



2

Geography * * *

CLIMATE AND NATURAL VEGETATION OF INDIA

MIND MAP



The factors affecting the climate

- * Latitudes
- * Altitudes
- * Distance from the sea
- * Monsoon winds
- * Relief
- * Jet streams



Monsoon ↓ Seasons

- * Winter or cold weather season (Jan - Feb)
- * Pre Monsoon or Summer or hot weather season (Mar - May)
- * South west Monsoon or rainy season (June - Sep)
- * North east Monsoon season (Oct - Dec)



Distribution of Rainfall

- * Average annual rainfall in India - 118 cm
- * Uneven rainfall
- * Area receiving rainfall -
 - Over 200 cm - 11%
 - 125 - 200 cm - 21%
 - 75 - 125 cm - 37%
 - 35 - 75 cm - 24%
 - Less than 35 cm-7%



Natural Vegetation

- * Tropical Evergreen Forest
- * Tropical Deciduous Forest
- * Tropical Dry Forest
- * Mountain or Montane forest
 - i) Eastern Himalayan Forest
 - ii) Western Himalayan Forest
- * Alpine Forest
- * Tidal Forest
- * Coastal Forest
- * Riverine Forest



Wild Life

- * Non - domesticated animals
- * Both vertebrates and invertebrates
- * World's total species: 1.5 million India's species 81,251



Biosphere Reserves

- * Biosphere Reserves in India - 18
- ↓
- Eleven of the eighteen biosphere reserves of India fall under the list of Man and Biosphere Programme of UNESCO

CLIMATE AND NATURAL VEGETATION OF INDIA

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POINTS TO REMEMBER

- Climate of India is labelled as "Tropical Monsoon Type"
- Equable climate is also called the British climate.
- The Tropic of Cancer divides the country into two equal halves.
- The sudden approach of monsoon wind over south India with lightning and thunder is termed as the 'break' or 'burst of monsoon'.
- The average annual rainfall of India is 118 cm.
- 'Mango showers' or thunder showers help in quick ripening of mangoes along the coast of Kerala and Karnataka.
- The Indian Board for Wild Life (IBWL) was constituted in 1952.
- The Government of India enacted Wildlife (Protection) Act in 1972.
- The Indian government has established 18 Biosphere reserves in India.
- Desert and semi - desert Vegetation are also called as 'Tropical thorn forests'.
- Coastal forests are littoral forests.

PLACES AND THEIR IMPORTANCE

- | | |
|-----------------------|---|
| Atacama desert | - The driest place on the earth. |
| Mawsynram (Meghalaya) | - Receives highest rainfall in the world (1141 cm). |
| Gulf of Mannar | - Biosphere reserve in Tamilnadu. |

I. Choose the correct answer:



TEXTUAL QUESTIONS

1. **Meteorology is the science of _____.**

a) Weather	b) Social	c) Political	d) Human
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2. **We wear cotton during _____.**

a) Summer	b) Winter	c) Rainy	d) Northeast Monsoon
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3. **Western disturbances cause rainfall in _____.**

a) Tamil Nadu	b) Kerala	c) Punjab	d) Madhya Pradesh
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4. **_____ helps in quick ripening of mangoes along the coast of Kerala and Karnataka.**

a) Loo	b) Norwester	c) Mango showers	d) Jet stream
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5. **_____ is a line joining the places of equal rainfall.**

a) Isohyets	b) Isobar	c) Isotherm	d) Latitudes
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6. **Climate of India is labelled as _____.**

a) Tropical humid	b) Equatorial Climate
c) Tropical Monsoon Climate	d) Temperate Climate
7. **The monsoon forests are otherwise called as _____.**

a) Tropical evergreen forest	b) Deciduous forest
c) Mangrove forest	d) Mountain forest

8. _____ forests are found above 2400 m Himalayas.

- a) Deciduous forests b) Alpine forests
c) Mangrove forests d) Tidal forests

9. **Sesahachalam hills, a Biosphere reserve is situated in _____.**

- a) Tamil Nadu b) Andhra Pradesh c) Madhya Pradesh d) Karnataka

10. _____ is a part of the world network biosphere reserves of UNESCO.

- a) Nilgiri b) Agasthiyamalai c) Great Nicobar d) Kachch

ADDITIONAL QUESTIONS

11. _____ is also called the British climate.

- a) Continental climate b) Humid climate
c) Equable climate d) Hot climate

12. **The most dominant factor which affects the climate of India is**

- a) Soil b) Natural vegetation
c) Monsoon winds d) Rainfall

13. **Western disturbance cause rainfall in**

- a) Odisha b) Kerala c) Punjab d) Andhra Pradesh

14. **The _____ is the state animal of Andhra Pradesh.**

- a) Black Buck b) Nilgiri Tahr c) Asiatic lion d) Snow leopard

15. **Biosphere Reserve in Odisha is _____.**

- a) Panna b) Simlipal c) Manas d) Cold desert

ANSWER

- | | | |
|------------------------|------------------------|--------------------------------|
| 1. a) Weather | 2. a) Summer | 3. c) Punjab |
| 4. c) Mango showers | 5. a) Isohyets | 6. c) Tropical Monsoon Climate |
| 7. b) Deciduous forest | 8. b) Alpine forest | 9. b) Andhra Pradesh |
| 10. d) (a) and (b) | 11. c) Equable climate | 12. c) Monsoon winds |
| 13. c) Punjab | 14. a) Black Buck | 15. b) Simlipal |

II.Fill in the blanks

ADDITIONAL QUESTIONS

- When the altitude increases the temperature _____.
- As we go higher and higher the temperature decreases. This phenomenon is known as _____.
- The Southwest monsoon begins to blow from the month of _____.
- The Southwest monsoon begins to retreat from north India by the end of _____.
- The sudden approach of monsoon wind over south India with lightning and thunder is termed as the _____.
- Mawsynram is located in the state of _____.



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ANSWER

- | | | |
|--------------|---------------------|--------------|
| 1. decreases | 2. normal lapse | 3. June |
| 4. September | 5. burst of monsoon | 6. Meghalaya |

III. Match the following:



TEXTUAL QUESTION

- | | | |
|-----------|---------------------------|--------------------------------------|
| A) | 1. Project Elephant | a. Desert and Semi desert vegetation |
| | 2. Biodiversity hotspot | b. October - December |
| | 3. North East Monsoon | c. Littoral Forest |
| | 4. Tropical thorn forests | d. Protect the elephants |
| | 5. Coastal forests | e. The Himalayas |

Ans:

- 1) d
- 2) e
- 3) b
- 4) a
- 5) c



ADDITIONAL QUESTION

- | | | |
|-----------|---------------------|---------------|
| B) | 1. Highest rainfall | a. Norwesters |
| | 2. Mausim | b. Tamil Nadu |
| | 3. Black Buck | c. Mawsynram |
| | 4. Nilgiri Tahr | d. Season |
| | 5. Kalbaisakhis | e. Punjab |

Ans:

- 1) c
- 2) d
- 3) e
- 4) b
- 5) a

IV. Consider the given statements and choose the correct option from the given below:



TEXTUAL QUESTIONS

1. **Assertion (A) : Monsoons are a complex meteorological phenomenon.**
Reason (R) : Meteorologists have developed a number of concepts about the origin of monsoons.

a) Both (A) and (R) are true ; R explains A	b) Both (A) and (R) are true; R does not explain A
c) (A) is correct (R) is false	d) (A) is false (R) is true
2. **Assertion (A) : The Himalayas acts as a climatic barrier.**
Reason (R) : The Himalayas prevents cold winds from central Asia and keep the Indian sub-continent warm.

a) Both (A) and (R) are true ; R explains A	b) Both (A) and (R) are true; R does not explain A
c) (A) is correct (R) is false	d) (A) is false (R) is true



ADDITIONAL QUESTIONS

3. **Assertion (A) : Wild animals are non - domesticated animals and include both vertebrates and invertebrates.**
Reason (R) : India has a poor and undiversified wild life.

a) Both (A) and (R) are true ; R explains A	b) Both (A) and (R) are true; R does not explain A
c) (A) is correct (R) is false	d) (A) is false (R) is true

4. **Assertion (A)** : During cold weather seasons, the vertical rays of the sun falls over Tropic of Capricorn which is far away from India.

Reason (R) : Hence, India receives the slanting sun's rays which results in low temperature.

- a) Both (A) and (R) are true ; R explains A b) Both (A) and (R) are true; R does not explains A
c) (A) is correct (R) is false d) (A) is false (R) is true

ANSWER

1. a) Both (A) and (R) are true: R explains A 2. a) Both (A) and (R) are true: R explains A
3. c) (A) is correct (R) is false 4. a) Both (A) and (R) are true: R explains A

V. Choose the inappropriate answers:



TEXTUAL QUESTIONS

1. **Tidal forests are found in and around** _____.
a) Desert b) The deltas of Ganga and Brahmaputra
c) The delta of Godavari d) The delta of Mahanadi
2. **Climate of India is affected by** _____.
a) Latitudinal extent b) Altitude
c) Distance from the sea d) Soil



ADDITIONAL QUESTIONS

3. **Norwesters cause rainfall to the state of** _____.
a) Assam b) Bihar
c) Odisha d) West Bengal
4. **The storm which occurs in the Bay of Bengal causes rainfall to** _____.
a) Tamil Nadu b) Andhra Pradesh
c) Madhya Pradesh d) Karnataka

ANSWER

1. b) The deltas of Ganga and Brahmaputra 2. d) Soil
3. c) Odisha 4. c) Madhya Pradesh

V. Answer the following in brief:



TEXTUAL QUESTIONS

1. **Define 'Meteorology'.**
Meteorology is the branch of science concerned with the processes and phenomena of the atmosphere, especially as a means of forecasting the weather.
2. **What is meant by 'normal lapse rate'?**
Temperature decreases at the rate of 6.5°C for every 1000 meters of ascent. This is called 'normal lapse rate'.



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3. What are 'Jet streams'?

- Jet streams are the fast moving winds blowing in a narrow zone in the upper atmosphere.
- According to the jet stream theory, the onset of southwest monsoon is driven by the shift of the subtropical westerly jet from the plains of India towards the Tibetan plateau.
- The easterly jet streams cause tropical depressions both during south-west monsoon and retreating monsoon.

4. Write a short note on Monsoon Winds.

- The most dominant factors which affects the climate of India is the monsoon winds.
- These are seasonal reversal winds and India remains in the influence of these winds for a considerable part of a year.
- The onset of southwest monsoon brings down the temperature of the entire India and causes moderate to heavy rainfall in many parts of the country.
- Similarly, the climate of southeast India is also influenced by north east monsoon.

5. Name the four distinct seasons of India.

- Winter or cold weather season (January - February)
- Pre monsoon or summer or hot weather season (March - May)
- Southwest monsoon or rainy season (June - September)
- North east monsoon season (October - December)

6. What is 'burst of monsoon'?

The sudden approach of monsoon wind over south India with lightning and thunder is termed as the 'break' or 'burst of monsoon'.

7. Name the areas which receive heavy rainfall.

The western coast, Assam, South Meghalaya, Tripura, Nagaland and Arunachal Pradesh are the heavy rainfall areas.

8. State places of mangrove forest in India.

- The delta of the Ganga - Brahmaputra
- The deltas of Mahanadi, Godaveri and Krishna rivers.

9. Name the trees of Tropical Evergreen Forest.

The most important trees are rubber, mahogany, ebony, rosewood, coconut, bamboo, cinchona, candel, palm, iron wood and cedar.

10. Write any five Biosphere Reserves in India.

- i) Agasthiyamalai - Kerala
- ii) Dibru Saikhowa - Assam
- iii) Gulf of Mannar - Tamil Nadu
- iv) Kanchenjunga - Sikkim
- v) Panna - Madhya Pradesh

11. What is 'Project Tiger'?

Project Tiger was launched in April 1973 with the aim to conserve tiger population in specifically constituted "Tiger Reserves" in India.

This project is benefited tremendously with an increase of over 60% of tiger population resulting in 3,015 tigers.

ADDITIONAL QUESTIONS

12. What do you mean by Monsoon?

- The word 'monsoon' has been derived from the Arabic word 'Mausim' which means 'season'.
- Originally, the word 'monsoon' was used to describe a system of seasonal reversal of winds along the shores of the Indian Ocean especially over the Arabian Sea.
- It blows from the south - west to north - east during summer and from the north - east to south - west during winter.

13. What is natural vegetation?

- Natural vegetation refers to a plant community unaffected by man either directly or indirectly.
- It includes all plant life forms such as trees, bushes, herbs and forbs, etc that grow naturally in an area have been left undisturbed by human for a long time.

14. What are the factors which affect the climate of India?

Factors like latitude, distance from the seas, monsoon wind, relief features and jet stream affect the climate of India.

15. Write a note on the Nilgiri Tahr.

- The Nilgiri Tahr is facing a major threat in the Western Ghats.
- Continuous poaching activities and Eucalyptus cultivation is hampering its habitat. The Nilgiri Tahr population is continuously decreasing.

VI. Distinguish Between:

TEXTUAL QUESTIONS

1. WEATHER AND CLIMATE.

	Weather	Climate
1.	Weather refers to the state of atmosphere of a place at a given point of time.	Climate is the accumulation of daily and seasonal weather event of a given location over a period of 30 - 35 years.
2.	Weather of a place may change daily.	Climate of a place remains constant over a long period.

2. TROPICAL EVERGREEN FOREST AND DECIDUOUS FOREST.

	Tropical Evergreen Forest	Deciduous Forest
1.	These forests are found in areas with 200cm or more annual rainfall.	These forest are found in the areas with 100 to 200 cm rainfall.
2.	The trees in these forests are evergreen. They do not shed their leaves.	The trees of these forests drop their leaves during the spring and early summer.
3.	The annual temperature is about more than 22°C.	The mean annual temperature of these region is about 27°C.
4.	Important trees: Rubber, Mahogany, Ebony, Rosewood.	Important trees: Teak, Sal, Sandal wood, Bamboo.



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3. NORTH EAST MONSOON AND SOUTH WEST MONSOON

	North East Monsoon	South West Monsoon
1.	Northeast monsoon blows during October and November	Southwest monsoon blows from June to September
2.	Northeast monsoon winds blow from land.	Southwest monsoon originates from the Indian ocean.
3.	It gives rainfall to the Coromandel coast.	It gives rainfall to the western coastal plain and most other parts of India.
4.	India gets only 25% of rainfall from the Northeast monsoon.	India gets 75% of rainfall from the southwest monsoon.



ADDITIONAL QUESTIONS

4. EASTERN HIMALAYAN FOREST AND WESTERN HIMALAYAN FOREST

	Eastern Himalayan Forest	Western Himalayan Forest
1.	These are found on the slopes of the mountains in North - East states.	These forests are found in the states of Jammu and Kashmir, Himachal Pradesh and Uttar Pradesh.
2.	These forests receive rainfall of more than 200cm.	The rainfall of this region is moderate.

5. WINDWARD SIDE AND LEEWARD SIDE OF THE MOUNTAINS

	Windward side	Leeward side
1.	The side of the mountain facing the moisture laden rain bearing wind is called windward side.	The other side of the mountain which is sheltered from the moisture laden wind is called leeward side.
2.	It receives heavy rainfall.	It receives very low rainfall.
3.	Eg: Western coastal plain.	Eg: Deccan plateau.

6. SUMMER SEASON AND WINTER SEASON

	Summer	Winter
1.	It is summer in India from March to May.	It is winter in India from January and February.
2.	During summer the vertical rays of sun fall over peninsular India.	During winter the vertical rays of sun fall over the Tropic of Capricorn.
3.	The temperature increases from south to north	The temperature increases from north to south.

VII. Give Reasons:



TEXTUAL QUESTIONS

1. Western Coastal plain is narrow.

The Western Coastal plain is narrow because the river flowing through this plain do not form any delta.

2. **India has a tropical monsoon climate.**

India has a tropical monsoon climate because most of India lies in the tropical belt and her climate is influenced by the monsoon winds which mainly blow in the tropics ie; 20°N and 20°S.

3. **Mountain are cooler than the plains.**

When the altitude increases the temperature decreases. Temperature decreases at the rate of 6.5°C for every 1000 metres of ascent. Hence mountains are cooler than the plains.



ADDITIONAL QUESTIONS

4. **Why Atacama desert is the driest place on the earth?**

- In the central India summers are hot and winters are cold.
- It is because of the absence of influence of seas.

VIII. Answer in detail:



TEXTUAL QUESTIONS

1. **Write about Southwest Monsoon.**

- The Southwest Monsoon is the most significant feature of the Indian Climate.
- The onset of the Southwest Monsoon takes place normally over the southern tip of the country by the first week of June, advances along the Konkan coast in early June and covers the whole country by 15th July.
- The sudden approach of monsoon wind over south India with lightning and thunder is termed as the 'break' or 'burst of monsoon'.

The monsoon wind strikes against the southern tip of Indian landmass and gets divided into two branches.

- Arabian Sea branch
- Bay of Bengal branch

The Arabian Sea branch:

- It gives heavy rainfall to west coast of India as it is located in the windward side of the Western Ghats.
- The other part which advances towards north is obstructed by Himalayan Mountains and results in heavy rainfall in north.
- As Aravalli Mountain is located parallel to the wind direction, Rajasthan and Western part do not get much rainfall from this branch.

Bay of Bengal branch:

- The wind from Bay of Bengal branch moves towards northeast India and Myanmar.
- This wind is trapped by a chain of mountains namely Garo, Khasi and Jaintia which are mainly responsible for the heaviest rainfall caused at Mawsynram located in Meghalaya.
- Later, it travels towards west which results in decrease in rainfall from east to west.
- Over all about 75% of Indian rainfall is received from this monsoon.
- Tamil Nadu which is located in the leeward side receives only a meagre rainfall.

2. **Describe the forests of India.**

On the basis of temperature, rainfall, topography and soil, the natural vegetation of India can be divided into the following types.



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Tropical Evergreen Forest:

- These forest are found in areas with 200cm or more annual rainfall.
- Western Ghats in Maharashtra, Karnataka, Kerala, Andaman - Nicobar Islands, Assam, West Bengal, Nagaland, Tripura, Mizoram, Manipur and Meghalaya states have this type of forests.
- The most important trees are rubber, mahogany, ebony, rosewood, coconut, bamboo, cinchona, candel, palm, iron wood and cedar.

Tropical Deciduous Forest:

- These forests are found in the areas with 100 to 200 cm annual rainfall.
- These are called 'Monsoon Forests'.
- The trees of these forests drop their leaves during the spring and early summer.
- These forests are found in Punjab, Haryana, Uttar Pradesh, Bihar, West Bengal, Jharkhand, Madhya Pradesh, Chattisgarh, Maharashtra, Telangana, Andhra Pradesh and Tamil Nadu.
- Teak and Sal are the most important trees. Sandal wood, rose wood, Kusum, Mahua, Palas, haldu, amala, padank, bamboo and tendu are the other trees of economic importance.
- These forests also provide fragrant oil, varnish, sandal oil and perfumes.

Tropical Dry Forest:

- These forests are found in the areas with 50 to 100 cm annual rainfall.
- They represent a transitional type of forests.
- These are found in east Rajasthan, Haryana, Punjab, Western Uttar Pradesh, Madhya Pradesh, Eastern Maharashtra, Telangana, West Karnataka and East Tamil Nadu.
- The important species are mahua, banyan, amaltas, palas, haldu, kikar, bamboo, babool, khair, etc.

Tropical Thorn Forest:

- These are found in the areas having annual rainfall of less than 50 cm.
- They have low humidity and high temperature.
- These forests are found in north - west India, which includes west Rajasthan, South - west Haryana, North Gujarat, South - west Punjab, parts of the Deccan plateau in Karnataka, Andhra Pradesh and Maharashtra.
- Babul, Kikar and Wild palms are common trees found here.

Mountain or Montane Forest:

On the basis of altitude and amount of rainfall, these forests are classified into two.

- i) Eastern Himalayan Forest,
- ii) Western Himalayan Forest.

Alpine Forest:

- It occurs all along the Himalayas with above 2400m altitude.
- These are purely having coniferous trees.
- Oak, silver fir, pine and juniper are the main trees of these forests.
- The eastern parts of Himalayas have large extent of these forests.

Tidal Forest:

- These forests occur in and around the deltas, estuaries, creeks, prone to tidal influences and as such are also known as delta or swamp forests.
- The delta of the Ganga, Brahmaputra has the largest tidal forest.
- The deltas of Mahanadi, Godavari and Krishna rivers are also known for tidal forests.
- The other name of these forests is mangrove forests.

Coastal Forest:

- These are littoral forests. Generally coastal areas have these forests.
- Casuarina, palm and coconut are the dominant trees.
- Both the eastern and western coasts have this type of forests.

Riverine Forest:

- These forests are found along the river on Khadar areas.
- These are known for tamarisk and tamarind trees.
- The rivers of great plains are more prominent for this type of forest.

3. Write the names of biosphere reserves and their location in India.

The Indian government has established 18 Biosphere Reserves in India which protect larger areas of natural habitats.

S.No	Biosphere Reserves	States
1.	Achanakmar, Amarkantak	Madhya Pradesh, Chattisgarh
2.	Agasthiyamalai	Kerala
3.	Dibru Saikhowa	Assam
4.	Dihang Dibang	Arunachal Pradesh
5.	Great Nicobar	Andaman and Nicobar Islands
6.	Gulf of Mannar	Tamil Nadu
7.	Kachch	Gujarat
8.	Kanchenjunga	Sikkim
9.	Manas	Assam
10.	Nanda Devi	Uttarakhand
11.	The Nilgiris	Tamil Nadu
12.	Nokrek	Meghalaya
13.	Pachmarhi	Madhya Pradesh
14.	Simlipal	Odisha
15.	Sundarbans	West Bengal
16.	Cold desert	Himachal Pradesh
17.	Sesahachalam hills	Andhra Pradesh
18.	Panna	Madhya Pradesh

ADDITIONAL QUESTIONS**4. Analyse any two factors affecting the climate of India.****Latitude:**

- India lies between 8°4' N and 37°6' N latitudes.
- The Tropic of Cancer divides the country into two equal halves.
- The area located to the south of Tropic of Cancer experiences high temperature and no severe cold season throughout the year.
- The areas of the north of this parallel enjoys sub tropical climate.
- Here, summer temperature may rise above 40°C and it is close to freezing point during winter.

Altitude:

- When the altitude increases, the temperature decreases.
- Temperature decreases at the rate of 6.5°C for every 1000 metres of ascent. It is called 'normal lapse rate'.
- Hence, places in the mountains are cooler than the places on the plains.
- That is why the places located at higher altitude even in South India have cool climate.
- Ooty and several hill stations of South India and of the Himalayan ranges like Mussourie, Shimla, etc are much cooler than the places located on the Great Plains.



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5. Write about the Biosphere Reserves of India.

- Biosphere reserves are protected areas of land coastal environments wherein people are an integral component of the system.
- The Indian Government has established 18 Biosphere Reserves in India which protect larger areas of natural habitat and often include one or more National Parks preserves along with buffer zones that are open to some economic uses.
- Eleven of the eighteen biosphere reserves (Gulf of Mannar, Nanda Devi, the Nilgiris, Nokrek, Pachmarhi, Simlipal, Sunderbans, Agasthiyamalai, Great Nicobar, Kanjanjunga and Amarkhantak) of India fall under the list of Man and Biosphere programme of UNESCO.

6. Explain the Wild life of India.

- The term 'Wildlife' includes animals of any habitat in nature. Wild animals are non-domesticated animals and includes both vertebrates (fish, reptiles, birds and mammals) and invertebrates like bees, butterflies, moth etc.
- India has a rich and diversified wildlife.
- The Indian fauna consists of about 81,251 species of animals out of the world's total of about 1.5 million species.
- The faunal diversity of the country consists of about
 - 6,500 invertebrates
 - 5,000 molluscus
 - 2,546 fishes
 - 1,228 birds
 - 458 mammals
 - 446 reptiles
 - 204 amphibians
 - 4 panthers and
 - 60,000 species of insects.
- Our country is the home to tigers, lions, leopards, snow leopards, pythons, wolves, foxes, bears, antelope species, monkeys, wild dogs, camels, snakes, crocodiles, rhinoceroses, varieties of bison and the mighty Asian elephants.
- Hunting, poaching, deforestation and other anthropogenic interferences in the natural habitats have caused extinction of some species.
- In view of this the role of wildlife in maintaining ecological balance, conservation and management of biodiversity of India is necessary at present.
- The Government of India has enacted wildlife (protection) Act in 1972 with the objective of protecting wildlife of the country.
- To preserve the country's rich and diverse wildlife 102 National Parks and about 515 wildlife sanctuaries across the country have been created.

IX. HOTS:



TEXTUAL QUESTION

1. Why is Mawsynram, the wettest place in the world?

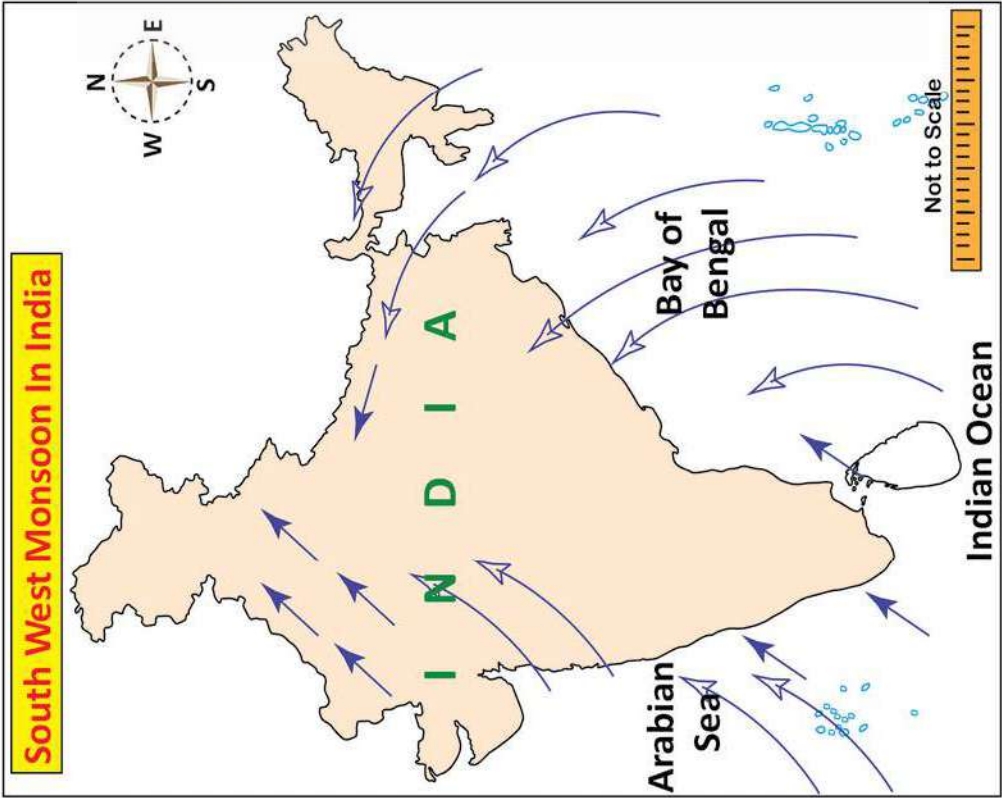
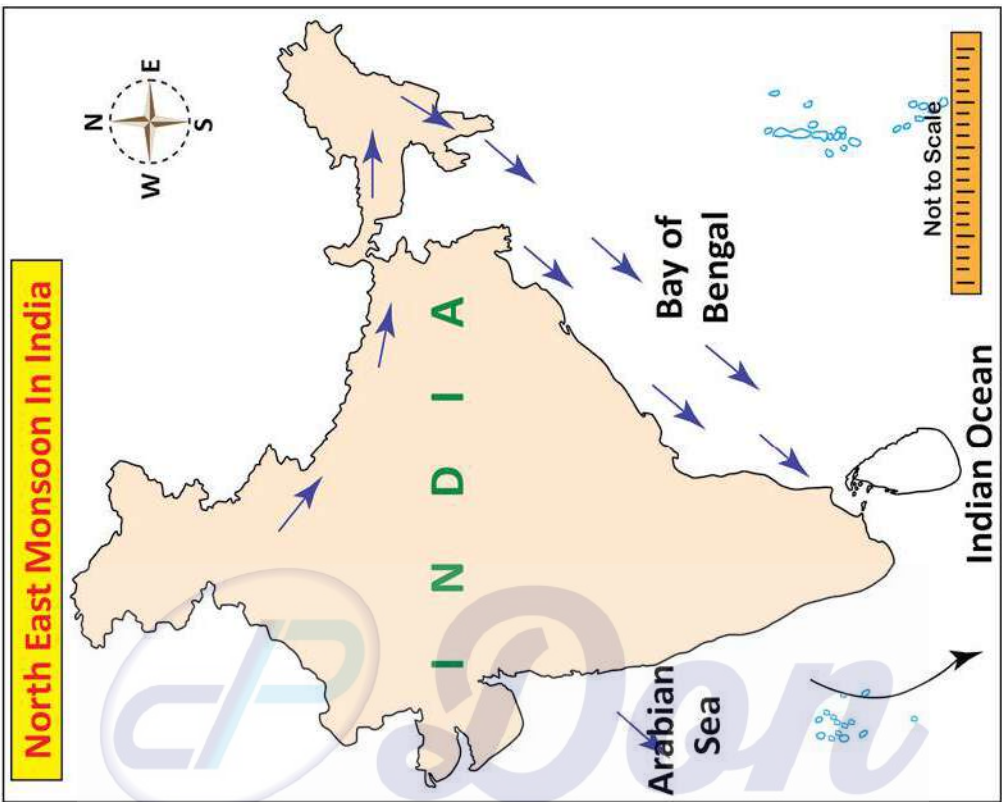
The moisture wind from Bay of Bengal branch moves towards northeast India and Myanmar. This wind is trapped by a chain of mountains namely Garo, Khasi and Jaintia and the heaviest rainfall is caused at Mawsynram. So it is the wettest place in the world.





MAP WORK

1. India - South West Monsoon & North East Monsoon

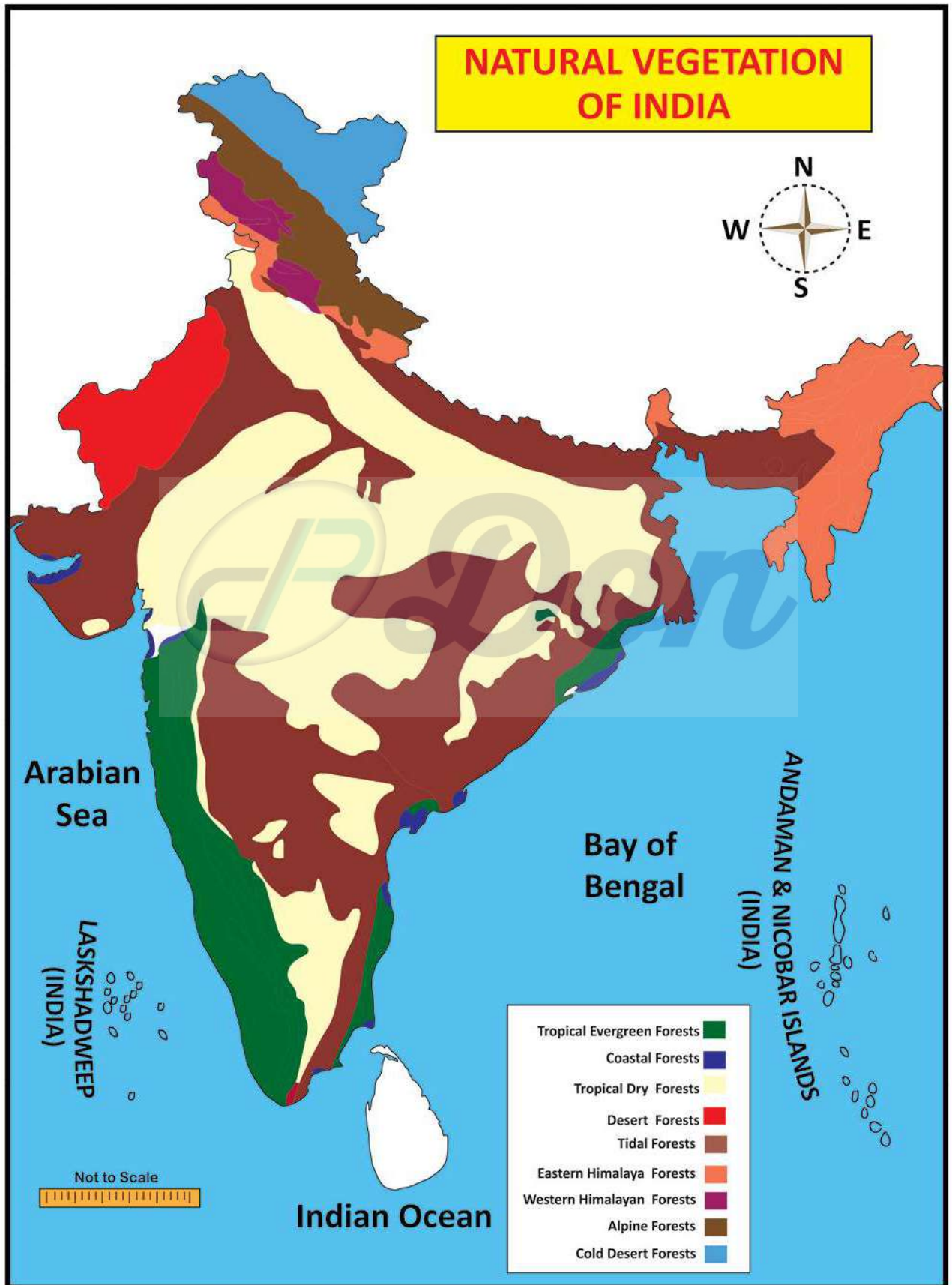




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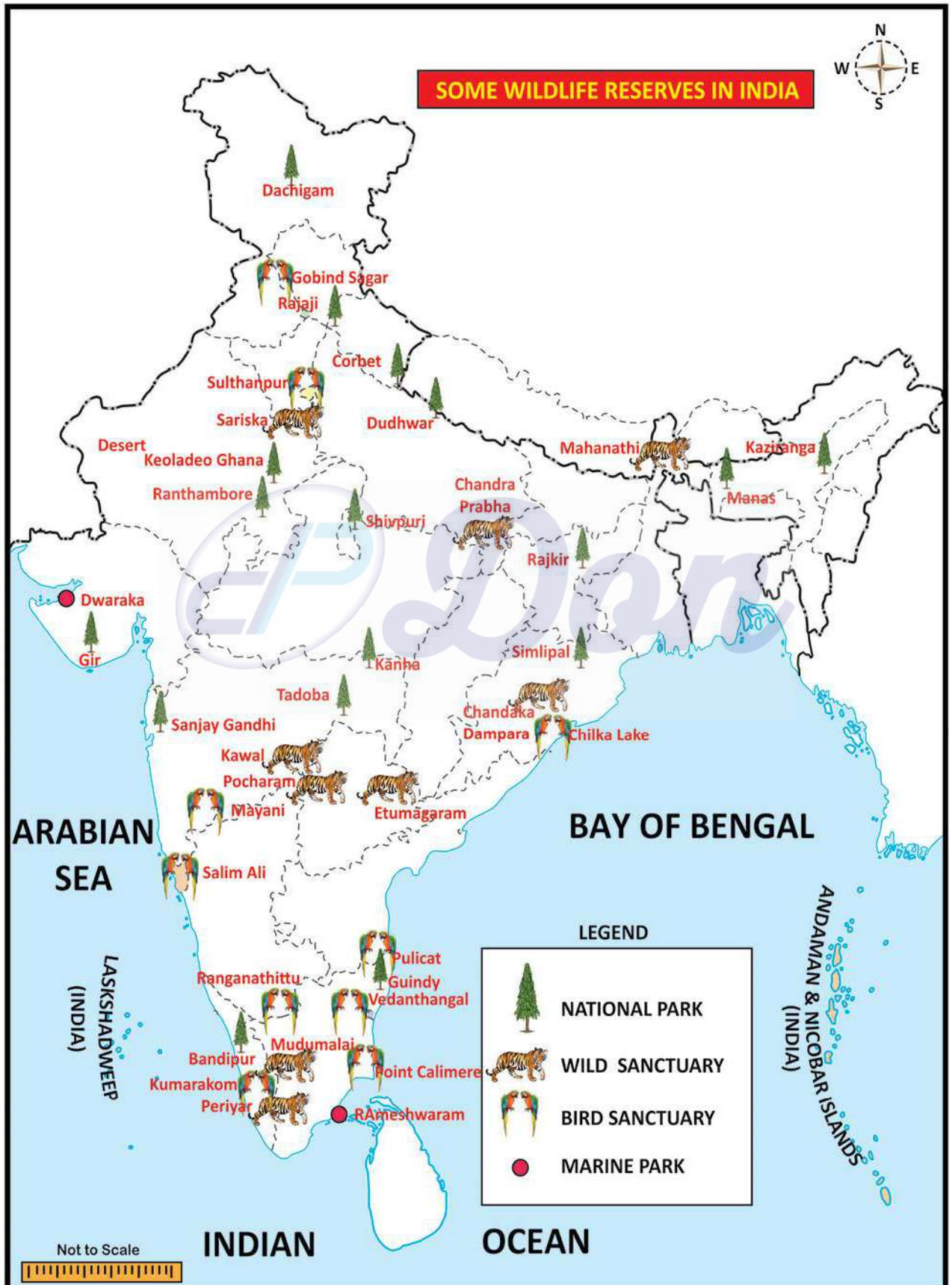
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2. India - Natural Vegetation





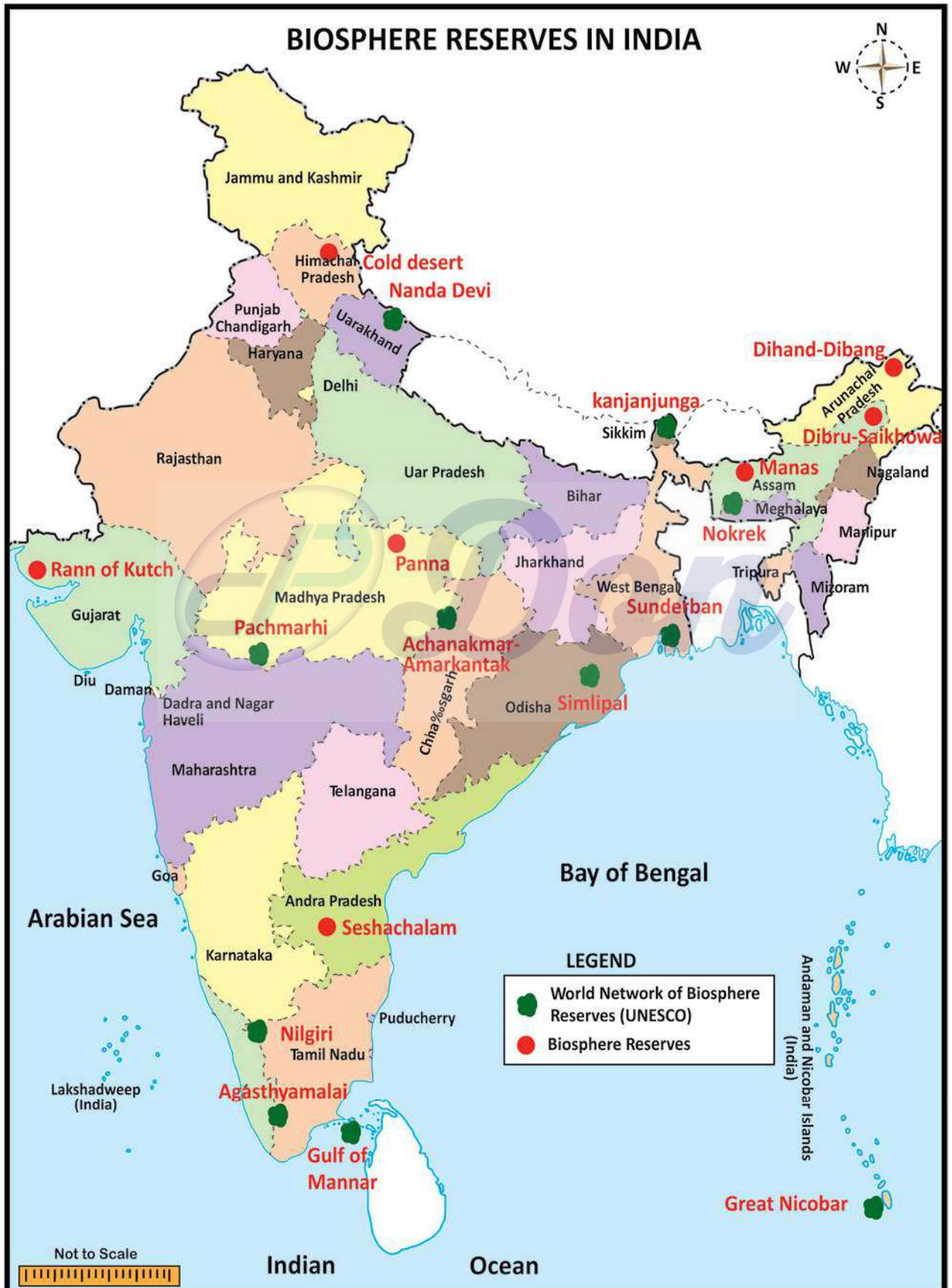
3. India - Some Wildlife Reserves



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4. India - Biosphere Reserves



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Unit Test

UNIT - II – Climate and Natural Vegetation of India

Time : 1.00 hr.

Marks : 30

I. Choose the correct answer:

5 × 1 = 5

- _____ is a part of the world network biosphere reserves of UNESCO.
a) Nilgiris b) Agasthiyamalai c) Kachch d) Great Nicobar
- The deciduous forests are otherwise called as _____.
a) Mountain forest b) Mangrove forest
c) Tropical evergreen forest d) Monsoon forest
- _____ is a line joining the places of equal rainfall.
a) Isohyets b) Isobar c) Isotherms d) Latitudes
- Meteorology is the science of _____.
a) Weather b) Social c) Human d) Political
- _____ is our state animal.
a) Cow b) Nilgiri Tahr c) Cat d) Ox
- Assertion (A) :** Monsoons are a complex meteorological phenomenon.
Reason (R) : Meteorologists have developed a number of concepts about the origin of monsoon.
a) Both (A) and (R) are true : R explains A b) Both (A) and (R) are true: R does not explain A
c) (A) is correct (R) is false d) (A) is false (R) is true
- Climate of India is affected by _____.
a) Latitude b) Altitude c) Soil d) Distance from the sea

II. Match the following:

5 × 1 = 5

- | | | |
|--------------------------------------|---|--------------------------------------|
| 8. Inter - Tropical Convergence Zone | - | a. Desert and semi desert vegetation |
| 9. Pune | - | b. Littoral forest |
| 10. Coastal forest | - | c. Protect the elephants |
| 11. Project Elephant | - | d. Leeward side |
| 12. Tropical thorn forest | - | e. Moves northward |

V. Give reasons:

2 × 1 = 2

13. Mountains are cooler than plains.

VI. Distinguish between:

2 × 1 = 2

14. North east monsoon and South west monsoon.

VII. Answer the following in brief:

5 × 2 = 10

- What are 'jet streams'?
- What is 'Project Tiger'?
- What is 'Burst of monsoon'?
- Define 'Meteorology'.
- Name the four distinct seasons of India.

VIII. Answer the following in a paragraph:

4 × 1 = 4

20. Write about South-west monsoon.

