

# **SOCIAL SCIENCE**

**STANDARD SEVEN**

**TERM II**

## 1. ARAB AND TURKISH INVASIONS

The rise and growth of Islam has been regarded as one of the most important events in World history. Prophet Muhammad (570-632 A.D) was the founder of Islam. Islam grew up in the deserts of Arabia. Its first converts were the Arabs. The Arabs made Islam a powerful force in the politics of Asia. The Persians strengthened Islam and the Turks extended it both towards the West and the East and made Islam as one of the foremost religions of the World.

### Arab conquest of Sind and Multan 712 A.D.

Commercial contacts prevailed between India and Arabia for a long time. There were many causes for the conquest of Sind. The Arabs were attracted by the rich ports of Sind and so they wanted to extend their political and religious control over it. They were angry with the ruler of Sind who failed to check the pirates who plundered them.

**Muhammad-bin-Qasim** was sent by Al-Hajjaj, the Governor of Iraq with the permission of Caliph Walid to conquer Sind. He marched against Dahir the ruler of Sind, defeated him in the Battle of Rewar and captured Sind. He also captured Multan. He got so much of wealth from Multan that he called Multan 'The City of Gold.'.

### Administrative System

Muhammad-bin-Qasim divided Sind and Multan into a number of

Iqtas or districts. Arab military officers were appointed as heads of the Iqtas. Local Hindu officers were allowed to administer the subdivisions of the districts. The Arabs imposed Jizya on non-muslims.

### End of Muhammad-bin-Qasim

Caliph Sulaiman, succeeded Caliph Walid after his death. He was an arch enemy of Al-Hajjaj, the Governor of Iraq. He dismissed Muhammad-bin Qasim as he was the son-in-law of Al-Hajjaj. He sent him as a prisoner to Mesopotamia and tortured him to death.

Sind and Multan remained as part of the Caliph's empire for more than 150 years. Their power gradually declined.

### Effects of Arab Conquest

The conquest of Sind sowed the seeds for the coming of Islam into India. The Arabs learnt the art of administration, astronomy, music, painting, medicine and architecture from our land. Indian Philosophy, numerals and astronomy were taken to Europe by the Arabs.

### Qasim and his Defence Forces

Muhammad-bin-Qasim had an army of 25,000 troops including 6000 Syrian horses, 6000 Camels, 3000 Bactrian Camels, an artillery force of 2000 men with five catapults and advanced guards.

## **Turkish Invasion**

### **The Expansion of Turks into India**

The Turks got the upper hand over the Caliphs of Baghdad in the 8<sup>th</sup> and 9<sup>th</sup> centuries. They were more aggressive than the Arabs. They completed the work begun by the Arabs and extended their dominion beyond Sind and Multan into India.

### **Heroic Defence of Women**

Rani Bai, the wife of Dahir and the other women of Sind put up a heroic defence within the Fort of Rewar. When their attempt failed they performed Jauhar to save their chastity and escape from the hands of the invaders.

### **Impacts of Arabian Invasion**

Brahma Siddhanta, a Sanskrit work of Brahma Gupta was translated into Arabic. Arabic works mention the names of Indian scientists like Bhala, Manaka and Sindbad. Dhana was appointed as a chief Medical officer in a hospital at Baghdad. Manaka, a physician cured a serious disease of Caliph Harun-al-Rashid.

### **Mahmud of Ghazni**

Sabuktigin the ruler of Ghazni was succeeded by Ismail. He was dethroned in 998 A.D. by his brother, the famous Mahmud of Ghazni. He invaded India in 1000 A.D. He was the first Turkish invader. Mahmud defeated Jaipala, the ruler of the Hindu Shahi dynasty, Fateh Daud of Multan and Anandpala of Nagarkot. He also crushed the Chandelas, the rulers of Mathura, Kanauj and Gwalior. After each expedition he

returned to Ghazni with enormous wealth.

Mahmud's important expedition in Hindustan was against the Somnath temple in 1025 A.D. which was situated on the coast of Kathiawar. As the ruler of Kathiawar, Raja Bhima Dev, and his followers fled from the place, he easily plundered the temple and returned to Ghazni with a rich booty which exceeded twenty lakh dinars.

### **Estimate of Mahmud of Ghazni**

Mahmud of Ghazni was one of the greatest Muslim rulers of Asia. He was a great patron of art and letters and he patronised scholars like Firdausi and Alberuni.

**Sir Henry Elliot** in his book "The History of India" refers to the seventeen expeditions of Muhammad of Ghazni. He says that after every expedition Muhammad returned to Ghazni with countless wealth and enormous booty beyond all calculations.

### **End of Ghazni's rule in India**

Mahmud's successors were weak. So Ala-ud-din Husain of Ghori invaded Ghazni, plundered and burnt it. By 1186 A.D. the power of the House of Ghazni declined and that of Ghori rose up.

### **Muhammad of Ghori**

Muhammad was the third important Muslim invader of Hindustan. He became the ruler of Ghori, a mountainous region situated between Ghazni and Herat.

Hence, he was popularly known as Muhammad of Ghori.

### **His invasions**

As an ambitious and enterprising ruler, he started his attacks on India in 1176 A.D. He captured Multan and Uch. He subjugated lower Sind in 1182 A.D. In 1185 A.D., he invaded Punjab and captured the Fortress of Sialkot. In 1186 A.D. he besieged Lahore.

### **First Battle of Tarain (1191 A.D.)**

In 1189 A.D. Muhammad of Ghori captured the fortress of Bhatinda and advanced into the kingdom of Prithviraj Chauhan, the Rajput ruler. Prithviraj marched against him with a large force and defeated Muhammad of Ghori in the Battle of Tarain in 1191 A.D. Prithviraj also recovered Bhatinda, which was earlier occupied by Mahmud of Ghazni.

### **Second Battle of Tarain (1192 A.D.)**

Muhammad of Ghori re-enforced himself and marched against Prithviraj for the second time in 1192 A.D. He gave a crushing defeat to the combined forces of the Rajput rulers under Prithviraj at Tarain. Prithviraj was imprisoned and later put to death. The Second Battle of Tarain marked the beginning of the Turkish rule in the heart of Hindustan for the first time in Indian history.

Muhammad of Ghori appointed Qutb-ud-din Aibak as his commander.

### **Tactics of Muhammad**

Muhammad divided his army into five divisions. Four armies were sent to attack the Rajput army on all sides. The fifth army was kept in reserve. The Rajputs fought with great gallantry. When they became exhausted, the fifth army was sent. They attacked with vigour and defeated the Rajputs.

### **Rajput Uprisings**

Between 1193 and 1198 A.D. there were many Rajput uprisings. Qutb-ud-din Aibak put them down and brought many of their territories under his control. Delhi was made the capital of Muhammad of Ghori's territory in India.

### **Battle of Chandwar (1194 A.D.)**

Muhammad of Ghori marched against Jaichandra, the greatest Rajput ruler of Kanauj who was having a vast part of Indian Territory under his control. In the Battle of Chandwar, Jaichand was struck in the eye by an arrow and he was killed by Muhammad of Ghori. The victory at Chandwar helped Muhammad of Ghori to extend further into India.

### **Conquest of Bengal and Bihar**

Muhammad-bin-Baktiyar Khilji, one of the commanders of Muhammad of Ghori, destroyed Vikramasila and Nalanda Universities in 1202-1203 A.D.

He also captured Nadia in Bengal and parts of Bihar.

### Death of Muhammad of Ghori

Muhammad of Ghori went back to Ghazni in order to check his Central Asian enemies. While he was engaged in evening prayer, he was assassinated on 25<sup>th</sup> March 1206 A.D., by some Shia rebels and Khokhars.

### An Estimate

Muhammad of Ghori was considered to be the real founder of the Turkish Empire in India because of his various conquests and annexations of the Rajput territory in North India.

### EXERCISE

#### I) Choose the best answer.

1. Muhammad-bin-Qasim was sent to conquer \_\_\_\_\_.  
a) Sind                                      b) Delhi                                      c) Ghori
2. Mahmud of Ghazni defeated \_\_\_\_\_ the ruler of Hindu Shahi dynasty.  
a) Jaichand                                      b) Jaipala                                      c) Rajya Pal
3. Somnath temple was plundered by Mahmud of Ghazni in \_\_\_\_\_.  
a) 1025 A.D.                                      b) 1027 A.D.                                      c) 1001 A.D.
4. In the First Battle of Tarain Muhammad of Ghori was defeated by \_\_\_\_\_.  
a) Sabuktigin                                      b) Ghiyasuddin                                      c) Prithiviraj
5. The Commander of Muhammad of Ghori was \_\_\_\_\_.  
a) Qutb-ud-din Aibak                                      b) Balban                                      c) Nasir-ud-din

#### II) Fill in the blanks.

1. Prophet Muhammad was the founder of \_\_\_\_\_.
2. Muhammad-bin-Qasim invaded Sind in \_\_\_\_\_ A.D.
3. In the Second Battle of Tarain Muhammad of Ghori killed \_\_\_\_\_.
4. Muhammad-bin-Baktiyar Khilji captured Nadia in \_\_\_\_\_.
5. Muhammad of Ghori was considered to be the real founder of a \_\_\_\_\_ Empire in India.

### III) Match the following.

- |                   |                  |
|-------------------|------------------|
| 1. Al-Hajjaj      | City of Gold     |
| 2. Multan         | Governor of Iraq |
| 3. Sabuktigin     | Kathiawar        |
| 4. Somnath Temple | Scholar          |
| 5. Firdausi       | Ruler of Ghazni  |

### IV) Answer the following questions briefly.

1. Write a note on the administrative system of Arabs in Sind.
2. Who dismissed Muhammad-bin- Qasim and Why?
3. Who were the rulers defeated by Mahmud of Ghazni?
4. What were the regions invaded and captured by Muhammad of Ghori?
5. Why was the Battle of Chandwar important in the history of India?

### V) Answer in detail.

1. Write in detail about the Arab conquest of Sind and Multan and its effects on India.
2. Give an account of the First and Second Battle of Tarain.



## FORMATIVE ASSESSMENT

### 1. Group Discussion:

Divide the class into groups. Ask each group to discuss the topic. “The Arabs made Islam – a powerful force in the politics of Asia”. Then a child from each group can come forward to share what they discussed.

### 2. Find more:

Read about Qasim and his defence forces and the tactics of Muhammad of Ghori given in your lesson.

Find out details of the present day defence forces of India.

- i. Army
- ii. Navy
- iii. Air force
- iv. Training centers

### 3. Oratorical competition:

Imagine yourself to be Muhammad of Ghori. Your soldiers have lost hope after their defeat in the First battle of Tarain at the hands of Prithviraj Chauhan. How would you instill confidence in them to fight again?

- The pupil who is motivated best wins

### 4. Debate:

Which of the conquests – Arab or Turkish had a lasting impact on medieval History.

### 5. Prepare charts:

The class can be divided into groups. Each group can prepare a chart on the following topics.

- i. Indian impact on the Arabs
- ii. Administration
- iii. Astronomy
- iv. Music
- v. Art and Architecture

### 6. Things to do:

Collect information about the foreigners who invaded India during medieval period.

## 2. SULTANATE OF DELHI

The period from 1206 A.D. to 1526 A.D. came to be known as the Sultanate period. During this period the Mamaluk, Khilji, Tughluq, Sayyid and Lodi dynasties ruled over India. With the death of Muhammad of Ghori, his commander Qutb-ud-din-Aibak came to power and founded the Mamaluk dynasty.

### MAMALUK DYNASTY Qutb-ud-din Aibak (1206-1210 A.D.)

The rule of Qutb-ud-din Aibak, the commander of Muhammad of Ghori marked the beginning of the Mamaluk rule and the establishment of Sultanate period in India. He assumed sovereign powers on 24<sup>th</sup> June 1206 A.D. He did not issue coins or read the khutba in his name. He was the founder of the Turkish dominion in India.

The term Mamaluk was the Quranic term for a slave.

### Task of Saving his Empire

Qutb-ud-din's immediate tasks were

- to prevent Ala-ud-din Muhammad, the Shah of Khwarizm from occupying Ghazni and Delhi.

- to prevent the Rajputs from recovering their principalities.
- to put down Ali Mardan Khan of Bengal, Qubacha and Yalduz.

In order to save his infant Turkish Empire, he made many matrimonial alliances and shifted his capital to Lahore. He successfully

put down his enemies and firmly established his hold over India.

### An Estimate

Qutb-ud-din Aibak was a pious Muslim. His administration was purely based on his military strength. Local administration was entrusted to native officers. He built Quwat-ul-Islam mosque at Ajmer and Dhai Dinka Jhonpara mosque at Delhi. He started the construction of Qutb Minar at Delhi. He patronized Hassan Nizami and Fakhre Mudir. He was called as **Lakh Baksh** or **Giver of Lakhs** for his generosity. He died in November 1210 A.D. after he fell from his horse while playing polo.

### Ilutmish (1211 – 1236 A.D.)

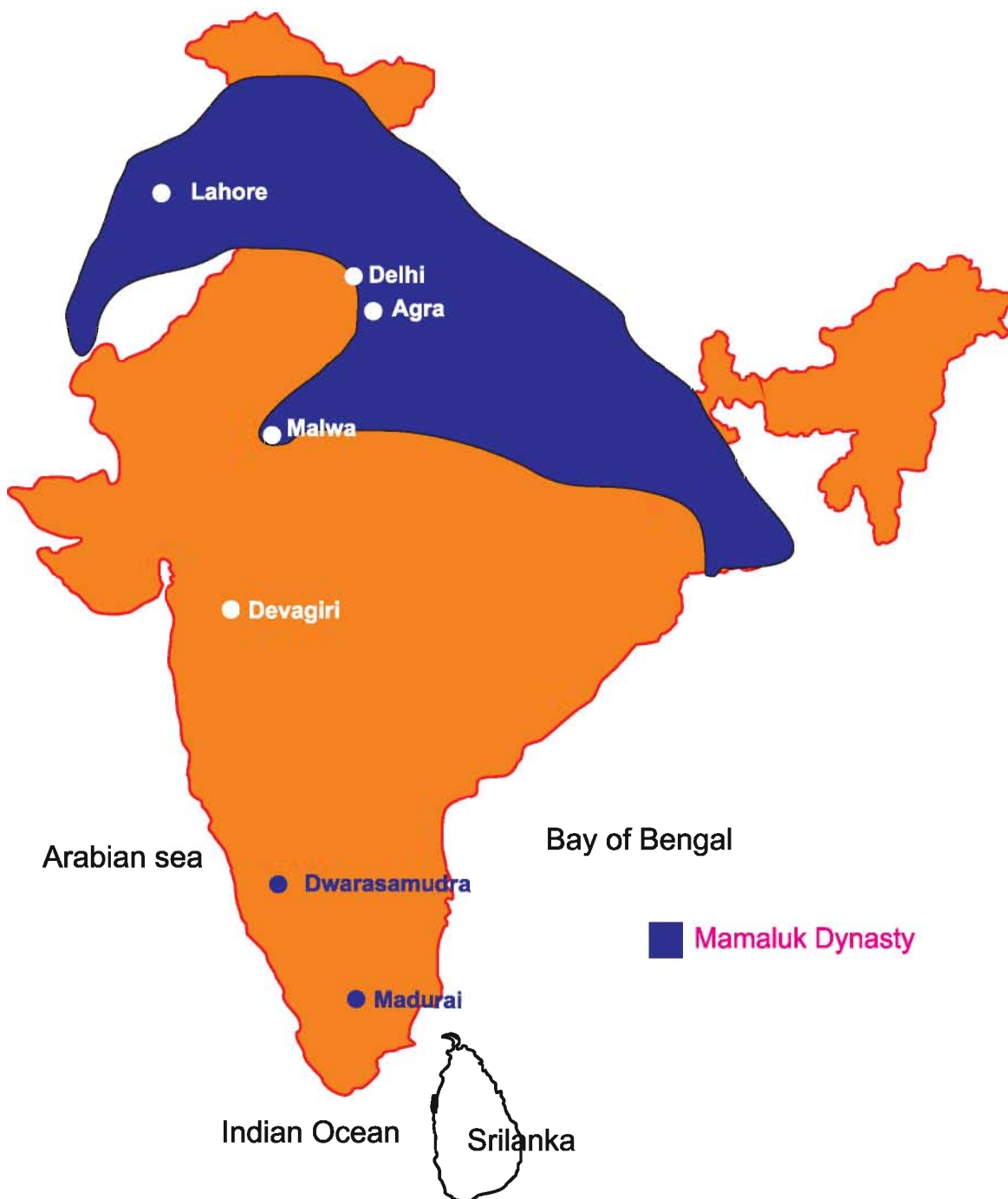
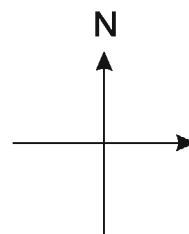
Ilutmish was born in the Ilbari tribe of Central Asia. As a boy he was sold as a slave to Qutb-ud-din Aibak. Aibak made him as his son-in-law. He killed Aram Shah, the son of Aibak and became king in 1211 A.D.

### Conquest of Ilutmish

Ilutmish was surrounded by enemies on all sides. He put them down and strengthened his position. As Yalduz considered himself to be the successor of Muhammad of Ghori, Ilutmish defeated him and put him to death. He drove out Nasir-ud-din Qubacha, the ruler of Uch and Multan from Punjab in 1217 A.D. He captured Bhakkar, where Qubacha took shelter. Bengal was also brought under his control.



## MAMALUK DYNASTY



Ilutmish put down the revolt of the Khilji Maliks of Bengal in 1230 A.D. Ilutmish refused to give shelter to Jalal-ud-din Mangabarni, the Shah of Khwarizm who was attacked by Mongols. This pleased Chengiz Khan and so he did not invade India. In this way Ilutmish saved Delhi from Mongol invasion. In Rajputana, Ilutmish recaptured Ranthambore and Mandor. He defeated Udai Singh, the ruler of Jalor and made him a feudatory. Thangiri, Ajmer, Sambha, Nagur, Kalinjar and Gwalior were captured by him.

Ilutmish re-established his authority over Badaun, Kanauj, Benaras and Katchar-the doab region between the Ganga and the Yamuna.



**Qutb Minar**

Qutb Minar was built in honour of Sufi Saint Khwaja Qutb-ud-din Baktiyar kaki who died in Delhi. The construction started by Aibak was completed by Ilutmish

### End of Ilutmish

Ilutmish undertook an expedition against Bamiyan. He nominated his daughter Raziah as his successor before his death. He fell ill and died in 1236 AD.

### Administration

Ilutmish set up Iqtas under Iqtadars. The army was maintained by 'A Corps of Forty' or Chahalgan. He was the first Turkish ruler to introduce Arabic coinage.

### Estimate

Ilutmish was a successful general and administrator. He completed the work of Aibak. He built up the Turkish Kingdom in North India.

### Coins of Ilutmish

The silver tanka of Ilutmish weighed 175 mgs and had an Arabic inscription on it. Ilutmish also introduced copper Jital.

### Sultana Raziah (1236-1240 A.D.)

Raziah was the first woman ruler of Sultanate period. She defeated and killed Firoz Shah who ascended the throne after the death of Ilutmish. She successfully restored the prestige of the Turkish Kingdom in India. Her rule ended in 1240 A.D. because of a conspiracy by the Turkish nobles. The successors of Raziah were weak and hence Balban rose to power in 1265 A.D.

### Successors of Raziah

Bahram Shah	1240 -1242 A.D.
Alaud-din Masid	1242 - 1246 A.D.
Nasir-ud-din Mahmud	1246 -1264 A.D.
Balban	1265 -1287 A.D.

### Balban (1265 – 1287 A.D.)

Balban an Ilbari Turk became the ruler in 1265 A.D. after the death of Nasir-ud-din Mahmud.

He believed in the Divine Right Theory of Kingship. He introduced **Poibos**- a form of salutation to the king by kissing his feet in the court.

According to Lanepoole, "**Balban**, a slave, water carrier, huntsman, general, statesman and Sultan-is one of the most striking figures among the notable men in the long line of Kings of Delhi".

### Internal policies

Balban curtailed and destroyed the 'Corps of Forty' by giving them severe punishments and promoting juniors to important positions. He introduced a well organised spy system.

A separate military department called Diwan-i-arz was established. Many military posts were set up at Bhojapur, Patiali, Kampil and Jalali. Balban suppressed Tughril Khan, who declared his independence and recovered Bengal.

### Divine right Theory

The ruler was considered as a representative of God on earth.

### An Estimate of Balban

Balban was a great patron of learning. He patronized Amir Khusrau who is called as the 'Parrot of India' and Amir Hasan. Balban was the most successful ruler among the slave kings.

### End of Balban

Balban was shocked when his

son Mahmud was killed during an encounter with the Mongols. He never recovered from the sorrow and died in 1287 A.D.

### End of the Mamaluk Dynasty

Balban was succeeded by Kaiqubad his grandson who was very incompetent. The nobles made Kayumar, the infant son of Kaiqubad as ruler. Jalal-ud-din Khilji, the commander of Balban became the regent of the infant king. He killed Kaiqubad and Kayumar and became the ruler of Delhi. Thus Mamaluk Dynasty was brought to an end and the Khilji Dynasty was founded.

### KHILJI DYNASTY

**Jalal-ud-din Firoz Khilji**  
(1290 – 1296 A.D.)

In 1290 A.D. Jalal-ud-din Firoz Khilji ascended the throne of Delhi. He followed the policy of peace after he became the ruler. He wanted to rule without bloodshed. Hence, he was called as **Clemency Jalal-ud-din**.

### Domestic Policies

Jalal-ud-din suppressed a revolt by Malik Chhajju at Kara. He appointed his nephew and son-in-law Ala-ud-din Khilji as the Governor of Kara. Theft and robbery became common during his reign. Though a number of thugs and robbers were arrested, Jalal-ud-din forgave them and even set them free in Bengal. He arrested and killed Sidi Maula, a religious leader who tried to seize the throne.

### Mongol Invasion

Jalal-ud-din defeated and arrested the Mongols who tried to advance upto Sunam in 1292 A.D. He pardoned them as they sued for peace. A few of the Mongols stayed back in India after the invasion.

### End of Jalal-ud-din

Jalal-ud-din's policy of peace was not liked by the young Khiljis. Ala-ud-din Khilji the son-in-law of Jalal-ud-din treacherously murdered him and came to power after his return from Devagiri.

### Ala-ud-din Khilji (1296-1316 A.D.)

Ala-ud-din Khilji ascended the throne in 1296 A.D. He consolidated his hold over North India and invaded South India also.

### Conquests in the North

Ala-ud-din Khilji sent a strong army under his generals Ulugh Khan and Nusrat Khan to conquer Gujarat and they succeeded in doing so. Ranthambore was captured and its ruler Hamir Deva was killed. Chittor, Malwa, Mandu, Ujjain, Dhar, Chanderi, Marwar and Jalor were also captured.

### Conquest in the South

Ala-ud-din Khilji was the first Sultan who invaded South India. He sent his most trustworthy general, Malik Kafur against the rulers of the south. Ramachandra Deva, the Yadava ruler of Devagiri, Prataprudra-II of Warangal and Vira Ballala-III, the Hoysala ruler were defeated and made vassals of Delhi.

Malik Kafur helped Sundara Pandya against his rival Vira Pandya. He reached as far as Rameswaram and built a mosque there. The kingdoms of the south accepted the overlordship of Ala-ud-din khilji and agreed to pay tribute to him.

### The Mongol Invasion

Ala-ud-din successfully repelled the Mongol invasion more than a dozen times. He renovated the existing forts and outposts. He constructed new forts and strongly garrisoned them to strengthen his frontiers.

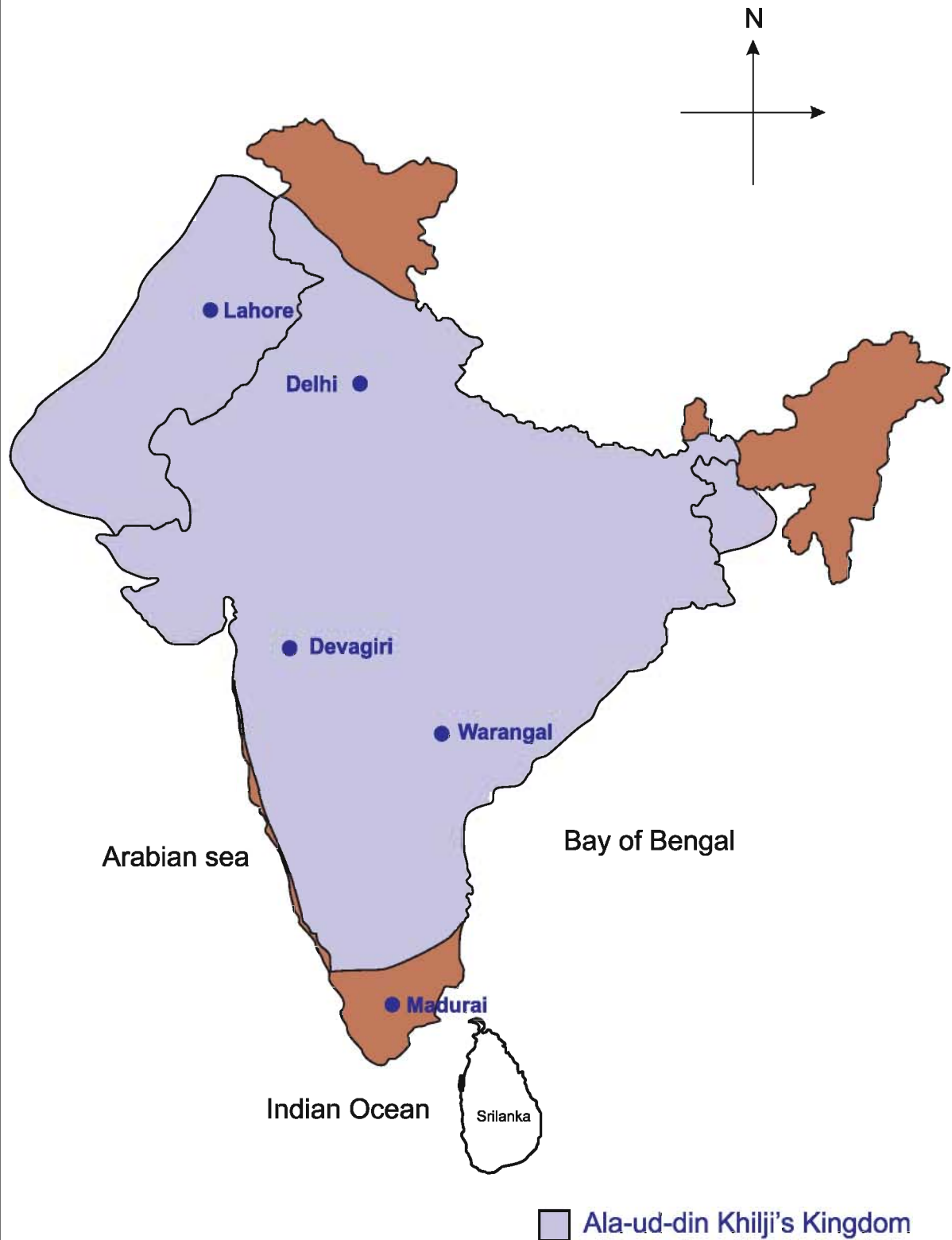
### Domestic Policies of Ala-ud-din Khilji

Ala-ud-din believed in the Divine Right Theory of Kingship. He introduced **four ordinances** to prevent frequent rebellions. He confiscated religious endowments and free grants of lands, reorganized the spy system, prohibited social parties and use of wine.

A permanent standing army was organized by Ala-ud-din. He introduced the system of branding of horses and descriptive roll of individual soldiers to prevent corruption.

The prices of essential commodities were fixed which was less than the usual market rates. Black marketing was strictly prohibited. Revenue was collected in kind and not in cash. He posted several horsemen and clerks in new posts. The postal system was good

## Empire of Ala-ud-din Khilji





during his period. He followed a harsh policy towards the Hindus. Jizya, grazing tax and house tax were imposed on them.

### Marketing System

Officers like Diwan-i-riyasat and Shahana-i-mandi were appointed to regularize the market. All merchants were required to register themselves in the office of the Shahana-i-Mandi and sell their goods at fixed rates.

### An Estimate

Ala-ud-din was the first to raise a standing army, to regularize the markets and to capture regions south of the Vindhyas. He built Alai Darwaza, fort of Siri and the Palace of a thousand pillars. He was undoubtedly a great conqueror and a noble administrator. He was a man of determination.

### End of the Dynasty

Ala-ud-din died in 1316 A.D. Due to weak successors like Qutb-ud-din Mubarak Shah (1316–1320 A.D.) and Nasir-ud-din Khusrav Shah (1320 A.D.), the Khilji dynasty came to an end. Finally in 1320 A.D. a group of nobles led by Ghazi Malik, the Governor of Punjab, invaded Delhi and captured the throne. Ghazi Malik assumed the title of Ghiyas-ud-din Tughluq and founded a new line of rulers at Delhi known as the Tughluq Dynasty.

## TUGHLUQ DYNASTY

### Ghiyas-ud-din Tughluq (1320–1325 A.D.)

Ghiyas-ud-din Tughluq or Ghazi Malik was the founder of the Tughluq dynasty. From a humble origin he ascended the throne by his ability and hard work in 1320 A.D.

### Domestic and Foreign Policies

Ghiyas-ud-din restored order in his empire. Lot of importance was given to agriculture, irrigation, judicial, police and postal arrangements. Warangal, Utkala or Orissa and Bengal were brought under his control. He captured and imprisoned the Mongol leaders who invaded North India.

### End of his rule

While attending a reception for his victories at Bengal the pavilion on which he stood gave way and Ghiyas-ud-din was crushed to death in 1325 A.D. The crown prince Junakhan succeeded him.

### Muhammad-bin-Tughlaq (1325-1361 A.D.)

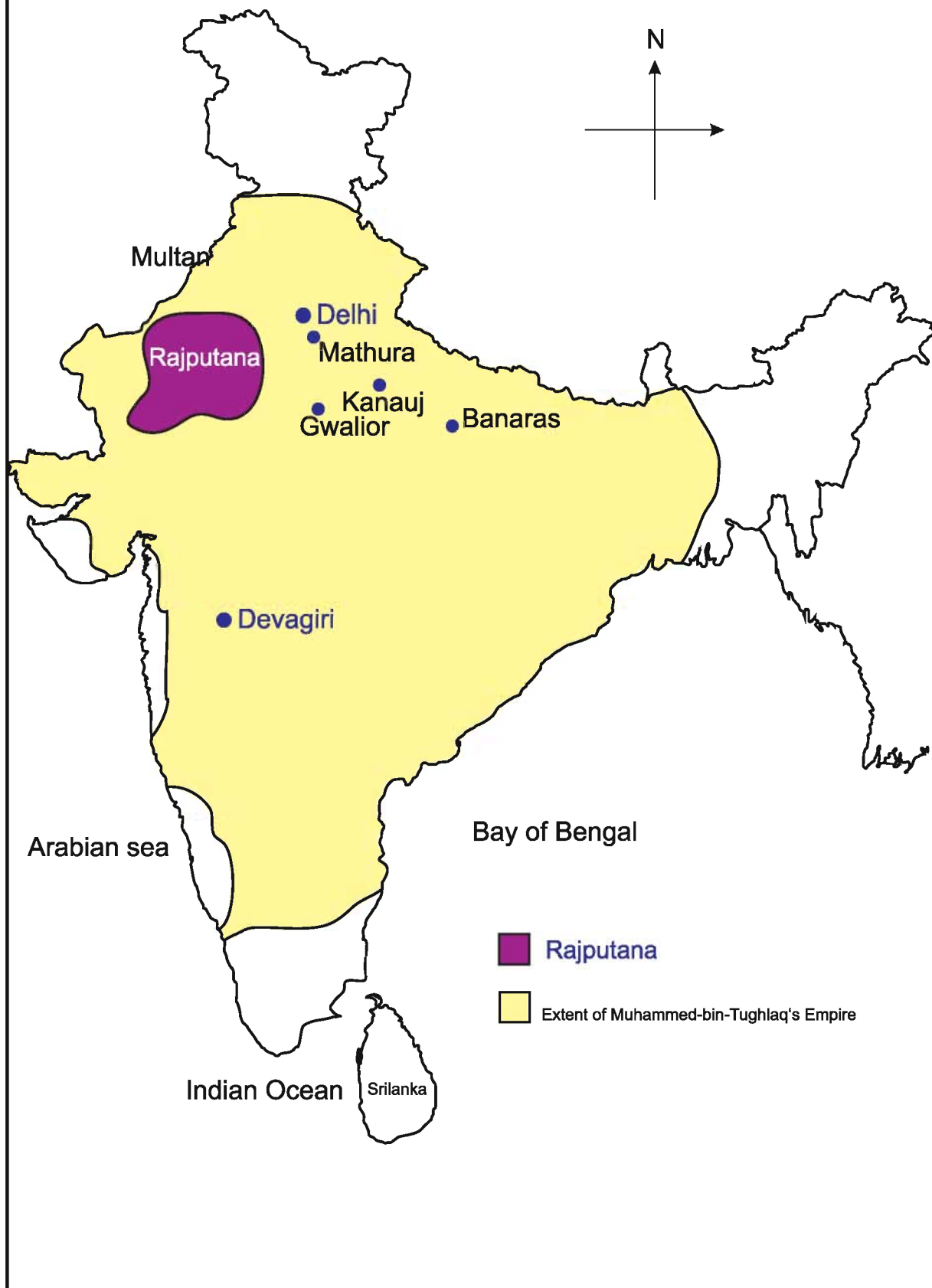
Prince Junakhan took up the title Muhammad-bin-Tughluq in 1325 A.D. when he ascended the throne. He stood for political and administrative unity of India. He captured Warangal in 1327 A.D.

### Domestic Policies

Mohammed-bin-Tughluq raised the taxes in the Doab region to fill up his empty treasury. To avoid heavy taxes the people ran away to the forests. As cultivation was neglected severe famines occurred. He realized his mistake and sanctioned



## Empire of Muhammad-bin-Tughlaq



loans and dug canals to overcome famine but it was too late.

Mongols were often invading the Indian frontiers. In order to protect his capital, he transferred his capital from Delhi to Devagiri. He ordered both the government officials and the common people to shift to Devagiri. The people faced untold miseries. Due to practical difficulties he ordered them to return back to Delhi.

Copper currency system was introduced by the Sultan. The official machinery was not appointed to mint coins. So, people started minting coins in huge numbers. The value of coins fell so low that the Sultan withdrew the copper token currency.



Coins of Mohammed-bin-Tughluq

Mohammed-bin-Tughluq raised an army of 3,70,000 men in order to conquer Transoxiana, Khurasan and Iraq. He disbanded them after realizing that it was not possible.

Mohammed-bin-Tughluq's policy of giving huge presents to Tamashirin, the Mongol leader, to avoid a Mongol invasion was a great burden on his exchequer.

## An Estimate

The domestic policies of Mohammed-bin-Tughluq were good but his operative measures ended in a failure. His character of taking hasty decisions and inoperative policies were responsible for the decline of the Delhi Sultanate.

## Firoz Tughluq (1351-1388 A.D.)

Firoz Tughluq, the son of the younger brother of Ghiyas-ud-din Tughluq ascended the throne in 1351 A.D.

## Administrative Reforms

Firoz Tughluq introduced a lot of reforms which were beneficial to the people. He cancelled all Taquavi (agricultural) loans granted by Mohammed-bin-Tughluq. He increased the salary of the revenue officers. Unlawful and unjust cesses were abolished. He collected four important taxes such as Kharaj-1/10 of the produce of the land, Khams-1/5 of the warbooty, Jizya-Poll Tax and Zakat-Tax on muslims for specific religious purposes. He gave importance to public works. He excavated many irrigation canals, constructed 50 dams, 150 wells and 100 bridges. He built the towns like Firozabad, Fatehabad, Jaunpur and Hissar. Firoz prohibited all kinds of mutilations and torture. The Quranic laws were followed. He imposed Jizya on the Brahmans.

An Employment Bureau, Marriage Bureau, (Diwani-i-kherat) and hospitals (Dar-ul-shafa) were established.

Diwan-i-Istibqaq was established to give financial help to the poor. Liberal grants were given to scholars and religious institutions.

### Foreign Policy

In 1353 A.D. and 1359 A.D. Firoz besieged Bengal. He captured Jainagar and destroyed the Jagannath Temple at Puri. He made the rulers of Nagarkot and Tatta to pay tributes.

### An Estimate

Firoz proved his greatness by his benevolent reforms and contributed to the material prosperity of his people. The Sultan himself wrote his autobiography called Futuhat-i-Firoz Shahi. He patronized the scholar Zia-ud-din Barani. During his period a number of Sanskrit books on medicine, science and arts were translated into Persian. Kutab- Feroz Shahi was a book which dealt with Physics.

### Later Tughluqs

Ghiyas-ud-din Tughluq Shah II, Abu Bakr Shah, Nasir-ud-din Mohammed Tughluq were the successors of Firoz. They were not very strong and powerful. By the end of the fourteenth century, most of the provinces under them became independent. Punjab and Delhi alone remained in the hands of the Tughluqs.

The Sultans of the Tughluq Dynasty however, continued to rule upto 1414 A.D. It was during their period that the invasion of Timur took place.

### Timur's invasion (1398 A.D.)

The ruler of Samarqand, Timur was attracted by the fabulous wealth of Hindustan. He invaded India during the period of Nasir Mahmud Tughluq. He crossed the river Indus and reached Delhi. The Sultan and his Prime Minister Mallu Iqbal opposed Timur. Timur defeated them and occupied Delhi in 1398 A.D. Timur inflicted untold miseries on the people by plundering and massacring them. His invasion led to the decline of the Tughluq Dynasty.

### THE SAYYID DYNASTY (1414-1451 A.D.)

The Sayyid dynasty rose to prominence in Delhi with the decline of the Tughluq dynasty. **Khizr Khan** (1414-1421 A.D.) the Governor of Multan took advantage of the chaotic conditions in India after Timur's invasion occupied the throne of Delhi in 1414 A.D. and founded the Sayyid dynasty. Khizr Khan, the founder did not assume any royal title. Though he brought Punjab, Dilapur and parts of Surat under his control, he lost Jaunpur, Malwa, Gujarat, Khandesh, Bengal and Deccan. He died in 1421 A.D. and was succeeded by his son **Mubarak Shah** (1421-1434 A.D.) He suppressed the Khokhars and the local chiefs of the Doab region. His reign is notable for the fact that for the first time Hindu nobles were appointed in the court of Delhi. He built a city called "Mubarakbad" on the banks of the river Jamuna. He was murdered in 1434 A.D.

Mubarak's nephew, **Muhammad Shah** (1434-1445 A.D.) succeeded him. He put down the ruler of Malwa with the help of Bahlol Lodi the Governor of Lahore. For the help rendered by Bahlol Lodi he was conferred with the title Khan-i-Khanan. Muhammad Shah died in 1445AD.

Muhammad Shah was succeeded by **Ala-ud-din Shah** (1445-1457 A.D.). He was a very feeble ruler. Bahlol Lodi the Governor of Lahore occupied Delhi in 1457 A.D. and allowed Ala-ud-din Shah to retire to Badaun where he died in 1478 A.D. The Sayyid Dynasty came to an end in 1457.A.D.

### LODI DYNASTY Bahlol Lodi (1451-1489 A.D.)

The Lodi Dynasty was founded by Bahlol Lodi. It was the last of the ruling dynasties of the Sultanate period. He was a shrewd politician who clearly realized his limitations. He always took steps to satisfy his nobles. He conquered Mewat, Samthal, Sakit, Etawa and Gwalior. He died in 1489A.D.

Bahlol Lodi did not take his seat on the throne but sat on the carpet in front of the throne along with his nobles in order to get their recognition and support.

Bahlol's son **Sikandar Shahi** (1489-1517 A.D.) ascended the throne under the title of Sikandar Shah. He extended his empire from

Punjab to Bihar. He built the city of Agra which became an important administrative and cultural center of the Lodi's. He organized an efficient spy system. He improved agriculture and industry. During his period several Sanskrit books dealing with mathematics, medicine, astronomy and yoga were translated into Persian.



Ibrahim Lodi Tomb

He enjoyed "Shehnai" music. A reputed work on music titled "Lahjat-i-Sikandar Shahi" was prepared during his reign. He was an orthodox Muslim and put serious restrictions on the Hindus. He was the greatest ruler of the Lodi Dynasty. He died in 1517A.D.

### End of Lodi Dynasty

Ibrahim Lodi (1517-1526 A.D.) succeeded Sikandhar Lodi. He was an uncompromising and intolerant ruler. Ibrahim Lodi humiliated many of his nobles and killed some of them cruelly. Dilwar khan Lodi the son of Daulat khan Lodi was treated cruelly by Ibrahim Lodi. In order to take revenge on him, Daulat khan Lodi invited Babur the ruler of Kabul to



invade India. Babur accepted his invitation, invaded India and defeated Ibrahim Lodi in the first battle of Panipat in 1526 A. D. The Lodi dynasty came to an end with the defeat of Ibrahim Lodi.

### **Administration under the Delhi Sultanate**

The Sultanate of Delhi which extended from 1206 A.D. to 1526 A.D., for a period of about 320 years, was a Theocratic as well as a Military State. Administration was based on Islamic laws.

#### **Ministers to Sultan**

##### **Wazir**

Prime Minister and Finance Minister.

##### **Diwani-I-Risalt**

Foreign Affairs Minister.

##### **Sadr-us-Suddar**

Minister of Islamic Law.

##### **Diwan-I-Insha**

Correspondence Minister.

##### **Diwan-I-Ariz**

Defence or War Minister.

##### **Qazi-ul-quzar**

Minister of Justice.

### **Central Administration**

The Sultan was the head of the empire. He enjoyed vast powers. There were six ministers to assist him. Many officials were also appointed to take care of the administration.

### **Provincial Administration**

The empire was divided into several Iqtas. Iqtas were administered by Iqtadars or

Governors. Iqtas were divided into smaller units called Shiqqs, Parganas and the Villages.

The head of the Shiqq was called Shiqqdar. Important officials of the Pargana were the Amil or Munsif, the treasurer and the quanungo.

### **Local Administration**

The village was the smallest unit of administration. Local hereditary officers and the Panchayats in each village carried out the village administration. The Panchayat looked after education, sanitation, justice, revenue etc. The Central Government did not interfere in the village administration.

### **Revenue Administration**

Land revenue was the main source of income. So, a lot of importance was given to agriculture and irrigation. Trade tax, House tax, Horse tax, Mines tax, etc. were some of the taxes collected during the Sultanate period.

### **Judicial Administration**

The Sultan was the highest judicial authority. Qazi-ul-quzar was the Chief Judicial officer. There was a Quazi in every town. Usually severe punishments were given to the criminals.

### **Military Administration**

The Sultan was the Commander of the army. The four divisions of the army were the Royal army, Provincial or Governor's army, Feudal army and War Time army.

### Social life of the Sultanate period

The important characteristic of the society was the division of people on the basis of their nationality as foreign Muslims, Indian Muslims and Hindus.

### Economic conditions of the people

The people were mainly involved in agriculture and industry. Textile industry was the primary industry. Sugar industry, paper industry, metal work, stone cutting, pearl diving, ivory and sandal works were the other industries of this period.

#### Textiles

Indian textiles was in great demand in foreign countries. Bengal and Gujarat were famous for their quality fabrics. Cotton, woollen and silk of different varieties were produced in large quantities. The clothes were studded with gold, diamonds, pearls, silver and stones.

### CONTRIBUTIONS OF THE DELHI SULTANATE

#### Art and Architecture

Delhi Sultans had a genius for architecture. There was a blend of Indian and Islamic styles. The three well developed styles were -Delhi or Imperial Style, Provincial Style and Hindu architectural style. Qutubminar, Quwat-ul-Islam mosque, the tombs of Nasir-ud-din Muhammad and Balban were built by the Mamaluk rulers.

Siri the new town in Delhi, Dargah of Hazrat Nizam – ud – din Aulia and the Alai Darwaza belonged to Khilji period.

The rulers of Tughluq period did not give importance to ornamentation. Their buildings were solid and strong. Some buildings bear mark of Hindu features. The palace and the tomb of Ghiyas – ud – din Tughluq, Adalabad Fort built by Muhammad–bin Tughluq and the cities of Tughluqabad and Jahanpanah stand testimony to the architectural skill of the Tughluq period.

The Lodi Garden and Moti Masjid in New Delhi and the tomb of Sikandar Lodi are some examples of Lodi architecture.

### Literature

The Delhi Sultans were great patrons of learning. Great scholars namely Alberuni, Amir Khusrau and Zia-ul-Barani adorned their court. Many Sanskrit works were translated into Arabic. A lot of vernacular literature was also produced during this period. Urdu language originated during the Sultanate period.

### SCHOLARS OF SULTANATE PERIOD

Alberuni an Arabic and Persian Scholar served under Mahmud of Ghazni. He learnt and translated two Sanskrit works into Arabic. He was impressed by the Upanishads and Bhagavat Gita. In his work Tarikh-ul-Hind, he



referred to the socio-economic conditions of India.

Amir Khusrau was a great Persian poet. He is said to have written four lakh couplets. He was a great singer and was given the title 'Parrot of India'. He used a lot of Hindi words in his works.

### Impact of Turkish Conquest

The Turkish conquest of India had its impact on various fields.

- 1) It paved the way for a centralized political organization.
- 2) It restored contacts with the rest of Asia and parts of Africa.
- 3) A permanent army was established.
- 4) Trade developed due to the uniform legal system, tariff regulations and currency.
- 5) Persian became the court language and brought uniformity in administration.

### Disintegration of the Delhi Sultanate

The disintegration of the Delhi Sultanate had begun during the Tughluq period. The invasion of Timur and the incompetent and intolerant nature of some of the Sayyid and Lodi rulers led to the crumbling of the Delhi Sultanate. The first to break free from Delhi in the South were the rulers of the Vijayanagar and Bahmani Kingdom.

Khandesh, Bengal, Sind, Multan, Gujarat, Malwa, Jaunpur, Kashmir, Assam and Orissa also asserted their independence.

Further the defeat of Ibrahim Lodi in the first Battle of Panipat in 1526 A.D. by Babur ended the Lodi dynasty and brought the downfall of the Delhi Sultanate in India. The Delhi Sultanate which began in 1206 A.D. and lasted for about 300 years came to an end with the establishment of Mughal rule in India in 1526 A.D.

### EXERCISE

#### I) Choose the correct answer.

1. The Mamaluk rule was founded by \_\_\_\_\_.  
a) Balban                      b) Iltutmish                      c) Qutb-ud-din Aibak
2. The first Turkish ruler to introduce Arabic coinage was \_\_\_\_\_.  
a) Iltutmish                      b) Amir Khusrau                      c) Amir Hasan
3. The poet known as the "Parrot of India" was \_\_\_\_\_.  
a) Al-Beruni                      b) Kaiqubad                      c) Amir Khusrau
4. The founder of the Sayyid Dynasty was \_\_\_\_\_.  
a) Khizr Khan                      b) Muhammad Shah                      c) Daulat Khan Lodi

5. Babur the ruler of Kabul was invited by \_\_\_\_\_ to invade India.

- a) Bahlul Lodi      b) Ibrahim Lodi      c) Daulat khan Lodi

**II) Fill in the blanks.**

1. Quwat-ul- Islam mosque at Ajmer was built by \_\_\_\_\_.
2. The first woman ruler of the Sultanate period was \_\_\_\_\_.
3. The founder of the Tughluq dynasty was \_\_\_\_\_.
4. Bahlol Lodi occupied the throne of Delhi in \_\_\_\_\_.
5. Sikhandar Shah Lodi enjoyed \_\_\_\_\_ music.

**III) Match the following.**

- |                              |                               |
|------------------------------|-------------------------------|
| 1. Qutb-ud-din Aibak         | Divine Right Theory           |
| 2. Balban                    | Muhammad-bin-Tughluq          |
| 3. Jalal-ud-din Firoz Khilji | Ruler of Samarqand            |
| 4. Prince Juna khan          | Lakh Baksha or Giver of Lakhs |
| 5. Timur                     | Policy of Peace               |

**IV) Answer the following questions briefly.**

1. How did Qutb-ud-din Aibak save his infant Turkish Empire?
2. How was Balban able to destroy the "Corps of Forty"?
3. Write a short note on Ala-ud din Khilji's army.
4. What were the public works introduced by Firoz Tughluq?
5. Give a short account of Timur's invasion.

**V) Answer in detail.**

1. How did Iltutmish put down his enemies and strengthen his position?
2. Describe in detail the conquests of Ala-ud-din Khilji in North and South India.
3. Give an account of the domestic policies of Mohammed-bin-Tughluq.
4. Write in detail about the administration of the Delhi Sultanate.

## FORMATIVE ASSESSMENT

### 1. Narrate in class:

The class should be divided into groups. A representative from each group should pose as Qutb-ud-din Aibak and narrate how the Turkish rule was established by him/her in India.

### 2. Find out:

Find more on the Divine Right Theory of Kingship – the countries and the kings who followed it.

### 3. Enact:

- i. The achievements of Ala-ud-din Khilji, a man of determination who made his dynasty strong. (Or)
- ii. The benevolent reforms and greatness of Firoz Tughlaq.

### 4. Prepare:

Prepare an album (or) a power point presentation on the Art and architecture of the Delhi Sultanate.

### 5. Learn Urdu words:

Persons		Things	
Father		Pencil	
Mother		Pen	
Brother		Notebook	
Sister		Paper	
Teacher		Ink	

### 6. Things to do:

Mark the following on the outline map of India .

- i. Extent of Muhammad – bin – Tughluq's Empire.
- ii. Places: Multan, Mathura, Kanauj, Gwalior, Delhi, Banaras.

## 1. WEATHER AND CLIMATE

Weather and Climate are two terms which everyone uses in day-to-day life. This is because our daily routine is based on the prevailing weather conditions. Human activity of any region is determined by weather and climate. For example, in the tropical regions, paddy is cultivated as a major crop whereas, in the temperate regions, wheat is cultivated as a major crop. We wear cotton clothes in summer and woollen clothes in winter. We all like to have ice-cream, buttermilk or cool drinks in summer and we prefer to have hot coffee or tea during winter and rainy days. Not only these, but also our food habits, customs, traditions and even most of our common celebrations and festivals are associated with weather and climate.

### Activity

Find out the celebrations and festivals which are associated with weather and climate.

### WEATHER

Weather refers to the physical state of the atmosphere within 24-hours, described by weather elements such as temperature, atmospheric pressure, humidity, rainfall, cloudiness, wind speed and wind direction. Differences in these can occur due to the angle of the sun at any particular spot, which vary by latitude from the tropics.

### CLIMATE

The word climate is commonly defined as the weather averaged over a long period of time and over a large area. The standard averaging period is 30 years.

### Do you know?

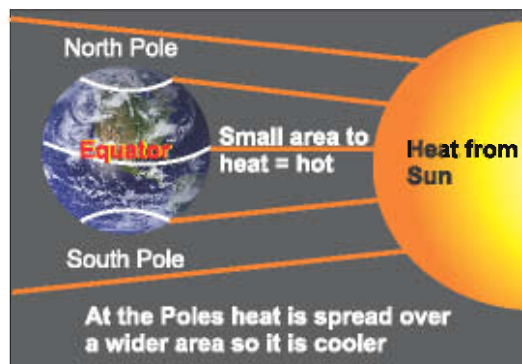
The word Climate is derived from the ancient Greek word "Klima" which means "inclination"

### Factors determining Weather and Climate

The weather elements are modified by various factors. The following factors affect the climate of a place.

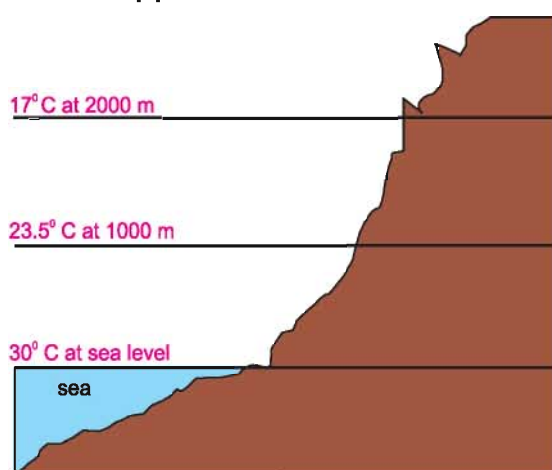
### Latitude

The equator receives vertical sunrays which fall over a smaller area. In contrast, the polar regions receive slanting sunrays and they fall over a wider area. As a result of this, the places near the equator are hotter than the poles. For example, Madurai in Tamilnadu is hotter and Moscow in Russia is colder.



## Altitude

Did you ever visit hill stations? How did you feel the weather conditions there? The weather and climate are modified by the mountains and hills. The places located on higher altitudes are always cooler than that of lower places. It is because when the altitude increases, temperature decreases. For example Ooty and Kodaikanal are cooler than Trirchirappalli.



### Do you know?

Temperature decreases at the rate of 6.5°C for every 1000 metres high on the Earth's surface.

## Distance from the Sea

### Activity

Ask your mother to keep two vessels, one with water and another empty on the burning stove. Then you observe which one gets heated up faster.

The empty vessel is compared to the land and the other one to the sea. The sea absorbs and retains heat for long duration like the

vessel with water. The coastal areas experience the cool, wet air from the sea throughout the year which modifies the weather along the coast to have uniform weather both in the winter and summer. This condition is said to be an equable climate or maritime climate.

### Activity

Find out the weather differences between Mumbai and Delhi during summer and winter.

On the other hand, the land absorbs and loses heat quickly like an empty vessel. The interior land areas experience warm dry air. They are very hot in summer and very cold in winter. This condition is said to be extreme type of climate or continental climate.

## Ocean Currents

### Activity

Look at a map of the world and locate the hot deserts. The ocean currents are one of the reasons for the origin and occurrence of hot deserts. Discuss, why is it so?

Based on temperature the ocean currents are classified as **Warm Ocean Currents** and **Cold Ocean Currents**. Warm currents make coastal areas warm, wet and free from ice and cold currents make them cool, dry and form icebergs.



**Do you know?**

The meeting places of warm and cold ocean currents are the areas of major fishing grounds because the conditions are suitable for the growth of the fish food, plankton. At that same time, these areas are dangerous for shipping as they form dense fog and low clouds.

**Direction of prevailing winds**

The winds that blow from the sea contain more moisture so they are cool and wet. Example-Southwest Monsoon. On the other hand, the winds that blow from the land areas are warm and dry. Example-Northeast Monsoon. Guess - which one can cause rainfall and why?

**El Nino Effect**

In our country, we hear the term **"Monsoon Failure"** very often. What does it mean? Why does it happen? In spite of the various reasons for the failures, we need to analyse El Nino as one of the reasons for the same. El Nino means **"The Christ Child,"** in Spanish. It is formed around Christmas time and continues for a few months. During this period, once in five or six years, the temperature rises rapidly and a low pressure system is formed along the coast of Peru and Ecuador. It attracts winds from all directions. So, the trade winds become very weak over the Pacific Ocean and Indian Ocean and these winds are deflected

causing a prolonged dry period in India. The other effects of El Nino experienced in other areas are Bush fire and drought in Australia, famine in Indonesia and forest fires in Brazil and Southeast Asia.

**Human influence**

The Industrial revolution brought changes in our lifestyle. As a result of this, forest areas were cleared and now we have many types of transport facilities, concrete buildings and many industries. All these developments made our life easy and comfortable. On the other hand, their effects are felt in the name of Global warming, Green house effect and pollution, which have increased the amount of CO<sub>2</sub>. Creation of an urban heat island is also the result of human influence. The urban heat island occurs in metropolitan areas which are significantly warmer than their surrounding areas.

**TEMPERATURE****Do you know?**

Terrestrial radiation refers to the heat energy emitted from the Earth

The sun is the source of light and heat to the earth. Earth receives only a small amount of solar radiation which takes eight minutes to reach the earth's surface. Incoming solar radiation is called insolation.



### Do you know?

The difference between the maximum and minimum temperatures of a day is called the diurnal range of temperature.

Heat energy from solar radiation is received by the Earth through three mechanisms. They are: i) **radiation in the atmosphere** ii) **Conduction over land** and iii) **Convection** in the water bodies. The Earth's atmosphere is heated more by terrestrial radiation than insolation.

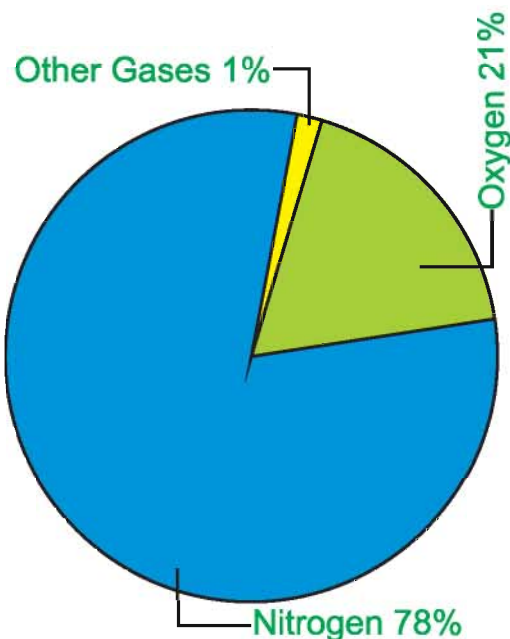
### Do you know?

The difference between the hottest and coldest months of the year is known as the annual range of temperature.

## Earth's atmosphere

The atmosphere of the Earth is surrounded by gases which are retained by Earth's gravity. Earth's atmosphere is made up of a combination of gases. The major components of air are nitrogen and oxygen. Argon, Neon, Helium, Krypton, Carbon di-oxide, Ozone and so on are the other gases found in little quantities. Apart from these gases the water vapour and dust particles present in the atmosphere are responsible for weather changes.

The presence of all these gases varies with quantity in the atmosphere according to heights. The air is dense near the surface and becomes thinner and thinner with increasing height. Based on the



### Components of Air

characteristics of the atmosphere, it is divided into four major layers, as troposphere, stratosphere, ionosphere and exosphere.

## Troposphere

Troposphere begins at the surface of the earth and extends up to 8 km at the poles and 18 km at the equator. This layer is known for all kinds of weather changes such as temperature, pressure, winds, clouds formation and rainfall. In this layer alone, the temperature decreases with increasing altitude. The **tropopause** is a thin layer that lies between the troposphere and the stratosphere.

### Do you know?

**Meteorology** is the scientific study of the atmosphere, focusing on weather processes for short term and it is the study of lower layer of the atmosphere.

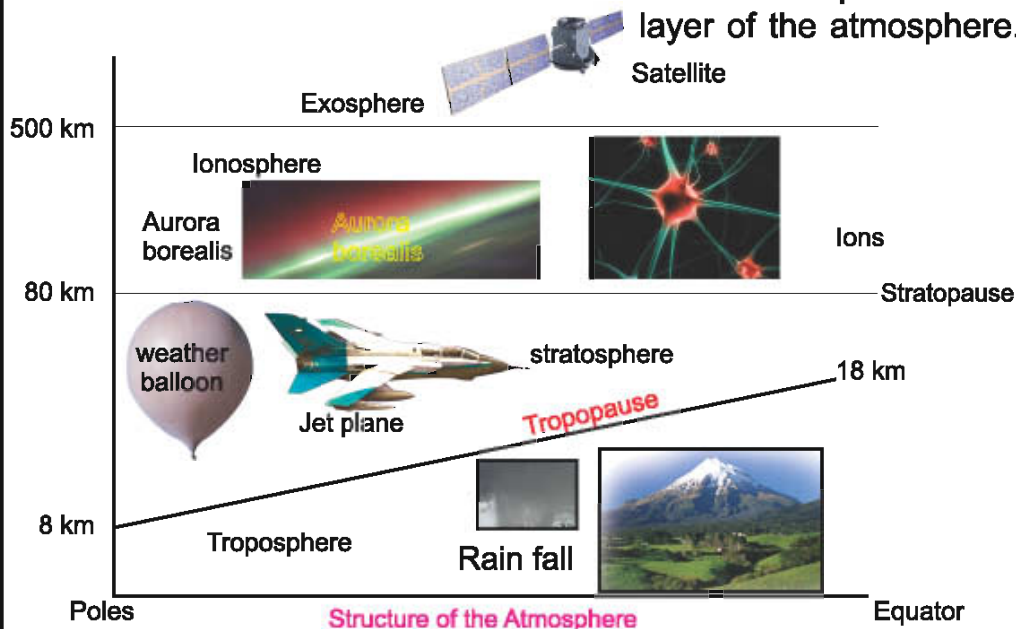
## Stratosphere

Stratosphere extends approximately for about 80 km. Temperature increases with height. This is the layer where most jet planes fly. The top edge of the stratosphere is rich in ozone. It captures the ultraviolet rays of the

called the **northern lights** or **aurora borealis** in the Northern Hemisphere, the **southern lights** or **Aurora Australis** in the Southern Hemisphere.

## Exosphere

The exosphere is the uppermost layer of the atmosphere. The main



sun and takes the harmful effects out. Since unfiltered radiation from the sun can destroy all animal tissues, Ozone is very important for all living beings on earth. This zone is also called **isothermal layer** or **ozonosphere**. Above the stratosphere, there is again a buffer layer called the **stratopause**.

## Ionosphere

Ionosphere stretches from 80 km to 500 km. It is called ionosphere because, in this part of the atmosphere, the sun's radiation is ionized. It reflects the radio waves back to the earth's surface which are useful for modern communication. The colourful displays of auroras are

### Do you know?

Aerology is a branch of meteorology involves observation and research of the atmosphere using air balloons, radiosondes and airplanes. Aerology concerns the observation and research of ozone, radioactivity and some components of long wave radiation. Hence, it is the study of the upper layer of the atmosphere.

gases within the Earth's exosphere are the lightest gases, mainly hydrogen and helium. The exosphere is sometimes considered a part of outer space.

## Heat Zones

You have already learnt that the temperature reduces with

increasing latitude. Based on this, the Earth is divided into TORRID, TEMPERATE and FRIGID zones.

#### Do you know?

The instrument used to measure the temperature is called the thermometer. The imaginary lines that join different places with same temperature on the map is called Isotherms.

### TORRID ZONE

The zone between the Tropic of Cancer ( $23\frac{1}{2}^{\circ}\text{N}$ ) and the Tropic of Capricorn ( $23\frac{1}{2}^{\circ}\text{S}$ ) receive vertical sunrays all-round the year. So they are hotter than the other zones.

#### Activity

Do you know about Summer Solstice and Winter Solstice? Find out when they occur and their features.

### Temperate Zone

The zone between the Tropic of cancer ( $23\frac{1}{2}^{\circ}\text{N}$ ) and the Arctic Circle ( $66\frac{1}{2}^{\circ}\text{N}$ ) is known as the Northern Temperate Zone. Similarly, the zone between the Tropic of Capricorn ( $23\frac{1}{2}^{\circ}\text{S}$ ) and the Antarctic Circle ( $66\frac{1}{2}^{\circ}\text{S}$ ) is known as the Southern Temperate Zone. These places always receive slanting sun rays. So the temperature here is lower than that of the Torrid Zone.

### FRIGID ZONE

The zone between the Arctic Circle ( $66\frac{1}{2}^{\circ}\text{N}$ ) and the North Pole ( $90^{\circ}\text{N}$ ), similarly between the Antarctic Circle ( $66\frac{1}{2}^{\circ}\text{S}$ ), and the South Pole ( $90^{\circ}\text{S}$ ), are called the

Frigid Zones. They always receive the slanting sunrays so these zones are cooler than other two zones.

#### Do you know?

There are three scales to measure temperature. They are :  
1) Celsius 2) Fahrenheit and  
3) Kelvin

Air pressure is defined as the pressure thrust by the weight of the air on the earth's surface. The average air pressure at the sea level is 1,013 millibars. The horizontal distribution of the air pressure is highly influenced by the temperature of a given place.

#### Do you know?

Barometer is the instrument used to measure the atmospheric pressure.

The atmospheric pressure is always inversely related to the atmospheric temperature. The high pressure belts are formed in the areas of low temperature.

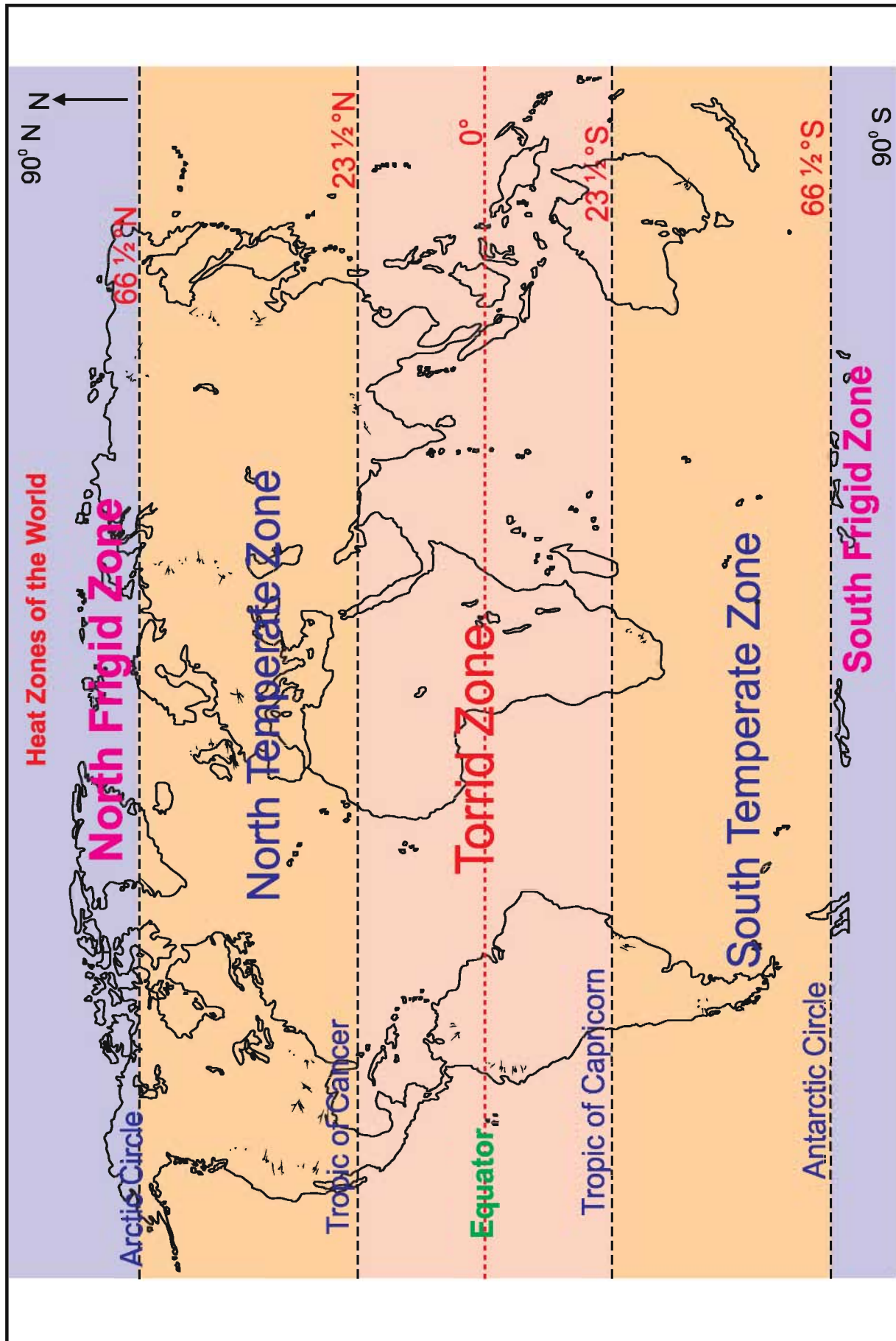
### Equatorial Low Pressure Belt

This belt lies between  $5^{\circ}\text{N}$  and  $5^{\circ}\text{S}$ . The sunrays are vertical over here throughout the year. Since temperature is high, the air becomes lighter and ascending. It causes low pressure conditions. This zone is otherwise called as "a belt of Calm" or "Doldrums".

### Subtropical High Pressure Belt

This zone lies between  $25^{\circ}$  and  $35^{\circ}$  latitudes in both the hemispheres. The ascended air from the tropics is getting cooled due to low temperature so the air descends at about  $30^{\circ}$ - $35^{\circ}$  latitudes.





In ancient times, the merchants carrying horses in their ships had to throw some of them out while passing through this zone of the calm in order to lighten the ship. Hence, this zone is called “horse latitudes”.

### Do you know?

The imaginary lines joining different places with the same pressure on a map are known as isobars.

### Subpolar Low Pressure Belt

This belt lies between 60°-65° latitudes in both the hemispheres and the air spreads outward from this zone due to the rotation of the earth so the low pressure is produced.

### Polar High Pressure Belt

This pressure belt persists at the poles. The sunrays fall very slanting at the poles and as a result the temperature is low and heavy air accumulates and produces high pressure.

## WINDS

The air in horizontal motion is called wind. The air generally moves from high pressure area to the low pressure area. The speed of the wind is generally mentioned in kilometers or miles at land and in knots at sea.

### Do you know?

All moving objects including winds and ocean currents tend to get deflected towards right in the Northern hemisphere and left in the Southern hemisphere due to the rotation of the earth. This changeless principle is called the Ferral's Law or Coriolis force.

### The Classification of Winds

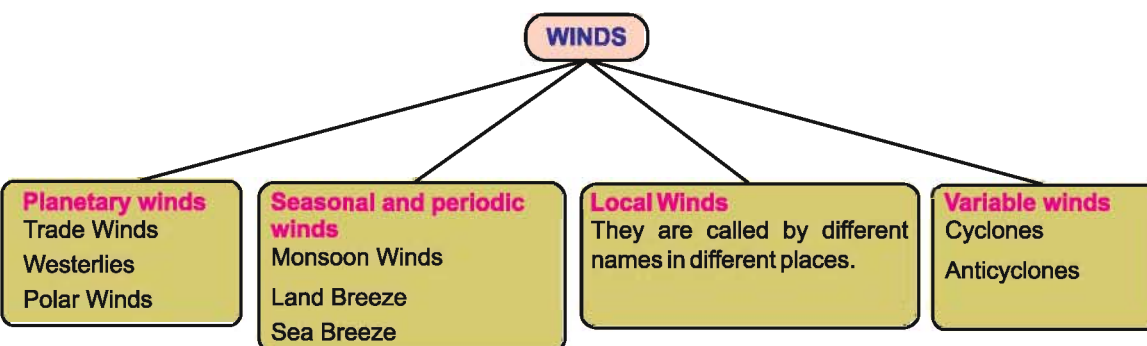
The winds are classified on the basis of the duration of winds and place of origin. They are classified into the following:

#### Planetary Winds

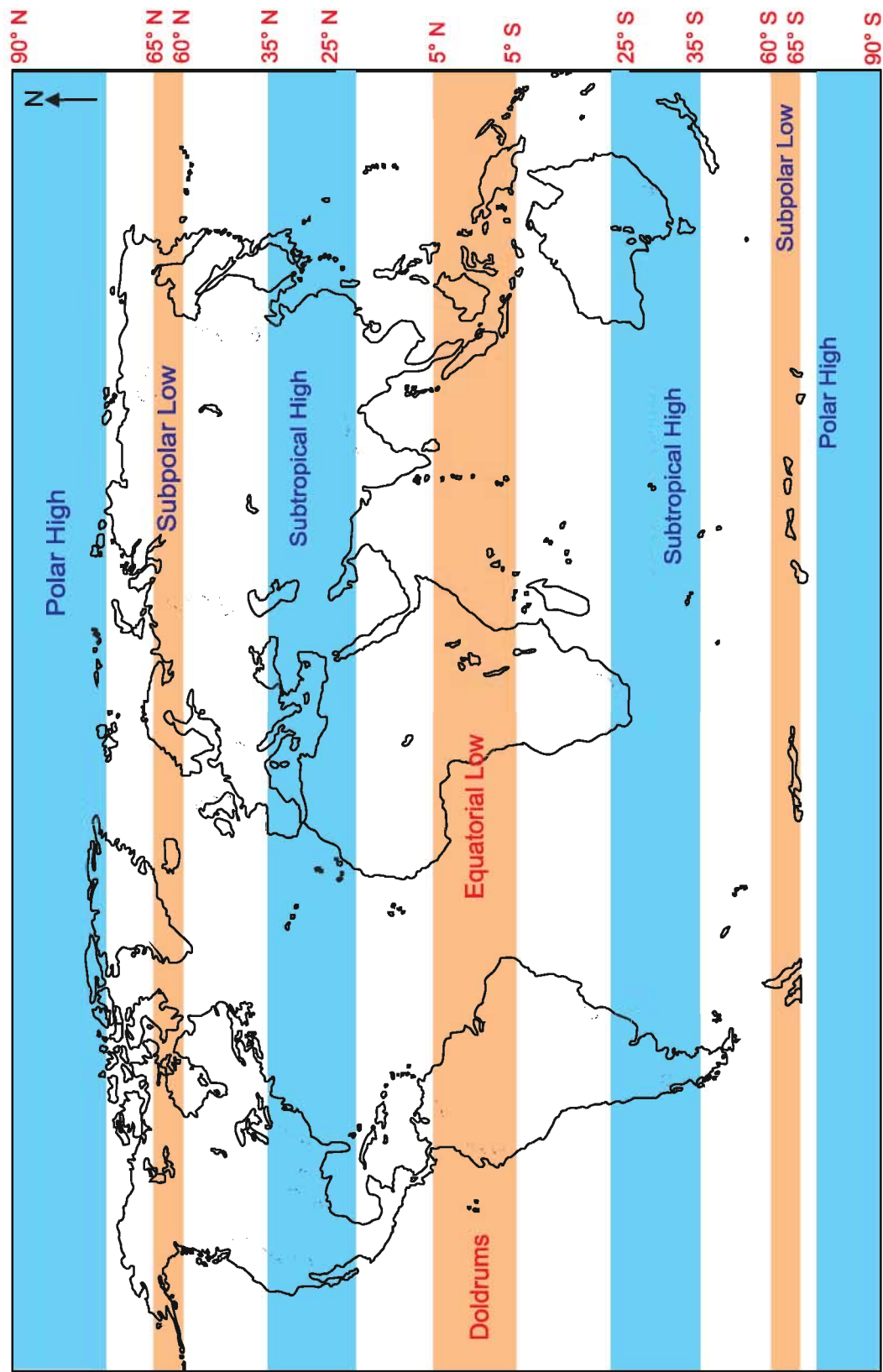
The winds that blow from a particular direction throughout the year are known as the **Planetary winds**. The major trade winds are given below.

### Do you know?

Anemometer is an instrument used to measure the velocity and direction of wind. Wind vane is used to indicate the direction of the wind.



## Major Pressure belts of the World





The trade winds blow within the tropics, as *Southeast trades* and *Northeast trades*. They are called so because once it was favourable for sailors. They are regular and constant especially over the sea. These winds get deflected due to Ferrel's law.

The Westerlies blow from the subtropical high pressure belt to the subpolar low pressure belt in both the hemispheres. In the northern hemisphere, they blow as North westerlies and in the south it blows as the South westerlies. These winds blow along the Earth's rotation from west to east.

The Polar winds blow as easterlies from polar high pressure belt to the subpolar low pressure belt. They are bitterly cold winds and they penetrate into many parts of the interior areas (Example, USA) but in India they are blocked by the Himalayas.

### Seasonal and periodic winds

These winds are mainly caused due to the differences in heating and cooling of the surface of the earth. These winds blow only at specific time.

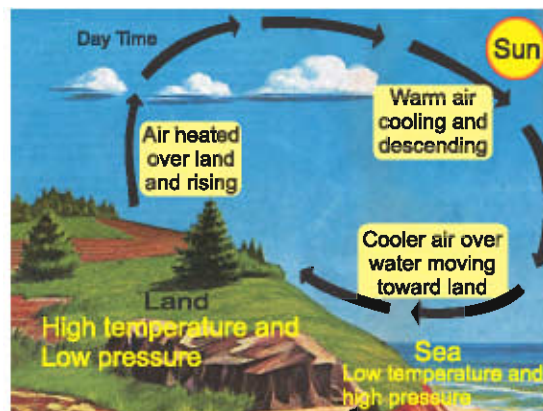
### Monsoon winds

The monsoon is devined from the Arabic word "**Mausim**", which means seasons. The monsoon winds are further divided into Southwest Monsoon and Northeast Monsoon. The Southwest Monsoon winds blow from the south Indian Ocean and South Pacific Ocean towards Asia whereas the Northeast Monsoon winds blow from the

Asian high pressure areas to the Indian Ocean and Pacific Ocean. The details of these winds will be given in higher classes.

### Sea breeze

During the daytime, the land becomes warmer than the adjoining water bodies. As a result, a low pressure on the land and a high



Sea breeze

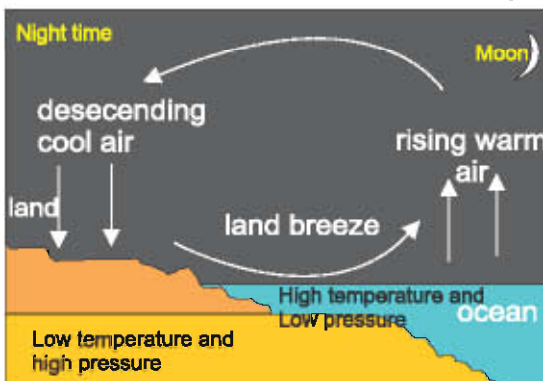
pressure on the water body is formed; this leads to the cool wet breeze from the sea to blow towards land in the late evening.

### Activity

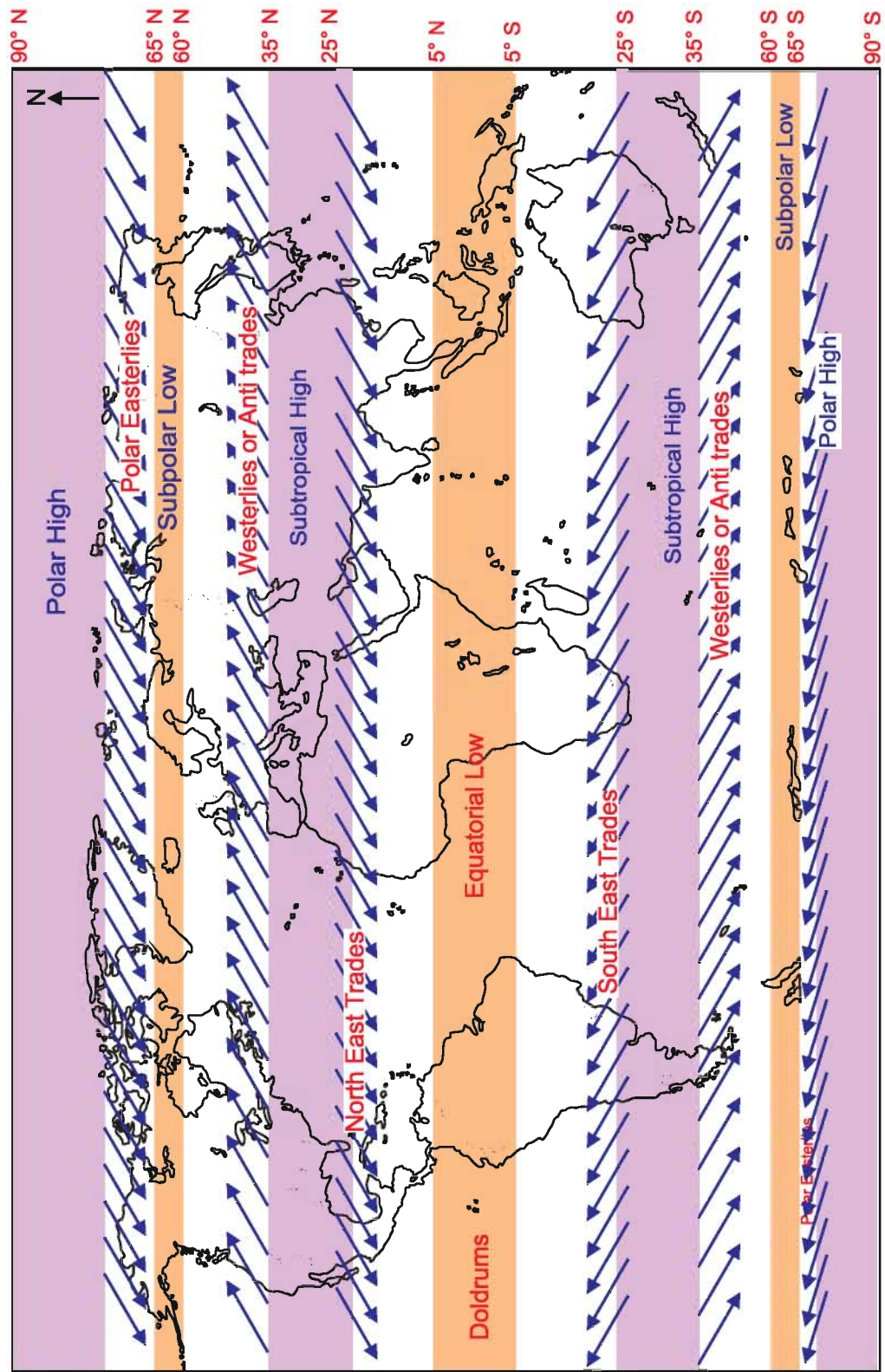
Find out why people go to the beach in the evening not in the noon during summer

### Land Breeze

During the night time the land becomes cooler than the adjoining water bodies. So there is a high



## Planetary Winds of the World



pressure on the land and the low pressure on the water body. Hence cool dry breeze blows from the land towards the sea in the early morning.

### Activity

How does land breeze help fishermen to go for fishing?

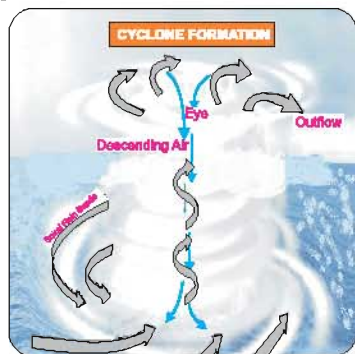
### Variable winds

The variable winds have no definite location or direction. These winds get fluctuated in direction and speed.

### Cyclones

The cyclones are the centres of a low pressure system. They attract winds from all directions.

Moreover, they are associated with heavy rain and high speed winds.



Cyclone formation



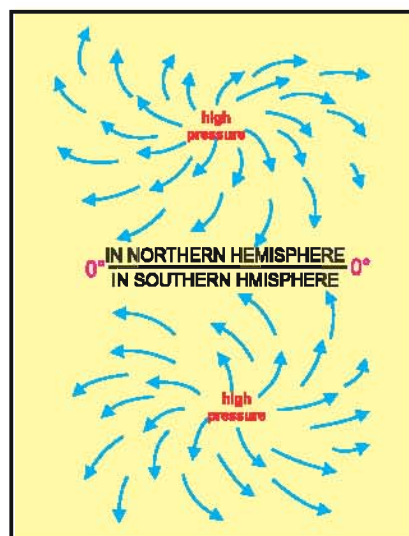
Eye of the cyclone

The centre of the cyclone is the vacuum area which is termed as **"the eye of the cyclone"**. According to its origin and its location it is called by different names such as cyclones,

typhoons and hurricanes. They move anti-clockwise in the northern hemisphere and clockwise in the southern hemisphere. When a low pressure system is formed over water bodies, it is violent and causes rainfall.

### Anticyclones

The anticyclones are the centres of the high pressure systems from which the wind



movement takes place outward. These winds are associated with clear weather and no rainfall. The anti-cyclones move clockwise in the northern hemisphere and anticlockwise in the southern hemisphere. They are mostly formed over the land and so they are dry.

### Local winds

These winds blow with some special characteristics over a small area and last for a short period. All these winds are mostly seasonal and are given local names. Some of the local names and the areas related to that are given below.



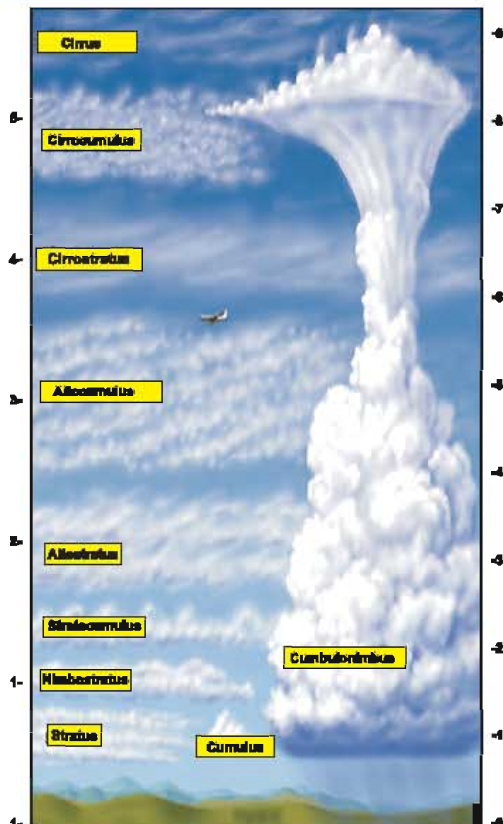
## WARM LOCAL WIND LOCATION

Brick fielder	Australia
Chinook	USA
Fohn	Northern Italy
Sirocco	Sahara desert
Loo	Thar desert in India

## COOL LOCAL WIND LOCATION

Harmattam	Central Africa
Mistral	Alps region
Purga	Russia
Norte	Gulf of Mexico
Pampero	Argentina

## CLOUDS



Clouds



Cirrus clouds



Stratus clouds



Cumulus clouds



Nimbus clouds

A cloud can be defined as a mass of small water droplets or ice crystals formed by the condensation of water vapour in the atmosphere. Clouds are formed by very minute suspended water particles present in the atmosphere. According to the shape and altitude, the clouds are classified as Cirrus, Stratus, Cumulus and Nimbus.

**Cirrus clouds** are high clouds because they are formed above 5,000 metres above sea level. They are naturally dry, consists of ice crystals and never bring rainfall. These clouds are long, fibrous, and curved, with no tufts or curls at the ends.

**Stratus clouds** are low clouds because they are formed within 2,000 metres above the sea level. They have uniform base and look like a dark grey sheet. They may cause snow and drizzle.

**Cumulus clouds** are often described as "puffy" or "cotton-like" in appearance which are medium clouds. Cumulus clouds may appear

alone, in lines or in clusters. These clouds are associated with rainfall, lightning and thunder. They are otherwise called thunder clouds. They extend up to 12,000 metres high above the sea level.

**Nimbus clouds** are vertical clouds. They are thick dark or grey or black clouds. They cause continuous rainfall so they are known as storm or rain clouds.

## Rainfall

Rainfall may be defined as the water drops that fall from the clouds to the earth. The mechanism of rainfall begins from evaporation and it continues as condensation at considerable heights. Later on, the clouds are formed which may cause Rainfall.

Rainfall is classified into 3 types, namely:-

- Convectional Rainfall
- Relief or orographic Rainfall
- Cyclonic Rainfall

### Do you know?

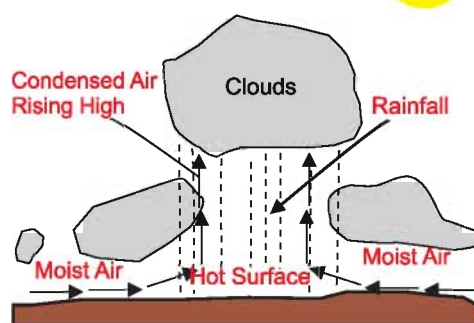
Rain gauge is an instrument used to measure the amount of rainfall. The imaginary lines that join different places having same amount of rainfall on a map are known as Isohyets.

## Convectional rainfall

The equatorial regions receive vertical sunrays, and hence become hot. The hot air expands and rises vertically upwards. As the temperature reduces gradually, the air gets cooled and forms clouds. When the clouds reach the dew point, they cause rainfall. This is known as convectional rainfall. This type of rainfall is accompanied with

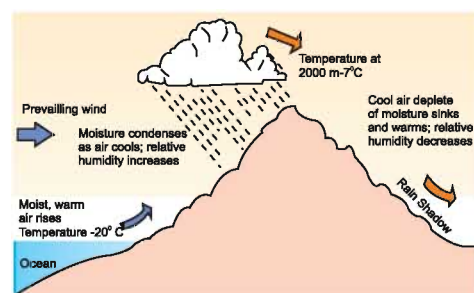
thunder and lightning. Usually, it occurs around 4'o clock, hence, it is called 4'o clock rainfall.

### Convectional Rainfall



## Relief or Orographic rainfall

The winds that blow from the sea contain a lot of moisture. When the moisture-laden winds from sea climb the hill slope, the winds become cool causing heavy rainfall on the windward side. Then these winds descend on the lee ward side of the mountains and cause low to no rainfall.



### Orographic rainfall

### Do you know?

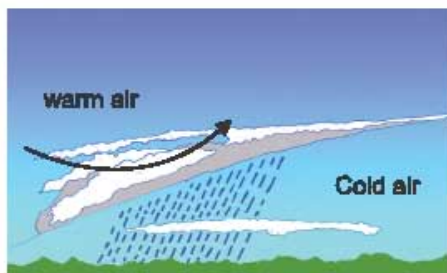
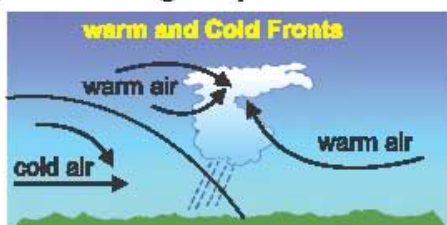
Though Kerala and Tamil Nadu lie on the same latitudes Kerala receives more rainfall because the state of Kerala lies on the windward side of the Western Ghats, but TamilNadu lies on the leeward side.

## Cyclonic rainfall

The warm air from the hot area is further heated and moves upward. Hence, a low pressure area is



developed and attracts air from the adjacent high pressure areas.



Cyclonic rainfall

Owing to Earth's rotation, the wind gets deflected and a circular motion of winds develop. The air rises upward in the form of a funnel. The rising air gets cooled and condensation takes place. This brings heavy rainfall in the low pressure centres. Example during October, November and December, the Northeast Monsoon season period, there are a number of cyclones caused along the coast of Tamil Nadu, Andhra Pradesh and Odisha.

### Lightning

Lightning can be defined as the atmospheric discharge of electricity. It is accompanied by thunder. It travels at a speed of 96,560 miles per second.



Lightning

### Do you know?

The study or the science of lightning is called Fulminology. The person who studies lightning is referred to as a Fulminologist.

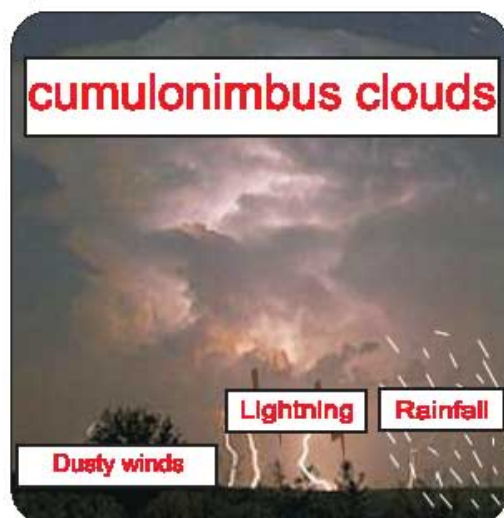
There are 16 million lightnings every year. Generally, lightning is associated with convectional rainfall, cyclonic rainfall and also clouds formed from volcanic eruption. Lightning is formed by the meeting of the positive and negative charges in the clouds containing ice. Researchers are hoping to generate electricity from lightning.

### Do you know?

Find the reason for the cancellation of 23,000 aircrafts at the time of volcanic eruption in Iceland in April 2010.

### Thunderstorm

Thunderstorms are produced by cumulonimbus clouds. They are usually of short duration. They are accompanied by lightning, thunder, strong wind gusts, heavy rain and



Thunderstorm

sometimes hail. The presence of warm and humid air in the lower layers of the atmosphere, atmospheric instability and intense convective activity are the requirements for its origin.

Since the thunderstorms are accompanied by many weather elements, Meteorologists refer them to as weather factories. The

formation of the thunderstorms ranges from 4 to 20 km.

In the tropical regions, they occur on the land in the rainy season usually in the afternoon or evening. But in the oceans, they occur during night. In the regions with a monsoon type of climate, they occur in the beginning and at the end of the summer monsoon.

### EXERCISE

#### I) Fill in the blanks.

1. The Greek word 'Klima' refers to \_\_\_\_\_.
2. The temperature on the earth's surface decrease at the rate of \_\_\_\_\_ for every 1000 metres.
3. El Nino means \_\_\_\_\_ in Spanish.
4. The \_\_\_\_\_ is a metropolitan area which is significantly warmer than its surrounding areas.
5. The \_\_\_\_\_ is the boundary between the troposphere and stratosphere.
6. The Equatorial low-pressure belt is called \_\_\_\_\_.
7. The air in horizontal motion is called \_\_\_\_\_.
8. The name of the local wind which blows over Thar desert in India is \_\_\_\_\_.
9. The study of the science of lightning is called \_\_\_\_\_.
10. Thunderstorms are produced by \_\_\_\_\_ clouds.

#### II) Choose the correct Answer.

1. In the tropical regions, \_\_\_\_\_ is a major crop.  
a) Paddy    b) Wheat    c) Tea    d) Barley
2. During El Nino period the temperature rises rapidly once in three to eight years along the coast of \_\_\_\_\_.  
a) Peru and Ecuador    b) Spain and France    c) India and Pakistan  
d) China and Japan
3. The difference between maximum and minimum temperature of the day is called \_\_\_\_\_.  
a) Terrestrial radiation    b) Diurnal range of temperature  
c) Annual range of temperature    d) Isolation

4. \_\_\_\_\_ is an instrument used to measure the atmospheric pressure.  
a) Thermometer    b) Hygrometer    c) Barometer    d) Wind vane
5. Sub tropical high-pressure belt is called \_\_\_\_\_.  
a) Doldrums    b) Horse latitudes    c) Coriolis force    d) Belt of calm
6. In \_\_\_\_\_ layer, the sun's rays are ionized.  
a) Troposphere    b) Stratosphere    c) Ionosphere  
d) Exosphere
7. \_\_\_\_\_ clouds are associated with rainfall, thunder and lightning.  
a) Cirrus    b) Stratus    c) Cumulus    d) Nimbus
8. \_\_\_\_\_ type of rainfall is also called 4'o clock rainfall.  
a) Convectional    b) Orographic    c) Cyclonic    d) Monsoon
9. The average air pressure at the sea level is \_\_\_\_\_ millibars.  
a) 1008    b) 1020    c) 1033    d) 1013
10. The \_\_\_\_\_ clouds are vertical clouds.  
a) Cirrus    b) Stratus    c) Cumulus    d) Nimbus

### III) Match the following.

- |                       |   |
|-----------------------|---|
| 1. Global Warming     | - Vacuum  |
| 2. Thermometer        | - Human influence                                   |
| 3. Anemometer         | - Weather factory                                   |
| 4. Eye of the Cyclone | - Instrument showing velocity and direction of wind |
| 5. Thunderstorms      | - Instrument measuring temperature                  |

### IV) Write short answer for the following.

1. Differentiate weather and climate.
2. What are the advantages and disadvantages of meeting warm and cold ocean currents. ?
3. List the mechanisms by which the earth receives the solar radiation.
4. What are the scales to measure temperature?
5. Differentiate Isobars and Isohyets.
6. Define Ferrel's law.
7. What are planetary winds?
8. What is lightning? How are they formed?
9. What is weather factory?
10. Differentiate equable and extreme type of climate?

## **V. Brief Answers.**

1. What are the factors determining weather and climate? Explain EL Nino or Human influences.
2. What are the heat zones of the Earth? Explain any one of them with a neat diagram.
3. What is called land breeze? Explain with a neat diagram.
4. What is called sea breeze? Explain with a neat diagram.
5. What are the types of rainfall? Explain convectional rainfall with a diagram.
6. Differentiate orographic rainfall and cyclonic rainfall.
7. Write a note on thunderstorms.
8. What are clouds? Write the types of clouds and explain any one of them in detail.
9. What are the layers of atmosphere? Explain any one of them with a diagram.

## **VI. Map skill:**

1. Draw heat zones of the earth on the outline map of world.
2. Mark the major pressure belts of the earth on the outline map of world.
3. Mark the major planetary winds of the earth on the outline map of world.

### **FORMATIVE ASSESSMENT**

1. Find out and write on essay on the factors determining weather of your locality.
2. Draw a chart to show Earth's atmosphere.
3. Bring out a diagram to show uses of land breeze and sea breeze.
4. Draw maps to show heat zones, major pressure belts and planetary winds of the world.
5. Have a discussion on what are the types of rainfall you receive, and when do you receive the same in your locality.
6. Name the cyclones formed in the recent years, and mention the year in which they formed, and write an essay on any one of them with the photos and pictures related to it.
7. Have a debate on "The effects of no cloud formation".
8. Find out the celebration and festivals which are associated with weather and climate in different parts on the world or in Tamil Nadu.
9. On the outline map of world mark the hot deserts and the cold ocean currents related to it.
10. Write an essay on winter solstice and summer solstice.



## 1. POLITICAL PARTIES

The present age is an Age of Democracy. According to Abraham Lincoln, "Democracy is the government of the people, for the people and by the people". In a democracy, a citizen is both the ruler and the ruled. Citizens should always be conscious of their rights and duties. They should be aware of what is happening in the country. Political awareness is created by the Political parties. They help in forming public opinion. Hence the political parties are essential for the success of democracy.

Political parties are the most visible institutions in a democracy. They serve as a link between the people and the government and provide a forum for the discussion of various issues.

### Meaning

A political party is a group of people who come together to contest elections and hold powers in the government. They agree on some policies and programmes to uplift the society. A political party has three components—a **leader, active members and the followers**.

### Characteristics of a Political Party

1. A political party agrees on important matters of public policy.
2. It aims to take part in the struggle for power.
3. It implements its policies and programmes by constitutional

(democratic) means.

4. It should have some degree of permanence.
5. It must have definite aims and objectives.

### Functions of the Political Parties

Basically political parties fill political offices and exercise their powers. They perform the following functions:

1. Parties contest elections.
2. Parties put forward their policies and programmes before the voters.
3. Parties play a decisive role in making laws.
4. The party which wins majority seats becomes the ruling party and runs the government.
5. Those parties that lose the majority in the elections form the opposition. They voice their different views and criticize the government for its failures and wrong policies.
6. Parties shape public opinion. They raise and highlight issues.

### Structure and Working of a Political Party

A political party has a hierarchical structure. At the top, there is a periodically elected **President**. He is assisted by **Secretaries** and a **Treasurer**. A **working committee** may be set up to meet from time to time for holding



discussions and taking decisions. Conferences may be convened once in six months or a year to discuss their deliberations and working of their party. These conferences show their strength and solidarity to create a great impact on the public.

### Types of Party System

There are three types of party system in the world namely.

**1. Single Party System** in which one ruling party exists and no opposition is permitted. The former communist country USSR (United Soviet Socialist Republic) is an example for the single party system.

**2. Bi-Party System or Two Party System** in which two major parties exist. Example, United States of America (U.S.A) and United Kingdom (U.K)

**3. Multi-Party System** in which there are more than two political parties. Example-India, Sri Lanka, France and Italy.

### Multi-Party System In India

The vastness of India and its diversified character has given rise to a large number of political parties. India has the largest number of political parties in the world. In India, there are a large number of State and National Parties.

The emergence of a large number of State parties is due to various reasons like regional issues, caste and communal divisions, cultural diversity, language etc.,

Regional parties have now gained importance and play a significant role at national level whenever there is a need for forming a coalition Government.

### State Party

A party is recognised as a State party by the Election Commission of India based on certain percentage of votes secured or certain number of seats won in the Assembly or Lok Sabha Elections.

### National Party

A party which is recognised as a State party in at least four states is recognised as a National party.

Every party in the country has to register with the Election Commission. While the Commission treats all parties equally it offers some special facilities to State and National parties. These parties are given a unique symbol. Only the official candidates of the party can use that election symbol.

Thus the political parties help the representatives of the government to work successfully and they form the backbone of democracy.

## EXERCISE

### I) Choose the correct answer.

1. A Political party creates \_\_\_\_\_ awareness.  
a) social                      b) economic                      c) political
2. Bi-party system exists in \_\_\_\_\_.  
a) India                      b) U.S.A                      c) France
3. A Party which is recognised as a State Party in \_\_\_\_\_ States is a National Party.  
a) Four                      b) Eight                      c) Seven
4. \_\_\_\_\_ form the backbone of democracy.  
a) Election                      b) Political parties                      c) Votes

### II) Fill in the blanks.

1. In a democracy, the citizen is both the ruler and the \_\_\_\_\_.
2. Political parties help in forming \_\_\_\_\_ opinion.
3. Political Parties serve as a link between the \_\_\_\_\_ and the government.
4. The country having the largest number of political parties in the world is \_\_\_\_\_.

### III) Answer the following questions briefly.

1. Give Abraham Lincoln's definition for democracy.
2. What is a Political party?
3. What are the components of a Political party?
4. Mention a few characteristics of a Political party.
5. When is a Political party recognized as a National Party?

### IV) Answer in detail.

1. Give an account of the functions of Political parties in a Democratic country.
2. What are the three types of party system in the world? Explain with examples.

## FORMATIVE ASSESSMENT

### 1. Group discussion:

Discuss which Party System- Single party System, Bi-Party System, Multi-Party System is the best.

### 2. Find out more:

Find about the party systems followed / Political Parties functioning in our neighbouring countries.

Country	Party system	Names of Political parties

### 3. Debate :

Conduct a debate in class on the advantages and disadvantages of Multi-Party system.

### 4. Group Activity:

Prepare a booklet on the major political parties or political parties functioning in your state – their symbols - aims and objectives – pictures of the leaders etc.

### 5. Essay Writing:

“Political parties form the backbone of democracy”

**'I can, I did'**  
**Student's Activity Record**

Subject :

Sl. No.	Date	Lesson No.	Topic of the Lesson	Activities	Remarks