

Social Science II



SEASONS AND TIME

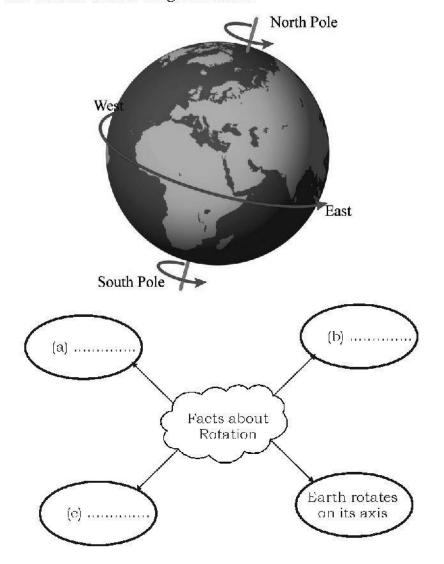


To Remember

You have already learnt how diverse and dynamic the earth we live in. 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 scasons.

'Seasons and Time' discusses why seasons change?, apparent movement of the sun ans Rotation and calculation of time.

1. Fill in the circles based on given hints.



- 2. Fill in the boxes based on the hints.
 - (i) The Earth revolves around the sun in an elliptical Orbit

(a) Revolution

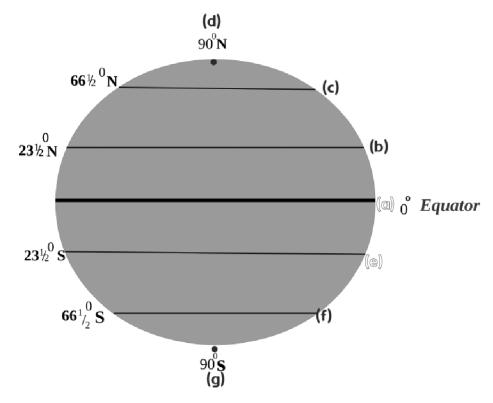
(ii) The position of the Sun varies apparently between Tropic of Cancer and Tropic of Capricorn.

(b)

(iii) The southward movement of the Sun from Tropic of Cancer to Tropic of Capricorn

(b)

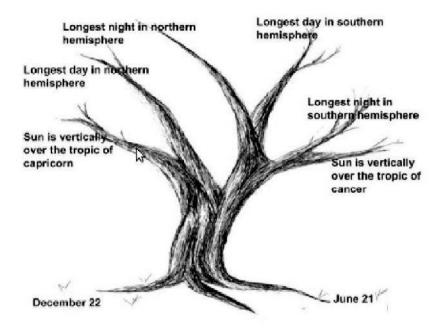
3. Label the major parallels of latitude.



4. Complete the chart.

Day Apparent position of the Sun		Speciality of the day
21 March	Equator	(i)
(ii)	Tropic of Cancer	Summer Solstice
September 23	(iii)	Equinox
December 22	Tropic of Capricorn	(iv)

5. Observe the picture and complete the table.



Summer Solstice	Winter Solstice
June 21	December 22
(a)	(b)
(c)	(d)
(e)	(f)

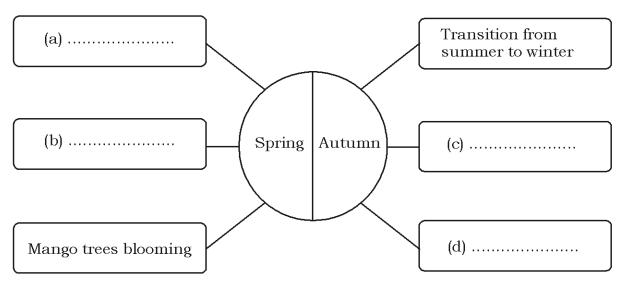
6. Complete suitably.

March 21	Sun is vertically over the equator a) b)
June 21	c) Day is longer in Northern Hemisphere d)
September 23	e) f) Equal day and night
December 22	Sun is vertically over Tropic of Capricorn g)h)

7. Complete the table.

Greenwich Meridian	International Date Line
Zero degree longitude	180 degree longitude
(a)	(b)
(c)	(d)
(e)	(f)

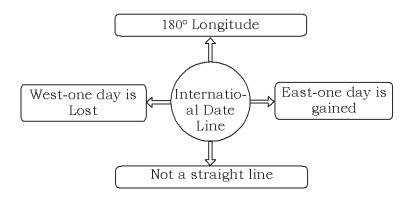
- 8. Fill in the boxes using the given hints.
 - Hints:
 - Transition from winter to summer.
 - The atmospheric temperature decreases considerably
 - plants sprouting
 - Shortening of day and lengthening of night
 - Transition from summer to winter
 - Mango trees blooming



9. Match the following.

A	В
a. Time based on the position of the Sun	1. 24
b. Local time at the Standard Meridian	2. Local time
c. Indian Standard Meridian	3. Greenwich Mean Time
d. Time zones based on the Greenwich Meridian	4. Standard time
e. Local time at the Prime Meridian	5. 82.30°East

- 10. Calculate the time at 30 $^{\circ}$ degree west and 82.30 $^{\circ}$ east longitudes when it is 3 pm at Greenwich.
- 11. Find out the importance of International Date Line.



12. 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

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IN SEARCH OF THE SOURCE OF WIND

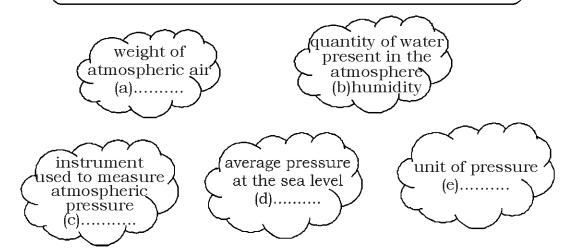


To Remember

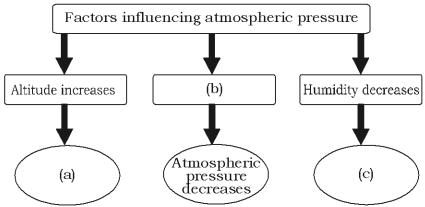
Atmospheric air is movable. The horizontal movement of air from high pressure region to low pressure region is called wind. Various kinds of winds influence in our daily life. Pressure changes in the atmosphere make wind. Global pressure belts, planetary winds, periodic winds, variable winds and local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

1. Find the correct answer using the given hints.

Hectopascal, Mercury barometer, Atmospheric pressure, Humidity, 1013.2hPa



2. Altitude, temperature and humidity affects the atmospheric pressure. Complete the flow chart.



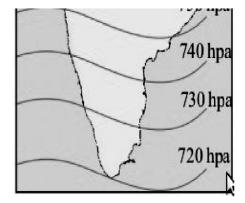
3. Observe the picture and answer the following questions.

a. Name the lines shown in the picture.

b. Write two peculiarities of these lines .

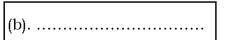
Write two peculiarities of these lines .

•
•

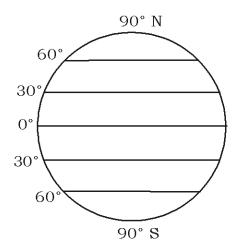


4. Identify the factors for that cause the formation of different pressure belts.

(a).



- 5. Observe the picture.
 - (A) Identify the pressure belts from the hints and write it in the picture
 - a. Air is thrown away due to the rotation of the earth
 - b. The zone experiences severe cold through out the year
 - c. The air expands due to sun's heat and rises up
 - d. Hot air ascending from equatorial region cools and subsides



(B) Complete the following table by incorporating the names of different pressure belts and their latitudinal extent.

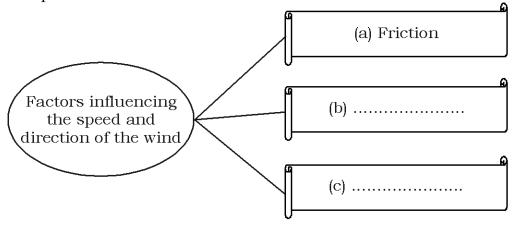
Pressure belt Latitudinal extent

Equatorial low pressure belt # 5°N to 5°S

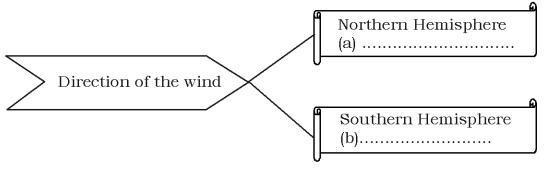
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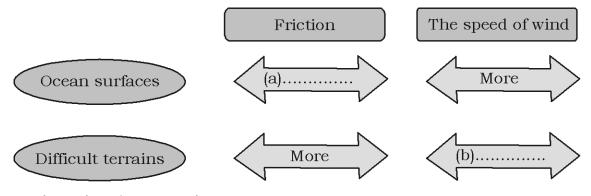
6. Complete the chart.



7. Complete the chart related to Coriolis Force

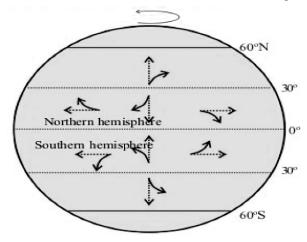


8. Complete the diagram related with friction.



9. Analyse the picture and prepare a note.

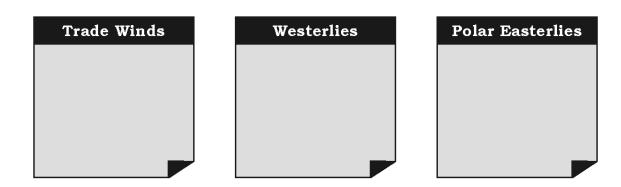
[Arrow marks \(\) indicate the direction of the wind]



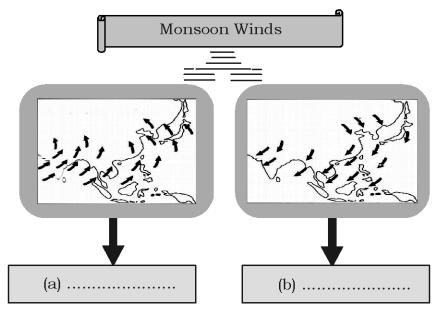
10. Match the following in column A with items in column B.

A	В
Equatorial low pressure belt	Earth's rotation
Pressure of an area is higher than that of the surrounding area	Pressure gradient
Coriolis Force	Doldrum
The change in pressure with horizontal distance	Shifting of pressure belt
Apparent movement of the sun	High pressure area

- 11. List out the given points about the Planetary Winds under the headings given below.
 - In Southern hemisphere it is known as Roaring Forties, Furious Fifties and Shrieking Sixties.
 - It determines the climate of North American, the Eastern European countries and Russia.
 - These winds blow from the sub tropical high pressure belt towards the equatorial low pressure belt.
 - These winds blow from sub tropical high pressure belt to the sub polar low pressure belt.
 - The North East Trade Wind and the South East Trade Wind.
 - These cold winds blow from the polar high pressure to the sub polar low pressure belt.



12. Observe the picture and identify the Monsoon Winds.



13. Match the following.

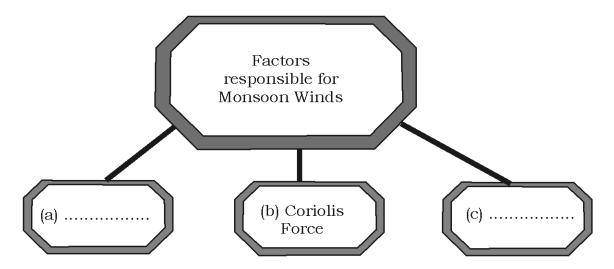
A	В
Monsoon Winds	Night time
Sea & Valley Breeze	Local wind
Kalbaisakhi	Day time
Land Breeze & Mountain Breeze	Cyclones
Ockhi	periodic winds

14. Following pictures denote the direction of Variable Winds. Identify them & complete the table.

Picture	Name of the wind	Direction	Hemisphere
	(a)	Anti-clockwise	(b)
	(c)	(d)	Southern Hemisphere
(5)	(e)	Clockwise	(f)
	Anti Cyclones	(g)	(h)

15.	Iden	tify the local winds and fill the box with the help of hints given below.
	(i)	
	•	This hot wind blows down the eastern slopes of the Rockie Mountains in North America.
	•	The name of this wind means 'snow eater'.
	•	It is helpful for wheat cultivation in the Canadian low lands.
(ii)		
	•	This wind blows down the northern slopes of Alps mountain.
	•	It helps to reduce the severity of cold in this region.
(iii)	.	
(111)		It is a dry wind which blows from Sahara desert to the West Africa.
		This wind is called as the 'doctor' because it improve the climatic
	•	condition of this region
<i>,</i> • 、		
(iv)		
	•	The hot wind blowing from Rajasthan desert.
	•	The wind blowing in the North Indian Plains. The wind which reise the summer temperature of North Indian
	•	The wind which raise the summer temperature of North Indian Plains.
(v)		
` ,	•	It blows in South India during summer season.
	•	It helps in ripening and fall of mangoes

16. Complete the chart.



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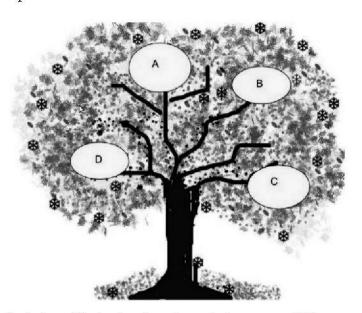
HUMAN RESOURCE DEVELOPMENT IN INDIA



To Remember

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.

1. Complete the picture different levels of human resource development.



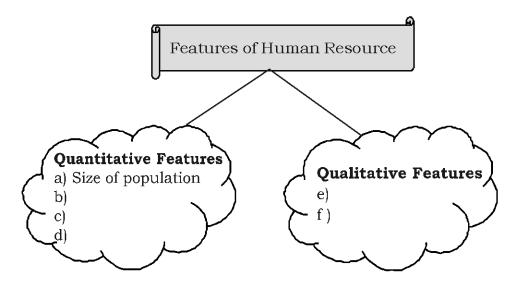
A- Individuals take efferts to develop their own skills.

B-

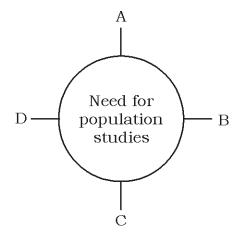
C-

D-

2. Fill suitably.



- Population density
- Health care
- Structure of population
- Growth of population
- Education
- Size of population
- 3. Complete the chart.

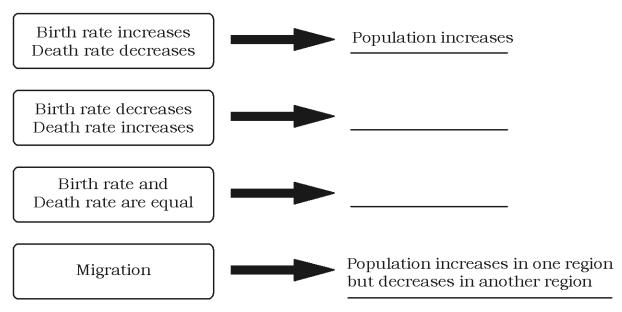


- A Informs the availability of human resources in a country.
- В -
- C -
- D -

4. Match the following.

A	В
1. Number of people per square kilometer area	a. size of population
2. Increase in the number of people in an area within a period of time	b. population growth rate
3. Increase in population in a year as compared to the previous year	c. population growth
4. Total number of people residing in a country at a particular time.	d. density of population

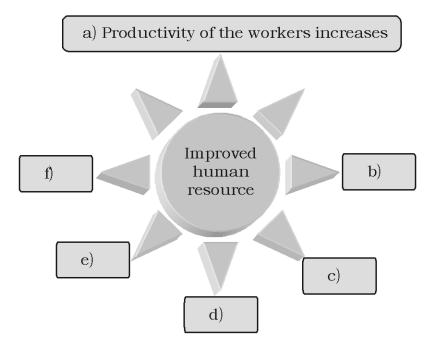
5. Examine the effect of birth rate, death rate and migration on the population.



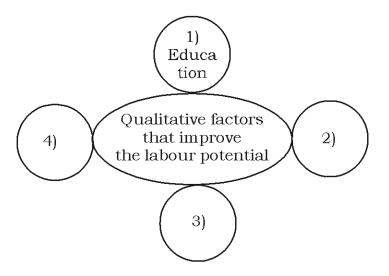
- 6. Complete the chart related to the problems in the health sector and education sector.
 - Problems of garbage
 - Malnutrition
 - Continuing dropout
 - Lifestyle diseases
 - Lack of quality
 - Lack of basic facilities

Health	Education
A. Problems of garbage	В
С	F
Е	D. Lack of quality

7. Complete the diagram.



8. Complete the diagram.



- 9. How is healthy persons co-operate the development of nation. Discuss and find out the statment.
- 10. 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





TERRAIN ANALYSIS THROUGH MAPS

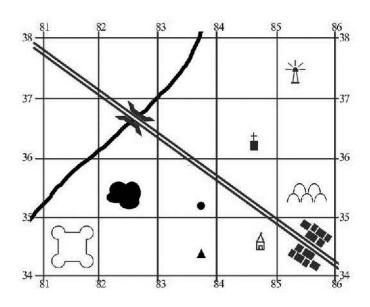


To Remember

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 a well as man made features on the earth's surface.

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1. Analyse the model grid and complete the column.



- (a) Location of church using 6- figure grid reference method
- (b) Location of settlements using 4- figure grid reference method

(c) Find the geographical feature with reference of 6- figure grid of 853373

(d) Find out the physical features of the given model grid -

-

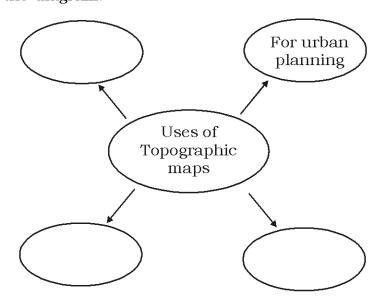
2. Find out the important surface features of topographic maps.

The undulations of the terrain

Forests

Villages

3. Complete the diagram.



4. Complete the table.

Geographic features	Conventional Signs and symbols
Spring	+
Well	(a)
(b)	A
Grave	(c)
(d)	+
Fort	(e)

5. Find out the features and complete the table.

Eastings	Northings
These are north-south lines	• These are east-west lines.
•	•
•	•

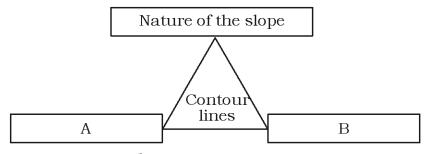
6. Match the following.

A	В
Scale	Toposheets
1:1000000	Degree sheets
1:250000	Minute sheets
1:50000	Million sheets

7. Complete the table.

Geographic features	Colour
Latitudes and longitudes	Black
Forests	(a)
Cultivable land	(b)
Barren land	(c)
Settlements	(d)

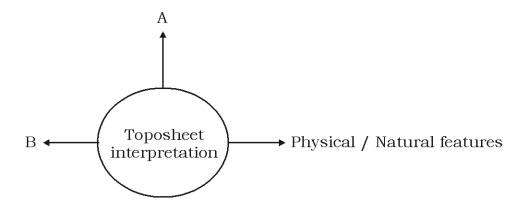
8. Name the things can be assessed from the contour lines in the topographic map. What are they?



9. Choose the correct right answers from the given list and complete the column.

[Contour lines, Intervisibility, Contour values, Contour interval, Survey of India, Topographic maps]

- (1) The central govt. agency entrusted in the preparation of Topographical maps in India -
- (2) The imaginary lines drawn on maps connecting those places having equal elevation from the sea level -
- (3) The maps depict in minute details all the natural and manmade features on the earth's surface –
- (4) In topographic maps, if any two places are mutually visible -
- (5) The difference between the value of adjacent contours -
- (6) The respective altitude will be marked with each contour line -
- 10. Complete the word web



11. Classify the following.

(Farmlands, Boundaries, Spring, Toposheet number, Contour intervals, Open scrub, Bridges, Streams, Lakes, Post Office, Northings, Scale of the map)

A B C

Primary information	Physical features	Cultural features
Northings	• Streams	• Farmlands
•	•	•
•	•	•
•	•	•





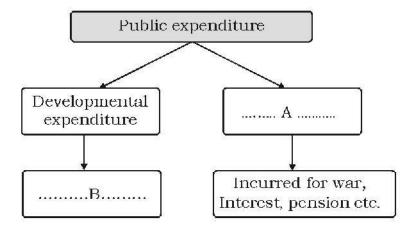
PUBLIC EXPENDITURE AND PUBLIC REVENUE



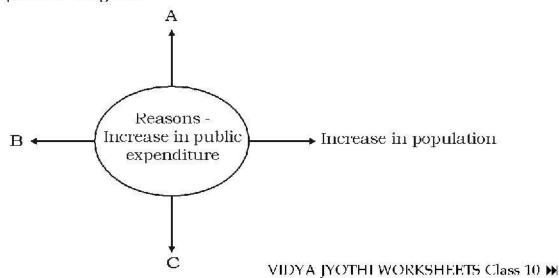
To Remember

The 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.

1. Complete the chart.



2. Complete the diagram.



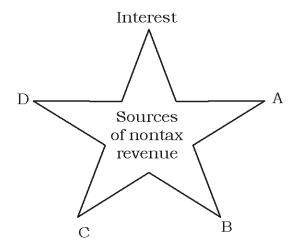
3. Complete the table.

Central government	State government	Local self government
• Integrated GST	• Stamp duty	• Property tax
•	•	•
•	•	
•		

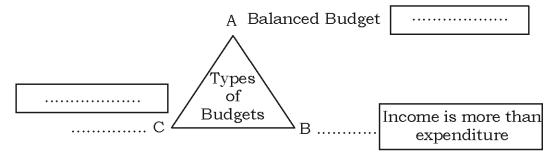
4. Complete the table related to Taxes.

Direct tax	A	
•B	Tax is imposed on one person and paid by another.	
•	 Tax burden is not felt by the tax payer. 	
Eg:-Personal income tax	Eg:C	

- 5. Complete the following suitably.
 - (a) Major direct taxes in India
 - The tax imposed on the income of individuals. Personal income tax
 - Corporate tax
 - (b) Additional taxes
 - Imposed for a certain period of time. Surcharge
 -2....... Cess
 - (c) Public debts
 - The loans availed by the government from individuals and institutions
 within the country Internal debt
- 6. Complete the chart.



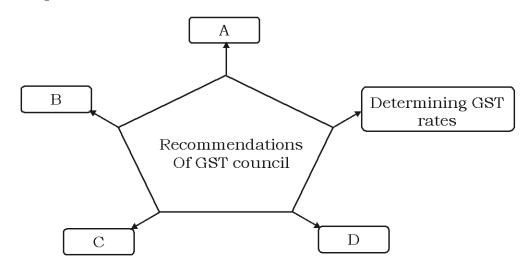
7. Complete the chart related to budget.



- 8. Complete the list related to the reasons for increase in India's public debt.
 - Increased defence expenditure
 - lacktrian
 - •
 - •
- 9. Match the following

A	В
Deficit budget	Income > expenditure
Surplus budget	Income = expenditure
Balanced budget	Income <expenditure< td=""></expenditure<>

10. Complete the chart related to the recommendations of GST council.

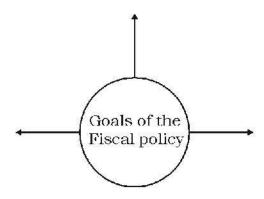


11. Choose the right answers from the brackets and Complete the table. (State GST, Integrated GST, Central GST)

(8	a)	The tax imposed by the central government	
(1	b)	The tax imposed by the state government	
(0	c)	The tax imposed on interstate trade	

- 12. Complete the given list by adding more facts associated with GST.
 - GST was introduced in India on 1st July 2017.
 -

 -
- 13. Complete the word sun.





1 SEASONS AND TIME

- 1. (a) day and night
 - (b) 24 hours
 - (c) west to east
- 2. (a) Revolution
 - (b) Apparent movement
 - (c) Dakshinayanam
- 3. (a) Equator
 - (b) Tropic of Cancer
 - (c) Arctic Circle
 - (d) North Pole
 - (e) Tropic of Capricorn
 - (f) Antarctic Circle
 - (g) South Pole

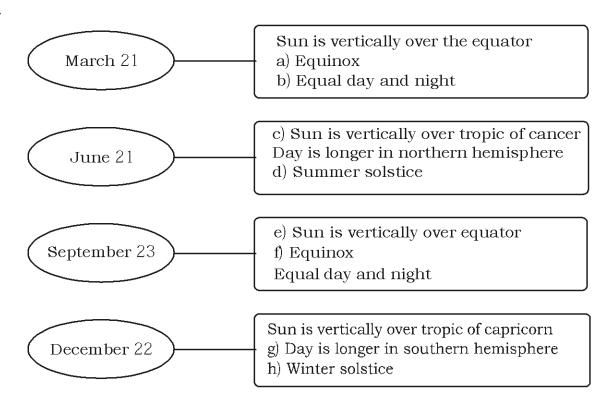
4.

Day	Apparent position of the sun	Speciality of the day
21 March	Equator	(i) Equinox
(ii) June 21	Tropic of Cancer	Summer Solstice
September 23	(ii) Equator	Equinox
December 22	Tropic of Capricon	(iv) Winter Solstice

5.

Summer Solstice	Winter Solstice
June 21	December 22
(a) Sun is vertically over Tropic of Cancer	(b) Sun is vertically over Tropic of Capricorn
(c) Longest day in northern hemisphere	(d) Longest day in southern hemisphere
(e) Longest night in southern hemisphere	(f) Longest night in northern hemisphere

6.



Greenwich I	Meridian	International Date Line
Zero degree	longitude	180 degree longitude
(a) Prime M	eridian	(b) Not a straight line
(c) Towards	west decrease in time felt	(d) West- 1 day is lost
(e) Towards	east increase in time felt	(f) East-1 day is gained

- 8. a) Spring
 - (a) Transition from winter to summer.
 - (b) plants sprouting

Mango trees blooming

b) Autumn

Transition from summer to winter

- (c) The atmospheric temperature decreases considerably
- (d) Shortening of day and lengthening of night

9.

A	В
a. Time based on the position of the Sun	2) Local time
b. Local time at the standard meridian 4) Standard time	
c. Indian Standard Meridian	5) 82.30' East
d. Time zones based on the Greenwich Meridian	1) 24
e. Local time at the Prime Meridian	3) Greenwich Mean Time

10. The time difference for 82°30 'longitude

= $5\frac{1}{2}$ hours

= 5 hours 30 minutes

As India is located to the east of Greenwich, the time in India will be 5 hours and 30 minutes ahead of Greenwich Mean Time.

Therefore the time at India = Time at Greenwich +Time difference

= 3 pm + 5 hours 30 minutes

= 8.30 pm

As 30° W is located to the west of Greenwich, the time at 30° W will be 2 hrs behind of Greenwich Mean Time

Therefore the time at 30° W = Time at Greenwich - Time difference

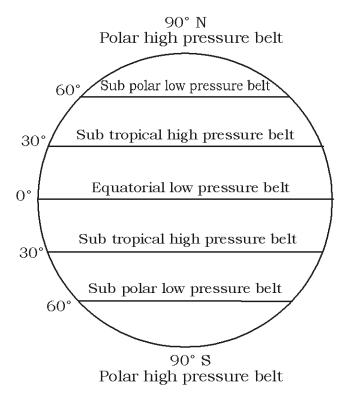
= 3 pm - 2 hours

= 1 pm

- 11. 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.
- 12. 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.

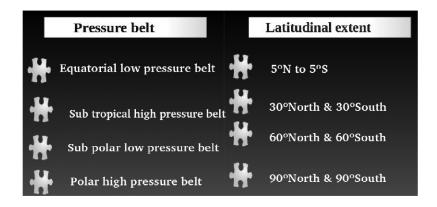
2 IN SEARCH OF THE SOURCE OF WIND

- 1. a) Atmospheric pressure
 - (b) Humidity
 - (c) Mercury barometer
 - (d) 1013.2hPa
 - (e) Hectopascal
- 2. (a) Atmospheric pressure decreases
 - (b) Temperature increases
 - (c) Atmospheric pressure increases
- 3. a. Isobars
 - b. i. Imaginary lines joining places having the same atmospheric pressure.
 - ii Helps to understand the distribution of the atmospheric pressure of any region by observing the isobars.
- 4. Variation in the amount of solar energy
 - Rotation of earth



- (A) a. Sub polar low pressure belt-60%
 - b. Polar high pressure belt-90%
 - c. Equatorial low pressure belt-between 5° north & south latitudes
 - d. Sub tropical high pressure belt-30°

(B)



- 6. (b) Pressure gradient
 - (c) Coriolis Force
- 7. Northern Hemisphere
 - (a) deflect towards right

Southern Hemisphere

- (b) deflect towards left
- 8. a) Less
 - b) Less
- 9. The picture indicates Coriolis Force
 - Due to the Coriolis effect, the winds in the northern hemisphere deflect towards their right and those in the southern hemisphere deflect their left.
 - Admiral Ferrel found the theory
 - This is known as Ferrel's law

A	В	
Equatorial low pressure belt	Doldrum	
Pressure of an area is higher than that of the surrounding area	Highpressure area	
Coriolis Force	Earth's rotation	
The change in pressure with horizontal distance	Pressure gradient	
Apparent movement of the sun	Shifting of pressure belt	

11.

Trade Winds	Westerlies	Polar Easterlies
i) These winds blow from the sub tropical high pressure belt towards the equatorial low pressure belt.	i) These winds blow from sub tropical high pressure belt to the sub polar low pressure belt.	i) These cold wind blow from the polar high pressure to the sub Polar low pressure belt.
ii) The North East Trade Wind and the South East Trade Wind.	ii) In Southern hemisphere it is known as Roaring Forties, Furious Fifties and Shrieking Sixties	ii) It determines the climate of North American, the Eastern European countries and Russia.

- 12. (a) South West Monsoon Wind
 - (b) North East Monsoon Wind

A	В
Monsoon Winds	Periodic wind
Sea &Valley Breeze	Day time
Kalbaisakhi	Local wind
Land &Mountain Breeze	Night time
Ockhi	Cyclonic wind

- 14. (a) Cyclone
 - (b) Northern Hemisphere
 - (c) Cyclone
 - (d) Clockwise
 - (e) Anti- Cyclone
 - (f) Northern Hemisphere
 - (g) Anti-Clockwise
 - (h) Southern Hemisphere
- 15. (i) Chinook
 - (ii) Foehn
 - (iii) Harmattan
 - (iv) Loo
 - (v) Mangoshowers
- 16 (a) The apparent movement of the sun.
 - (c) Difference in heating

HUMAN RESOURCE DEVELOPMENT IN INDIA

- 1. B family creates an environment for the development of the potential of individuals.
 - C institutions and agencies provide facilities for education and training.
 - D nation provides the necessary facilities for its people to develop their skills.

2.	Quantitative Features	Qualitative Features	
	Size of population	• Health care	
	Population density	• Education	
	Structure of population		
	• Growth of population		

- 3. B- Accessing the basic facilities
 - C- Quantifies the goods and services required
 - D- Determines the socio-economic development policies.

4.	A			В
	1.	1. Number of people per square kilometer area		density of population
	2.	2. Increase in the number of people in an area within a period of time		population growth
	3. Increase in population in a year as compared to the previous year		b.	population growth rate
	4. Total number of people residing in a country at a particular time.		d.	size of population

- 5. Birth rate increases Death rate decreases- Populatin increases
 Birth rate decreases Death rate increases Population declines
 Birth rate and death rate are equal No change in population
 Migration Population increases in one region but decreases in another region
- 6. Health Education

 A . Problems of garbage B Continuing dropout

 C Malnutrition F Lack of basic facilities

 E Lifestyle diseases D Lack of quality

- 7. a) Productivity of workers increases
 - b) Economic inequality is reduced
 - c) Natural resource is utilized effectively
 - d) Makes possible the development and use of advanced technology
 - e) Social welfare is ensured
 - f) Entrepreneurship improves
- 8. 1) Education
 - 2) Health care
 - 3) Training
 - 4) Social capital

- 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.
- 10. 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.

4 TERRAIN ANALYSIS THROUGH MAPS

- 1. (a) 846362
 - (b) 8534
 - (c) Light house
 - (d) River, Spring
- 2. Rivers
 - Other water bodies
 - Agricultural land
 - Barren land
 - Towns
 - Transport and telecommunication system
- 3. Analysis of the physical and the cultural features of the earth surface.
 - For military operations and the preparation of military maps.
 - Identification and studying of the natural and the cultural resources of a region as part of economic planning.

4.

(a)	•
(b)	Tube well
(c)	
(d)	Church
(e)	I

- 5. Eastings:
 - Their value increases towards the east.
 - The value of the eastings immediately left to the geographic features is considered for identifying a location.

Northings:

- Their value increases towards the north.
- The value of the northings immediately to the south of the feature in the map is considered for identifying a location.

A	В
Scale	Toposheets
1:1000000	Millionsheets
1:250000	Degree sheets
1:50000	Minute sheets

- 7. (a) Green (b) Yellow (c) White (d) Red
- 8. A Altitude of the place
 - B Shape of the landform
- 9. (1) Survey of India
 - (2) Contour lines
 - (3) Topographic map
 - (4) Intervisibility
 - (5) Contour interval
 - (6) Contour values
- 10. A Marginal information / Primary information
 - B Cultural / Man-made features

11.	A	В	С
	Primary information	Physical features	Cultural features
	Northings	• Streams	• Farmlands
	• Toposheet number	• Open scrub	• Boundaries
	• Contour intervals	• Lakes	• Bridges
	Scale of the map	• Spring	• Post office

PUBLIC EXPENDITURE AND PUBLIC REVENUE

- 1. A) Non developmental expenditure
 - B) Incurred by the government for constructing roads, bridges and harbours, starting up new enterprises, setting up educational institutions etc.
- 2. A Increase in the defence expenditure
 - B Welfare activities
 - C Urbanisation

3.	Central government	State government	Local self government
	Corporate tax	• Land Tax	Property tax
	Personal Income Tax	Stamp duty	Professional Tax
	Central GST (CGST)	State GST (SGST)	
	• Integrated GST (IGST)		

- 4. A Indirect tax
 - B Tax is paid by the person on whom it is imposed.

Tax burden is felt by the tax payer.

- C GST
- 5. (a) 1- The tax imposed on the net income or profit of the companies.
 - (b) 2- Imposed by the government for a certain specific purpose.
 - (c) 3- The loans availed from foreign governments and international institutions.
- 6. A. Fines and penalties
 - B. Grants
 - C. Profit
 - D. Fees
- 7. A. Income and expenditure are equal.
 - B. Deficit budget—Expenditure is more than income.
 - C. Surplus budget
- 8. Increase in population
 - Social welfare activities
 - Developmental activities

9.	A	В
	Deficit budget	Income <expenditure< th=""></expenditure<>
	Surplus budget Income >expenditu	
	Balanced budget	Income = expenditure

- 10. A. Taxes, cess and surcharges that are to be merged into GST
 - B. The goods and services that are to be brought under GST.
 - C. The time frame for including the excluded items into GST.
 - D. Determining the tax exemption limit on the basis of total turnover.
- 11. Central GST
 - State GST
 - Integrated GST
- 12. Unified indirect tax system.
 - In each stage, the tax is imposed on the value added.
 - The tax paid in the earlier stages need not be paid by the final consumer.
 - GST registration is mandatory to the traders if the turnover is more than 20 lakh in a financial year.
- 13. Attain economic stability.
 - Create employment opportunities.
 - Control unnecessary expenditure.