

NCERT SIMPLIFIED SERIES

- ◆ Focus on Core Concepts
- ◆ Crisp and Clear Language
- ◆ Subject-wise Organization
- ◆ New NCERT Updated Content
- ◆ Practice Questions for Assessment



GEOGRAPHY

Summary Notes

From Classes 6-12

For UPSC & other competitive exams

Preface

Dear Aspirants,

Welcome to "**NCERT Simplified**," a comprehensive guide designed to provide a concise and focused overview of the National Council of Educational Research and Training (NCERT) textbooks. This book is tailored to meet the needs of aspirants preparing for competitive examinations like SSC, UPSC, and other government-related exams. Published by **StudyIQ**, this book aims to simplify the vast NCERT syllabus and equip you with the essential knowledge to ace your exams.

In the realm of competitive examinations, NCERT textbooks are regarded as the foundation for building a strong understanding of various subjects. They are trusted by educators and students alike for their well-structured content and accuracy. However, with an ever-expanding syllabus, it becomes challenging for aspirants to cover every detail. Recognizing this need, "**NCERT Simplified**" is crafted as the ideal companion to streamline your preparation and maximize your chances of success.

Key Features of the Book:

1. **Comprehensive Summary:** We have retained the core concepts, theories, and principles while eliminating redundant details, so you can focus on mastering the essential knowledge.
2. **Subject-wise Organization:** The book is divided into distinct sections, each dedicated to a specific subject, such as History, Geography, Economics, Polity, Society and more.
3. **Crisp and Clear Language:** We understand that clarity and simplicity are crucial in the learning process. Thus, our language is crafted to be lucid and accessible, making complex ideas easier to grasp. This writing style not only aids in a quick review but also facilitates better retention of information.
4. **Practice Questions:** Alongside the summaries, "**NCERT Simplified**" includes thoughtfully selected practice questions to assess your understanding and reinforce your learning.

As you embark on your journey to crack competitive examinations, "**NCERT Simplified**" promises to be your reliable companion. We hope this book empowers you with the knowledge, confidence, and skills required to excel in your exams and achieve your dreams.

Wishing you all the best!

Team StudyIQ

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SAMPLE PAGES

GLOBE: LATITUDES AND LONGITUDES

Earth is not a sphere. It has a bulge in the middle and is slightly flattened at the North and South Poles. A globe is a precise representation of the earth in miniature form.

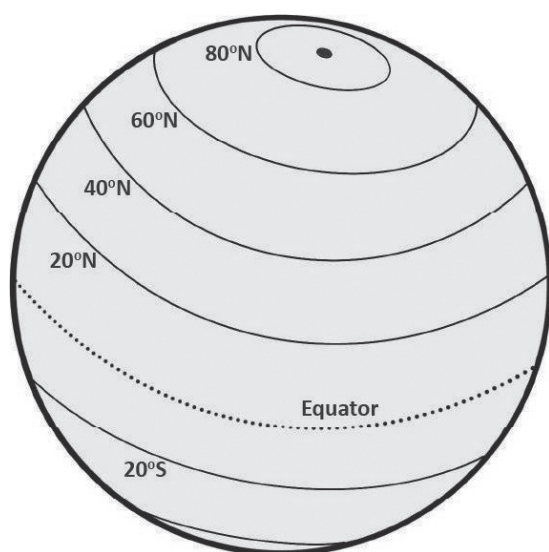
GLOBE

- Globe is not fixed and can vary in size and type.
- On the globe, countries, continents and oceans are represented in their correct sizes.
- The globe is divided into two equal parts by an imaginary line. This line is known as the equator.
 - The northern half of the earth is known as the Northern Hemisphere and
 - The southern half is known as the Southern Hemisphere.

EQUATOR

- The equator is an imaginary circular line and is a very important reference point to locate places on the earth.
- The equator represents the zero degree latitude

Latitudes



- All parallel circles from the equator up to the poles are called parallels of latitudes.
- Latitudes are measured in degrees.

- The distance from the equator to either of the poles is one-fourth of a circle round the earth, it will measure $\frac{1}{4}$ th of 360 degrees, i.e. 90°.
 - All parallels north of the equator are called 'north latitudes.'
 - All parallels south of the equator are called 'south latitudes.'

Other Parallels of Latitudes which are Important

Apart from the equator (0°), the North Pole (90°N) and the South Pole (90° S), there are four important parallels of latitudes:

1. Tropic of Cancer (23½° N) in the Northern Hemisphere.
2. Tropic of Capricorn (23½° S) in the Southern Hemisphere.
3. Arctic Circle at 66½° north of the equator.
4. Antarctic Circle at 66½° south of the equator.

Heat Zones of the Earth

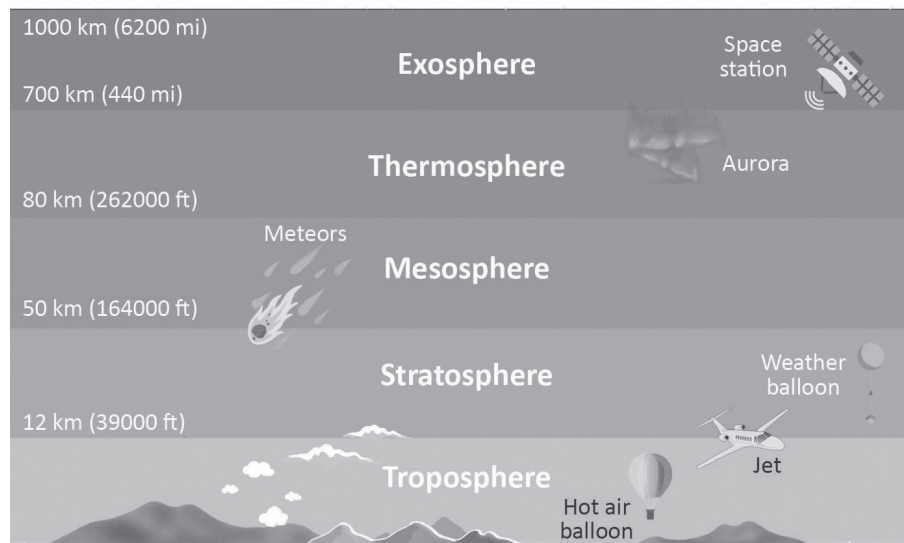
- **Torrid Zone:** At least once a year, the midday sun lies directly overhead at all latitudes between the Tropics of Cancer and Capricorn.
 - As a result, the **heat is most intense** here.
- **Temperate Zones: Beyond the Tropics of Cancer and Capricorn,** the midday sun never rises overhead at any latitude.
 - As a result, the sun's beams' angle decreases as they approach the poles.
 - Because of this, the regions between the Tropic of Cancer and the Arctic Circle in the Northern Hemisphere and the Tropic of Capricorn and the Antarctic Circle in the Southern Hemisphere have mild temperatures.
- **Frigid Zones:** In the Northern Hemisphere, **regions between the Arctic Circle and the North Pole**, as well as between the Antarctic Circle and the South Pole, are extremely cold.
 - It is as a result of how low the sun rises in this area.
 - As a result, its rays are always angled downward and produce less heat.

3. **The Indian Ocean:** It is the only ocean named after a country, that is, India. The shape of the ocean is almost triangular. In the north, it is bound by Asia, in the west by Africa and in the east by Australia.
4. **The Southern Ocean:** It encircles the continent of Antarctica and **extends northward to 60 degrees south latitude.**
5. **The Arctic Ocean:** It is **located within the Arctic Circle** and surrounds the North Pole. It is connected with the Pacific Ocean by a narrow stretch of shallow water known as Bering strait. It is bound by the northern coasts of North America and Eurasia.

ATMOSPHERE

- The earth is surrounded by a layer of gas called the atmosphere.
 - This thin blanket of air is an integral and important aspect of the planet. It provides us with the air we breathe and protects us from the harmful effects of the sun's rays.
 - The atmosphere extends up to a height of **about 1,600 kilometres.**
 - The **atmosphere is divided into five layers** based on composition, temperature and other properties.
- These layers starting from earth's surface are called the troposphere, the stratosphere, the mesosphere, the thermosphere and the exosphere.
 - The atmosphere is composed mainly of nitrogen and oxygen, which make up about 99 per cent of **clean, dry air.**
 - **Nitrogen 78%, oxygen 21%** and other gases like carbon dioxide, argon and others comprise **1% by volume.**
 - Oxygen is the breath of life while nitrogen helps in the growth of living organisms.
 - **Carbon dioxide**, though present in minute amounts, is important as it absorbs heat radiated by the earth, thereby keeping the planet warm. It is also essential for the growth of plants.
 - The density of the atmosphere varies with height. It is maximum at sea level and decreases rapidly as we go up.
 - They have to carry with them oxygen cylinders to be able to breathe at high altitudes.
 - The temperature also decreases as we go upwards.
 - The atmosphere exerts pressure on the earth.
 - This varies from place to place. Some areas experience high pressure and some areas low pressure. Air moves from high pressure to low pressure. Moving air is known as wind.

Layers of the Atmosphere



BIOSPHERE

- The biosphere is the narrow contact zone between land, water, and air, where life is unique to our planet.
- It contains various species of organisms, ranging from microbes to large mammals, all connected for survival.
- Organisms in the biosphere can be categorized into the plant and animal kingdoms.

DRAINAGE SYSTEM

The flow of water through well-defined channels is known as 'drainage' and the network of such channels is called a 'drainage system'. The drainage pattern of an area is the outcome of the geological time period, nature and structure of rocks, topography, slope, amount of water flowing and the periodicity of the flow.

SOME IMPORTANT TERMS

Catchment Area: A river drains the water collected from a specific area, which is called its catchment area'.

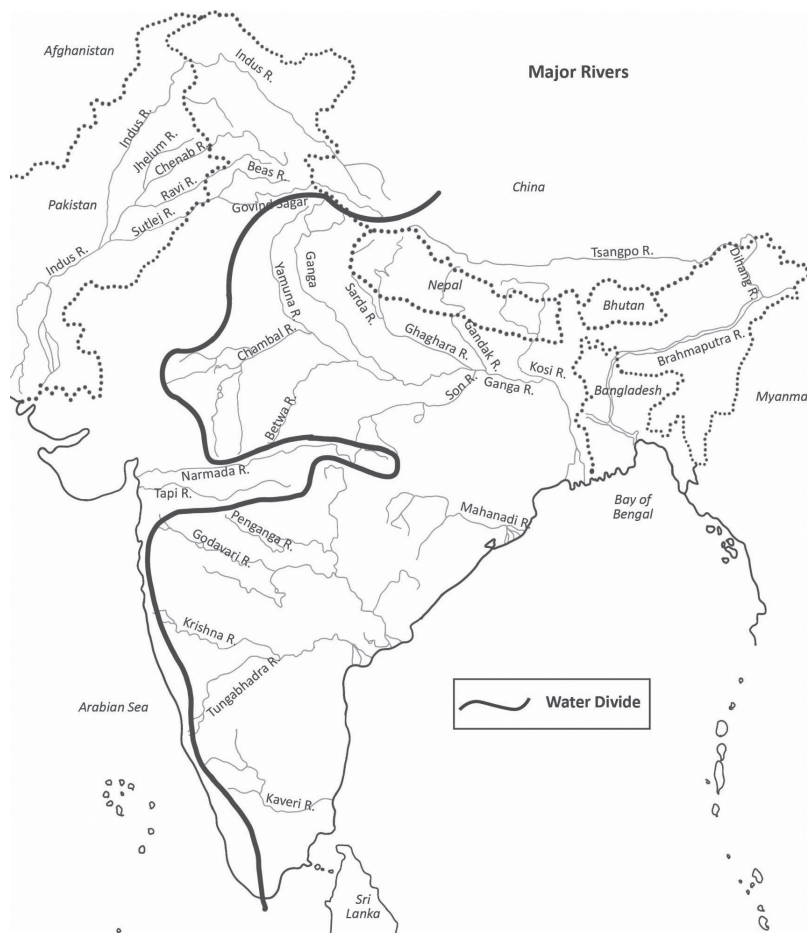
Drainage basin: An area drained by a river and its tributaries is called a drainage basin.

Watershed: It is the boundary line separating one drainage basin from the other.

- The catchments of large rivers are **called river basins** while those of small rivulets and rills are often referred to as **watersheds**.
- **Watersheds are small in area** while the basins cover larger areas.
 - River basins and watersheds are marked by unity. What happens in one part of the basin or watershed directly affects the other parts and the unit as a whole.

DRAINAGE PATTERNS

- **Dendritic:** This drainage pattern resembles the **branches of a tree**. Example: The rivers of **northern plain**.



FACTORS DETERMINING THE CLIMATE OF INDIA

LATITUDE

- In an east-west direction, the Tropic of Cancer runs across the center of India. As a result, the **northern half of India is in a subtropical and temperate zone**, whereas the southern section of the country, **south of the Tropic of Cancer, is in a tropical zone**.
- Due to its proximity to the equator, the tropical zone has **year-round high temperatures** with a limited daily and yearly range.
- Due to its distance from the equator, the region north of the Tropic of Cancer has a severe climate with an **extensive range of daily and yearly temperatures**.

HIMALAYAN MOUNTAINS

- It effectively serves as a climate barrier, shielding the subcontinent from the chilly northern winds. These arctic winds that sweep through central and eastern Asia have their origins there.
- The **monsoon winds are also trapped by the Himalayas**, which makes **them lose moisture** within the subcontinent.

DISTANCE OF LAND AND WATER

- India is bordered by the Indian Ocean on its southern side and surrounded by a continuous mountain range in the north.
- Land and water heat up or cool down at different rates, resulting in **varied temperature patterns**.
- This uneven heating generates **distinct air pressure zones** around India, leading to changing weather conditions.
- These variations in air pressure zones **influence monsoon winds**, causing them to reverse direction.

DISTANCE FROM THE SEA

- Coastal regions with long coastlines have a more stable climate due **to the influence of the sea**. Inland areas, being farther from the sea, experience more extreme climates.
- The seasonal contrasts in weather at places in the interior of the country such as Delhi, Kanpur and Amritsar can be observed.

ALTITUDE

- **Temperature decreases with increasing altitude**. Mountainous regions are cooler than plains.
- For instance, Agra and Darjiling are on the same latitude, but Darjiling experiences much cooler temperatures due to its higher elevation.

RELIEF

- The **temperature, air pressure, wind speed and direction, as well as the total volume and distribution of rainfall**, are all influenced by India's physiography or relief.
- The southern plateau is dry because of its leeward location along the Western Ghats, whereas the windward portions of the Western Ghats and Assam receive considerable rainfall around June to September.

InterTropical Convergence Zone (ITCZ)

- The Inter Tropical Convergence Zone (ITCZ) is a **region of low pressure situated at the equator** where trade winds converge, causing air to rise.
- In July, the ITCZ is found between latitudes **20°N and 25°N (over the Gangetic plain)** and is sometimes referred to as the **monsoon trough**.
- This monsoon trough facilitates the creation of a **thermal low-pressure area** over northern and northwestern India.
- The ITCZ's movement causes the southern hemisphere's trade winds to cross the equator around longitudes **40°E to 60°E**.
- Due to the **Coriolis force**, these trade winds shift direction, blowing from southwest to northeast, marking the start of the southwest monsoon.
- In the winter season, the ITCZ shifts southward, leading to a reversal of winds from northeast to south and southwest, known as **the northeast monsoons**.

NATURE OF INDIAN MONSOON

- By conducting systematic analyses of rainfall patterns in the South Asian region, researchers have made strides in comprehending the fundamental causes and distinguishing features of the monsoon. This investigation has shed light on critical aspects of the monsoon such as:
 - **The onset of the monsoon**
 - **Break in the monsoon**