

Mango trees blossom by the advent of winter Mangoes ripen as winter retreats and summer advances Rainy season bids farewell to summer for boat races Rainy season retreats to bring Thiruvonam to all.

Nature creates many wonders in accordance with time. Winter, Summer, Rains ... all come one after the other. This change in the nature is known as seasons.

# Learning Outcomes

- Prepares note analysing the factors responsible for the changes in seasons.
- Observes different seasons and explains the changes made by each season in the atmosphere and environment.

# Activity

Choose the right answer from the table given below and complete the table.

Revolution of the Earth	
Inclination of the axis	
Parallelism of the axis	

- a. From the orbital plane 66½° and from the vertical plane 23½°.
- b. Parallelism is maintained throughout the revolution.
- c. The earth revolves around the sun in an elliptical orbit in 365¼ days (365 days and 6 hours)

# 🔊 At a Glance

Revolution of the Earth, tilt of the axis, parallelism of the axis are the reasons for change in seasons.

#### Let's Write and Assess

Write short note on the factors that influence the occurrence of different seasons.

#### Learning Outcome

Explains equinoxes, solistices and the length of day and night on these days on both the hemispheres.

#### Concept

Apparent movement of the sun, day and night at poles.

#### Activity

### Complete the table

Postition of the Sun	North Pole	South Pole
June 21 - Sun is over the Tropic of Cancer	(a)	(b)
December 22 Sun is over	Continuous night	Continuous days for
the Tropic of capricon	for six months from March 21 to	six months from September 23 to
	September 23	March 21

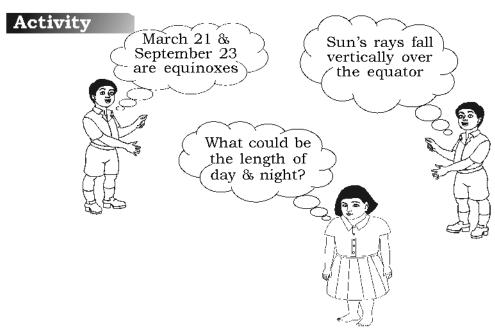


#### At a glance

- a) Continuous day for six months from March 21 to September 23
- b) Continuous night for six months from September 23 to March 21

#### Let's write and Assess

Explain the duration of day and night in the north and south polar regions, when the sun is respectively over the Northern Hemisphere and Southern Hemisphere.



On equinoxes the length of day and night will be equal on both the hemispheres.

#### Let's Write and Assess

Write the features of equinoxes.

# Activity

Complete the table.

Summer Solstice	Winter Solstice
June 21	
	Sun is vertically over Tropic of Capricorn
Longer day in Northern Hemisphere	
	Longer night in northern Hemisphere

# At a Glance

When the position of sun is over the Tropic of Capricorn, longer day is experienced in Northern Hemisphere and longer night is experienced in Southern Hemisphere.

#### Let's Write and Assess

Compare Summer Solstice and Winter Solstice and prepare short notes

# Learning Outcome

Identify the seasons and its changes in the environment.

# Activity

Classify the following statements suitably.

- a) Transition from winter to summer
- b) The atmospheric temperature decreases considerably
- c) Shortening of day and lengthening of night
- d) The plants sprouting
- e) The trees generally shed their leaves
- f) Transition from summer to winter
- g) Mango trees blooming

# At a Glance

Spring Season	Autumn Season
(a)	(b)
(d)	(c)
(g)	(f)

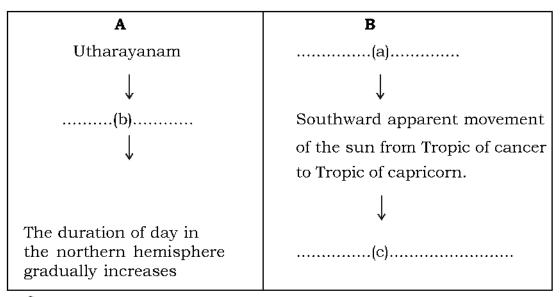
#### Let's Write and Assess

#### Complete the table

Spring Season	Autumn Season
◆ The plants sprouting	◆ Lengthening of night
•	<b>•</b>
•	<b>*</b>

#### Activity

#### Complete the table suitably





- a) Dakshinayanam
- b) Northward apparent movement of the sun from Tropic of Capricorn to Tropic of Cancer.
- c) The duration of day in the southern hemisphere gradually increases.

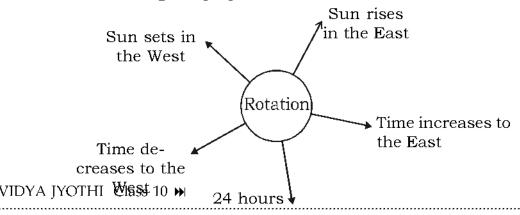
#### Learning Outcome

Explains Revolution of the earth and its results.

#### Activity

The earth that rotates from West to East takes 24 hours (1 day) to complete one rotation

Based on the diagram prepare notes.



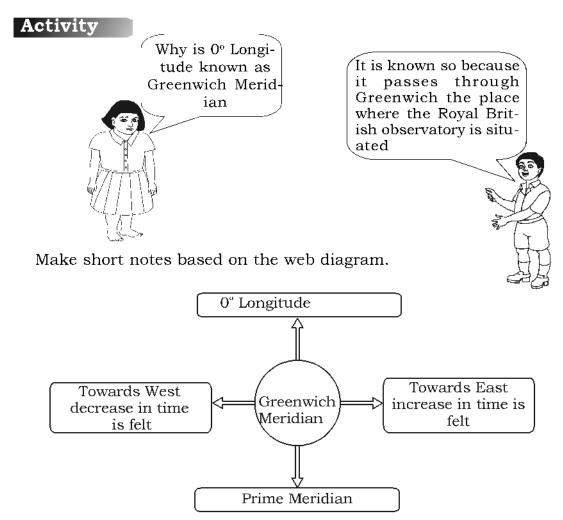
Since the rotation is from West to East, Sunrise is first experienced at the East of a region. So increase in time is marked towards East and decrease towards the West respectively.

#### Let's Write and Assess

Record the results of rotation.

#### Learning Outcome

Analyse the importance of Greenwich Meridian and International date line and prepare notes on it.

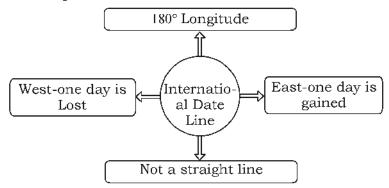


# At a Glance

Time is calculated worldwidely based on the Greenwich line. Hence this line is also known as the Prime Meridian.

# **Activity**

Find out the importance of International Date Line.



# At a Glance

To avoid the difficulties of a country which records two different times with 24 hours difference, certain adjustments have been made avoiding the land areas along the 180° longitude. This is not a straight line.

#### Let's Write and Assess

Explain the significance of Greenwich Meridian and International Date line in calculating global time or International time.

# Learning Outcome

Based on Greenwich Meridian the time in India and other nations are calculated.

# Activity

Find out the time at India (82½°E) and Newyork (74° W) When the Greenwhich time is 12noon.

# At a Glance

It is noon at one place and midnight elsewhere in the earth. Two different days at the same time on the earth. The sequence of time also is varied like the wonders of the seasons. We should know that.

#### Let's Write and Assess

- 1. Explain the apparent movement of the Sun?
- 2. What is the significance of March 21 and September 23 with reference to equinoxes?

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- 3. Compare summer solstice and winter solstice and prepare a short note.
- 4. Write down the features of Spring and Autumn.
- 5. What is the importance of Greenwich Meridian and International Date Line in Calculating International Time?
- 6. What is the importance of 82½° E longitude?
- 7. Why do we experience increase in time towards the East and decrease towards the West?

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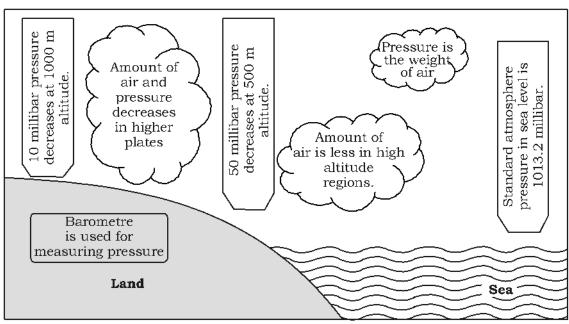
#### Introduction

Atmospheric air is movable. The horizontal movement of air from high pressure region to low pressure region is called wind. Various kinds of winds influence in our daily life. Pressure changes in the atmosphere make wind. Global pressure belts, planetary winds, periodic winds and local winds are some other topics addressed in this unit.

### Learning outcome

Explains that the atmospheric pressure is not uniform everywhere.

# Activity



Based on the above figure, complete the table given below.

а	The instrument used to measure atmospheric pressure	
b	The unit used to measure atmospheric pressure	
С	The normal atmospheric pressure at the sea level	
d	When altitude increases atmospheric pressure (increases/decreases)	
е	How much millibar of the atmospheric pressure is decreased for every 10 metre altitude?	
f	How is the atmospheric pressure for 1 km altitude?	

- a. Barometer
- b. Millibar (Hectopascal)
- c. 1013.2mb

- d. decreases
- e. 1 mb

- f. 100 millibar
- · Atmospheric pressure is less at highlands
- Altitude is one of the major factors that influence atmospheric pressure.
- Pressure and altitude are inversely proportional.

#### Let's Write and Assess

- I. When you are going to high altitude places like Ponmudi, Ooty etc. you might have felt your ears clog. Why?
- II. Why do mountaineers carry oxygen cylinders?

# Learning outcome

Explains the relation between temperature and atmospheric pressure.

### Activity

During day time temperature is high and pressure is low at the place A. But during night temperature decreases and pressure increases. Based on the statement, complete the worksheet.

Place	Temperature (increases/decreases)	Pressure(increases/ decreases)	Factors influencing the
			pressure
Day			?
Night			

- Temperature is one of the factors that influence atmospheric pressure.
- During day, the temperature will be high and the pressure will be low.
- Temperature and pressure will be inversely proportional.

#### Let's Write and Assess

- a. Compared to cold regions tropical regions experience low temperature. Why?
- b. What are the changes in the atmosphere when the temperature increases or decreases?

### Learning outcome

Explains the relation between humidity and atmospheric pressure.

# Activity

#### Conversation

- Son Mom, when water boils the vapour reaches the atmosphere. At those time, don't the weight of air increase and concentrates downwards.
- Mom Dear son, water vapour has less weight than air. So when water boils water vapour (humidity) rises upward. Humidity is the amount of water vapour present in the atmosphere.
   When humidity increases, pressure decreases.

The answer given by the mother is an apt one. Based on this answer the following questions.

- A and B are two places located at high altitude. A is located near the sea and B 400 km away from the sea shore. IN which place does low pressure experience. Why?
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In the place nearby the sea, humidity will be more due to high rats of evaporation. The humid air which is filled with vapour has less weight. So the atmospheric pressure will be low.

#### Let's Write and Assess

- a. Compared to interior land, the atmospheric pressure in coastal areas is low. Why?
- b. What do you call a place with more pressure and with less pressure?



#### At a Glance

- High pressure (HP)
- Low pressure (LP)
- Humidity and pressure are inversely proportional.
- When humidity increases, pressure decreases
- Isobar are drawn on maps to connect places having equal atmospheric pressure.

# Learning outcome

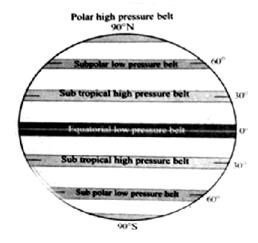
Illustrates the global pressure belts.

# Activity

- Following are the characteristics of the four different latitudinal regions.
  - I live in 60° latitudinal region on earth.
    - Due to the rotation of the Earth the air is whirled out.
  - I am in 30° latitudinal region.
     Due to the rotation of the Earth, the warm air concentrate in my region.
  - O

    I am in the Equatorial region

    Due to the heat of the suns
    rays, air gets heated and rises up.
  - 90°
     1 am in the polar region.
     1 have intensive cold throughout the year.



Polar high pressure belt. Global pressure belts

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Based on the features of the longitudes, fill in the table below. The illustration of global pressure belts will also help you.

	Global Pressure Belts	Location	Features
1.		0°	
2.		30°	
3,		60°	
4.		90°	?



### At a Glance

- Equatorial Low Pressure Belt
- Sub-tropical high pressure belt
- Sub-polar low pressure belt
- Polar high pressure belt
- The air movement in Equatorial region is vertical.
- Uneven distribution of solar energy and the rotation of Earth are the reasons for the formation of global pressure belts.
- Due to the rotation of the Earth, the cold air whirl out from the sub-polar regions.

#### Let's Write and Assess

- Equatorial low pressure belt is otherwise called doldrums. Why?
- What are the reasons for the formation of the global pressure belts?
- Sub polar region is located near the polar region. But low pressure is experienced in this area. Why?

# Learning outcome

Describes how the pressure gradient force, Coriolis force and friction influence the speed and direction of the wind.

# Activity

Freely moving bodies get deflected to the right in the northern hemisphere and to the left in the southern hemisphere due to a force generated as a result of earth's rotation. By analyzing the concept 'Coriolis Force', complete the table given below.

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	Direction of Wind	Global Winds	Latitudes	Hemisphere
1.	×	?	?	
2.	K	?	?	
3.	A	?	?	
4.	K	?	?	



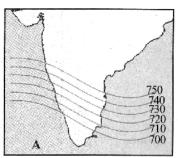
- Westerlies (S)
- South East trade wind / Polar Easterlies (S)
- Westerlies (N)
- North East trade wind / Polar Easterlies (N)
- Direction of all winds deflected due to Coriolis force.
- Apparent movement of the Sun, shifting of pressure belts and Coriolis force are the factors that cause the deflection of wind's direction.

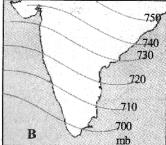
#### Let's Write and Assess

- a. Prepare a short note on the global wind systems.
- b. Explain the Coriolis force.

#### Activity

Isobars are used to indicate pressure gradient force. Isobars are closely arranged. It represents steep pressure gradient force. Isobars are distributed distantly, it represents gentle pressure gradient force. Analyse the following figures and answer the questions given.





- a. Which figure shows high pressure gradient force? How do you identify it?
- b. In which direction is wind blowing in both figures? (towards South / towards North)



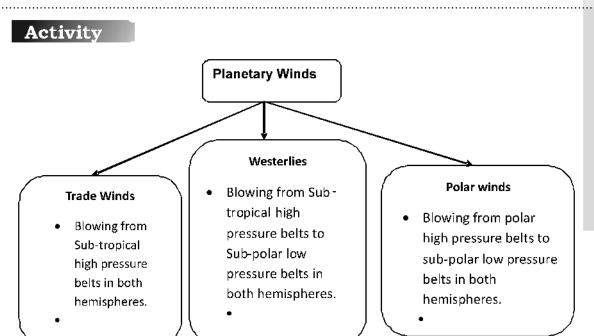
- Closely arranged isobars indicates very steep pressure gradient force.
- Wind blows from high pressure regions to low pressure regions.
- The speed and direction of wind are influenced by pressure gradient force, Coriolis force and friction.

#### Let's Write and Assess

- a. Friction influence the speed and direction of winds. What are the other factors?
- b. Suppose a powerful wind is blowing from East to West. If so, identify the direction which high pressure is experience? Which factor is established here to represent the high velocity?

# Learning outcome

Classifies the different types of wind.



The above flow chart is not completed. Consider other features of the above mentioned winds and prepare an explanatory note.



#### Trade winds

• The North-East trade winds and South-East trade winds converg at ITCZ of the equatorial region.

#### Westeries

• Westerlies blow through the vast oceans in the Southern hemisphere.

#### Polar winds

- Polar winds are blow from eastern direction due to the coriolis force and is called polar easterlies.
- Globally the atmospheric pressure varies at various latitudes.
- The pressure changes make winds.
- The winds are stronger at Southern hemisphere due to vast ocean.

#### Let's Write and Assess

 What is the major reason for the occurrence of planetary wind system? • Westerlies are very stronger in the Southern hemisphere when compared to Northern hemisphere. Why?

# Activity

The South –West monsoon and the North –East monsoon are periodical winds blowing in a year from different directions. The reasons for the occurrence of these winds are mentioned below. With the help of these information, prepare a write up.

A The apparent movement of the sun: Due to this the pressure belts also shift slightly.

Coriolis force: When the South-East trade wind entered into Northern hemisphere, its direction deflects and form South-West monsoon winds.

**Heat Difference:** The unequal heating of land and ocean results in the ai movement from ocean to land and or from land to ocean at different seasons.

# At a Glance

В

- The monsoon winds are periodical winds.
- As the trade winds cross the Equator they get deflected and transform into South-West monsoon winds under the influence of the Coriolis force. It provide rainfall on land.
- The influence of South-West monsoon is from June to September.
- During October and November, the North East monsoon blows to Indian Ocean from the land.

#### Let's Write and Assess

C

Explain the circumstances that leads to the occurrence of the South
 West monsoon and the North East monsoon.

# Activity

Based on the information given in the table, prepare a note on the occurrence of land breeze and sea breeze.

	Day		Night	
	Pressure	Temperature	Pressure	Temperature
Sea	Increases	Decreases	Decreases	Increases
Land	Decreases	Increases	Increases	Decreases
Direction of wind	From sea to land		From 1	and to sea
Name of wind	Sea breeze		Land	l breeze

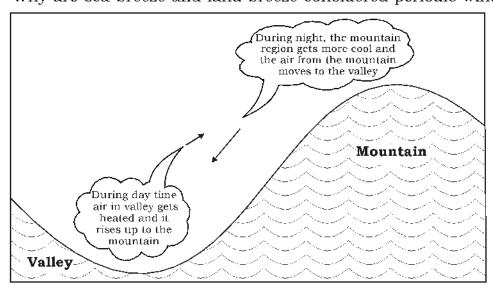
# At a Glance

During day land heats faster than sea. Low pressure is formed on land and high pressure at sea. This causes for the formation of sea breeze.

During night, land cools faster than sea. Low pressure is formed at sea and high pressure at land. It leads to the occurrence of land breeze

#### Let's Write and Assess

Why are sea breeze and land breeze considered periodic winds?



Using the information and hints provided in the picture, prepare a write up on the occurrence of the mountain breeze and valley breeze.



- The valley breeze blows from valley to mountain during day.
- During night, the mountain breeze blows from the mountain top to the valley.

# Learning outcome

Classifies the different types of winds.

# Activity

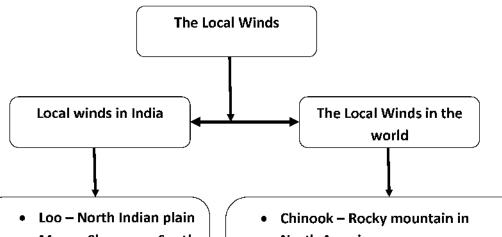
Observe the given pictures and complete the table.

	Variable	Direction	
	winds		
a1[ab,01009o		Northern	Southern
ब्हुगरीयन्त्राती करते शीराज्ञी की (कुला कर्का ब्हुला)		Hemisphere	Hemisphere
resultanza obra saladi (a esemberrad caranza)	Cyclones	(b)	clockwise
പ്രതിച്ക്രവാതം			
essharo diseubili (genotéssoraje)	(a)	anti clockwise	(c)
eg Widerschaus offenziele (maniferrofenzers ge)			

# At a glance

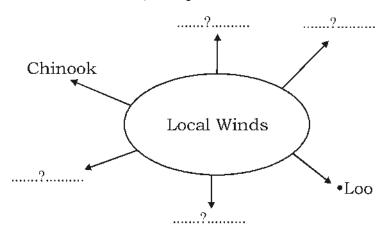
- a) Anti cyclones
- b) Anti clockwise
- c) Anti clockwise

#### **Activity**



- Mango Showers South India
- Kalbaishaki Eastern
- North America.
- Hurmattan -Sahara desert in Africa
- Foehn Alps mountain in Europe

Based on the flow chart, complete the word sun suitably.



- Loo The North Indian Plain
- Mango Showers South India
- · Kalbaisakhi Eastern India.
- Chinook North America

- Harmattan –Africa
- Foehn Alps

# Let's Write and Assess

Arrange the information given in the columns  ${\bf A}$  and  ${\bf B}$  suitably.

A	В	
Sahara desert	Mango Showers	
Rocky mountain range	Harmattan	
South India	Loo	
Alps mountain range	Chinook	
North India	Foehn	

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The development of a country is possible only if the availability of skilled human resources is ensured. Therefore various features of the available human resources are to be studied and its availability should be ensured. The lesson is based on this objective. The quantitative features of human resources and the qualitative factors that improve them are analysed in detail in this chapter.

#### Learning Outcome

Analyses the present need for human resource development

#### Activity

Find out the different levels of human resource development

# At a Glance

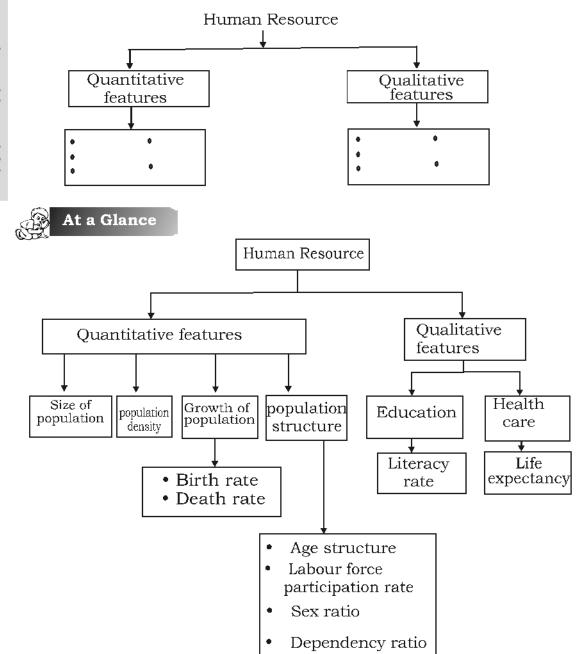
- Self effort of individual
- Family
- Various institutions and agencies
- Nation

#### Learning Outcome

Prepares a flow chart depicting the qualitative and quantitative aspects of human resources.

#### Activity

Complete a flow chart including qualitative and quantitative features of human resources.



# **Learning Outcome**

Compares and presents the size of population in India with the world population.

# Activity

Why do we coduct population analysis? Let's prepare a table.

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- Assessing the availability of human resource.
- Assessing the basic facilities by the people.
- · Assessing the goods and services required.
- Analyses the population.
- Identifying country's population problems and planning remedial measures.
- Determining the socio-economic development policies.

#### Learning Outcome

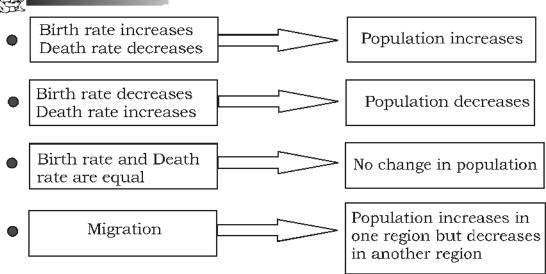
Analyses the factors that affect population and prepare a note.

#### Activity

Let's compare the changes in population due to birth rate, death rate and migration.



#### At a Glance



#### **Learning Outcome**

Analyses the graph showing the population, age structure, labour force participation rate and dependency ratio.

#### Activity

Let's describe the labour force participation rate and dependency ratio

#### At a Glance

- Labour force participation rate is the ratio of working people in the total population
- Dependency ratio is the ratio of the people depend on the working

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population in the total population.

#### **Learning Outcome**

Analyses and presents the findings of the qualitative aspects of human resources.

#### **Activity**

Let's find out the qualitative factors that improve the labour potential



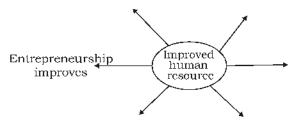
#### At a Glance

Education
 Healthcare
 Training
 Social capital

### Activity

Let's complete the chart.

Reduces economic inequality



# At a Glance

- Increase productivity of the workers.
- Social welfare is ensured
- Natural resource are utilized effectively
- Makes possible development and use of advanced technology.

### Let's Write and Assess

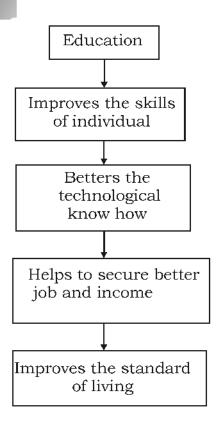
- 1. What are the advantages of improving human resources?
- 2. How does human resource development help in economic development?
- 3. Prepares a note onthe role of education and healtheare in human resources development

# Activity

Let's prepare a flowchart on how eduaction helps in the development of a country.

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# Activity

Let's write any three projects implemented in India to develop human resource through education.



# At a Glance

Projects	Goals
Integrated Child Development Scheme (ICDS)	<ul> <li>To ensure integrated development of children upto 6 years</li> <li>To provide healthcare for pregnant and lactating women</li> </ul>
Samagra Shiksha Abhiyan (SSA)	<ul> <li>To ensure universal education to all up to higher secondary level</li> <li>To ensure quality and equity</li> <li>To promote the vocational education strenthen</li> </ul>

Samagra Shiksha was formed by integrating Sarva Shiksha Abihyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA)	<ul> <li>To the teacher training institutes like SCERT/DIET</li> <li>•</li> </ul>
Rashtriya Uchthal Shiksha Abhiyan (RUSA)	<ul> <li>To increase the access to higher education</li> <li>To improve the quality of higher education</li> </ul>
National Skill Development and Monetary Reward Scheme	<ul> <li>To improve the working skills of the youth</li> <li>To ensure the availability of people with employable skills</li> </ul>

#### Learning Outcome

Discusses and prepare notes on the programmes that works for education and health care.

# Activity

How is healthy persons co-operate the development of nation. Discuss and find out the statment.



#### At a Glance

- Production increases with the increase in efficiency and the number of working days.
- Natural resources can be utilized properly.
- Medical expense can be reduced.
- Economic development is possible through the increase in production.

#### Activity

Let's find out the various institutions established up by the government for health care.



# At a Glance

- Medical colleges
- · District hospitals
- Community health centres
- Primary health centres

Health sub centres

#### Activity

NRHM and NUHM are the two governmental agencies which fuction to make provide the quality health service to all. Find out their various fields of operation



#### At a Glance

NRHM  $\rightarrow$  Operates in the rural areas.

NUHM → Provides improved health services to the residence of urban slums and other marginalised people in towns with a population of more than 50,000.

### Activity

Let's find out and list the existing problems to be solved in the field of education and health



#### At a Glance

	Health	Education
•	Problems of garbage	Continuing dropout
•	Malnutrition Life style diseases	<ul><li>Lack of basic facilities</li><li>Lack of quality</li></ul>
•	Hike in medical expenses	Limitation in getting admission

It is to be aware that human resource is more important than any other factors of production and that should be developed through careful planning and should participate in nation's development as we are the part of human resource.

#### Let's Write and assess

- 1. List out the various objectives of population study?
- 2. Classify and list out the qualitative and quantitative aspects of human resources.
  - a. Population Structure
- b. Education

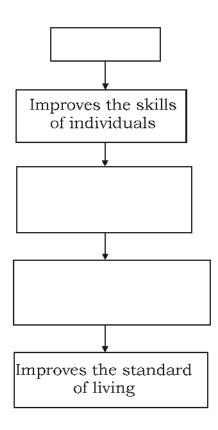
c. Healthcare

- d. Size of population
- 3. Write a note on the changes in population of a country due to birth rate, death rate and migration.

# 4. Match the Following.

Samagra shiksha	To improve the availability of higher education
<ul> <li>Integrated child development scheme</li> </ul>	To improve the working skill of the youth
<ul> <li>Rashtreeya vtchathal siksha Abhiyan</li> </ul>	<ul> <li>To ensure integrated development of children upto 6 years</li> </ul>

5. Complete the flow chart.



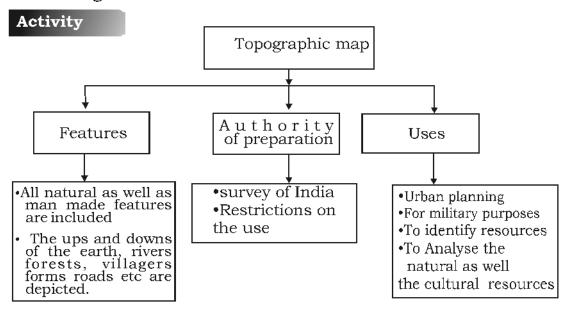
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**Preface**: Topographic maps differ from other maps. They are large scale maps. They are prepared by incorporating elaborate details of comparatively small areas. Topographic maps depict in detail all natural as well as man made features on the earth's surface.

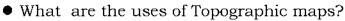
#### **Learning Outcome**

Understands and explains what Topographic maps are, how they are prepared for what purpose they are used and its layout and numbering



Read the flow chart given above and answer the following questions.

• What is a Topographic map?



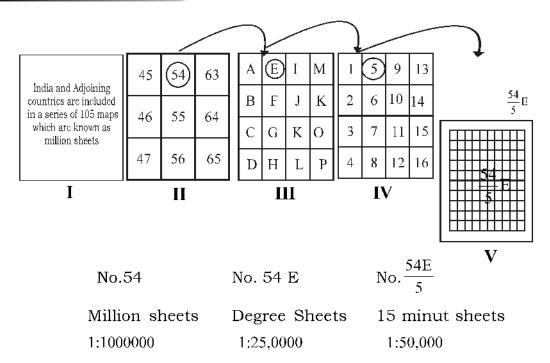


- Hope the answers to the above questions can be found out from the flow chart.
- Certain restrictions have been imposed on the use of Topographic maps of strategic regions owing to the national security concerns.

#### Let's Write and Assess

- a. Comparing with other maps what are the features of Topographic maps?
- b. Why are certain restrictions imposed on using topographic maps?

# **Learning Outcome**



The above given II, III, IV images are the toposheets that represent India in 105 map series sheets. Each sheet in 105 million sheets is divided into (eg: 54 in image II) 16 divisions (eg: 54E in Image III).

Again each of those divisions are divided into 16 sheets. (eg.  $\frac{54}{5}E$  of

image IV) Such one divison is the sheet number  $\frac{54}{5}E$  of image V.

#### Let's Write and Assess

It is explained how to numbers are given toposheets. Now find the answer to the following questions.

• Explain how the toposheet in the image V got the number  $\frac{54E}{5}$ 

# At a

#### At a Glance

• The whole world is depicted in 2222 sheets.

#### Let's Write and Assess

- Compare million sheets and degree sheets and prepare a short note.
- How many sheets are used to depict the whole world?

# Learning Outcome

Identifies the conventional signs and symbols and colours used in the toposheets and gather inference.

# Activity

Various features on the earth's surface are represented in topographic maps using internationally accepted signs, symbols and colours. Complete the table using the hints given against each colour.

# **Accepted colours**

- blue- water bodies including rivers, oceans (perennial water bodies)
- Yellow Cultivable land Green forests, fauna and flora
- Red :Roads, paths, settlements, forts, buildings
- Black: Railway line, grave, numbers representing height, short forms

	Signs/ Symbols	Features	Colours
1		Grave	?
2.		Permanent house	?
3	H	fort	?
4		road	?
5	RH	Rest house	?
6	+	spring	?
7	<b>A</b>	Tube well	?
8	•_	well	??
9		settlements	?
10		Cultivable land	?



 As the colours and symbols used in the toposheets are internationally accepted, the maps prepared in one country can be easily understood and analysed by the people in another countries.

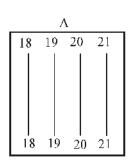
#### Let's Write and Assess

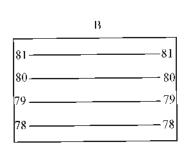
- Why are internationally accepted signs, symbols and colours used to depict topographic maps?
- Which are the colours used to represent settlements, grasslands, rivers, PO etc.

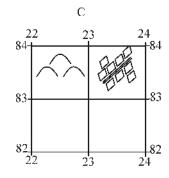
# Learning Outcome

• Creating knowledge on grid reference, features on the earth's surface are located precisely.

# Activity







#### A. Eastings

- These are north-south lines
- Their value increases towards the East.
- The value of the eastings immediately left to the geographic features is considered for identifying a location

# B. Northings

- These are lines drawn in the east west direction.
- Their value increases towards the north.
- The value of the northings immediately to the south of the feature in the map is considered for identify ing a location

In fig A its Eastings and in B its Northings. The grid formed by the eastings and the northings are called reference grid and is shown in fig C. The geographic features in it are fort, grave and settlements. Locate

in which grid they are. How to locate-one is explained here. Hope the other two will be located.

Fort: (4 figure grid reference)

First write the value of the eastings to the immediate left of the fort(23). Then value of the northings just south of the fort is to be written. (82). Thus the location of the fort as per the 4 figure grid reference will be 2382. Write the grid reference of the other two.

Settlements	
Grave	



**•** 2383 **•** 2283

#### Let's Write and Assess

- What is the difference between Eastings and Northings?
- In four figure grid reference what does the first two digits and last two digits represent?

# Learning Outcome

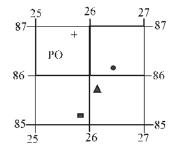
Comparatively smaller geographic features in a topographic map are generally located through the 6-figure grid reference method.

# Activity

We have now completed 4-figure grid reference method. Usually for smaller geographic feature 6-figure grid reference method is used. Try to find out the six figure grid reference of the geographic features given here. An example is given here.

Spring: (+)

- First write the value of the Eastings (25) on the immediate left of the spring
- Then divide the distance upto the next Eastings into 10 equal parts. And findout which division points to the spring. (7)
- Write the values thus found next to the Eastings value (257)



- Next write the value of the Northings just below spring (86)
- Now divide the distance upto the next Northings into ten equal parts and find out to which division points to the spring (8)
   VIDYA JYOTHI Class 10 N

- Write this value next to Northings value found earlier (868)
- Following that write Eastings value (258) and Northings value (868) together as 6 figure grid reference (257868)
- This is the 6 figure grid reference of the spring. Now complete the 6 figure grid reference of the other geographic features.

	Sign symbol	Geographic features	6 grid reference
1	+	spring	257868
2	PO	Post office	?
3	•	well	?
4	<b>A</b>	Tube well	5
5	-	Permanent House	5



● PO – 253863

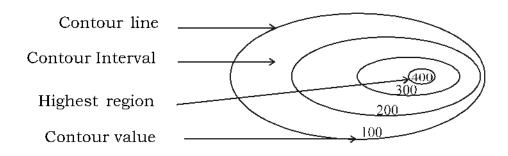
#### Write, Evaluate

- Explain the method of locating geographic features through 6-figure grid reference.
- How will you locate 3rd and 6th digits?

# Learning Outcome

• To find out the shape of terrain, and intervisibility by understanding contour lines.

# Activity



The diagram represents contour lines. Based on the hints in the diagram, write down the answers to the questions given.

- a. What are Contour lines?
- b. What is the Contour interval?

<sup>146</sup> VIDYA JYOTHI Class 10 ▶1

- c. What landform do the Contour lines represent?
- d. What is the maximum height of the landform here?



- Contour lines are imaginary lines drawn on places having equal height above sea level on a map.
- The difference in value of two Contour lines is Contour interval.
- Landforms which have height. (Hills, Mountains)
- Height 400m

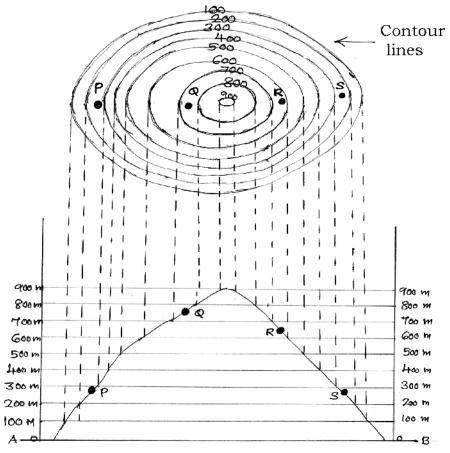
#### Let's Write and Assess

• Can you make Landform using the above Contour lines?

# Consolidation

- On maps height is picturised by drawing Countour lines.
- They are drawn in brown colour.

# Activity



The Contour lines seen in topographic maps are given above. The given landform is drawn using the Contour values on it. On the Contour lines points are marked as PQRS at different locations.

Find whether there is inter visibility between those places and complete the table.

Places	Intervisibility
	Yes/ No
P and Q	
Q and R	
P and S	
P and R	

#### At a Glance

- Between P and Q No intervisibility
- Between Q and R No intervisibility
- Intervisibility is essential in errecting Eleleric posts, Mobile towers.. etc.

#### Let's Write and Assess

• What are the uses of intervisibility?

# Learning Outcome

By interpreting toposheets primary information and physical and cultural features are identified and prepares notes.

#### Activity

- a. Primary information: The general information given outside the margin in topographic maps. Example: Sheet No: Contour interval.
- b. Physical features: Features on the nature like water bodies eg: rivers, streams, wells, tubewells springs etc as well as different land forms.
- c. Cultural features: They are the man made features on the toposheets like settlements, roads etc.
- a. Read the above given hints. Now catagorise the following under appropriate headings and complete the table.

Features:	•	Farmla
-----------	---	--------

armlands • Boundaries

• Spring

• Toposheet number

• Contour intervals

• Open Shrub

Bridges

• Streams

• Lakes

• Post Office

Northings

• Scale of the map

Primary information A	Physical features B	Cultural features C
•	•	•
•	•	•
•	•	•
•	•	•



• Farmlands - C • Streams - B. Contour - Interval-A

#### Let's Write and Assess

- Create a similar table interpreting the toposheet given in page 70 in the text book.
- What is meant by primary information?

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This unit comprises of the main concepts of public expenditure, public revenue, public debts which is connected with public finance. Public expenditure, different sources of public revenue, direct and indirect taxes, non-tax revenue, public debt, budget, fiscal policy - are the areas imported through this lesson.

### Learning Outcome

Presents the features of public revenue and public expenditure.

# Activity

Find out the factors which leads to an increase in public expenditure in India.

# At a Glance

- Increase in population
- Increase in defence expenditure
- Welfare activities
- Government subsidies
- Urbanisation
- Industrialisation

# Activity

Compare developmental and non-developmental expenditures.



# At a Glance

\* The expenditure incurred by the government for constructing roads, bridges and harbours, starting up new enterprise, setting up VIDYA JYOTHI Class 10 M

educational institutions etc are considered as developmental expenditures.

\* Expenditure incurred by way of war, interest, pension, etc. are considered as non-developmental expenditures.

# Activity

Fill in the blanks

Public revenue = +



#### At a Glance

• Tax revenue

Non-tax revenue

# Learning Outcome

Analyses the features of direct tax and indirect tax with examples and enlist them in the table.

### Activity

Let's complete the table.

Direct tax	Indirect tax
(a)	Tax is imposed on one person and paid by another
Tax burden is felt by the tax payer	(b)
Eg. : (c)	Eg. : GST

# At a Glance

- a) Tax is paid by the person on whom it is imposed.
- b) Tax burden is not felt by the tax payer.
- c) Personal imcome tax/corporate tax

#### Let's Write and Assess

1) Compare the features of direct tax and indirect tax.

# Learning outcome

Explains the characteristics of Direct taxes and Indirect taxes

# Activity

Observe the given GST Bill and answer the following questions.

- ◆ Identify the type of tax from the bill
- When was the tax introduced in India?
- Complete the list by adding the features of this indirect tax

Taxes are levied at different stages starting from production to final consumption of goods and services.

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### At a glance

- ◆ Goods and Services Tax (GST)
- ◆ 1st July 2017
- In each stage, the tax is imposed on the value added
- ◆ Tax is collected only on value addition
- The tax paid in the earlier stages and need not be paid by the final consumer

#### Let's write and Assess

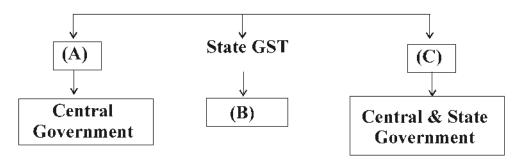
Name the tax, by merging different indirect taxes which is introduced in India on 1st July 2017. Prepare a note based on the features of this tax.

	GST RULE 2017-TAX INVOICE CASH				
GST32AATEM9805BIZK					
PAN AAIFM9805B					
	DATE:08/09/	2018 BIL	.LNO:507	04	
	ltem Name	MRP	Qty	Rate	Total
S	COMPLAN KESER B	305	1	299.32	299.32
(g)	SANTHIGIRI TURM	72	1	65	65
(P)	BRAH FRIED RAWA	89	I	86.08	86 08
	GARLIC	60	0.2	55 64	11 13
$\langle u \rangle$	CYCLE 3 IN 1	50	2	49	98
æ	SPYZEE ROASTED	70	1	66.2	66.2
5	CADBURYS D/M	20	2	19	38
5	COLGATE STRONG	176	1	171.12	171.12
Œ.	BRAH WHEAT POWD	53	1	51.25	51.25
(Q)	PAVITHRAM GINGE	218	1	206.28	206.28
5	VIM LIQUID YMI	155	1	152.88	152.88
5	HARPIC 500 ML	80	1	78.05	78.05
5	SURF EXCEL DETE	190	1	186.49	186.49
-5	SURF MATIC E.L.	225	1	222.98	222.98
5	HARPIC BATH CLE	40	1	38.3	38.3
!	DOPPI SSK DELUX	42	5	35	175
ς	UIALA CRIÆSHINE	110	1	107.23	107.23
5	X ALL LOTION	47	1	44	44
	UZHUNNU BALL	97	1	83	83
				Round Off	-0.31
				TOTAL.	2180
	TOTAL-ITEM:19				
	Gs1% L 0% @ 5%,# 12%,\$ 18%,& 28%				
	Net Amt:	CGST%	CG Amt	SGST%	SGAmt
!	269.13	0		0	
(d)	545.53	2.5	13.64	2.5	13.64
#	0	6	0	6	0
S	1134.21	9	102.08	9	102.08
ÄZ.	0	14	D	14	0
	TOTAL:		115.72		115.72

#### Activity

#### Complete the flowchart

# Good and Services Tax (GST)





# At a glance

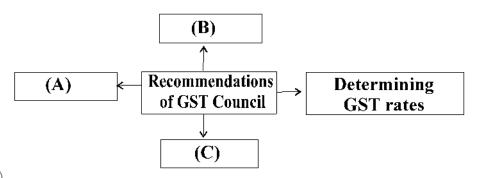
- (A) Central GST
- (B) State Government
- (C) Integrated GST

# Let's write and Assess

What are the various Goods and Services taxes? Explain.

#### Activity

Complete the chart.





#### At a glance

- Taxes, cess and surcharges that are to be merged into GST
- The goods and services that are to be brought under GST.
- Determining the tax exemption limit on the basis of total turnover.
- The time frame for including the excluded items into GST.

#### Let's write and assess

List out the recommendations of GST Council.

Mention the members of GST Council?

# **Learning Outcome**

Catagorise the taxes imposed by Central, State and Local self governments.

# Activity

Classify the taxes from the list given and complete the table.

Professional tax, State GST, Land tax, Integrated GST, Property tax, Personal Income tax, Stamp Duty, Corporate tax.

Central Government	State Government	Local self Government
•		
-	•	•
-	•	•

# At a glance

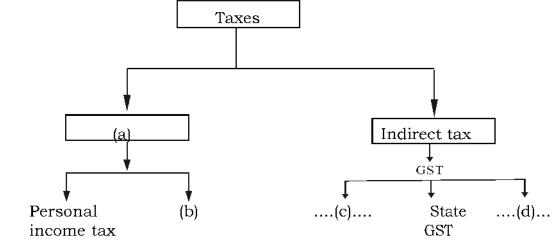
Central Government	State Government	Local self Government
Integrated GST	Land Tax	Property Tax
Personal Income Tax	State GST	Professional Tax
Corporate Tax	Stamp Duty	

#### Let's write and Assess

Give two examples for the taxes imposed by central, state and local self governments.

# Activity

#### Complete the flow chart



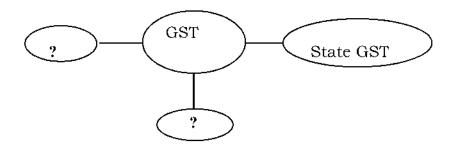


# At a Glance

- (a) Direct tax
- (c) Central GST
- (b) Corporate tax
- (d) Integrated GST

# Let's Write and Assess

- 1. Classify the following taxes into direct taxes and indirect taxes (State GST, Corporate tax, Personal income tax, Integrated GST)
- 2. Complete the diagram



\* The tax imposed at the production stages of a commodity is called excise duty

# Activity

Compare cess and surcharge.



#### At a Glance

- Additional tax imposed on tax is called surcharge.
- Additional tax imposed by the government for a certain specific purpose is called cess.

# Activity

#### Complete the table

Central Government		
	Stamp duty	Professional tax
*************************************	***************************************	***************************************



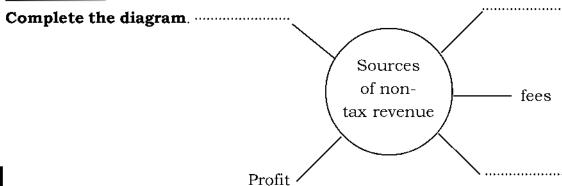
# At a Glance

Central Government	State Government	Local Self Government
Corporate tax	Stamp duty	Professional tax
• Personal income tax	• State GST	Property tax
• Central GST	• Land tax	
• Integrated GST		

# Learning Outcome

Classifies and explains the sources of non-tax revenue.

# Activity





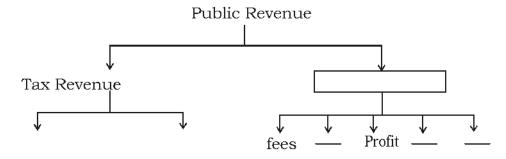
### At a Glance

• Grants

- Interest
- Fines and penalties

#### Let's Write and Assess

1. Complete the flow chart



- 2. Classify the following into tax revenue and non-tax revenue.
- Corporate tax
- Interest
- Personal income tax

• GST

- Profit
- Grants

# Learning Outcome

Presents the features of internal debt and external debt.

# Activity

Complete the table.

Internal debt	External debt



# At a Glance

- Internal debt is the loans availed by the government from Individuals and institutions within the country.
- External debt is the loans availed from foreign governments and International institutions.

# Activity

Find out the reasons for increasing the public debt in India.



# At a Glance

- Increase in population
- Developmental activities
- Increase in defence expenditure
- Social welfare activities
- Urbanisation

# Learning Outcome

Identifies the different types of budgets.

### Activity

Rewrite the sentences that are given wrong.

- Deficit budget \_\_\_\_ Income = Expenditure
- Surplus budget \_\_\_\_\_ Income < Expenditure
- Balanced budget \_\_\_\_\_ Income > Expenditure

# **₽**At

# At a Glance

- Deficit budget \_\_\_\_\_\_ Income < Expenditure
- Surplus budget \_\_\_\_\_\_ Income > Expenditure
- Balanced budget \_\_\_\_\_ Income = Expenditure

# Learning Outcome

Presents the main features of the fiscal policy.

# Activity

Explain fiscal policy and its objectives.



 Government's policy regarding public revenue, public expenditure and public debt is called fiscal policy.

#### Aims

- 1) Attain economic stability
- 2) Create employment opportunities
- 3) Control unnecessary expenditure

4) Control inflation and deflation

Students understand the need for increase in public revenue from this lesson and it also develops interest in participating in activities that increase public revenue. Moreover they get an opportunity to realise that budget is the reflection of a country's economic activities and also symbolises developments. This lesson helps students get a view that a strong fiscal policy of a nation will protect it from financial crisis.

#### Let's Write and Assess

- 1) Classify the following budgets given below.
  - (a) Income ₹ 14,800 crores

Expenditure ₹ 14,800 crores — budget

(b) Income ₹ 14,800 crores

Expenditure ₹ 16,200 crores — budget

(c) Income ₹ 14,800 crores

Expenditure ₹ 13,200 crores — budget

- 2) Differentiate the taxes into State Government taxes, Central government taxes and local self government taxes.
- 3) Which are the important direct taxes in India?
- 4) Which are the two significant sources of income of the government?
- 5) Compare the features of direct tax and indirect tax.

8003



To understand the features of the Earth's surface, information on topography is to be gathered and analysed. The conventional modern techniques instruments and technology used for this. Let's know more about them.

# Concept

Explains the ideas related to remote sensing.

#### Activity

Complete the table using the hints given below. (Remote sensing, Sensor, platform)

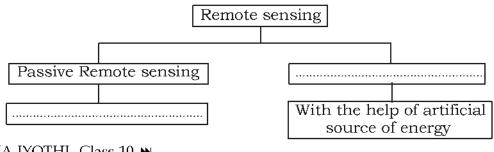
- c. The carrier on which sensors are fixed : .....

#### Learning Outcome

Compares different types / methods of remote sensing

#### Activity

Complete the flow chart





#### At a Glance

Based on the source of the energy, remote sensing can be classified into two. Remote sensing done with the help of solar energy is known as passive remote sensing and those done with the aid of artificial source of energy is known as active remote sensing.

#### Let's Write and Assess

Compare passive and active remote sensing and prepare notes based on it.

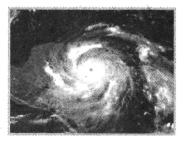
### Learning Outcome

Classifies remote sensing based on the platforms.

#### Activity







Complete the table analysing the images

Technology	Platform	Sensors
Terrestrial photography	(a)	(d)
Aerial Remote sensing	(b)	(e)
Satellite Remote sensing	(c)	(f)



#### At a Glance

- (a) Earth's surface (b) Air craft (c) Satellite (d) Camera (e) Sensor
- (f) Scanner

Based on the platform remote sensing can be classified into three

#### Let's Write and Assess

Which of the following is not a sensor?

(a) Scanner (b) Stereoscope (c) Camera

#### **Learning Outcome**

Explains the importance of overlap in aerial photographs.

### Activity

Arrange items in A with items in column B.

Stereopair	60% of the adjacent aerial photograph is repeated	
Stereoscope	A pair of aerial photograph with an overlap	
Overlap	Instrument used to give three dimensional	
	vision	

# At a Glance

In aerial remote sensing, when two adjacent photographs with an ovrelap is viewed through a stereoscope it gives a three dimensional vision

#### Let's Write and Assess

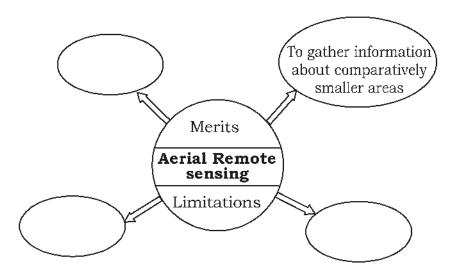
Explain Overlap, Stereopair and Stereoscope

# **Learning Outcome**

List out the merits and limitations of Aerial Remote Sensing

#### Activity

Complete the word sun



Receives continuous pictures of an area. The aircraft requires open space for take off and landing. Expense is more.

#### Let's Write and Assess

List out the limitation of Aerial Remote sensing.
VIDYA JYOTHI Class 10 ▶

#### Learning Outcome

Compares geo stationary and sun synchronous satellites

#### Activity

#### Complete the table

Features	Geo stationary satellite	Sun synchronous satellite
Elevation		
Field of view		
Uses		
Examples		

# At a glance

#### Geo - stationery satellites

- The satellites that move in equal velocity with the earth's rotation.
- · Orbit the earth at an elevation of about 36000 kilometers above the earth.
- · One third of the earth comes under its field of view.
- · Helps in continuous data collection of an area.
- · Used in telecommunication and for weather studies.
- Eg. INSAT satellites.

#### Sun synchronous satellites.

- The artificial satellites that passes around the earth along the poles.
- The surveillance area is less than that of the geostationary satellites.
- The repetitive collection of information of a region at regular interval is possible.
- · Used for the collection of data on natural resources, land use, ground water.
- · Used for remote sensing purpose.
- · Eg. IRS, Landsat series.

#### Let's Write and Assess

Compare Geo stationary and Sun sychronous satellites and VIDYA JYOTHI Class 10 M

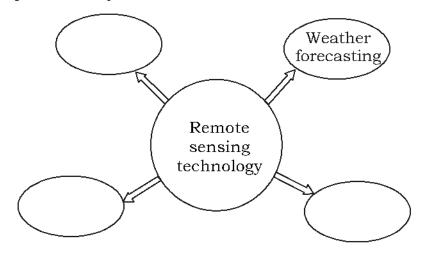
prepare short notes on it.

#### Learning Outcome

Lists out the fields where remote sensing technology is used.

# Activity

Complete the diagram.



# Learning Outcome

Explain the concepts related to remote sensing technology.

# Activity

Complete A, B and C by using the hints given below. (Satellite imageries, special resolution, spectral signature)

The amount of reflected energy by each object	)A
The information in digital format transmitted from the sensors converted into picture formats	.)B
The size of the smallest object on the earth's surface that a satellite sensor can distinguish	)c

#### Let's write and evaluate

Prepare notes on the following.

- · Spectral signature
- · Satellite imageries
- · Spatial resolution

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# 🔊 At a Glance

For ocean explorations, understanding land use, to locate flood and drought affected regions, for oil explorations.

#### Let's Write and Assess

List out the uses of remote sensing technology.

#### Learning Outcome

Explains Network analysis, Buffer analysis and Overlay analysis. Complete the table.

Network Analysis	Buffer Analysis	Overlay Analysis

# At a Glance

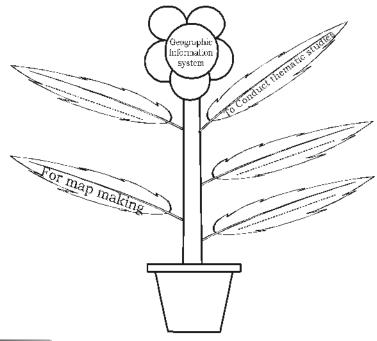
- The linear features on the map such as road, railway, rivers etc are subjected to Network analysis.
- For Buffer analysis, a point feature or at a definite distance along a linear feature is analysed
- Overlay analysis is used to identify the interrelationship of various surface features on Earth and the changes they have undergone over a period of time.

#### Let's Write and Assess

List out the analytical capabilites of Network analysis, Buffer analysis and Overlay analysis.

#### **Learing Outcome**

Lists out the uses of Geographic Information System.



# At a Glance

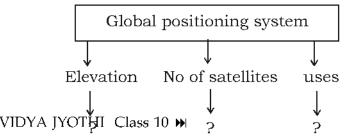
- Compile data from different sources
- Update and incorporate data easily
- Conduct thematic studies
- Represent geographic features spatially
- Prepare maps, tables, graphs etc.
- Generate visual models of future phenomena and processes based on the data collected.

# Learning outcome

Identifies the potential of GPS

# Activity

Complete the chart given below.





#### At a glance

- GPS helps in sensing the latitudinal and longitudinal location and elevation of objects on the earth's surface.
- Elevation  $\longrightarrow$  between the altitudes 20000 and 20200 km above the earth's surface to locate objects.
- A series of 24 satellites placed at six different orbits.

#### Let's Write and Assess

- 1. Lists the possible uses of Geographic Information System
- 2. Based on the platform, remote sensing can be classified into three. Which are they? Explain.
- 3. Write down the limitations of Aerial Remote Sensing
- 4. Compare Geostationary and Sun synchrous satellites and prepare short notes.
- 5. Write the uses of remote sensing technology
- 6. The surface features of the Earth can be analysed in various ways according to the requirements. Explain the following.
  - A. Network Analysis
  - B. Buffer analysis
  - C. Overlay analysis
- 7. What are the advantages of Geographic Information system?
- 8. Explain the Global Positioning System (GPS).

മാരു



In this chapter we are going to discuss India's diverse physiographic features, latitudinal and longitudinal extensions, mountain ranges. classification of rivers, monsoons winds and climate, characteristics of seasons, soil type and vegetations etc. Let's discuss one by one in detail.

### Important ideas

- Physiographically India is divided in to the North Mountain Ranges, the North Indian plain, Peninsular plateau, Coastal plains and Islands.
- The North Mountain ranges can be classified in to the Trans Himalayas, Himalayas and Purvachal (Eastern Highlands).
- Karakoram, Ladakh and Zaskar are the three ranges in Trans Himalaya.
- The Himalalya consists with the Himadri, Himachal and siwalik.
- The patkaibum, Naga hills, Garohills, Khali hills, Jayathiya hills are located in the purvachal (Eastern Highlands).
- The North Mountain ranges played a vital role in the human life and climate of India.
- The rivers like Indus, Ganga and Brahmaputra made fertile at the Himalayam valley.
- The peninsular rivers like Mahanadi, Godavari, Krishna, Kaveri,
   Narmada and Tapti plays an important role in the human life.

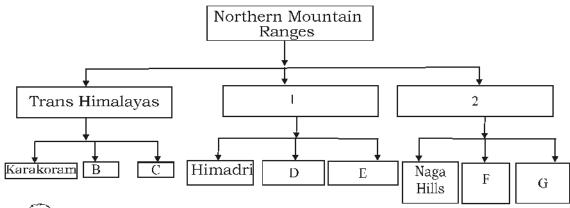
- The Great Indian plain is known as the granary of India and the Peninsular plateau is the store house of minerals.
- The Indian coastal Plain is Sub-divided in to the Western coastal plain and the Eastern coastal Plain.
- The Western coastal plain stretches from the Rann of Katch to the Sunderban delta.
- The Aravalli mountain, the Vindhya Satpura ranges and Western ghats are located at the peninsular plateau of India.
- The North Mountain range consists with mountain soil Great Indian Plain consists with alluvial soil black soil and red soil are mainly fomed at the Peninsular plateau and the coastal plain consists with alluvial soil.
- The seasons in India are classified into the Hot weather season, the cold weather season, South-West Monsson season and the North East Monsoon season.
- The cold weather season (winter) is from December to February.
- The hot weather season (summer) is from March to May.
- The South West monsoon season experienced in India during the period of June to September.
- The North East Monsoon season experiences in India from October to November.
- Loo and Mangoshower are local winds experience in India during the summer season.

# **Larning Outcome**

Analyse the diverse physiographic features of India.

#### Activity

Complete the flow chart showing the mountain ranges of the Northern Mountain Ranges





# At a Glance

- 1. Himalayas
- 2. Eastern highlands C. Zaskar
- E. Siwalik

- B. Ladakh
- D. Himachal
- F. Khasi, Garo, Jaintia hills

G. Mizo hills

Northern Mountain Range			
Trans Himalayas	1. Himalayas	2. Eastern hills	
B. Ladakh	D. Himachal	F. Khasi, Garo hills	
C. Zaskar	E. Siwalik	G. Mizo hills	

#### Let's Write and Assess

- 1. How do the Northern Mountain System is classified?
- 2. List the important mountain ranges in the Northern Mountain region.

# Activity

Find out the major mountain ranges in the Northern Mountain Ranges

- A. Trans Himalayas
  - It includes Karakoram, Ladakh, Zaskar ranges.
  - •
  - ٠
- B. Himalayas
  - It extends between the North East Trans Himalayas and the South

#### Eastern High Lands

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#### C. Eastern Highlands

 It includes Patkaibum, Naga hills, Garo, Khasi and Jaintia hills and Mizo hills.

# At a Glance

#### A. Trans Himalayas

- The highest mountain peak in India is Mount K2 (Godwin Austin)
- The average height is 6000 meters.

#### B. Himalayas

- These mountain ranges have a length of about 2400 Kilometers.
- Extending over 5 lakh square kilometers.
- It comprises of Himadri, Himachal and Siwaliks.

#### C. Eastern Highlands

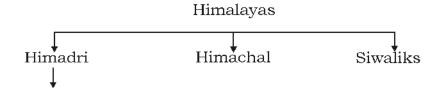
- It is known as Purvachal.
- Cherrapunji, the place receiving the highest rainfall in the world is situated in this area.

#### Let's Write and Assess

1. Which are the major mountain ranges in the Northern Mountain region. Find out its features.

#### Activity

Complete the flow chart showing the major mountain ranges in the Himalayan ranges.





#### Himadri

- The highest mountain range.
- Average altitude is 6000 meters
- Origin of the rivers Ganga and Brahmaputra
- Mountain peak like Kanchenjunga, Nandadevi, etc. are in this region.

#### Himachal

- Situated to the South of the Himadri.
- Average altitude is 3000 metres
- The hill stations like Shimla, Darjeeling, etc. are situated in the Southern slopes of this ranges.

#### Siwaliks

- Situated to the South of the Himachal
- Average altitude is 1220 meters
- · Presence of Dunes eg. Dehradun.

#### Let's Write and Assess

1. Which are the major mountain ranges in the Himalayas. Discuss its features.

#### Learning Outcome

Explain the influence of the Himalayan mountain ranges and the monsoon winds in the climate of India.

#### Activity

Discuss the role of Northern Mountain ranges.



#### At a Glance

- Protecting India from foreign invasions.
- Block the monsoon winds and cause rainfall throughout North India.
- Prevent the dry cold winds blowing from the North from entering India during winter.

- Caused the emergence of diverse flora and fauna.
- Resources of rivers.

#### Let's Write and Assess

• Elucidate the role played by the Northern Mountain ranges in moulding the climate and the life of India.

# Learning Outcome

Classfies the rivers in India as Himalayan rivers and peninsular rivers.

# Activity

Importance of mountain ranges in moulding the climate and human life of India. Find out.



Observe the above map and complete the table below.

Table - Himalayan Rivers

Himalayan	Tributaries	States through	Sea which it
Rivers		which it flows	joins
	•	•	
•	•	•	•
	•	•	
•			
Peninsular	Tributaries	States through	Sea which joins
rivers		which it flows	
Mahanadi			
•			
•			
•			
•			
•			

# At a Glance

Himalayan Rivers	Tributaries	State through which it flows	Sea which joins
• Indus	• Jhelum • Chenab	• Jammu & Kashmir • Punjab	• Arabian Sea
• Ganga	• Yamuna • Son	<ul><li>Hariyana</li><li>Madhya Pradesh</li><li>Uttar Pradesh</li><li>Himachal Pradesh</li></ul>	• Bay of Bengal
Brahma     putra	• Tista • Luhit	<ul><li>Arunachal Pradesh</li><li>Assam</li><li>Sikkim</li></ul>	• Bay of Bengal

Peninsular	• Tributaries	<ul> <li>States through</li> </ul>	• Seas which
Rivers		which it flow	it joins.
• Mahanadi	• Ib, Tel	<ul><li>Madhya Pradesh,</li><li>Odisha, Chattisgard</li></ul>	Bay of Bengal
Godawari	• Indravathi	• Maharashtra, A.P	Bay of Bengal
	• Sabari		
• Krishna	• Bhima	Maharastra, A.P	Bay of Bengal
	Tungabhadra	Karanataka	
Kaveri	• Kabani	Karnataka	Bay of Bengal
	• Amaravathi	Tamil Nadu	
Narmada	• Hiran	Gujarat	• Arabian Sea
	• Benjan	Maharashtra	
		Chattisgad	
Tapti	• Anar	Madhya Pradesh	• Arabian sea
	• Girna	Maharashtra	

# Let's Write and Assess

- 1. Which are the important tributaries of Himalayan Rivers?
- 2. Which are the important peninsular rivers and their tributaries?
- 3. Locate the origin of Himalayan Rivers like Sindhu, Ganga and Brahmaputhra.

# Activity

Complete the table.

Himalayan Rivers	Peninsular Rivers
Originate from the Himalayan     Mountain ranges	Originate from the Mountain ranges in peninsular plateau
•	•
•	•
•	•
•	•
•	•

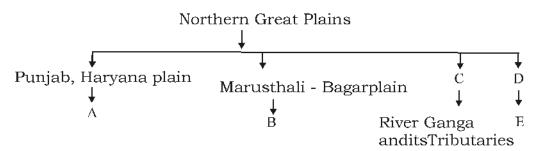


#### At a Glance

Himalayan rivers	Peninsular Rivers
Originate from the Himalayan mountatain range	<ul> <li>Orginate from the mountatain ranges in peninsular plateau</li> </ul>
• Extensive catchment area	Comparatively smaller catchment area
• Intensive erosin	• Intensity of erosion is high
<ul> <li>Create gorges in the mountain region and take Meandering Course in the plains</li> </ul>	<ul> <li>Do not create deep valleys due to hard and resistant rocks</li> </ul>
<ul><li>High irrgation potential</li><li>Navigable along the plain</li></ul>	<ul><li>Less irrigation potential</li><li>Navigation potential is low</li></ul>

#### Let's Write and Assess

• Find out the features of Himalayan rivers and peninsular rivers



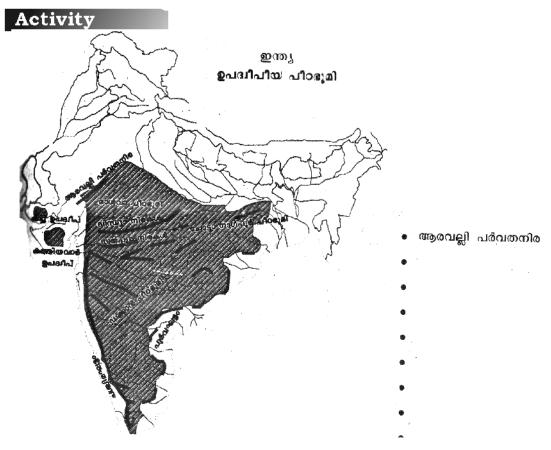
# At a Glance

- A River Indus and it's tributaries
- B Luni and saraswathy Rivers
- C Ganges plain
- D Brahmaputra plain
- E River Brahmaputra and its tributaries

#### Let's Write and Assess

How is the Northern great plains classified? Which are the rivers VIDYA JYOTHI Class 10 ▶

# responsible for its formation?



Identify the Mountain ranges in the peninsular plateau and its features

Mountain range in the Peninsular plateau	Highest	Soil	Vegetation
<ul><li>Aravalli range</li><li>A</li><li>B</li></ul>	• C	• D	<ul><li>Sandalwood</li><li>Bamboo</li><li>F</li></ul>
			• G

# At a Glance

- A Vindhya Satpura ranges
- B Western Ghats
- C Anamudi (2695m)
- D Black cotton soil
- E Laterite soil
- F Teak
- G Sal

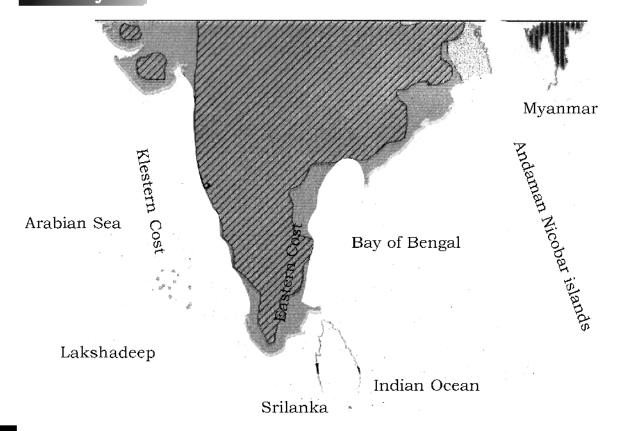
#### Let's Write and Assess

- 1. Features of peninsular plateau
- 2. Which is the highest peak in peninsular piateau?

# Learning Outcome

To understand the difference between West coastal plain and East coastal plain

# Activity



West Coastal Plain	East Coastal Plain	
Between Arabian Sea and the Western Ghats	Between bay of Bengal and     Eastern Ghats	

# At a Glance

West Coastal Plain	East coastal Plain
Between Arablan sea and     Western Ghats	Between Bay of Bengal and     Eastern Ghats
From Rann of Kutch to     Kanyakumari	From Sunderban Delta region to Kanyakumari
<ul><li>Comparatively narrow</li><li>Can be divided into Gujarat</li></ul>	<ul><li>Comparatively wide</li><li>Can be divided in to North Zircan</li></ul>
coast, Konkan coast and Mala bar coast	-
Lakes and backwaters can be found	Deltas are found

# Let's Write and Assess

1. Identify the features of West Coastal Plain and East Coastal Plain.

# Learning out come

- Analyses the influence of climatic and physiographic diversities on the soil types and vegetation
- Find soils in each physiographic division

#### Activity

List out major soils in India

Physiographic division	Soils
Northern Mountain Ranges	•A
Northern Great Plain	•B
Peninsular Plateau	•C
Coastal region	•D



# At a Glance

- A Mountain soil
- B Alluvial soil

- C Black soil, red soil, Laterite soil
- D Alluvial soil

#### Let's Write and Assess

List out major soils found in each physiographic divisions of India

#### Learning Outcome

Explains th features of seasons

#### Activity

Find out the features of 4 seasons and complete the table

Winter season	Summer Season	South West Monsoon season	North East Monsoon Season

# At a Glance

#### Winter season

- This season is experienced during December- February
- Temperature decreases from South to North
- Snowfall in Manali and Shimla
- Western disturbance occurs

#### Summer season

- This season is experienced during the months of March May
- Highest temperature is recorded at Barmer in Western Rajastan
- · Temperature highly increases in North India.
- Loo, Mango showers are the local winds experienced in India

#### North- East Monsoon

- This season is experienced during the months of October- November
- This seasons termed as Retreating Monsoon
- Experience October heat
- Rainfall along the Eastern Coastal plains

#### South-West Monsoon

- This season is experienced during the months of June- September
- South West Monsoon wind causes rain
- · More rain in Himalayas Valley regions

#### Let's Write and Assess

- 1. Find out the features of North-East Monsoon and South West Monsoon
- 2. What are the climatic changes that happen in South West parts of India during summer and winter?

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# Important ideas

- Agricultural seasons in India can be divided in to three ie, Kharif, Rabi, Zaid.
- Rice, Maize, Cotton are the important kharif crops
- Wheat, Tobacco, pulses are the important zaid crops.
- Fruits and Vegetables are important zaid crops.
- Indian agricultural crops can be divided into two cash crops and food crops.
- Alluvial soil for rice and black soil for cotton are suitable.
- Minerals are divided into Metallic and Non-metallic
- TISCO, IISCO, VISL, Bhilai, Rurkela, Durgapur, Bokaro are the important Iron and Steel industries in India.
- Gold, Silver, Copper, Mica are mining in India.
- Coal, Petroleum and Natural Gas like mineral fuel etc are mining in India
- Roads in India are divided into National Highways, State Highways,
   District Roads and village Roads.
- Indian Railway lines are divided into Broad Guage, Metre Guage and Narrow Gauge.
- Water transport has certain advantages than other means of transport.
- India has five waterways.
- There are twelve major ports in India.
- Mumbai, Visakhapattanam, Kolkata, Kochi etc. are the important ports in India.

This chapter mainly deals with the above mentioned facts.

# Learning Outcome

• Classifies the crops in accordance with the agricultural seasons in India

# Activity

Classify crops and prepare a table based on the agricultural seasons in India.

Cropping Seasons	Sowing period	Harvesting period	Major crops
Kharif			
Rabi			
Zaid			

# At a Glance

Cropping Seasons	Sowing period	Harvesting period	Major crops
Kharif	June (On set of monsoon)	Early November (End of monsoon)	Rice,Maize, millets, Cotton,Jute, Sugarcane, groundnut
Rabi	Middle of November (Beginning of winter)	first week of March (Beginning of summer)	Wheat, tobacco, mustard pulses
Zaid	March (Beginning of summer)	June (Beginning of monsoon)	Fruits, Vegetables

# Let's Write and Assess

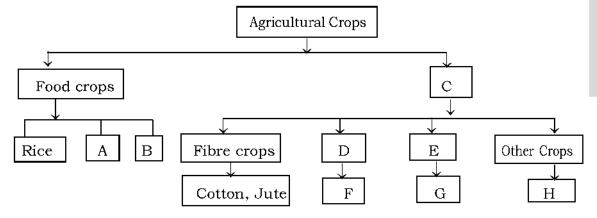
- 1) Name the important Kharif crops and identify the agricultural season?
- 2) Which is the agricultural season of fruits and vegetables?
- 3) What are the major Rabi crops and their agricultural seasons?

# Learning Outcome

Classifies the crops into food crops and cash crops.

# Activity

Complete the flow chart by classifying the crops cultivated in India



# At a Glance

- a) A Maize; B Wheat; C Cash crops D Beverage crops;
  - E Spices; F Tea, Coffee, G Cardamom, Pepper; H Sugarcane, Rubber

#### Let's Write and Assess

- 1) Give examples for food crops.
- 2) How are cash crops classified? Give examples.

### Learning Outcome

Analyses the geographical conditions required for the major crops in India.

#### Activity

Complete the table on the geographical factors necessary for the following food crops.

Food crops	Temperature	Rainfall	Soil	Major producing states
Rice				
Wheat				
Maize				



بقعم				
Food crops	Temperature	Rainfall	Soil	Major producing states
Rice	above 24ºC	more than 150cm	alluvial soil	Kerala, Tamilnadu Karnataka, Andhrapradesh, Orissa, West Bengal
Wheat	10° to 26°C	75cm		Rajasthan, Gujarat Madhyapradesh, Uttarpradesh Punjab, Haryana
Maize		75cm	well drained fertile soil	Madhya Pradesh, Karnataka, Rajastan, Uttar Pradesh

#### Let's Write and Assess

- 1) Which are the states that cultivate rice?
- 2) Which soil is suitable for the cultivation of wheat?
- 3) Which are the states that cultivate maize?

# Learning Outcome

Understands the geographical requirements necessary for the cash crops cultivated in India.

# Activity

Find out and complete the table on the geographical requirements necessary for the major cash crops cultivated in India.

Cash crops	Temperature	Rainfall	Soil
Jute			
Tea			
Coffee			
Sugarcane			
Rubber			
Cotton			



دمر:			
Cash crops	Temperature	Rainfall	Soil
Jute	high temperature	above 150 cm	well drained alluvial soil
Tea	25º - 30º	200–250 cm	well drained soil rich in humus content
Coffee	moderate temperature	high rainfall	well drained soil
Sugarcane	high temperature	high rainfall	Black soil, alluvial soil
Rubber	above 25°c	more than 150 cm	Laterite soil
Cotton	20°c - 30°c annual rain fall	less annual rainfall	Black soil, Alluvial soil

### Let's Write and Assess

- 1) What are the geographical factors required for the cultivation of jute?
- 2) What is the suitable temperature required for the cultivation of tea?
- 3) Which soil is suitable for the cultivation of sugarcane?
- 4) What are the geographical requirements suitable for the cultivation of rubber?

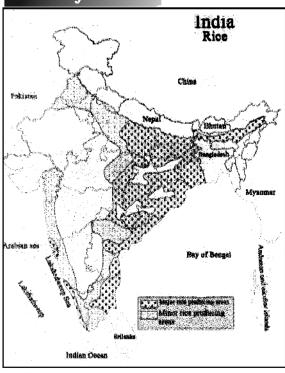
# Learning Outcome

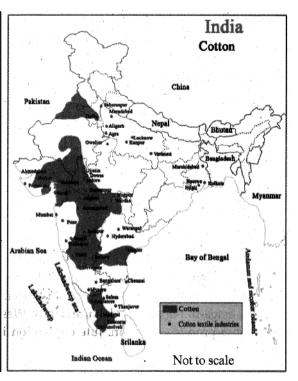
Identifies the tname of states where rice, wheat and cotton are cultivated.

### Activity

Observe the given picture and find out the states where rice, wheat and cotton are cultivated.

# Activity





# At a Glance

- Rice → Kerala, Tamilnadu, Andhra pradesh, Odisha, West Bengal, Uttar Pradesh, Bihar, Assam, Maharashtra, Karnataka
- Wheat → Punjab, Haryana, Uttar Pradesh, Rajsasthan, Madhya Pradesh, Gujarath, Maharashtra
- Cotton → Tamilnadu, Kerala, Karnataka, Maharashtra, Rajastan

### Let's Write and Assess

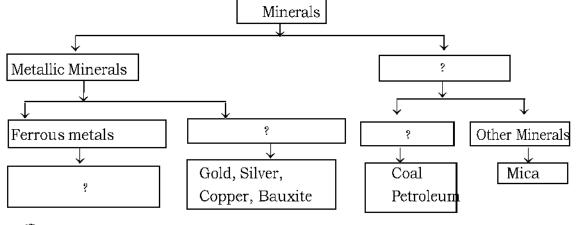
- 1) Which are the states where cotton is cultivated?
- 2) Which are the major paddy producing states?
- 3) Name the states where wheat is cultivated?

### **Learning Outcome**

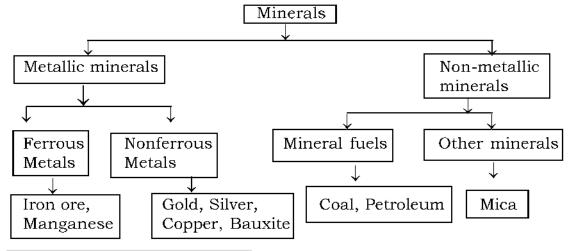
- 1) Prepares a flowchart showing the classification of minerals with examples.
- 2) Prepares maps on the distribution of minerals.
- 3) Understands the classification of minerals.



Complete the given flowchart.



# At a Glance



#### Let's Write and Assess

- 1) Write examples for metallic minerals?
- 2) Write examples for non metallic minerals?

### Learning Outcome

Locates the major iron and steel industries in the outline map of India.

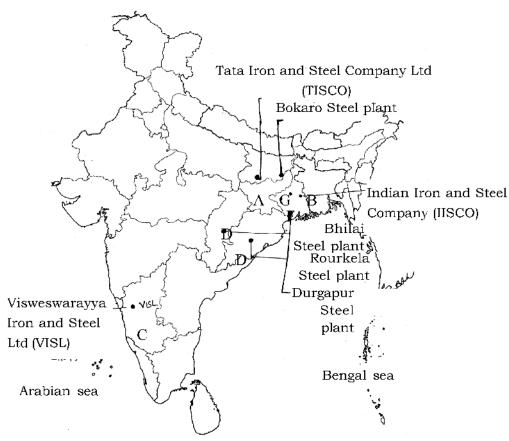
# Activity

Locate the iron and steel industries in the outline map of India.

- A) Tata Iron and Steel Company Ltd (TISCO)
- B) Indian Iron and Steel Company (IISCO)

- C) Visweswaraya Iron and Steel Ltd (VISL)
- D) Hidustan Steel Ltd (HSL), Bhilai
- E) Hidustan Steel Ltd (HSL), Rourkela
- F) Hidustan Steel Ltd (HSL), Durgapur
- G) Hidustan Steel Ltd (HSL), Bokaro





# Let's Write and Assess

Name the major iron and steel industries in India? Identify the states in which they located?

# **Activity**

Complete the following table.

Minerals	Major producing states
Gold	
Silver	
Copper	
Bauxite	
Mica	

Minerals	Major producing states
Gold	Karnataka
Silver	Rajasthan, Jharkhand, Madhya Pradesh
Copper	Jharkhand, Rajasthan, Madhya Pradesh
Bauxite	Jharkand, Chhattisgarh, Madhyapradesh, Odisha
Mica	Andhra pradesh, Rajasthan, Jharkhand, Bihar

# At a Glance

#### Coal

- Indian coal is mainly seen in bituminous type of coal.
- West Bengal, Jharkhand, Odisha and Chhattisgarh are the important bituminous producing states
- The less energy efficient coal lignite is found in Neyveli, Tamilnadu.

#### Petroleum and Natural Gas

- Besides Petrol and Diesel, Fertilizers, artificial rubber, artificial fibre etc. are extracted from it.
- Assam, Gujarat, Maharashtra etc. are the important Petroleum producing states.
- Mumbai-High in Maharashtra is the largest Petrolium producing centre.

• Natural gas is the fuel obtained along with petroleum.



• Write the features of Indian coal, Petroleum and natural gas in India from the following table.

Indian coal	Petroleum and natural gas mind in India
Coal is the major source of thermal power in India	<ul> <li>The chief energy source for transportation through road, rail or air.</li> </ul>
Medium grade of bituminous type	<ul> <li>Numerous by products are also obtained from petroleum such as chemical fertilisers artificial rubber, artificial fibers, vaseline etc.</li> </ul>
West Bengal, Jharkhnad,     Odisha and Chattisgarh are     the producing states.	The largest oil field in the Mumbai - High in Maharashtra.
The less energy efficient coal namely lignite is found in Neyveli in TamilNadu.	Natural gas is the fuel obtained along with petroleum

## Let's Write and Assess

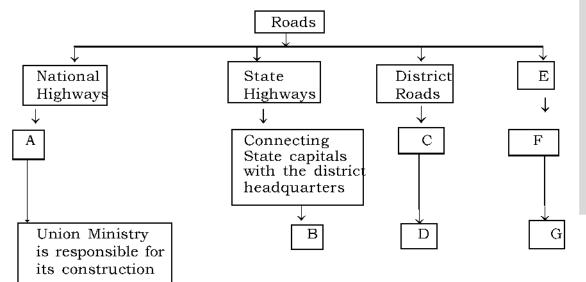
Coal, Petroleum and natural gas are the important energy sources in India. Write the features of these sources.

# Learning Outcome

- Prepares a report on the major means of transport in India.
- Evaluates the role of transportation in the development of the country.

# Activity

Complete the given flow chart on the classification of roads in India based on the construction and management.



- $A \rightarrow linking$  the state capitals, major cities, ports etc
- $B \rightarrow state$  governments are responsible for its construction.
- $C \rightarrow linking$  the district head quarters.
- $D \rightarrow$  These roads are built by the District Panchayats
- E → Village roads
- $F \rightarrow linking villages$
- $G \rightarrow$  built by the local self government

#### Let's Write and Assess

• How the Indian roads are classified? What are its features?

# Learning Outcome

• On the basis of width of the Railway lines identifies the different types of railway lines.

# Activity

Complete the table given below based on the width between the rails.

Rail guage	width between the rails	
•	• 1.676 metres	
•	• 1m	
•	• 0.762m/0.610m	



Rail guage	width between the rails	
Broad guage	• 1.676 metres	
Metre guage	• 1m	
Narrow guage	• 0.762m/0.610m	

#### Let's Write and Assess

- What is the width between the broadgauge railway lines?
- Identify the Railguage if the width between the rails is one metre.

# Activity

Find out the advantages of water transport on other means of transport.

- Suitable for large scale cargo transport
- •
- •
- •
- •

# At a Glance

- The cheapest means of transport
- Does not cause environmental pollution
- Most suitable for international trade
- Cost of construction is less

#### Let's Write and Assess

What is the importance of water transport.

# Learning Outcome

Find out the important National waterways and major centres linking the Waterways.

# Activity

Complete the table on the major national waterways & places connecting them.

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National water way	Connecting places / rivers	
National waterway I (NWI)	Α	
В	Sadia to Dubri in the river Brahmaputra	
National waterway 3 (Nw3)	С	
D	Canal from Kakinada to Pondicherry linking Godavari and Krishna	
National waterways (NW5)	E	



- A. National Waterway 1 → Allahabad to Haldia in the river Ganga (1620 Km)
- B. National Waterway 2 → Sadia to Dubri in the river Brahmaputra (89 Km)
- C. National Waterway 3 → The west coast Canal in Kerala from Kollam to Kottappuram (205 Km)
- D. National Waterway 4 → Canal from Kakinada to
  Puducherry linking Godavari and
  Krishna rivers (1095 Km)
- E. National Waterway 5 → Brahmani Mahanadi delta river system linked to east coast canal (623 Km)

#### Let's Write and Assess

- 1) Which are the major National Waterways in India?
- 2) Which is the National Waterways in Kerala that links Kollam & Kottappuram?
- 3) Which places does NW-1 connect?

# Learning Outcome

Labels the major ports in the outline map of India.

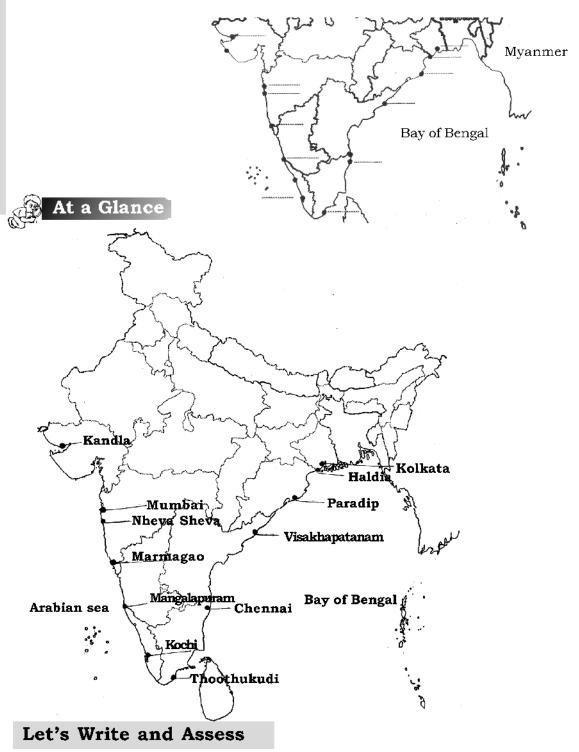
# Activity

Locate the major ports in the outline map of India.

- Candla
- Chennai
- Marmagao
- Haldia
- Tuticorin
- Nheva Sheva
- Paradip
- Kochi

- Mumbai
- Visakhapatanam
- Mangalore
- Kolkata

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- 1) Which are the most important ports in Western coastal area of India?
- 2) Which are the major ports situated in the Eastern coast of India?
- 3) Which are the major ports situated in India? VIDYA JYOTHI Class 10 >>>



This unit is prepared with an objective to strengthen the concept of financial institutions and their services. Through this unit, students get an awareness on the functions of Reserve Bank of India, which control the financial institutions, the mode of functioning of institutions, in the banking sector which functions, their functions and modern trends.

### Learning outcome

Explains the functions of the Reserve Bank of India.

# Activity

Write a short note on the functions of Reserve Bank of India.



### At a Glance

# 1. Printing of currency

- All currencies except one rupee note are printed by the RBI
- While printing notes, a certain amount of gold or foreign currency is kept as reserve fund.

#### 2. Controlling credit

- Control of credit is a main function of Reserve Bank.
- This is made possible by bringing about changes in the rate of interest.

#### 3. Banker to Government

· Reserve bank of India is to serve as the banker and advisor to

the Central and State governments.

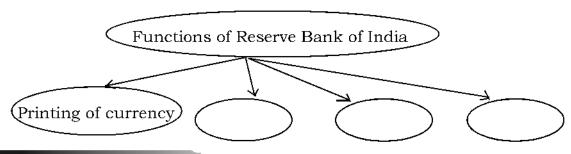
 Accepts deposits from the government, sanctions loans and renders other banking services to them.

#### 4. Banker's Bank

- Apex bank of all banks.
- Acts as a last resort to all banks in their financial matters.

#### Let's Write and Assess

Complete the flowchart.

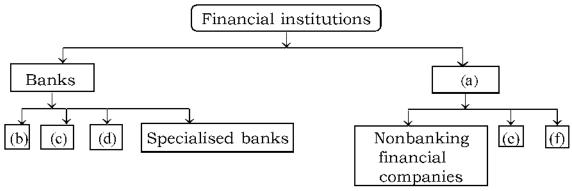


# Learning Outcome

Identifies the various financial institutions in India.

# Activity

Complete the flowchart.



# At a Glance

- (a) Non banking financial institutions.
- (b) Commercial banks
- (c) Co-operative banks
- (d) Development banks

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- (c) Mutual fund institutions
- (f) Insurance companies

# Learning Outcome

- Explains the important functions of commercial banks.
- List the services provided by banks other than their basic functions.

# Activity

Complete the table.

Basic functions of banks			
Accepting deposits		Providing loans	
Different types of deposits	Features	Loans	Features
•	•	•	•
	•		•
	•		
•	•		
	•		
	•		
	•		•
	•		•
	•		
•	•		
	•		
	•		



### **Deposits**

- 1. Current deposit
- Depositing and withdrawing money in an account at any time in a day.
- Deposits are used mainly by traders and industrialists.
- · Does not receive interest.

2. Fixed deposit

- Depositing money in banks by individuals and institutions for a specific period of time.
- Gives more interest rate than any other deposits.
- The interest rate will be high on the basis of the time period for which the money is deposited.
- 3. Savings deposit
- · Helps the public to deposit their savings.
- · Encourages savings habit
- · Low interest rate for deposits.
- 4. Recurring deposits• Receive a specific amount every month for a specified period of time.
  - Offers a rate of interest higher than savings deposit.
  - Interest rate will be less if the deposits are withdrawn before the maturity date.

#### Loans

- Cash credit
- Loans given to individuals and institutions by accepting collaterals
- Normally it is given for commercial and industrial purposes.
- Accepting trade related assets as collaterals, banks provide cash credit to traders.
- 2. Overdraft
- An opportunity for customers to withdraw money over and above the balance in their account.
- This opportunity is provided to individuals who maintain current deposits.
- Bank charges interest for the additional amount.

### Learning Outcome

Explains the upcoming trends in the banking sector.

# Activity

The third phase of the development of banks started in 1991. Let's prepare a table on the features of such banks which received license in this phase.

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- Banks started rendering services other than their basic functions.
- There were several banking reforms which helped in quick and time saving services, case of procedure etc.
- · Introduction of Automated Teller Machines (ATM), credit card, Phone banking, net banking, core banking are implemented.
- The private banks which received license during 1991, introduced new and innovative functions at a much quicker pace. Such banks are known as new generation banks.

#### Let's write and Assess

What do you meant by new generation banks?

# Activity

Identify and write the change in public banking sector after 2017 April.



# At a glance

- Merging of pubic sector banks brought in visible changes in banking sector
- State bank of Travancore, State Bank of Hyderabad, State Bank of Mysore, State Bank of Patiala, Bharatiya Mahila Bank etc are merged with State Bank of India.

# Activity

List the features of Electronic Banking and Core Banking.



## At a Glance

#### **Electronic Banking**

- It is a method by which all transactions can be carried out through net banking and telebanking.
- The assistance of the bank employees and banking equipments are not required.
- It operates with the help of internet.

- Money can be sent and bills can be paid anywhere in the world sitting at home.
- Saves time
- Low service charge.

#### Core Banking

- This system allows a branch to provide services to its customers of any branch of the same bank through interconnecting bank branches.
- It operates with the help of internet.
- Time saving
- · Not expensive
- · Simple procedure
- An individual can send money from his bank account to others account elsewhere.

# Learning Outcome

Explains the working and functions of cooperative banks.

# Activity

Find out the main functions of cooperative banks.

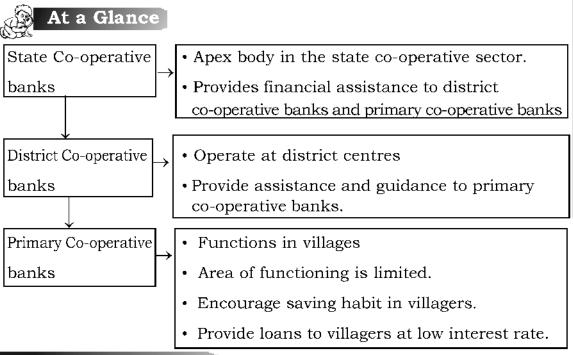


### At a Glance

- Co-operation, self help and mutual help are the working principles of co-operative banks.
- Provide loans to public.
- Protects the villages from private money lenders.
- Provide loans at low interest rate.
- Encourage the savings habit among people.

# Activity

Identity the different levels of co-operative banks.



# Learning outcome

Classifies and lists the features of Development banks, new generation banks and specialised banks.

# Activity

Find out the important features of Development banks.



- Development banks provide long term loans for various needs such as modernisation of industries, agriculture and trade sectors.
- Work as an agent that helps in the development of different sectors (Agriculture, industry, trade, etc.)
- Provide loans for construction of houses small scale industry and basic infrastructure development.

# Activity

List out the major specialised banks and their features.



Bank	Features
Exim Bank of India (Export Import Bank	Provides loans for exporting and importing products.
of India)	Provides instructions to individuals who come into this sector
Small Industries  Development Bank  of India (SIDBI)	<ul> <li>Provides help to establish new small scale industries and to modernise existing industries.</li> <li>Aim is to vitalize village industries.</li> </ul>
National Bank for Agricultural and Rural Development (NABARD)	<ul> <li>Apex bank in India which functions for the development of villages and agriculture.</li> <li>Unites all the banks which operate for the development of villages</li> <li>Provides financial assistance to agriculture, handicraft, small scale industries, etc.</li> </ul>

# Activity

Find out the features of Payment banks.



# At a Glance

- Payment banks have been established to help the low income groups, small scale industrialists and migrated employees.
- Accept deposits up to one lakh rupees only from individuals.
- Provide interest on deposits as specified by Reserve Bank of India.
- Do not provide loans.
- Debit card will be provided but no credit card.

# Activity

List out the features of Mahila banks and Mudra bank



Bank	Features
Mahila Banks (Now it is	<ul> <li>Bharathiya Mahila Bank was started in November 2013</li> </ul>
merged with SBI)	<ul> <li>The slogan of this bank, is 'Women empowerment is India's empowerment'.</li> </ul>
	It provides loans mainly to women.
Mudra Bank	<ul> <li>A recently introduced bank for providing short term loans.</li> </ul>
	Bank provides financial help to small scale entrepreneurs and micro finances.

# Learning Outcome

Presents different types of non-banking financial institutions and describes how they differ from banks.

# Activity

Explain the non-banking financial institutions with examples.



# At a Glance

- These institutions work in the financial sector but do not perform all the functions of a bank.
- They do basic functions such as accepting deposits, lending loans etc.
- Some services like withdrawal of cash by cheque, mail transfer, lockers are not provided here.

Example: Non - banking financial companies, Mutual fund institutions, Insurance companies.

# Learning Outcome

Explains the working of microfinance and selfhelp groups.

# Activity

Evaluate how microfinance helps the common man citing example.

# At a Glance

- Provides different financial services including micro credit to common people.
- Helps in collective development by mobilising money from individuals.
- Helps to increase the standard of living of the poor.
- Encouraging saving habit among the low income groups in the society.
- Helps to seek self employment.
- Make use of the individual potential for group development.
- Provides loans to members in need.
- · Starts small scale enterprise.

Example: Kudumbasree units, Self-help groups.

#### Let's Write and Assess

- Which among the following is not the function of Reserve Bank of India?
  - a) Printing of currency
  - b) Controlling credit
  - c) Accepting deposits
  - d) Banker's bank
- 2. Why is Reserve Bank of India known as 'Banker's Bank'?
- 3. Explain the four types of deposit received by the commercial banks.
- 4. Write down any four features of Payment bank.
- 5. Which among the following is the aim of Mudra Bank?
  - a) Women empowerment.
  - b) Financial help to small scale entrepreneurs.
  - c) Construction of houses.
  - d Offers high interest

- 6. Which among the following is an example of microfinance?
  - a) L.I.C
  - b K.S.F.E
  - c) U.T.I
  - d) Kudumbasree
- 7. Match the following.

A	В
a) Commercial Banks	Provides loans for exporting & importing
b) Exim Bank	Do not provide loans
c) Payment Bank	Recurring deposit
d) Development Bank	Industrial Finance Corporation of India

8. What are the major goals of microfinance?

This unit intends to create a positive attitude towards banking activities and to inculcate the values including saving habit in students.

മാരു



Consumer's satisfaction is the ultimate aim of production and distribution of goods services produced in an economy. In this unit, we discuss of how to ensure consumer satisfaction and protection through the economic activities like production, distribution and consumption.

# Learning Outcome

Explains the various needs of men are satisfied by the availability of goods and services.

# Activity

List out the goods and services which are used by us from early morning to night.

For eg: Tooth brush, Tooth paste, Soap, Towel, Food, Services of Bus driver and conductor, Teachers, etc and as such numerous goods and services.

#### Let's Write and Assess

Why do we use these goods and services?

Find out the economic activities which helps to satisfy our wants?



### At a Glance

- To satisfy our wants
- Production, distribution and consumption

#### Activity

Human wants are unlimited. All these wants can't be satisfied at a time. Find out the reason for it and complete the table

Number of wants	Obstacles to satify at a time
Unlimited	
Different	
Recurring	

- · Lack of the availability of resources
- Growth of population
- · Backwardness of Science and Technology
- · Increase of wants
- · Unscientific utilisation of resources.

#### Let's Write and Assess

Write a short note on why free goods like air and water became economic goods.

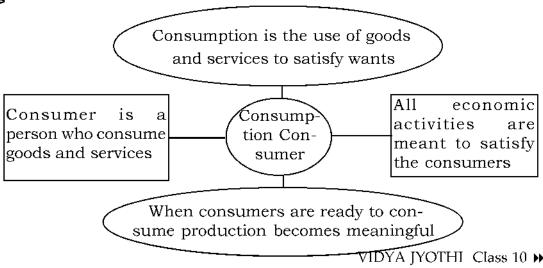
# Learning Outcome

Explains consumption and consumer.

# **Activity**

Consumer's satisfaction is the main objective of all of the economic activities. We can discuss who is a consumer, how does he get satisfaction and what is his role in the economy?

#### Significants



#### Let's Write and Assess

What is consumption?

Who is a consumer and what is his role in the economy?

# Learning Outcome

Identifies the situations where the consumers are exploited or cheated.

# Activity

Discuss various situations where the consumers are exploited or cheated.

#### **Indications**

- · Charging excess price
- Adulteration
- · Selling low quality products
- · Manipulation in weights and measures
- · Delay in making services available.

# Learning Outcome

• Explains the rights of the consumer under the Consumer Protection Act, 1986.

# Activity

To protect the consumers from exploitations, Consumers Protection Act - 1986 came into existance. Discuss the expectations of consumers from the products and distributors of goods and services.

#### **Indications**

- Quality
- Reliability
- · After sale service

- Fair price
- Availability at time
- Higher utility

• Free from exploitation

(Utility: Ability of a commodity to satisfy the wants/heads)

(T.B. Pg.No. 184)

Are these expectations fullfilled by the Consumer Protection Act 1986? Examine.

Is these expectations one fullfill under consumer protection Act - 1986? - Explain.

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#### **Indications:** Text page No. 184

- The right to be protected against the marketing of goods and services which are dangerous to our life and property.
- •
- •
- •

#### Let's Write and Assess

Write any 4 rights provided in the consumer's Protection Act.

What qualities do you expect from the goods you purchase?

# Learning Outcome

Presents the different means the composition and jurisdiction of consumer courts.

### Activity

T.B. Page No. 185 - Find out the structure and jurisdiction of District -State-National consumer courts from the table.

# Let's Write and Assess

Consumer courts are the safe guards of consumer's rights - Substantiate.

OR

Consumer courts are able to create confidence in the consumers and bring about a qualitative change in their lives. Explain

# Activity

Complete the table

District Consumer Disputes Redressal Forum	
	Verdicts are given on consumer disputes where compensation claimed is above 20 lakhs but up to rupees one crore.
	Consumer court has a president and members which is not less than in four.

#### **Indications**

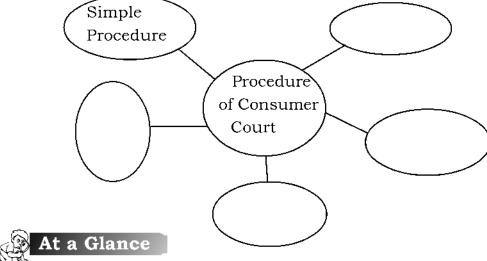
- Verdicts are given where the compensation claimed does not exceed Rs. 20 lakhs.
- State Consumer Disputes Redressal Commission
- National Consumer Disputes Redress at Commission.

#### **Functions of Consumer Courts**

- Gives legal help to the consumers.
- Plays an important role in ensuring justice to the consumers.
- Creates confidence in the consumers and bring about a qualitative change in their lives.

# Activity

Find out the difference in the procedures of consumer courts from the those of the general courts and complete the chart.



- - · Fast assurance of Justice.
  - · Less court expenses.
  - It is sufficient to submit before the court a written petition.
  - A nominal fee is charged on the basis of the value of the compensation.

# Learning Outcome

Prepares a specimen complaint to understand the situations and procedures of filing a complaint.

# Activity

Write certain situations where complaints about consumer disputes VIDYA JYOTHI Class 10 M

can be filed.



## At a Glance

- When the purchased product is damaged or defective
- Defective services received from Govt./Non-Govt/Private Institutions.
- Appropriation of price over and above the amount legally fixed or marked on the outer casing.
- Violation of the prevention of adulteration law.
- Sale of products which are harmful to life and properly.
- Loss due to trading methods which lead to unfair practices and limited consumer freedom.
- Giving misleading advertisement for increasing sales.

# Learning outcome

Identifies the compensations met by the courts in consumer disputes.

# Activity

List out compensations for consumer disputes detained through consumer courts.



#### At a Glance

- Replacing the product.
- · Repayment of cash paid or excess amount.
- Monetary compensation for the loss.
- Direction to rectify the defects on services.
- Stopping harmful trade practice.
- Prohibition of the sale of harmful food items.
- Reinbursement of the expenses incurred in loading the complaint.

# Learning Outcome

- Identifies the existing Acts to ensure consumer rights.
- Acts by analysing the things to note while purchasing products.

### Activity

• Find out other Acts for the protection of the consumers apart from the Consumer Protection Act - 1986



- Sale of Goods Act 1930
- Agriculture Produce (Grading and Marketing) Act 1937
- Essential Commodities Act 1955
- Weights and Measures Act 1976

#### Let's Write and Assess

Which is the Act that helps for determining the standard of agricultral products?

Write the Act which protects the consumer from supernormal profit hoarding and black marketing.

# Activity

List out the institutions and their functions for the protection of consumers interest.



# At a Glance

Legal Meterology	Ensures the weights and measures standards.
Food Safety	Ensures the quality of food products.
Central Drugs Price	Controls price of medicines.
Control Committee	
Drugs Control	Ensures the quality and safety of
Department	medicine.
Food Safety and	Ensures the quality of food products at
Standard Authority	various stages like production,
of India	distribution, storage, sale and import

#### Let's Write and Assess

Name the department which ensures the weights and measures standards

Name the Central Department which ensures the quality of food products at various stages like production, distribution, storage, sale and import.

# Activity

Symbols ISI and ISO are given to ensure the quality of products and institutions. Write the difference between these two.



#### At a Glance

ISI stamp is given by the Bureau of Indian Standard (BIS) to ensure VIDYA JYOTHI Class 10 »

a fixed quality of products.

• ISO is the symbol of International Organisation for Standardisation which certifies the quality of goods and services of more than 120 countries including India.

# Learning Outcome

Engages in consumer education activities realising their significance

# Activity

We can prepare a table showing the changes that will be formed in consumer through consumer education.

Changes in the consumer	Helps to consume sensibly
through education	as per the wants.
	•
	•



#### At a Glance

Helps to acquire information regarding products and services.

- Enables the consumer to make the right choice.
- Make the consumer aware of his rights.
- Makes them capable of intervening in consumer disputes.

#### Let's Write and Assess

Clarify the significances of consumer education.

Consumer education enables the consumer to right consumption.

Suggest habits that will be formed through consumer education in the consumers.



#### At a Glance

Text page No 191 & 192

- The changes in the habits of consumers can prevent adulteration and ensure quality to some extent.
- Make sure while purchasing the packed items, that the name of the product, date of packing, expiry date, weight, price and producers or distributors address are state.
- Note the symbols representing the standard of the products.