the presence of permanent high pressure and low pressure belts on the surface of the earth.
  - (d) Main types of planetary winds are trade winds, the westerlies and the polar winds.
2. Ocean water is saline due to the presence of a large amount of dissolved salts, most of which is sodium chloride or common salt. It is estimated that every 1,000 g of ocean water has 35 g of dissolved salts. So, the average salinity is 35 per thousand but it varies from one part of the ocean to another. The Dead Sea in Asia has the highest salinity. In general, salinity decreases towards the equator due to heavy rainfall.
3. A major part of the Amazon basin lies in Brazil, between the Guiana highland in the north and the Brazilian highland in the south. A Spanish explorer, Vicente Yanez Pinzon was the first European to discover the Amazon river. The Amazon river originates in the Andes mountains and drains into the Atlantic Ocean. It is the most important river in South America. It is the second longest river in the world (6,280 km) and it discharge the largest volume of water.
4. Public opinion, as a decision-making mechanism, plays a major role in a democracy. A democratic system grants people the right to formulate sound public opinion and express it properly which no democratic government can ignore. If any government ignores or suppresses it people can remove it in the next elections.
5. The media is the main source of political information and public debate. As it passes on expert opinion to the public, it becomes a key to democracy in the hands of informed and participating citizens. It explains the flaws in the existing system to people and makes it easier for them to make intelligent decisions about public affairs. This way, it protects the democratic interests of the people.

