Learn FINITE & THE CORE IAS
(A unit of just unlearn)

Bihar Prayas 2025-26

Bihar Special & Current Affairs

71st BPSC EXAMINATION

also useful for

CDPO, BIHAR POLICE, DAROGA (SI), TRE 4.0, JUDICIARY BIHAR SECRETARIAT, BSSC, AND OTHER EXAMS

— AUTHOR —
VINEET ANAND
5th RANK, 69th BPSC

TOPICS COVERED

- Bihar at a Glance
- Bihar Current Affairs (May 2024 – May 2025)
- Bihar Budget 2024–25
- Important Persons in News
- Important Indexes & Reports
- ISFR Report 2024
- Bihar Polity, History & Geography
- Bihar PYQs (Previous Year Questions)

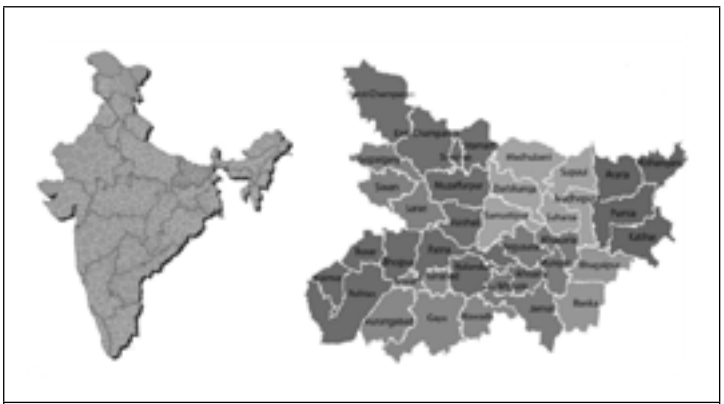
Suitable with: **BPSC PRAYAS TEST SERIES 2025**

4000+ MCQs | **30 TESTS** (10 SECTIONAL + 20 FULL MOCK TESTS) | **AI-Powered Online Test Portal Access** | **Perfectly Aligned with 71st BPSC Pattern**

CHAPTER 1

BIHAR – AN OVERVIEW

Bihar [ancient times, known as Magadha] is an entirely landlocked state located in the **eastern part of India**, precisely between **83°19'50" E to 88°17'40" E longitude and 24°20'10" N to 27°31'15" N latitude**. Its geographical location gives it a **transitional position** concerning its climate, economy, and culture, as it lies mid-way between the humid West Bengal to its east and the sub-humid Uttar Pradesh to its west.



Use India Map and mark Bihar then with arrow show this Bihar

The **Ganga River** flows through the middle of Bihar from west to east, **dividing the plain into two unequal halves**

Bihar remains a key agricultural state in India, with around **77%** of its population engaged in agriculture, well above the national average. The state ranks 4th in India for vegetable production, contributing approximately **17.5 million metric tonnes** annually, with key crops like potatoes, onions, and cauliflower. Bihar is also the **largest producer of litchis**, accounting for **71%** of India's total litchi production, and it contributes significantly to the production of fruits like mangoes, bananas, and guavas.

Beyond agriculture, **food processing, dairy, sugar, manufacturing, and healthcare** are identified as some of Bihar's fastest growing industries. The state has also planned initiatives for the development of other sectors like **education and tourism** and offers incentives for **information technology and renewable energy**.

Bihar's industrial sector is growing, supported by favorable policies like the **Industrial Policy 2020**. The state's **FDI inflows** saw an increase, reaching **US$ 70.21 million** in 2022, reflecting the success of initiatives to boost manufacturing, IT, and renewable energy sectors. Bihar's new **IT Policy 2024** and the **Bihar Startup Policy 2022** aim to attract further investments, with over **₹200 crore** already committed to the IT sector. Infrastructure developments like the **Bihta Dry Port** and **Danapur-Bihta Elevated Road** are enhancing logistics and connectivity. These efforts, along with initiatives such as **Bihar Ideas Yatra**, position Bihar as an emerging industrial hub in India.

1.1. In terms of its boundaries, Bihar shares:

National & International boundaries	
East: Northern part of West Bengal (National)	**West :** Uttar Pradesh (National)
North : Nepal (International)	**South :** Jharkhand (National)

Bihar shares an **international border** with **Nepal** to its **north**, stretching across **601 km**. Seven districts in Bihar border Nepal from the **west to the east**. These districts are (West Champaran, East Champaran, Sitamarhi, Madhubani, Supaul, Araria, & Kishanganj)

- A **national border** with **Jharkhand to its south: Rohtas, Aurangabad, Gaya, Nawada, Jamui, Banka, Bhagalpur, Katihar.**
- A **national border** with the **northern part of West Bengal to its east: Kishanganj, Purnia, Katihar**.
- Bihar shares its **western border** with **Uttar Pradesh**, and **eight districts** of Bihar border Uttar Pradesh, stretching from north to south. These districts are (**West Champaran, Gopalganj, Siwan, Saran, Bhojpur, Buxar, Rohtas & Kaimur**)

1.2. Government [As of 19th June 2025]

Governor	Chief Minister	Deputy Chief - Minister
Arif Mohammad Khan	Nitish Kumar	Samrat Choudhary, Vijay Kumar Sinha

1.3. State Symbols of Bihar

S. No.	Symbol	State Symbol	About State Symbol
1	**State Tree**	**Peepal**	- The scientific name of the **Peepal tree** is **Ficus religiosa** (Sacred Fig). - Found widely in the Indian subcontinent. - Revered by followers of **Buddhism**, **Jainism**, and **Hinduism**. - **Gautam Buddha** attained **enlightenment** under this tree in **Bodh Gaya**, Bihar.
2	**State Flower**	**Marigold**	- The scientific name of **Marigold** is **Tagetes erecta**. - Commonly blooms in **golden**, **orange**, and **yellow** colors. - Marigold is widely used in **Bihar** for religious rituals, festivals, and decorations.
3	**State Bird**	**House Sparrow**	- The scientific name of **House Sparrow** is **Passer domesticus**. - Sparrows are small, plump, **brownish-grey** birds with short tails. - They often nest in houses, trees, and other structures. - Their diet primarily consists of seeds, although they occasionally consume small insects.

4	**State Animal**	**Bullock**	- The state animal of Bihar, also known as **ox**, is used for **ploughing**, **transportation**, and **threshing grain**. - Bullocks are essential in rural Bihar for **irrigation**, **grinding grain**, and pulling **carts** and **wagons**.

1.4. Important Tourist Sites in Bihar

S. No.	Site Name	Location	Key Features & Importance
1	**Patna (Patliputra)**	Patna, Bihar	- Capital city of Bihar with a rich historical past. - Mahatma Gandhi Setu (5.7 km long) connects Patna to northern Bihar.
2	**Takht Sri Harmandir Patna Sahib**	Patna, Bihar	- Gurdwara was built in remembrance of **Guru Gobind Singh Ji's** birthplace. - Built by **Maharaja Ranjit Singh**.
3	**Golghar**	Patna, Bihar	- Large granary built in **Stupa architecture**. - Offers panoramic views of Patna, located near Gandhi Maidan.
4	**Patan Devi Temple**	Patna, Bihar	- One of the **51 Siddha Shakti Pithas**. - Legends tie it to the **right thigh** of Sati's body falling here.
5	**Mahavir Hanuman Temple**	Patna, Bihar	- A prominent Hindu temple dedicated to **Lord Hanuman**. - Second most visited shrine in **North India**.
6	**Kumhrar Park**	Patna, Bihar	- Archaeological remains from the **Mauryan period** (322–185 BCE). - Features the ruins of a **hypostyle 80-pillared hall**.
7	**Agam Kuan**	Patna, Bihar	- Ancient well from **Mauryan period** (Ashoka's time). - A sacred site believed to be linked to **Lord Vishnu's Sudarshan Chakra**.
8	**Patna Museum**	Patna, Bihar	- Established in 1917, showcases historical artefacts. - Mughal and Rajput style architecture.
9	**Bihar Museum**	Patna, Bihar	- Modern state-of-the-art museum. - Opened in **2017**, exhibits over **100 artefacts** from Patna Museum.
10	**Khuda Bakhsh Oriental Library**	Patna, Bihar	- Repository of **21,000** oriental manuscripts and **2.5 lakh printed books**. - Opened to the public in **1891**.
11	**Buddha Smriti Park**	Patna, Bihar	- In memory of the **2554th birth anniversary of Buddha**. - Inaugurated by the **14th Dalai Lama**.
12	**Barabar Caves**	Jehanabad, Bihar	- Oldest rock-cut caves in India, from the **Mauryan period** (3rd century BCE). - Associated with the **Ajivika sect**.
13	**Navlakha Palace**	Rajnagar, Madhubani, Bihar	- Ruins of a palace built by **Maharaja Rameshwar Singh**. - Destroyed in the **1934 earthquake**, remains a symbol of royal architecture.
14	**Kesaria Stupa**	Kesaria, East Champaran	- Tallest **Buddhist stupa** in India, built between **200–750 AD**. - **104 feet high**, a major Buddhist pilgrimage site.
15	**Gandhi Sangrahalaya**	Motihari, East Champaran	- Museum dedicated to **Champaran Satyagraha** led by **Mahatma Gandhi**. - Features a **Gandhian Memorial Pillar** designed by **Nand Lal Bose**.
16	**Sher Shah Suri Tomb**	Sasaram, Rohtas, Bihar	- Built by **Sher Shah Suri's son Islam Shah** after his death in **1545 A.D**. - Famous for its **fine sandstone** architecture.
17	**Maa Tara Chandi Temple**	Sasaram, Rohtas, Bihar	- A Shakti Peetha where the **right eye of Maa Tarachandi** is believed to have fallen. - Situated within a **cave** near **Sasaram**.
18	**Rohtas Garh Fort**	Rohtas, Bihar	- Ancient fort on **Kaimur hills** with **2000 limestone steps** to the top. - Legends tie it to **King Harishchandra's son Rohitashwa**.
19	**Vishnupad Temple**	Gaya, Bihar	- Temple dedicated to **Lord Vishnu** with the **footprint** of Lord Vishnu. - Believed to have been visited by **Lord Rama** and other legendary saints.
20	**Dungeshwari Cave Temple**	Gaya, Bihar	- Temple dedicated to **Dungeshwari** Goddess. - Associated with **Buddha's self-mortification** and the **Sujata** offering.

21	**Mangla Gauri Temple**	Gaya, Bihar	- One of the **18 Maha Shakti Peethas** in India. - Dates back to the **15th century**.
22	**Mandara Parvat (Hill)**	Bhagalpur, Bihar	- Believed to be the site of **Samudra Manthan** (churning of the ocean). - **750 feet tall granite hill** with impressions of **Vasuki's coils**.
23	**Kuppaghat**	Bhagalpur, Bihar	- Pilgrimage site for **Santmat** followers. - **Maharshi Mehi Ashram** located here.
24	**Ajgaivinath Temple**	Sultanganj, Bhagalpur, Bihar	- Temple dedicated to **Lord Shiva**. - Believed to be associated with **Muni Jahnu** and the **Ganges** river story.

1.5. Physical Features of Bihar

Total Geographical Area	94,163 km^2 (36,357 sq mi) (12th in India)
Rural Aral	92,257.51 km^2
Urban Area	1,095.49 km^2
Height above Sea-Level	173 Feet
Normal Average Rainfall	1,000 mm (40 inches) in the west-central part of the state to over 1,500 mm (60 inches) in the extreme north
Avg. Number of Rainy Days	52.5 Days in a Year
Length (North to South)	345 km
Length (East to West)	483 km
Largest District (by Area)	West Champaran
Smallest District (by Area)	Sheohar

1.6. Minerals and Energy Resources in Bihar

Mineral	Details	Location in Bihar
Manganese	- 5th largest producer globally. - Used in iron and steel industry. - Accounts for 7% of India's production.	Patna, Munger, Gaya
Mica	- Found in 3 varieties: Muscovite, Phlogopite, Biotite. - Bihar has Muscovite mica. - Used in electronics.	Nawada, Jamui, Muzaffarpur, Gaya
Pyrite	- Sulfide of iron, used for making sulfuric acid. - Bihar holds 95% of India's pyrite reserves.	Rohtas
Limestone	- Used in cement production. - Production in Bihar was 94.137 thousand tonnes in February 2025. (ceicdata.com)	Rohtas, Munger, Kaimur
Asbestos	- Used for fireproof safes and insulation.	Munger
Monazite	- Found in Gaya. - A source of thorium.	Gaya
Quartz	- Used in cement and power industries.	Munger
Uranium	- Used in nuclear reactors.	Gaya
Beryllium	- Used as a moderator in nuclear reactors.	Gaya
Bauxite	- Ore of aluminium.	Munger, Rohtas
Gold	- Found in Jamui district. - Used for ornaments and currency. - Accounts for more than 44% of India's gold reserves. (en.wikipedia.org)	Jamui
Feldspar	- Used in ceramics, glass, and refractory industries.	Munger, Gaya, Jamui
Lead	- Obtained from Galena. - Used in various industries.	Banka, Rohtas

1.7. Energy Resources in Bihar

- **Coal**: The Rajmahal Coalfield in Sahibganj district is the primary source of coal in Bihar.
- **Hydropower**: Bihar has potential for hydropower generation, particularly from the Sone and Gandak rivers.
- **Solar Energy**: The state is promoting solar energy initiatives to meet its growing energy demands.
- **Wind Energy**: Bihar has limited wind energy potential.

Energy Resource	Details	Location in Bihar
Barauni Thermal Power Plant	- The **only state-owned thermal power plant** in Bihar. - Established in **1970** with **Russian help**. - Now operated by **NTPC.**	**Barauni**
Kanti Bijli Utpadan Nigam Limited	- A joint venture between **NTPC** and **Bihar State Power Generation Company Limited**.	**Kanti**
Kosi Hydel Power Station	- Constructed on **Kosi River** in **Supaul**. - Commissioned in **1970** and handed over to Bihar govt in **2003**.	**Supaul**
Nabinagar Power Plant	- **Coal-based plant**. - Located in **Aurangabad**.	**Aurangabad**
Pirpainti Power Plant 3x800MW (total 2,400MW)	- To be constructed by **NTPC** at **Bhagalpur**.	**Bhagalpur**
Kajara Power Plant	- To be constructed by **NTPC** at **Lakhisarai**.	**Lakhisarai**
New Hydel Projects	- **Chausa Hydel Power Plant** in **Buxar**. - **Mathai Hydel Power Project** in **West Champaran**.	**Buxar**, **West Champaran**

1.8. Agriculture in Bihar

Crops	Details	Key Areas
Kharif Crops	- Sown in **May-June** and harvested in **Sept-Oct**. - Key crops: **Maize**, **Paddy**, **Jute**.	**Madhubani**, **Aurangabad**, **Rohtas**
Rabi Crops	- Sown in **Oct-Nov** and harvested in **Mar-Apr**. - Key crops: **Wheat**, **Gram**, **Rapeseed**, **Mustard**.	**Rohtas**, **Kaimur**, **Siwan**
Zaid Crops	- Produced between **Rabi** and **Kharif** seasons. - Key crops: **Muskmelon**, **Watermelon**, **Gourd**.	**Patna**, **Muzaffarpur**, **Bihar Sharif**
Rice	- Main cereal crop of Bihar. - **Aus** (summer) and **Aman** (winter) varieties.	**Rohtas**, **Aurangabad**, **Madhubani**
Wheat	- Best suited for **sandy soils**. - Important crop for Bihar's economy.	**Rohtas**, **Kaimur**, **Siwan**
Maize	- Best grown in **light clay soil**. - Major crop in **Khagaria** and **Katihar**.	**Khagaria**, **Katihar**, **Madhepura**
Jute	- Bihar ranks **2nd in India** for jute production. - Major areas: **Kishanganj**, **Purnia**.	**Kishanganj**, **Purnia**
Pulses	- Includes **Arhar**, **Gram**, **Urad**, **Masoor**, **Moong**, and **Khesari**.	**Patna**, **Aurangabad**, **Muzaffarpur**
Litchi and Mango	- Bihar is famous for **Litchi** production, especially from **Muzaffarpur**.	**Muzaffarpur**, **Gaya**, **Siwan**

1.9. Irrigation in Bihar

Irrigation System	Details	Area Covered
Sone Canal	- Eastern and Western canals. - Irrigates **Patna**, **Aurangabad**, **Gaya**, **Jahanabad**, **Rohtas**.	**Patna**, **Jahanabad**, **Aurangabad**
Kosi Canal	- Eastern and Western Kosi canals. - Irrigates **Purnia**, **Madhepura**, **Saharsa**, and **Darbhanga**.	**Purnia**, **Saharsa**, **Madhepura**
Gandak Canal	- Irrigates **Saran**, **Gopalganj**, **Siwan**, **Muzaffarpur**, **Vaishali**, **East Champaran**.	**Saran**, **Muzaffarpur**, **Vaishali**
Triveni Canal	- Irrigates **West Champaran**.	**West Champaran**
Kamla Canal	- Irrigates **Madhubani**.	**Madhubani**

1.10. Transportation in Bihar

1.22. Surnames of Prominent Personalities from Bihar

S. No.	Personality	Surname/Title	Contribution/Details
1	Dr. Rajendra Prasad	Deshratna	- First President of India. - Deshratna means Jewel of the Nation.
2	Ajatshatru	Ajatshatru	- Ancient king of Magadha. - Played a significant role in the history of Bihar.
3	Jayaprakash Narayan	Loknayak, JP	- Known as Loknayak (Leader of the People). - Key figure in the JP Movement and Emergency Movement.
4	Kunwar Singh	Babu	- Revolutionary leader during the First War of Independence (1857).
5	Dr. Shri Krishna Singh	Bihar Kesari	- First Chief Minister of Bihar. - Bihar Kesari means Lion of Bihar.
6	Ramdhari Singh Dinkar	Rashtra Kavi	- Known as the National Poet of India. - Famous for his poetry during Indian independence struggle.
7	Babu Jagjivan Ram	Babujee	- Dalit leader, freedom fighter, and former Deputy Prime Minister of India.
8	Baidya Nath Misra	Baba Nagarjun	- Famous Hindi poet and writer. - Known for his contribution to modern Hindi literature.
9	Dr. Anugraha Narayan Sinha	Bihar Bibhuti	- Known as Bihar Bibhuti (Jewel of Bihar). - Played a key role in Bihar's social and educational reforms.
10	Vidyapati	Bihar Kokil	- Famous Maithili poet. - Known as the Cuckoo of Bihar due to his poetic contributions in Maithili literature.

1.23. Holders of High Constitutional Offices from Bihar

Category	Name	Additional Information	Position	Year
Presidents of India	Dr. Rajendra Prasad	First President of India	President	1950–1962
Presidents of Other Countries	Sir Anerood Jugnauth	Former President of Mauritius	President of Mauritius	2003–2012
	Kailash Purryag	Former President of Mauritius	President of Mauritius	2012–2015
Vice Presidents of Other Countries	Parmanand Jha	First Vice-President of Nepal	Vice-President of Nepal	2008–2015
Prime Ministers of Other Countries	Navin Ramgoolam	Current Prime Minister of Mauritius	Prime Minister of Mauritius	1995–2000
	Seewoosagur Ramgoolam	First Prime Minister of Mauritius	Prime Minister of Mauritius	1968–1982
	Sir Anerood Jugnauth	Former Prime Minister of Mauritius	Prime Minister of Mauritius	1982–1995, 2000–2003
	Kamla Persad-Bissessar	First female Prime Minister of Trinidad and Tobago	Prime Minister of Trinidad and Tobago	2010–2015
	Basdeo Panday	Former Prime Minister of Trinidad and Tobago	Prime Minister of Trinidad and Tobago	1995–2001
	Girija Prasad Koirala	Former Prime Minister of Nepal	Prime Minister of Nepal	1991–1994, 1998–2001
Attorneys General of India	L.N. Sinha	Attorney General of India	Attorney General of India	1990–1992
Advocate General of Bihar	Rambalak Mahto	Longest serving Advocate General of Bihar and legal advisor to Nitish Kumar	Advocate General of Bihar	2005–2020

CHAPTER 2.1

ANCIENT HISTORY

Bihar's ancient history dates back to the dawn of human civilization and is associated with the emergence of the first myths and legends of Sanatana Dharma. For thousands of years, it was the center of a powerful kingdom, learning as a cultural center under the patronage of able kingdoms.

The state's history is one of the most diverse in India, consisting of three distinct regions, each with its unique culture and heritage. Bihar played a significant role as an administrative capital of a mighty kingdom and as a major cultural center throughout its ancient history. Not relevant

Stone Age Sites (Exam oriented)

Age	Site Discovered In	District/State	Time Period	Features
Paleolithic [Old Stone Age]	Munger, Nalanda	Bihar	1,00,000 BCE	Early stone tools, cave settlements
Mesolithic sites [Middle Stone Age]	Ranchi, Hazaribagh, Singh-bhum, Santhal Pargana	Jharkhand	1,00,000 – 40,000 BCE	Microlith tools, nomadic culture
Neolithic [New Stone Age]	Chirand, Chechar	Saran, Vaishali	2500–1500 BCE	Polished tools, early agriculture
Chalcolithic	Taradih, Chirand, Vaishali	Gaya, Saran	1500–700 BCE	Use of copper, settled village life

The Arrival of Aryans in Bihar

- During the later Vedic era (1000-600 BCE), the Aryans migrated towards Eastern India
- Satapatha Brahmana talked about the migration and dispersion of the Aryans.
- The *Varah Puran* references Gaya, Punpun, and Rajgir as auspicious places, while Kikat is noted as an inauspicious location.

Mahajanapadas

According to Buddhist and Jaina literature, India in the sixth century was ruled by several small kingdoms or city-states, with Magadha being the most prominent. By 500 BC, a group of sixteen monarchies and republics, known as the Mahajanapadas, emerged across the Indo-Gangetic plains.

Three of these Mahajanapadas were located in Bihar: Magadha, Anga, and Vajji.

Mahajanapada	Region	Capital	Key Facts
Anga	Sahibgunj and Godda (Jharkhand), Khagaria, Bhagalpur and Munger (Bihar)	**Champa**, also known as **Malinipuri**, was established by **Mahagovind**. **Hiuen Tsang** referred to it as **Chenanpo**. In modern times, it is known as **Bhagalpur** and **Munger** districts in Bihar.	Mention 01st time in Athar Veda, Known for its trade, was often in conflict with Magadha, It was located in the Magadha Empire's northeast
Avanti	Malwa (Ujjayini and Mahishmati)	-	A powerful kingdom, later split into two parts: Ujjayini and Mahishmati. Known for its strategic location.
Ashmaka	Between the Narmada and Godavari rivers	Podana	Located on important trade routes, it played a key role in facilitating commerce and cultural exchange.
Chedi	Bundelkhand (Modern-day Madhya Pradesh)	Shuktimati	Known for its significant military power, it was involved in numerous regional conflicts.

Kashi	Varanasi (Current Banaras)	Varanasi	A religious and cultural hub, Kashi was one of the oldest cities of India, significant in Hinduism.
Kosala	Faizabad, Gonda, Bahraich (U.P.)	Shravasti	Famous for its association with Lord Buddha and King Prasenjit, who supported Buddhism.
Kuru	Haryana, Delhi (West of Yamuna River)	Indraprastha	The Kuru dynasty is associated with the Mahabharata epic, with Delhi being a central location in the narrative.
Kamboja	District in Pakistan, associated with Modern Hazara	-	Located on the north-western frontiers of India, known for its warrior class and trade with Central Asia.
Gandhara	Eastern Afghanistan and western Pakistan	Taxila, Pushkalvati	A center of Buddhist learning, Gandhara was an important cultural and trade hub, known for its Greco-Buddhist art.
Magadha	Patna and Gaya (Bihar)	Rajagriha (Girivraj)	Magadha was first mentioned in the **Atharvaveda**. Played a significant role in the development of **Buddhism** and **Jainism**. The kingdom stretched from the **Ganga** in the north to the **Vindhyas** in the south, and from **Champa** in the east to the **river Sone** in the west. Its capital, **Girivraja (Rajgir)**, was surrounded by five hills. Later, **Patliputra** became the new capital. Magadha was the birthplace of two major empires: the **Maurya** and **Gupta** dynasties. **Koshal**, **Vatsa**, and **Avanti** were part of the Magadha Kingdom. One of the most powerful **Mahajanapadas**, home to rulers like **Bimbisara** and **Ashoka**
Malla	Eastern Uttar Pradesh (Deoria, Basti, Gorakhpur, Siddharth Nagar)	Kusinara, Pawa	Known for its confederation of republican clans, Malla was a prominent player in early Buddhist history.
Matsya	Rajasthani cities (Alwar, Bharatpur, Jaipur)	-	Located in the heart of Rajasthan, Matsya played an important role in the Vedic and post-Vedic periods.
Vajji	North of Ganges River (Bihar)	Vaishali	**Vaishali**, famous for its republican system, was regarded as the world's first republic and one of the earliest democratic states in history The **Vajji Kingdom** consisted of **eight clans**. It was located in the **northern part of India**. The three major clans within the kingdom were **Jnatrika**, **Videha**, and **Licchavi**. **Vaishali** served as **Vajji's** capital city.
Vatsa	Allahabad, Mirzapur (U.P.)	Kaushambi	Known for its strong trade and cultural influence, Vatsa was a major kingdom in northern India.
Panchala	Western Uttar Pradesh, East of Yamuna	Ahichhatra	Panchala is important in the Mahabharata, known for its role in the epic's events, especially the Kurukshetra War.
Surasena	Braj-Mandal (Mathura)	Mathura	A significant cultural and religious center, it was associated with Lord Krishna and the development of early art and sculpture.

The three Mahajanapadas in Bihar are discussed below:

Videha Clan:

- The first text to mention of it is Yajurveda.
- This kingdom's capital was Janakpur, which is currently located in Nepal.
- Nimi Videh, the son of Ishkavaku, started the kingdom.
- Mithila was found by Mithijanak Videh.

- Goddess Sita, daughter of King Janak, belonged to this clan.

Licchavi Clan

- It was the Vajji confederacy's most powerful clan. Vaishali served as its capital.
- It was located on the Northern Banks of the Ganga and in Nepal.
- Lord Mahavira was born in Vaishali's Kundagram. His mother was a Licchavi princess (sister of King Chetak).
- Ajatshatru of the Haryanka dynasty eventually integrated them into the Magadha Empire.

Jnatrika Clan:

- This clan was the home of Lord Mahavira. His father was the head of this clan.

Buddhism in Bihar

Bihar is considered the birthplace of **Buddhism**, as it is the land where **Gautama Buddha** (also known as **Siddhartha**), the founder of Buddhism, attained enlightenment, delivered his first sermon known as the "Dharma Chakra Pravartana," and ultimately attained **Parinirvana**. Born in **563 BCE** in **Lumbini**, near **Kapilavastu** (now in Nepal), he belonged to the **Sakya** clan. His father was **Suddodhana**, and his mother was **Mayadevi**. After his mother's death, he was raised by his foster mother, **Prajapati Gautami**. At the age of 16, he married **Yasodhara**, and they had a son, **Rahul**.

At the age of twenty-nine, Gautama Buddha left his home in search of Truth. However, after seven years of wandering, he found that his efforts did not yield fruitful results

The four noble truths of Buddhism are:

Noble Truth	Sanskrit/Pali Term	Explanation
Life is full of misery	Sarvam Dukkham	Suffering is an inherent part of human existence.
Desire is the cause of rebirth and misery	Dukkha Samudaya	Attachment and craving are the roots of suffering.
Misery and rebirth can be ended by conquering desire	Dukkha Nirodha	Liberation from suffering is possible by overcoming desire.
Salvation (Nirvana) is achieved by following the Eightfold Path	Gamini Pratipad / Astangika Marg	The path to end suffering and attain Nirvana lies in the Eightfold Path.

The fourth Buddhist Council saw the completion of the Tripitaka, which was written in Pali.

The Buddhist Literature are given below:

- **Abhidhamma Pitaka**: Contains the philosophical and metaphysical teachings of Buddha (religious discourses).
- **Sutta Pitaka**: A collection of Buddha's short sermons, divided into **5 Nikayas**.
- **Millindapanho**: Dialogues between Greek King **Menander** and Buddhist monk **Nagasena**.
- **Vinaya Pitaka**: Lays down the **rules and discipline** for monks and nuns.
- **Jatakas**: Stories about **Buddha's previous births**.

The eight-fold path followed by Buddhists is given below:

- **Samma-Kammanta**: Right or **integral action**.
- **Samma-Ajiva**: Right or **proper livelihood**.
- **Samma-Ditthi**: Right or **perfect vision**.
- **Samma-Sankappa**: Right or **perfected emotion/aspiration**.
- **Samma-Vaca**: Right or **perfect speech**.
- **Samma-Sati**: Right or **complete awareness**.
- **Samma-Samadhi**: Right or **holistic meditation**.
- **Samma-Vayama**: Right or **complete effort**.

List of the Buddhist Councils			
Council	**Venue**	**Patronage & Presidency**	**Outcome**

LFIMITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

POLITY & Ggovernance

Part 1

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

Part 1 Index

01 HISTORICAL UNDERPINNINGS AND EVOLUTION

1.1 Introduction

The Constitution of a country is a set of written rules accepted by all people living together in that country. It is the supreme law that determines the relationship between people living in a territory and the also relationship between people and the government.

Making of constitution for a diverse country like India has not been an easy process. It has a long history starting from 1934 when the Indian National Congress made the demand for a constituent assembly. Apart from this, post-independence, country had to face partition based on religious differences. Merger of princely states with India or Pakistan was also a difficult task. Writing a constitution amidst such challenges was not an easy task.

1.2 Why do we need a constitution?

Constitution is required as

- It provides a set of basic rules that allow for minimal coordination amongst members of a society.
- It specifies as to who has the power to make decisions in a society and it also decides how the government will be constituted.
- It sets some limits on what a government can imposed on its citizens. Such limits are fundamental in the sense that the government can never trespass on them.
- It enables the government to fulfil the aspirations of a society and create conditions for a just society.
- The Constitution expresses the fundamental identity of a people. It gives political and moral identity to the people.

NOTE In both 1928 and 1931 session, there was a consensus on inclusion of Universal adult franchise, right to freedom and equality and to protect the rights of minorities.

NOTE Indians gained a lot of experience in the working of legislative institutions setup by British by participation in elections held in provincial legislatures and Ministries all over British India. Therefore, a lot of institutional details and procedures were adopted from colonial Government of India Act 1935.

1.3 Historical Evolution of The Indian Constitution

Evolution of the Constitution can be studied under three major headings

I. During East Indian Company rule (1773-1858)
II. During British rule (1858-1947)
III. Post-independence, by constituent assembly.

1.3.1 During East Indian Company rule (1773-1858)

YEAR	NAME	FEATURES
1773	**Regulating Act of 1773**	▪ **First step by the British government to control and regulate the affairs of East India Company in India.** ▪ Designated the governor of Bengal as governor- general of Bengal and created an executive Council of 4 members to assist him. ▪ Made the Governors of Bombay and Madras Presidency subordinate to governor-general of Bengal. ▪ Provided for establishment of **Supreme Court at Calcutta** comprising one chief justice and three other judges. ▪ Prohibited servants of company from engaging in any private trade ▪ **Strengthen the control of British government over the company** by requiring the court of directors to report on Revenue, civil and military affairs in India.
1781	**Amending act of 1781**	▪ Exempted the governor general and his Council, servants of the company and revenue matters and matters arising in collection of revenue from jurisdiction of Supreme Court. ▪ Supreme Court was to have **jurisdiction over all the inhabitants of Calcutta**- ➢ Hindus were to be tried according to Hindu law, and ➢ Muslims were to be tried according to the Mohammedan law. ▪ **Appeals from provincial courts** could be taken **to Governor General-in-Council** and not the Supreme Court. ▪ Empowered the Governor General-in-Council **to frame regulation for provincial courts and Council.**
1784	**Pitt's India Act of 1784**	▪ **Distinguished between the commercial and political functions of the company.** ▪ Established **Board of Control to manage the political affairs of company and court of directors to manage the commercial affairs of company,** thus, establishing a system of double government. ▪ Also empowered the Board of Control to supervise and direct **all operations of Civil and military government or revenue** of British possessions in India. ▪ This act is important because it is the **very first time** that company territories in India were called as **the British possessions**.
1786	**Act of 1786**	▪ 1786 was a time when Lord Cornwallis was appointed as the governor general of Bengal. He places two demands to accept the post ➢ Special power to override the decision of council in special cases. ➢ To make him the Commander-in-Chief.
1793	**Charter Act of 1793**	▪ Extended the overriding power to all the feature Governor General and governors of presidencies. Also gave the governor general more power and control over the Government of subordinate presidencies of Bombay and Madras. ▪ Extended **the trade Monopoly of company in India for 20 years.** ▪ Provided that Commander-in-Chief would be a member of governor-general's Council unless he was the one so appointed. ▪ Laid down that members of Board of Control and their **staff would be paid out of Indian revenues.**
1813	**Charter Act of 1813**	▪ **Abolished the trade Monopoly of company in India** but only continued the Monopoly of company over trade in **tea and trade with China.** ▪ Asserted the sovereignty of British Crown over the company's territories in India. ▪ **Allowed Christian missionaries to come to India** and also provided for the spread of Western education among the inhabitants of British territories in India. ▪ Authorised the **local government in India to impose taxes on persons** and also punish the persons for not being taxes.
1833	**Charter Act of 1833**	▪ It **made governor general of Bengal as a Governor General of India**. Lord **William Bentick** was the first governor general of India. ▪ It was the height of centralisation as it deprived the governor of Bombay and Madras of their legislative powers.

		▪ Governor General of India was given the **Exclusive legislative powers for the entire British India.** ▪ Laws in the previous acts were called regulations but under this act were called acts. ▪ It **ended** the activities **of East India Company as a commercial body** and made it a purely administrative body. ▪ Attempted to **introduce a system of open competition for selection of civil service** stating that Indian should not be debarred from holding any place, office and Employment under the company.
1853	**Charter Act of 1853**	▪ **It separated for the first time Legislative and executive functions of the Governor generals Council.** ▪ There was addition of 6 new members called legislative councillors to the legislative Council of governor general. This functioned as a **mini parliament.** ▪ It introduced an open competition system for selection and recruitment of civil servants. ▪ A clear indication **that the companies' rule could be terminated at any time** the British Parliament liked was given. ▪ **For the first time**, local representation in Indian Legislative Council was allowed. Of the 6 new legislative members of the Governor General Council, **four members were appointed by local governments of Madras, Bombay, Bengal and Agra**.

1.3.2 During British rule (1858-1947)

YEAR	NAME	FEATURES
1858	**Government Of India Act 1858**	▪ This act is also known as **the act for good government of India** as it **abolished the East Indian Company** and transfer the powers of government, territories and revenues to the British crown. ▪ **Viceroy was a direct representative of the British Crown in India. Lord Canning became the first viceroy of India.** ▪ It abolished the Board of Control and court of directors does **ending the system of double government.** ▪ It created a **new office of secretary of state of India** which was a member of British cabinet and **responsible ultimately to the British Parliament.** ▪ **15-member Council of India** was established to assist the secretary of state for India. ▪ Secretary of state in Council was a **body corporate capable of suing and being sued** in India and in England.
1861	**Indian Councils Act Of 1861**	▪ **Indians were associated with the law-making process**. ➢ In 1862, lord Canning the then Viceroy **nominated 3 Indians to his legislative council-** ➢ Raja of Banaras, Maharaja of Patiala and Sir Dinkar Rao. ▪ **It initiated the process of decentralization** by restoring the legislative powers to the Bombay and Madras Presidency. ➢ Policy of Legislative devolution resulted in Grant of almost complete internal autonomy to provinces in 1937. ▪ Provided for establishment of **new legislative councils for Bengal, Northwestern provinces and Punjab.** ▪ Empowered the viceroy to make rules and orders for more convenient transaction of business in the Council. ➢ **It also gave recognition to the portfolio system.** ▪ It empowers **the viceroy to issue ordinances during emergency,** life of which would be **6 months.**

LFINITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

POLITY & GOVERNANCE

Part 2

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

Part 2 Index

10 CENTER AND STATE RELATIONS

10.1 Introduction

India is a land of Continental proportions and immense diversity. There are more than 20 major languages and several hundred minor one. It is the home of several major religions.

Despite all these diversities, we share a common landmass. When the decision to partition was taken, the constituent assembly decided to frame a government that would be based on the principles of unity and cooperation between the centre and the states.

Therefore, while recognising diversity, constitution emphasized Unity.

We are going to be dealing with various relations between centre and state in terms of sharing of power between the three organs of government.

- **Legislative,**
- **Administrative**
- **Financial.**

10.2 Legislative

10.2.1 Distribution of Legislative Power

- The constitutional provisions in India about distribution of legislative powers between the Union and the States are spread out over several articles **(articles 245-254).**
- However, the most important of those provisions – i.e. the basic one – **is that contained in articles 245-246.**

Article 245 sets out the limits of the legislative powers of the Union and the States from the geographical (or territorial) angle providing that.

- Parliament may make laws for the whole or any part of the territory of India and
- The legislature of a State may make laws for the whole or any part of the State.
- Parliament can make law for extra-territorial operation also.

From the point of view of the subject matter of legislation, it is article 246 which is important, which reads as under

- Parliament has exclusive power to make laws with respect to any of the matters enumerated in List 1 of the Seventh Schedule (referred to as the **"Union List").**

- Parliament shall have power to make laws with respect to any of the matters enumerated in List III in the Seventh Schedule (referred to as the **"Concurrent List").**
- The Legislature of any State has exclusive power to make laws for such State or any part thereof with respect to any of the matters enumerated in List II in the Seventh Schedule (referred to as the **"State List").**
- Parliament has power to make laws with respect to any matter for any part of the territory of India not included in a State, notwithstanding that such matter is a matter enumerated in the State List.
- **Article 248** provides for residuary powers of legislation as per this Parliament has exclusive power to make any law with respect to any matter not enumerated in the Concurrent List or State List. Such power shall include the power of making any law imposing a tax not mentioned in either of those Lists.

10.2.2 Power of Parliament to Legislate on State Subjects

AS PER ARTICLE 249

If the **Council of States has declared by resolution** supported by not less than two-thirds of the members present and voting that it is necessary in the national interest that Parliament should make laws with respect to any matter enumerated in the State List specified in the resolution, it shall be lawful for Parliament to make laws for the whole or any part of the territory of India with respect to that matter while the resolution remains in force. Such a resolution passed shall remain in force for such period not exceeding one year. However, it can be renewed any number of time but not exceeding one year at a time.

AS PER ARTICLE 250

Parliament shall, while a **Proclamation of Emergency** is in operation, have power to make laws for the whole or any part of the territory of India with respect to any of the matters enumerated in the State List. Such a law made by Parliament shall cease to have effect on the expiration of a period of six months after the Proclamation has ceased to operate.

AS PER ARTICLE 252

Power of Parliament to legislate for two or more States by consent if resolutions to that effect are passed by all the Houses of the Legislatures of those States, it shall be lawful for Parliament to pass an Act for regulating that matter accordingly, and any Act so passed shall apply to such States and to any other State by which it is adopted afterwards by resolution passed in that behalf by the House.

AS PER ARTICLE 253

Parliament has power to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at any international conference, association, or other body.

If **President's rule** is imposed in a state, then Parliament is empowered to make laws with respect to any matter in a state list and such a law continues to be operative even after President's rule.

10.2.3 Repugnancy Between Centre and State with Regard to Laws Made by Them

To deal with inconsistency between laws made by Parliament and laws made by the Legislatures of States,

ARTICLE 254 states that If any provision of a law made by the Legislature of a State is repugnant to any provision of a law made by Parliament which Parliament is competent to enact with respect to one of the matters enumerated in the Concurrent List, then the law made by Parliament shall prevail and the law by the Legislature of the State shall, to the extent of the repugnancy, be void.

Exceptions where laws of Parliament are not applicable.

1. **President** can make regulations for peace, progress, and good government of the five union territories which are - Andaman and Nicobar Islands, Lakshadweep. Dadar and Nagar Haveli, Daman, and Diu and Ladakh.
2. **Governor** is empowered to direct that an act of Parliament does not apply to a scheduled area in a state or if it applies then it applies with specific modification.
3. **Governor of Assam** may direct that an act of parliament does not apply to a tribal area or if it applies it applies with specific modifications or exceptions.
4. **President** enjoy the same power to Tribal areas in **Meghalaya. Tripura and. Mizoram**.

42nd Constitutional Amendment Act, 1976 transfer file subjects to a concurrent list from state list Education, forest, weights and measures, protection of wild animals and birds as well as administration of Justice.

However, where a law made by the Legislature of a State with respect to one of the matters enumerated in the Concurrent List contains any provision repugnant to the provisions of an earlier law made by Parliament, but been reserved for the consideration of the President and has received his assent, prevail in that State. At the same time, it is to be provided that the law by state has nothing that shall prevent Parliament from enacting at any time any law with respect to the same matter including a law adding to, amending, varying or repealing the law so made by the Legislature of the State.

Therefore, there is **dominance of union list over state list and that of concurrent list over state list.**

10.3 Administrative

10.3.1 Extent of Executive Power of Union and State

AS PER ARTICLE 256,

- the executive power of every State shall be exercised so as to ensure compliance with the laws made by Parliament and any existing laws which apply in that State.
- Also, the executive power of the Union shall extend to the giving of such directions to a State as may appear to the Government of India to be necessary for that purpose.

Control of the Union over States in certain cases

AS PER ARTICLE 257

- The executive power of every State shall be so exercised as not to impede or prejudice the exercise of the executive power of the Union.

LFIMITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

WORLD & PHYSICAL GEOGRAPHY

Part 1

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

CONTENTS

1 ORIGIN AND EVOLUTION OF EARTH

1.1 Introduction

The term geography was first coined by ERATOSTHENESE, a Greek scholar. The word Geography has been derived from two words- GEO (meaning Earth) and GRAPHOS (meaning description). It is, therefore, a study of description of the earth as the abode of human beings.

1.2 Theories of Origin of The Earth

Regarding the theories explaining the origin of earth, listed below is a table that explains all the early and modern theories.

Theory by	Name of Theory	Explanation of Theory
Immanuel Kant	Nebular Hypothesis	It proposed that the solar system formed from a rotating cloud of gas and dust, known as a nebula. The nebula collapsed due to gravity, and the material in the center became dense and hot enough to form the Sun. The remaining material in the nebula flattened into a disk and cooled, forming the planets and other objects in the solar system.
Chamberlain & Moulton	Planetesimal Hypothesis	A wondering star approached the sun and as a result, cigar shaped extension of material was separated from the Solar surface. As the star moved away, cigar shaped extension of material separated from the Solar surface and started revolving around the sun. It later slowly condensed into planets.
Sir James Jeans & Sir Harold Jeffrey	Binary Theories	They supported cigar shaped extension theory of Chamberlain and Moulton and later considered of a companion to the sun to have been coexisting.
Otto Schmidt & Carl Weizascar	Revised Nebular Hypothesis	They considered that the sun was surrounded by solar Nebula (Nebula is a giant cloud of dust and gas in space). It consisted of hydrogen and Helium mostly along with dust. The friction and pollution of particles lead to the formation of disc shaped cloud and planets were formed through the process of accretion.
Initiated By: Edwin Hubble	Big Bang Theory/ Expanding	The expanding universe hypothesis is the theory that the universe is expanding, and that the distance between any two points in the universe is increasing over time. This hypothesis is supported by a wide range of

	Universe Hypothesis	evidence, including Hubble's law, the cosmic microwave background radiation, and the large-scale structure of the universe.

1.3 Formation of Stars and Planets

More about Big Bang Theory

As per Big Bang Theory, development of universe takes place in the following stages:

- In the beginning, all the matter which forms the universe today existed in one place in the form of a tiny ball which has a very small volume, infinite temperature, and infinite density.
- At the big bang (13.7 billion years ago), the same tiny ball exploded leading to a huge expansion, which continuous even to the presence day.
- During expansion, some energy converted to matter (as Einstein's E=mc^2 equation explains). The first atom began to form within the first three minutes from the Big Bang event.
- Within 300,000 years after the big bang, temperature dropped to 4500K and gave rise to atomic matter. This is the time when Universe became transparent.

An alternative to expanding Universe hypothesis is **HOYLE'S CONCEPT OF STEADY STATE.**

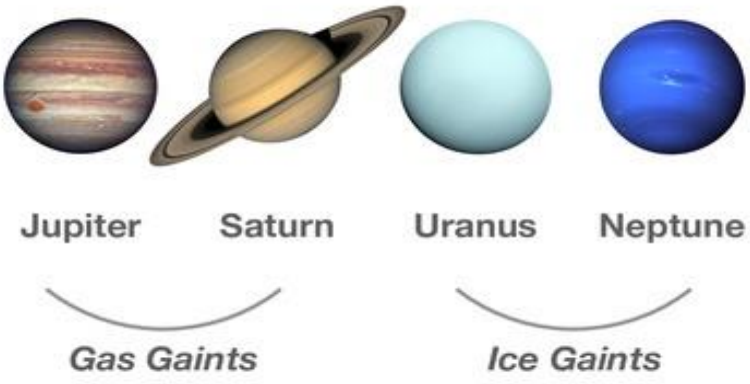
It considers the universe to be roughly the same at any point of time. However, now the greater evidence available favours the expanding universe hypothesis.

Formation	Details
Formation of Stars	▪ Distribution of matter and energy was uneven in the early universe. This gave rise to initial density differences. Initial density differences for the give rise to differences in gravitational forces, causing the matter to be drawn together. ▪ This formed the bases for development of Galaxies. (Galaxy contains large number of stars and is spread over was distances measuring in thousands of light years. Diameter of individual Galaxy range from 80,000-150,000 light years.) ▪ Therefore, by accumulation of hydrogen gas in the form of a very large cloud (known as NEBULA), a Galaxy is formed. ▪ Growing Nebula develops localised clumps of gases. These clumps continue to grow into denser gaseous bodies which gives rise to formation of star. ▪ Formation of star is believed to have taken place 5-6 billion years ago.
Formation of Planets	▪ Within a nebula, stars are localized lumps of gases. ▪ The gravitational force present within these lumps leads to the formation of a core. A huge rotating disc of gas and dust develops around this core. ▪ Then, the gas cloud start getting condensed and matter around the coal develops into small, rounded objects. These are called - PLANETESIMALS. ▪ Due to collision and gravitational attraction, smaller bodies i.e. PLANETESIMALS stick together and form fewer larger bodies called planets.

1.3 Our Solar System

- **Our solar system consists** of the sun, 63 moons, millions of smaller bodies like asteroids, comets, huge quantities of dust grains and gases as well as 8 planets- MERCURY, VENUS, EARTH, MARS, JUPITER, SATURN, URANUS, NEPTUNE.
- The Nebula which formed our solar system, started to collapse, and led to its core formation around 5-5.6 billion years ago. Planets in solar system were formed about 4.6 billion years ago.
- **The inner four planets** i.e. **Mercury, Venus, Earth, Mars** are referred to as **Terrestrial planets**, as they are formed from Rock and metals and have high density.
- **The outer four planets** i.e. **Jupiter, Saturn, Uranus, Neptune** are referred to as **Jovian or Gas Giant planets.** These are mostly larger planets than Terrestrial planets and have thick atmosphere of helium and hydrogen.

Terrestrial Planets
- Made of rocks or metals
- Surfaces are solid
- No rings
- Very few or no moons
- Relatively small



Jovian Planets / Giant Planets
- Gas giants: made of Helium and Hydrogen
- Ice giants: contain rock and ice
- No solid surface
- Support ring systems
- Multiple moons
- Immense in size

1.3.1 Difference between the two planets is because of the following reason:

Terrestrial Planets	Jovian Planets
▪ **Terrestrial planets** were formed in the closed vicinity of the Sun. It was too warm for gases to condense into solid particles. ▪ **Solar wind** was very intense near Terrestrial planets which blew off lots of gases and Dust from Terrestrial planets. ▪ **Terrestrial planets** were smaller and so their lower gravity could not hold the escaping gases.	▪ **Jovian planets** were formed at a larger distance to the sun where it was cold enough for gases to condense into solid particles. ▪ **Solar winds** were weak near Jovian planets and so, could not cause removal of gases from them. ▪ **Jovian planets** were comparatively bigger and so their Gravity could hold the gases around them.

1.4 Moon

- It is the only natural satellite of Earth.

LFIMITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

INDIAN GEOGRAPHY

Part 2

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

IN THIS BOOK

1 INDIA - LOCATION

1.1 Introduction

Our country India with its diverse culture, languages and populations also enjoys the blessings of having diverse geographical features. Not only features, but India's location also has strategic importance of it as it lies in India ocean which is significant for trade, commercial and security purposes.

1.2 About India

The mainland of India extends from Kashmir in North to Kanyakumari in South and Arunachal Pradesh in East to Gujrat in the west. Its territorial extent further extent towards sea up to 12 nautical miles. India has an enormous land boundary, its land boundary extends to about 15,200km. the total length of Indian Mainland, along with islands of Andaman and Nicobar as well as Lakshadweep is 7516 km.

1.2.1 Longitudinal and Latitudinal extent

- India's Latitudinal extent extend from 8°4'N to 37°6'N.
- India's Longitudinal extent extend from 68`7E to 97`25E.
- Tropic of Cancer (23.5 N latitude) passes through India from Gujrat, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, west Bengal, Tripura, Mizoram.

From above we can clearly see that Longitudinal and latitudinal extent of India is roughly 30 degree but actual distance between north and south is 3214 km whereas East-West extent is 2933 km. This difference is on the fact that distance between two longitude decreases towards poles whereas the distance between two latitudes remains same everywhere.

1.2.2 Size of India

- India with its area of 3.28 million sq. km accounts for 2.4% of world's landmass and stands seventh largest country in world.
- The size of India has been endowed with physical diversity. It includes Himalayas in north, Western Ghats in West, Eastern Ghats in East. It has a large river such as **Ganga, Brahmaputra, Mahanadi, Krishna Godavari** etc.

1.2.3 Political Division of India

India has been divided into 28 states and 8 Union territories as

28 states			
State	**Capital**	**State**	**Capital**
Andhra Pradesh	Amravati	**Manipur**	Imphal
Arunachal Pradesh	Itanagar	**Meghalaya**	Shillong
Assam	Dispur	**Mizoram**	Aizwal
Bihar	Patna	**Nagaland**	Kohima
Chhattisgarh	Raipur	**Odisha**	Bhubaneshwar
Goa	Panaji	**Punjab**	Chandigarh
Gujrat	Gandhinagar	**Rajasthan**	Jaipur
Haryana	Chandigarh	**Sikkim**	Gangtok
Himachal Pradesh	Shimla	**Tamil Nadu**	Chennai
Jharkhand	Ranchi	**Telangana**	Hyderabad
Karnataka	Bengaluru	**Tripura**	Agartala
Kerala	Thiruvanthapuram	**Uttar Pradesh**	Lucknow
Madhya Pradesh	Bhopal	**Uttarakhand**	Dehradun
Maharashtra	Mumbai	**West Bengal**	Kolkata

Eight Union Territories	
Union Territory	**Capital**
Delhi	Delhi
Jammu and Kashmir	Srinagar-Summer, Jammu-Winter
Ladakh	Leh
Chandigarh	Chandigarh
Dadra & Nagar Haveli and Daman & Diu	Daman
Puducherry	Puducherry
Andaman and Nicobar Island	Port Blair
Lakshadweep	Kavaratti

Some observations-

- **States as per Area wise (descending order):** Rajasthan, Madhya Pradesh, Gujrat, Karnataka, Uttar Pradesh, Andhra Pradesh, Odisha, Chhattisgarh, Tamil Nadu
- **States as per population wise (in descending order):** Uttar Pradesh, Maharashtra, Bihar, West Bengal, Andhra Pradesh, Madhya Pradesh, Tamil Nadu, Rajasthan, Karnataka, Gujrat

1.2.4 Coastline of India

India has a diverse and extensive coastline that stretches for about **7,517 kilometers (4,670 miles),** making it one of the longest coastlines in the world. The coastline is bordered by the Arabian Sea to the west, the Bay of Bengal to the east, and the Indian Ocean to the south. Here are some key features and characteristics of the coastline of India:

Geographical Diversity:

- The coastline of India exhibits significant geographical diversity, ranging from sandy beaches to rocky shores and cliffs.
- There are several estuaries, deltas, and lagoons along the coast, formed by rivers like the Ganges, Brahmaputra, Godavari, Krishna, and others.

Western Coast:

- The western coast of India is along the Arabian Sea. It is known for its picturesque beaches, rocky cliffs, and backwater regions. Some notable features include the Konkan Coast, Malabar Coast, and the sandy beaches of Goa.

Eastern Coast:

- The eastern coast of India faces the Bay of Bengal and is generally characterized by broader and less rugged coastlines compared to the west.
- The delta regions of the Ganges, Brahmaputra, and Godavari rivers contribute to the formation of extensive mangrove forests and deltas along the eastern coast.

Islands:

- India has several islands along its coastline, the most prominent being the Andaman and Nicobar Islands in the Bay of Bengal and the Lakshadweep Islands in the Arabian Sea.

1.2.5 India and its neighbors

Countries that has land border with India are **Afghanistan, Pakistan, China, Nepal, Bangladesh, Myanmar**.

Country	Boundary in km
Afghanistan	106km
Pakistan	3323
China	3440
Nepal	1770
Bangladesh	4096
Myanmar	1643

- India is surrounded by Arabian sea in the West, Indian Ocean in the south and Bay of Bengal in the East.
- Countries that share sea boundary are Sri Lanka, Maldives. Sri Lanka is separated from India by Palk strait and Gulf of Munnar.

1.2.6 Standard Meridian of India

- Standard Meridian is the longitude that determines the standard time for whole country. It is 82’30E and passes through Mirzapur to bring uniformity in time.
- It is because of this reason that clock shows same time in Jaisalmer and Arunachal Pradesh even though sun rises 2 hours earlier in Arunachal Pradesh than in Jaisalmer.

Note: State where Tropic of Cancer and standard Meridian meets is Chhattisgarh.

1.2.7 Strategic Importance of India

- India as a country in the Indian Ocean holds importance as it emerged as a critical conduit for trade, commerce, and energy. The waters of the Indian Ocean Region (IOR) have become a home for economic developments, disputes, conflicts, and competition for regional influence by regional and extra-regional powers. All major powers, such as the United States, Australia, Japan, United Kingdom, India, and China have sought stakes in the security of the IOR. The India Ocean remains a pivot, being the world’s busiest trade route. Around 80 percent of the world’s maritime oil trade passes through the IOR.

- India's location helps in connecting West Asia with East Asia through its mainland and acts as binding force in integration of Asia.
- Its vast diverse geographical features from mountains to plateaus to plains to islands endows it with rich diversity in food, clothing and culture making it one of the cultural tourist spots.
- In the Present World Order of Rising China's power, India sharing long border with China also add to its strategic location.
- Centrality of India is also corroborated by its presence in Indo-Pacific which is becoming a new point of Geopolitics.

===XXX===

LFIMITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

ANCIENT HISTORY | ART & CULTURE

Part 1

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

CONTENTS

01 PRE-HISTORIC INDIA

1.1 Pre-Historic India

- Human settlements in India have a prehistoric origin, with a history dating back to ancient times.
- ***No written records exist for the prehistoric era***, but abundant archaeological remains are scattered across various regions of India.
- These archaeological remnants encompass stone tools, pottery, artifacts, and metal implements utilized by prehistoric communities.
- The study of archaeology significantly contributes to reconstructing the history of this period.
- Archaeological findings provide insights into the life and culture of the people who inhabited India during prehistoric times.

The prehistoric period is categorized into the Paleolithic, commonly known as the Old Stone Age

1. Mesolithic (Middle Stone Age)
2. Neolithic (New Stone Age)
3. The Metal Age.

Nevertheless, the durations of these periods varied across the Indian subcontinent. ***Scientific dating methods are employed to determine the timeline of the prehistoric era.*** Radio-carbon dating, a commonly used technique, relies on measuring the decay of carbon in organic materials over time. Another dating method, Dendro-Chronology, involves determining the age of wood by counting the number of tree rings present in it.

1.2 Paleolithic or Old Stone Age

The Paleolithic Period, also known as the Old Stone Age, is a prehistoric era that ***spanned from about 2.5 million years ago to around 10,000 B.C.*** During this time, early human societies were characterized by a nomadic, hunter-gatherer lifestyle.

1.2.1 Key aspects of this period

Hunter-Gatherer Lifestyle

- People during the Old Stone Age were primarily hunter-gatherers, meaning they relied on hunting animals and gathering plants for their sustenance.
- Hunting tools were typically made from stone, and large stone axes were likely used for hunting large animals. The collaboration of groups was essential for successful hunting.

Stone Tools

- Stone tools were a crucial aspect of Paleolithic technology. These tools were fashioned from materials like quartzite and were used for various purposes, including hunting and processing food.
- The tools were often hand-sized and flaked-off large pebbles, showcasing the ingenuity of early humans in adapting natural materials for their needs.

Domestication and Agriculture
Over time, some groups of people in the Old Stone Age began experimenting with the domestication of animals and the cultivation of plants. This marked a significant shift toward a more settled lifestyle.

Crude Pottery
Evidence suggests that early humans in the later stages of the Paleolithic Period started making crude pottery. This development was a precursor to more advanced forms of pottery in later periods.

Rock Art
Notable examples of rock art, such as those found at Bhimbetka and other locations, provide insights into the creative and symbolic expressions of early humans. These paintings often depicted scenes from daily life, animals, and rituals.

Limited Knowledge of Language and Communication
Unfortunately, there is limited direct evidence regarding the language and communication of Paleolithic people. However, their collaborative efforts in hunting and evidence of symbolic expression through art suggest some level of social organization and communication.

Chronology
- **The Old Stone Age is generally divided into the Lower Paleolithic, Middle Paleolithic, and Upper Paleolithic**. The period before 10,000 B.C. falls within the Upper Paleolithic, characterized by more advanced stone tools and the emergence of symbolic art.
- Understanding the lifestyle and advancements of Paleolithic people provides valuable insights into the early stages of human development and the gradual transition from a nomadic, hunter-gatherer existence to more settled communities practicing agriculture.

Evidence
- Tools has been found in Kurnool district of Andhra pradesh.
- Tools used were axes, choppers and cleavers.
- **Hunters and gatherers** who **lived in the Belan Valley of Mirzapur district, Uttar Pradesh**, during the Stone Age left behind animal remains. These remains indicate they hunted wild animals for subsistence. While evidence suggests the presence of domesticated animals like goats, sheep, and cattle in later stages, the primary focus in the Belan Valley was likely on wild game.
- Developed in Pleistocene period or ice age.
- Early Man in India (except in alluvial plains of Indus, Ganga and Yamuna) used chipped stone tools, pebbles for hunting, cutting and other purpose.
- No knowledge on cultivation and horse.

1.2.2 Phases of Paleolithic period in India: Classification is based on
- Stone tools used
- Climate Change

Early /Lower Paleolithic age
- It Covers the greater part of Ice age.
- It is characteristic feature is the use of Hand-axes, cleavers, and choppers.
- Axes found in India is similar to west Asia, Europe and Africa.
- Stone tools used mainly for chopping, digging, and skinning.

Following are the sites
- The Soan Valley and Potwar Plateau are situated in Northwestern India.
- The Siwalik hills on the North India.
- Bhimbetka in Madhya Pradesh.

LIMITE
Read LESS Learn MORE

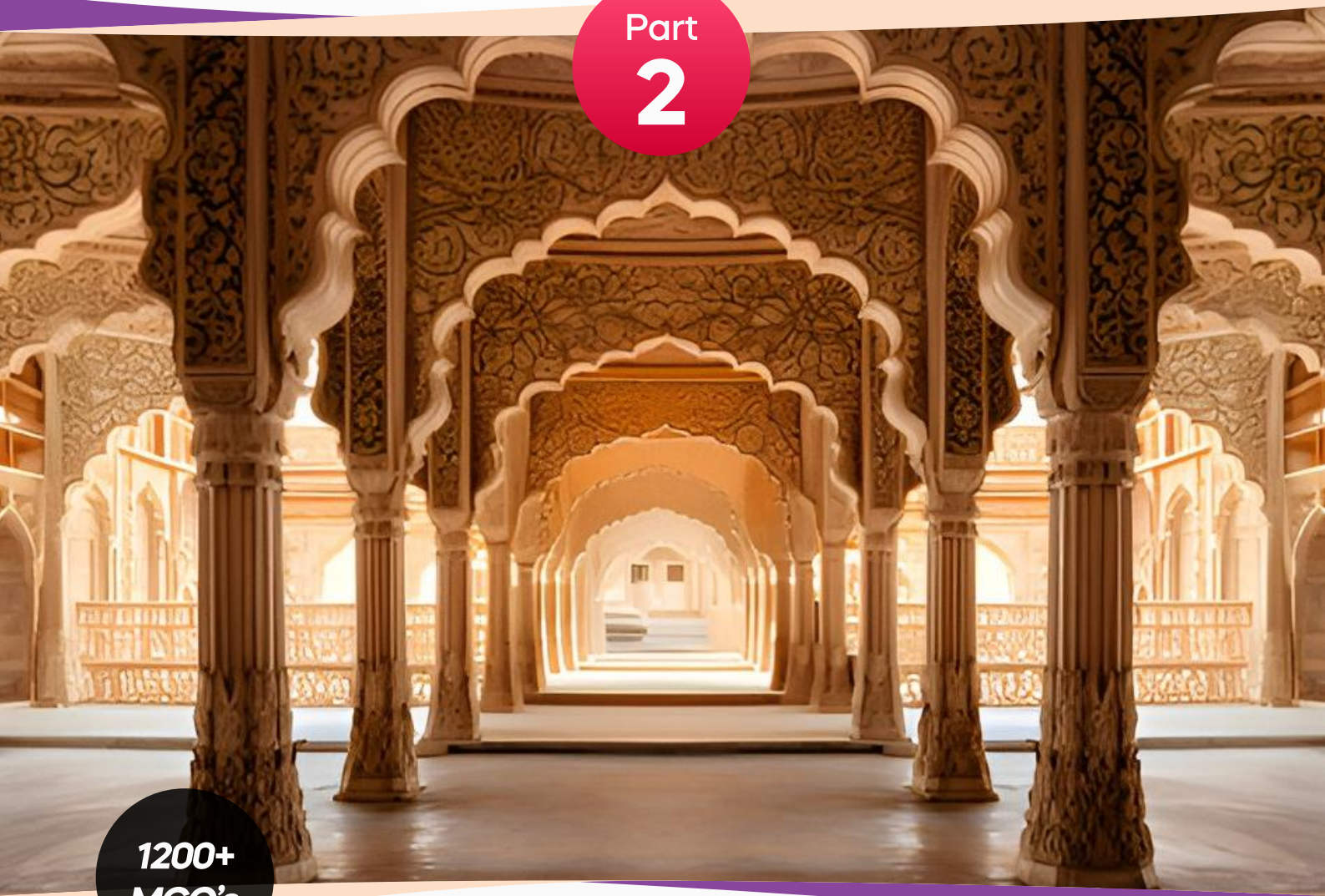
Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

MEDIEVAL HISTORY

Part 2



1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

In this Book

01 Disintegration of The Gupta Empire (6th Century)

1.1 Factors contributing to the decline and ultimate disintegration of Gupta Empire

1.1.1 Weak Succession and Internal Strife

- Multiple Succession Claims, for example- The **death of Kumaragupta I (415–455 CE)** saw competition among his sons for the throne. **Skandagupta** ultimately succeeded, but the succession dispute may have weakened the authority and unity of the ruling elite.
- Weak Heirs, for example- The reign of weak or inexperienced rulers like **Purugupta (467–473 CE) and Kumaragupta II (473–476 CE)** showcased instances where the designated successors lacked the strength and leadership qualities needed to rule a vast empire.
- Power Struggles Among Family Members, for example- **Skandagupta's reign (455–467 CE) was marked by power struggles and internal conflicts, including conflicts with his brother Purugupta**. This internal strife could have weakened the Gupta Empire's ability to respond effectively to external threats.

1.1.2 Weak leadership

- **Purugupta (c. 467–473 CE, Kumaragupta II (c. 473–476 CE) and Budhagupta (c. 476–495 CE)** are cited as ineffective rulers who faced challenges in maintaining effective governance and had difficulties in handling both internal and external pressures.
- **Vishnugupta (c. 540–550 CE):** Vishnugupta faced challenges in defending the Gupta Empire against the invasion of the **Huna ruler Mihirakula**. The empire's inability to repel the invader revealed weaknesses in military leadership and strategic planning.
- **Kumaragupta III (c. 530–540 CE):** Kumaragupta III is associated with administrative inefficiencies, contributing to a decline in central authority.

1.1.3 Dynastic struggles

- **Chandragupta II and Kacha**: Chandragupta II (c. 375–415 CE) had a son named Kacha. After Chandragupta II, there might have been a dynastic struggle between Kacha and his brother or other contenders for the throne.
- **Purugupta and Kumaragupta II**: The transition from Purugupta to Kumaragupta II might have involved dynastic conflicts or disputes within the ruling family. This period of succession could have been marked by internal strife and challenges to the legitimacy of the chosen heir.
- **Budhagupta and His Rivals**: Budhagupta's reign is associated with internal conflicts and power struggles. Rival factions within the Gupta dynasty may have vied for power, contributing to a sense of instability during this period.
- **Narasimha Gupta Baladitya and Kumaragupta III:**The transition between Narasimhagupta Baladitya and Kumaragupta III could have involved dynastic challenges. The struggles for succession might have impacted the stability of the Gupta Empire during this phase.

1.1.4 External Invasions

- **Invasions by the Huna (White Huns): Toramana**, a Huna ruler, invaded northern India during the early 6th century. His invasion posed a serious threat to the Gupta Empire. He captured territories in the Northwest, including Punjab and the region around Mathura, and established his rule. **Mihirakula (c. 510–540 CE), son of Toramana**, continued the Huna invasion after his father's death. His invasion further intensified the challenges faced by the Gupta Empire. He extended Huna control to parts of northern India, including Kashmir and Gandhara, and is often associated with acts of destruction and cruelty.
- **Persian Sassanian Empire: Invasions from the West- The** Gupta Empire faced incursions from the Persian Sassanian Empire in the western regions. The pressure from the Sassanians, combined with the Huna invasions from the northwest, created a challenging geopolitical environment for the Gupta rulers.
- **Central Asian Tribes: Invasions from Central Asia- Central Asian tribes, possibly Turkic or Mongolic groups**, might have contributed to the external pressures faced by the Gupta Empire.

1.1.5 Economic Strain

The Gupta Empire faced economic strain during certain periods which impacted the empire's financial stability and overall economic health.

- **Costs of Military Campaigns**: The Gupta rulers, particularly those engaged in conflicts with external invaders like the Huna, incurred significant expenses in maintaining and mobilizing military forces. It strained the state's finances.
- **Maintaining a Vast Empire:** The Gupta Empire covered a vast geographical expanse, from the Himalayas to the Deccan. The administrative and logistical challenges of managing such a large territory, including the costs of governance and infrastructure maintenance, contributed to economic strain.
- **Huna Invasions:** The invasions by the Huna, especially under the leadership of Toramana and Mihirakula, resulted in economic devastation. The Huna incursions led to looting, destruction of cities, and disruption of trade routes, causing a negative impact on the economic prosperity of the affected regions.
- **Economic Drain**: The Gupta rulers, in an attempt to finance military endeavors and maintain the opulence of their courts, might have imposed heavy taxes and levies on the populace, which could have led to discontent and economic hardship.
- **Decline in Agricultural Productivity**: Environmental factors, such as climate changes or natural disasters, may have contributed to a decline in agricultural productivity. Crop failures or suboptimal yields could have adversely affected the agrarian economy and food supply.
- **Trade Disruptions:** The disruption of trade routes due to invasions and political instability, especially in the northwest regions affected by the Huna invasions, hindered commercial activities. This, in turn, impacted the economic prosperity of the Gupta Empire.
- **Economic Competition among Regional Powers**: As regional powers and local rulers gained more autonomy, economic competition for resources and trade routes among these entities could have strained the overall economic structure of the Gupta Empire.

1.1. 6 Deccan and Regional Powers

During the decline of the Gupta Empire, several regional powers, especially in the Deccan and other parts of India, asserted their independence and contributed to the fragmentation of central authority. Here are those Deccan and regional powers

- **Vakataka Dynasty:** Central and Deccan regions. This dynasty rose to prominence during the declining phase of the Gupta Empire.
- **Chalukya Dynasty**: Primarily the Deccan plateau. The Western Chalukyas, in particular, established themselves as a significant power in the Deccan during the post-Gupta period. Their territorial expansion and growing influence in the Deccan contributed to the diminishing control of the Gupta rulers in these regions.
- **Pallava Dynasty:** Southern India, particularly Tamil Nadu and Andhra Pradesh. This dynasty continued to thrive during and after the Gupta period.

- **Gurjara-Pratihara Dynasty**: Western India, primarily present-day Rajasthan. This dynasty emerged as a powerful regional force in western India. Their increasing authority and control over territories in Rajasthan contributed to the regionalization of power and the weakening of Gupta influence in these areas.
- **Pushyabhuti Dynasty (Later Guptas):** Northern India, including regions around Malwa. The Pushyabhuti or Later Gupta dynasty attempted to revive the Gupta glory but operated on a more limited scale. While they sought to assert control in the north, their efforts were part of the larger trend of regional powers rising as the Gupta Empire declined.
- **Emergence of Local Dynasties**: Several local dynasties in different regions of India, such as the Maitrakas in Gujarat and the Kalachuris in central India, gained prominence during the post-Gupta period. Their rise reflected the trend of regionalization and the decline of centralized imperial authority.

1.1.7 Final Disintegration

The last rulers of the Gupta Empire faced significant challenges from internal conflicts, external invasions, and the rise of regional powers.

- **Vishnugupta**: Vishnugupta is often mentioned as one of the last known rulers of the Gupta Empire. His reign faced challenges from both internal and external factors, contributing to the decline of Gupta authority.
- **Kumaragupta III**: Kumaragupta III is mentioned as a ruler during the later Gupta period. Like Vishnugupta, Kumaragupta III faced challenges, and his reign is associated with administrative inefficiencies and the weakening of central authority.

The vacuum left by the diminishing Gupta authority allowed various regional powers to rise, leading to the fragmentation of political control in the Indian subcontinent.

1.2 Chronological List of Events and Emergence Of Regional Kingdoms and Dynasties after The Decline Of Gupta Empire

- **Vakataka Dynasty (5th to 7th centuries):** The Vakataka dynasty rose to prominence in central and southern India following the decline of the Gupta Empire.
- **Kadambas (4th to 6th centuries):** The Kadambas were contemporaneous with the later Gupta period, but they continued to assert their influence in the Deccan during the post-Gupta era.
- **Western Chalukya Dynasty (6th to 12th centuries):** The Western Chalukyas emerged as a significant power in the Deccan, particularly during the 6th to 8th centuries.
- **Eastern Chalukya Dynasty (7th to 12th centuries):** The Eastern Chalukyas, contemporaries of the Western Chalukyas, held sway in the eastern Deccan during the 7th to 12th centuries.
- **Ganga Dynasty (5th to 11th centuries):** The Ganga dynasty, based in present-day Karnataka, had a significant presence during the post-Gupta period.
- **Pushyabhuti Dynasty (Later Guptas) (6th to 7th centuries):** The Pushyabhuti dynasty, also known as the Later Guptas, operated in northern India during the 6th to 7th centuries.
- **Maitraka Dynasty (6th to 8th centuries):** The Maitrakas gained prominence in western India, particularly Gujarat, contributing to regional autonomy.
- **Harsha's Empire (7th century):** Harsha Vardhana established a large empire in northern India, extending into parts of present-day Uttar Pradesh, Haryana, and Punjab.
- **Pallava Dynasty (6th to 9th centuries):** The Pallava dynasty continued its influence in southern India, particularly in Tamil Nadu, during the 6th to 9th centuries.
- **Chahamanas (Chauhans) (6th to 12th centuries):** The Chahamanas, also known as the Chauhans, became a notable Rajput dynasty in northwestern India during the 6th to 12th centuries.
- **Gurjara Pratiharas (6th to 11th centuries):** The Gurjara Pratiharas emerged as a powerful Rajput dynasty in northwestern India during the 6th to 11th centuries.
- **Gauda Dynasty (6th to 12th centuries):** The Gauda dynasty, associated with Bengal, played a role in the post-Gupta political landscape during the 6th to 12th centuries.

LIMITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

MODERN HISTORY

Part 3

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

CONTENTS

01 MUGHAL EMPIRE'S DECLINE AND INDIA ON THE BRINK OF EUROPEAN ARRIVAL

1.1 Decline of Mughal Empire

- The fall of the Mughal Empire unfolded gradually over several decades, stretching from the late 17th century to the mid-19th century. A multitude of interconnected factors played a role in the weakening and eventual collapse of this once formidable empire.
- The decline was expedited by a succession of weak rulers, with disputes and conflicts among heirs causing political instability and a loss of central authority.
- Administrative machinery weakened due to corruption, inefficiency, and the decline of the Mansabdari system.
- Economic difficulties, such as heavy taxation and the imposition of the jizya tax on non-Muslims by Aurangzeb, adversely impacted the agrarian economy.
- The rise of the Marathas as a formidable regional force, particularly under leaders like Shivaji, posed a significant challenge to Mughal authority.
- Invasions by external forces, notably Nadir Shah in 1739, resulted in the loss of wealth and a blow to the prestige of Mughal rulers.
- The decentralization of power and the emergence of regional powers led to increased autonomy among provincial governors and local rulers, contributing to the empire's fragmentation.
- Arrival and expansion of the British East India Company, marked by significant victories in battles like **Plassey (1757) and Buxar (1764),** played a decisive role in the decline of the Mughal Empire.
- A decline in patronage for art and culture, contributed to a loss of cultural vibrancy.

1.2 Weak Rulers After Aurangzeb

Following the reign of Aurangzeb, the Mughal Empire experienced a period of decline, marked by weak rulers and internal strife.

Here are some of the notable rulers who succeeded Aurangzeb.

Bahadur Shah I (1707-1712)

He was the seventh emperor of the Mughal Empire in India, reigning from **1707** to **1712** and son of Aurangzeb. One significant event during his rule was **the Siege of Jodhpur in 1707, where he faced rebellion from his half-brother, Azam Shah.** Bahadur Shah, I emerged victorious in this conflict, consolidating his position as the emperor. Bahadur Shah I's death in **1712** led to a power struggle among his sons, further contributing to the fragmentation of Mughal authority.

Jahandar Shah (1712-1713)

Jahandar Shah was the tenth emperor of the Mughal Empire, reigning from **1712** to **1713** and grandson of Bahadur Shah I and the son of Azim-ush-Shan. Jahandar Shah's reign was characterized by political instability and a lack of effective governance. During his rule, the **influence of the Sayyid brothers, Abdullah Khan, and Hussain Ali Khan,** increased significantly. They manipulated Jahandar Shah, exacerbating the problems faced

by the empire. One of the significant events during Jahandar Shah's reign was the **invasion of the Sikh Guru Banda Singh Bahadur, who captured Sirhind in 1710. This marked one of the early challenges from the Sikh community to Mughal authority.**

Farrukhsiyar (1713-1719)

Farrukhsiyar was the eleventh emperor of the Mughal Empire, ruling from **1713** to **1719**. He was a **nephew of Jahandar Shah,** the preceding emperor. Farrukhsiyar's ascent to the throne was marked by the overthrow of his predecessor in the **Battle of Agra in 1713**. One of the notable events during his rule was the **Battle of Samugarh in 1719, where he faced off against the combined forces of the Sayyid brothers, Abdullah Khan, and Hussain Ali Khan.** Farrukhsiyar emerged victorious, but his reliance on the Sayyid brothers for support led to their growing influence and control over Mughal affairs.

Rafi ul-Darajat (1719)

Rafi-ul-Darajat was the twelfth emperor of the Mughal Empire, reigning for a very short period in **1719**. He was the youngest son of Rafi-ul-Daulah, the brother of Jahandar Shah.

Shah Jahan II (1719)

Shah Jahan II, another short-reigning Mughal ruler, succeeded Rafi ul-Darajat but died of illness within a few weeks.

Muhammad Shah (1719-1748)

Muhammad Shah, full name **Muhammad Shah Rangeela,** was the eighteenth emperor of the Mughal Empire, reigning from **1719** to 1748. The empire faced **external threats, with Nadir Shah of Persia invading India in 1739 and sacking Delhi. This event, known as the Battle of Karnal**, resulted in significant losses for the Mughal Empire, including the looting of immense wealth and the capture of the emperor.

Ahmad Shah Bahadur (1748-1754)

Ahmad Shah Bahadur, the son of Muhammad Shah, ascended the throne but was ineffective in dealing with the internal and external challenges faced by the empire.

Alamgir II (1760-1806)

Alamgir II, whose full name was Aziz-ud-din Alamgir II, was the fifteenth emperor of the Mughal Empire. Alamgir II was a **puppet emperor, and his ascension to the throne was facilitated by the influential vizier, Ghazi-ud-Din Imad-ul-Mulk. One significant event during Alamgir II's reign was the invasion of Delhi by Ahmed Shah Durrani (also known as Ahmad Shah Abdali) in 1761.** The Third Battle of Panipat, fought between the Marathas and Ahmad Shah Durrani, resulted in a decisive victory for the latter. Delhi was plundered, and Alamgir II was briefly imprisoned by Ahmad Shah Durrani. After a period of turmoil, Alamgir II was restored to the throne with the support of the Rohillas and Ghazi-ud-Din Imad-ul-Mulk.

Shah Jahan III (1806-1837)

Shah Jahan III, whose full name was **Muhi-ul-millat.** During this time, the Mughal Empire was already in a state of decline, with the British East India Company and various regional powers exerting significant influence over Indian affairs. Shah Jahan III's rule was largely ceremonial, and he had little real power.

Shah Alam II (1760-1806)

Also known as Ali Gauhar, Shah Alam II was the son of Alamgir II. He signed the **Treaty of Allahabad in 1765** with the British East India Company, recognizing them as the effective rulers of Bengal, Bihar, and Orissa. **Third battle of Panipat as well as Battle of Buxar were witnessed by his reign. He was the first Mughal emperor to receive pension.**

Akbar Shah II (1806-1837)

Akbar Shah II ascended to the throne in 1806 after the death of his father, Shah Alam II. His reign marked the declining phase of the Mughal Empire. **Akbar Shah II ascended the Peacock Throne, a famous jeweled throne that was once the symbol of Mughal grandeur.** However, by this time, the Mughal emperors had largely become figureheads with little real political power.

Bahadur Shah II (1837-1857)

Bahadur Shah II, also known as Bahadur Shah Zafar, was the last Mughal emperor and the titular leader of the Indian Rebellion of 1857. **During the Indian Rebellion of 1857**, also known as the Sepoy Mutiny or the First War of Indian Independence, Bahadur Shah II was reluctantly thrust into a leadership role by the sepoys (Indian soldiers in the British East India Company's army) and other rebels.

The rebellion, however, was suppressed by the British, and Bahadur Shah II was captured in September 1857. He was tried for treason, found guilty, and exiled to Rangoon (present-day Yangon) in British-controlled Burma (now Myanmar).

1.3 Socio-economic circumstances in India on the brink of British conquest

On the eve of British conquest in India, the socio-economic conditions were diverse and complex, reflecting the rich tapestry of the Indian subcontinent. Here is an overview of the socio-economic conditions in India around the time of the British conquest.

- **Agrarian Economy:** Agriculture was the backbone of the Indian economy. Most of the population was engaged in agricultural activities, cultivating crops such as rice, wheat, cotton, and sugarcane. It was organized based on traditional systems, with zamindars (landowners) collecting revenue from peasants.
- **Social Hierarchy:** Indian society was structured along the lines of the caste system, a hierarchical social order with Brahmins at the top, followed by Kshatriyas, Vaishyas, and Shudras. Below the caste system were various marginalized groups, often referred to as "Dalits" or "Untouchables."
- The core elements of Indian society encompassed both patriarchy and caste, with religious aspects also prevalent among Muslims. The status of women was notably subpar, marked by practices such as Sati, the Purdah system, child marriage, polygamy, and the prevalence of dowry. Concerning slavery, individuals in servitude were primarily engaged in domestic work, serving as menials. It is worth noting that the status of slaves in India was comparatively more favourable than their counterparts in Europe.
- **Trade and Commerce:** Trade and commerce were significant economic activities. Coastal areas, especially in Gujarat and the Coromandel Coast, were hubs of trade with other parts of Asia and the Middle East.
  - **Exports from India:** Textiles (including cotton and silk fabrics. Indian textiles, such as muslin and chintz), Spices (including pepper, cardamom, cinnamon, and cloves), Indigo, Opium, Precious Stones (including diamonds, emeralds, and rubies)
  - **Imports to India:** Bullion, Textiles and Finished Goods-The British aimed to establish a market for their manufactured products in India, Iron and Steel-Britain exported iron and steel products to India, Salt, Woolens
- **Regional Variations:** Different regions of India had varying economic structures. Here are examples.
  - **Bengal** Agriculture (Major producer of rice, jute, and sugarcane), Textiles (muslin and silk fabrics)
  - **Deccan Plateau** Agriculture (millet, pulses, and oilseeds), Trade Routes the Deccan was a crossroads for trade routes connecting northern and southern India, leading to a flourishing trade economy.
  - **South India (Tamil Nadu and Kerala)** Spices (Major exporter of spices such as pepper, cardamom, and cinnamon), Agriculture Rice, spices, and tropical fruits.
  - **Gujarat Trade and Commerce** Due to its strategic location on the Arabian Sea. Ports like Surat were bustling hubs for international trade, Textiles Gujarat was famous for its textile industry, producing fabrics like chintz and calico that were in demand in various parts of the world.
  - **Punjab Agriculture** Wheat and rice cultivation, Livestock
  - **Rajasthan** Trade and Caravan Routes, Handicrafts

LIMITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

ECONOMY

Part 1

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

In This Book

01 Indian Economy on the Eve of Independence

1.1 Introduction

India's present-day ***economy is*** not just a result of recent events but is ***deeply influenced by its historical past,*** especially the period of British colonial rule. Lasting almost two centuries until India gained independence on August 15, 1947, this chapter in history left a lasting impact on the country's economic structure. During colonial rule, India was primarily seen as a source of raw materials to fuel the industries of Great Britain. However, beyond the economic exploitation, the colonial era profoundly affected the lives of ordinary Indians, leaving behind scars that continue to shape the nation today. Understanding this historical context is essential to grasp the complexities of India's economy in the present day.

1.2 Low Level of Economic Development Under the Colonial Rule

- **Pre-British Economy:** India had a self-sufficient economy before British rule, with a ***focus on agriculture and diverse manufacturing activities***, notably handicrafts such as textiles, metalwork, and precious stones.
- **Colonial Economic Policies:** British colonial rule, lasting almost two centuries***, aimed to exploit India for raw materials to fuel Britain's industrial growth,*** drastically altering the country's economic structure.
- **Neglect of Indian Economy:** The colonial government prioritized protecting Britain's economic interests over developing India's economy. India became a supplier of raw materials and a consumer of British industrial products.
- **Lack of Economic Assessment:** The colonial government did not sincerely assess India's national and per capita income. Various estimators, including notable figures like Dadabhai Naoroji and V.K.R.V. Rao, provided conflicting results.
- **Economic Growth Under Colonial Rule:** Studies indicate that India's real output growth during the first half of the twentieth century was less than two per cent, with a meagre half per cent growth in per capita output per year.

1.3 Agricultural Sector

- **Dominance of Agriculture:** During British colonial rule, India's economy was predominantly agrarian, with around 85% of the population residing in villages and relying on agriculture for livelihood.
- **Stagnation Despite Size:** Despite the large population engaged in agriculture, the sector faced stagnation and occasional deterioration in productivity.
- **Land Settlement Issues:** The introduction of various land settlement systems, especially the zamindari system in the Bengal Presidency, diverted agricultural profits to zamindars rather than cultivators, contributing to the sector's stagnation.
- **Zamindar Practices:** Many zamindars prioritized rent collection over improving agriculture, causing misery and social tension among cultivators.
- **Revenue Settlement Impact:** Terms of revenue settlement, with fixed dates for revenue deposits, influenced zamindars' neglectful attitude, leading to the dismal economic condition of cultivators.

- **Technological and Infrastructural Challenges:** Low technology levels, lack of irrigation, and minimal use of fertilizers exacerbated farmers' difficulties and contributed to low agricultural productivity.
- **Commercialization Challenges:** While some regions saw higher yields of cash crops due to agricultural commercialization, this shift did not significantly improve the economic condition of farmers.
- **Limited Agricultural Investment:** Despite some progress in irrigation, overall agricultural investment in terracing, flood control, drainage, and soil desalinization remained insufficient.
- **Divergent Farmer Responses:** While a small group of farmers shifted to commercial crops, many tenants, small farmers, and sharecroppers lacked the resources and incentives to invest in agriculture, perpetuating challenges in the sector.

1.4 Industrial Sector

- **Colonial Stifling of Industrial Growth:** Under British colonial rule, India faced challenges in developing a robust industrial base, like the setbacks witnessed in agriculture.
  - Despite the decline of renowned handicraft industries, no corresponding modern industrial base emerged to replace them.
- **Dual Motive of Colonial Government:** The ***colonial government pursued a two-fold policy***: firstly, reducing India to a supplier of raw materials for British industries, and secondly, creating a vast market for finished British products in India.
  - The decline of indigenous handicraft industries led to massive unemployment in India but fuelled demand for imported cheap manufactured goods from Britain.
- **Slow Progress of Modern Industry:** During the late 19th century, modern industry, initially centered around cotton and jute textile mills, began to emerge slowly in India.
  - Cotton mills, largely dominated by Indians, were situated in Maharashtra and Gujarat, while jute mills, primarily owned by foreigners, concentrated in Bengal.
  - Iron and steel industries, like Tata Iron and Steel Company (TISCO), started in the early 20th century, with other industries (sugar, cement, paper) emerging post-World War II.
- **Limited Capital Goods Industry:** Despite some industrial units, there was a lack of a capital goods industry capable of producing machine tools for further industrialization.
  - The scattered establishment of manufacturing units did not compensate for the displacement of traditional handicraft industries.
- **Modest Growth and Contribution:** The growth rate of the new industrial sector and its contribution to Gross Domestic Product (GDP) or Gross Value Added remained small.
- **Constraints of the Public Sector:** The public sector's scope was limited to railways, power generation, communications, ports, and select departmental undertakings, restricting its impact on industrial growth in other areas.

1.5 Foreign Trade

- **Historical Significance of Indian Trade:** India has a rich history as a significant trading nation since ancient times.
  - However, under colonial rule, restrictive policies on commodity production, trade, and tariffs had adverse effects on the structure, composition, and volume of India's foreign trade.
    - **British Monopoly Control:** Britain maintained a monopoly over India's exports and imports.

- Over half of India's foreign trade was restricted to Britain, with limited exchanges with other nations like China, Ceylon, and Persia.

- **Impact of Suez Canal Opening:** The opening of the Suez Canal intensified British control over India's foreign trade.
- **Export Surplus Challenges:** India generated a large export surplus, but this came at a significant cost.
  - Essential commodities like food grains, clothes, and kerosene were scarce in the domestic market.
  - The export surplus did not result in the inflow of gold or silver into India but was used for colonial government expenses, war, and imports, leading to the drain of Indian wealth.

1.6 Demographic Condition

- **Census Operations and Demographic Transition:** The first census in 1881 provided initial details about the population of British India, revealing uneven population growth.
  - Census operations were carried out every ten years. Before 1921, India was in the first stage of demographic transition, shifting to the second stage afterward.
- **Population and Growth Rates:** Despite being in the second stage of demographic transition after 1921, India's total population and growth rates were not very high.
- **Social Development Indicators:** Overall literacy level was less than 16%, with female literacy at a negligible 7%.
  - Public health facilities were either unavailable or inadequate, leading to rampant water and air-borne diseases.
  - High mortality rates, particularly alarming infant mortality (218 per thousand compared to the present 33 per thousand), and a low life expectancy of 32 years (compared to the present 69 years) characterized the demographic conditions.
- **Poverty During Colonial Period:** Reliable data on poverty are scarce, but extensive poverty prevailed during the colonial period, contributing to the challenging profile of India's population at that time.

1.7 Occupational Structure

- **Persistent Agrarian Dominance:** During colonial rule, the occupational structure of India witnessed little change, with the agricultural sector consistently employing 70-75% of the workforce.
  - Manufacturing and services sectors accounted for only 10% and 15-20%, respectively.
- **Regional Variations:** Regional disparities emerged, with parts of Madras Presidency, Bombay, and Bengal seeing a decline in agricultural dependence, while Orissa, Rajasthan, and Punjab experienced an increase.

1.8 Infrastructure

- **Colonial Infrastructure Development:** Under colonial rule, basic infrastructure such as railways, ports, water transport, posts, and telegraphs were developed, primarily serving colonial interests.
- **Limited Road Development:** Roads constructed before British rule were inadequate for modern transport, often serving military purposes or transporting raw materials to ports for export.
  - All-weather roads were lacking, causing suffering in rural areas during natural calamities and famines.
- **Impact of Railways:** The introduction of railways in 1850 impacted the Indian economy by enabling long-distance travel and fostering commercialization of agriculture.

LIMITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

ECONOMY

Part
2

1200+
MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

In This Book

01 Introduction to macroeconomics and its concepts

1.1 Introduction

Macroeconomics, an integral part of economic theory, delves into the holistic examination of an economy. It scrutinizes elements such as **national income**, **aggregate employment**, the overall price level, **aggregate consumption**, and **aggregate investment**. Central to its analysis are the instruments of **aggregate demand** and **aggregate supply**. Macroeconomics is alternatively known as the **'Income Theory'** or the **'Employment Theory.'**

1.2 Unveiling the Macro Economy

Macro-economics, concerned with economy-wide issues, entails a thorough exploration of distinct economic sectors.

- **Producer Sector:** This sector is actively involved in the creation of goods and services.
- **Household Sector:** Households, recognized as owners of factors of production, engage in the consumption of goods and services.

Note: Households contribute as owners of factors of production.

- **Government Sector:** Engaged in activities such as taxation and subsidies.
- **Rest of the World Sector:** Involved in international trade through exports and imports.
- **Financial Sector:** Also known as the financial system, this sector engages in borrowing and lending activities.

1.3 Understanding the Circular Flow of Income

The circular flow of income illustrates the continuous movement of money, income, and goods and services across various economic sectors in a circular pattern.

1.3.1 Two Types of Circular Flow

Real/Product/Physical Flow

- **Real Flow:** Signifies the movement of factor services from the household sector to the producing sector and the reciprocal flow of goods and services from the producing sector to the household sector.
- **Example:** In a simplified economy with only two sectors (Producer and Household), producers supply goods to households, while households, as owners of factors of production, provide factor services to producers.

Money/Monetary/Nominal Flow

- **Money Flow:** Encompasses the movement of factor income, including rent, interest, profit, and wages, from the producing sector to the household sector as monetary rewards for their factor services.
- **Household Expenditure**

- The households, in turn, spend their incomes on goods and services produced by the producing sector, completing the cycle of money flow.

1.3.2 Circular Flow of Income in Two-Sector Model

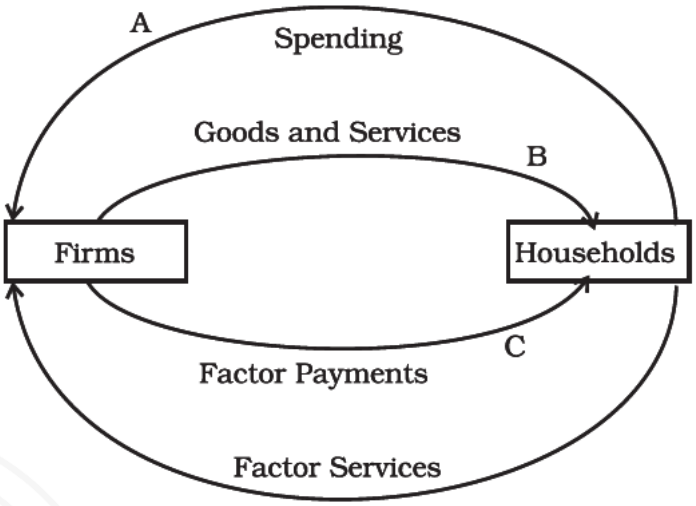


Figure 1.1 Circular flow of Income in a Simple Economy

In the context of a simplified economy focusing on **two main sectors**, namely households and firms, several key assumptions shape the economic dynamics. It is imperative to understand the basic premises for a comprehensive grasp of the circular flow of income in this model.

I. **Two Sectors:** The economy comprises only two sectors—households and firms.
II. **Service Exchange:** Households provide factor services to firms.
III. **Factor Services:** Firms hire factor services from households.
IV. **Consumption Pattern:** Households allocate their entire income to consumption.
V. **Goods Exchange:** Firms sell all produced goods and services to households.
VI. **Exclusion of External Factors:** In this simplified setup, there is no involvement of government or foreign trade.

This economic configuration results in two distinct markets

I. **Product Market:** The market for goods and services.
II. **Factor Market:** The market for factors of production.

Consequently, the following relationships are established within this simple economy

I. Total production by firms equals total consumption by the household sector.
II. Factor payments made by firms correspond to factor incomes received by the household sector.
III. Consumption expenditure by the household sector is equivalent to the income of the firm.
IV. Real flows of production and consumption by firms and households align with money flows of income and expenditure.

1.3.2 Phases of Circular Flow

The circular flow of income unfolds through three interconnected phases

Production Phase

- Encompasses the production of goods and services by the producer sector.
- Analyzing it in terms of the quantity of goods and services produced constitutes a real flow.
- However, when assessed based on the market value of the goods produced, it transforms into a money flow.

Distribution Phase

- Involves the flow of income in the form of rent, interest, profit, and wages from the producer sector to the household sector.
- Characterized as a money flow.

Disposition Phase

- Focuses on expenditures made, with disposition referring to the act of spending.

- Encompasses the money flow from other sectors to the producer sector as households and other sectors make expenditures on the purchase of goods and services.

These phases collectively illustrate the intricate dynamics of the circular flow of income in a two-sector model.

1.4 Some Fundamental Notions in Macroeconomics

1.4.1 Factor Income

- Income derived from the factors of production, provided by rendering productive services in the production process, is termed Factor Income.
- This concept is bilateral or two-sided in nature.
- It is integral to National Income as it contributes to the flow of goods and services. Examples include rent, interest, wages, and profit.

1.4.2 Transfer Income

- Income received without offering productive services is labelled transfer income.
- It is a unilateral or one-sided concept.
- Not included in National Income as it does not contribute to the flow of goods and services. Examples encompass old age pensions, scholarships, and unemployment allowances.

Two types of transfers exist

- **Current Transfers:** - Involves transfers from the income of the payer to the income of the recipient for consumption expenditure. - Recurring or regular in nature, e.g., scholarships, gifts, and old age pensions.
- **Capital Transfers:** - Defined as cash or in-kind transfers for investment purposes. - Non-recurring or irregular, e.g., investment grants, capital gains tax, and war damages.

1.4.3 Stock

- Any economic variable calculated at a specific point in time is termed a stock.
- It is static and does not change.
- Stock variables lack a time dimension. Examples include distance, amount of money, money supply, and water in a tank.

1.4.4 Flow

- Any economic variable calculated over a period of time is referred to as a flow.
- It is dynamic and subject to change.
- Flow variables possess a time dimension. Examples include speed, spending of money, water in a river, exports, and imports.

1.4.5 Economic Territory or Domestic Territory:

- Economic territory, as per the United Nations, is the geographical territory administered by a government where persons, goods, and capital circulate freely.
- This definition hinges on the criterion of the "freedom of circulation of persons, goods, and capital."
- **Notable considerations for economic territory:** (i) Embassies are excluded as areas where the government does not enjoy freedom. (ii) International organizations within a country's boundaries. (iii) In national income accounting, the term is broader, encompassing ships, aircraft, fishing vessels, embassies, consulates, and military establishments abroad.

1.4.6 Citizenship

- Citizenship is a legal concept based on place of birth or legal provisions allowing citizenship.

LFIMTE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

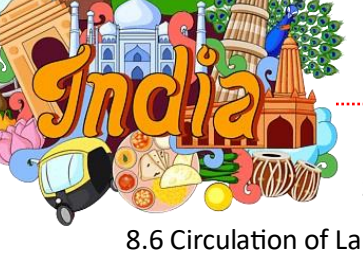
INDIAN SOCIETY

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

In This Book



01 Demography, Population Dynamics, & Related Concerns

1.1 Understanding Demography and Population Studies

1.1.1 Key Terms

- **Population Size:** The total number of individuals in a population at a given point in time.
- **Population Structure**: The composition of a population in terms of age, sex, ethnicity, and other demographic characteristics.
- **Birth Rate (Crude Birth Rate):** The number of births per 1,000 individuals in a population within a given period.
- **Death Rate (Crude Death Rate):** The number of deaths per 1,000 individuals in a population within a given period.
- **Migration:** The movement of people from one place to another, either within a country (internal migration) or between countries (international migration).
- **Population Growth:** The change in population size over time, influenced by births, deaths, and migration.
- **Fertility Rate:** The average number of children born to a woman over her lifetime, often measured as the **total fertility rate (TFR)** or the fertility rate at a specific point in time (e.g., the current fertility rate).
- **Mortality Rate:** The frequency of deaths in a population, often categorized by age, sex, or cause.
- **Age Distribution:** The proportion of individuals in different age groups within a population, often depicted in age pyramids or age-sex pyramids.
- **Dependency Ratio**: The ratio of dependent individuals (usually children and elderly) to the working-age population, indicating the level of economic support needed for dependents.

Demography is the statistical study of populations, including their size, structure, distribution, and dynamics.

It encompasses a wide range of factors such as birth rates, death rates, migration patterns, age distribution, and population density.

1.2 Theories and Concepts in Demography

1.2.1 Malthusian Theory of Population Growth

Proposed by **Thomas Robert Malthus,** it suggests that ***human populations tend to grow faster than the means of subsistence.*** Therefore, humanity is condemned to live in poverty forever because the growth of agricultural production will always be overtaken by population growth. While population rises in geometric progression (i.e., like 2, 4, 8, 16, 32, etc.), agricultural production can only grow in arithmetic progression (i.e., like 2, 4,6, 8, 10, etc.). **Malthus argued that controlling population growth was necessary for prosperity, foreseeing "positive checks" like famines and**

diseases. Malthusian theory has been subject to criticism and debate over the years. Critics argue that it overlooks technological advancements, changes in agricultural practices, economic development, and other factors that can increase resource production and improve living standards.

1.2.2 Theory of Demographic Transition

It is a conceptual framework that ***explains the relationship between population dynamics and economic development.*** It proposes three distinct stages through which societies tend to pass as they undergo demographic changes:

Stage 1: Pre-Industrial or Traditional Society: Both birth rates and death rates are high. The high birth rates are balanced by equally high death rates, resulting in a relatively stable population. Societies are primarily agrarian, and economic development is minimal.

Stage 2: Transitional Stage: Death rates decline significantly due to improvements in healthcare, sanitation, and nutrition. Birth rates remain high, resulting in rapid population growth. Industrialization and urbanization begin, leading to increased economic activities.

Stage 3: Industrial or Mature Industrial Society: Both birth and death rates decrease, leading to slow or zero population growth. Birth rates decline, and the population stabilizes. Societies become more industrialized and economically advanced.

1.2.3 Common Indicators

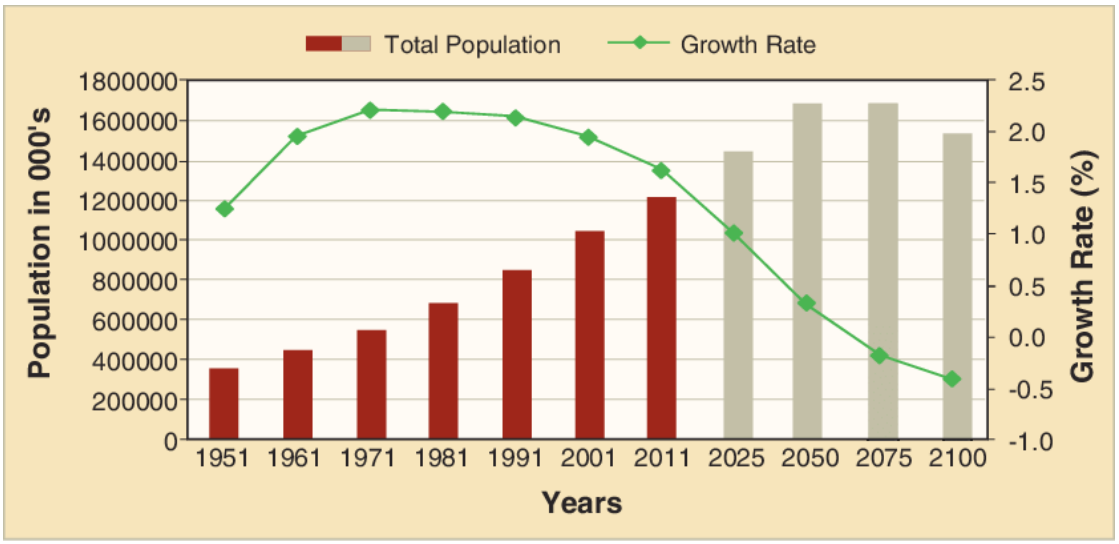
- **Birth rate:** Live births per 1000 population.
- **Death rate:** Deaths per 1000 population.
- **Growth rate:** Difference between birth and death rates.
- **Fertility rate:** Live births per 1000 women in the child-bearing age group.
- **Infant mortality rate:** Deaths of babies before one year per 1000 live births.
- **Maternal mortality rate:** Women who die in childbirth per 1,00,000 live births.
- **Life expectancy:** Estimated number of years an average person is expected to survive.
- **Sex Ratio:** Number of females per 1000 males.

1.3 Population Growth in India

The growth rate of India's population has witnessed fluctuations over the years, and various factors have influenced this trend.

1.3.1 Historical Growth Rates

- **1901–1951**: The average annual growth rate during this period did not exceed 1.33%, with some years experiencing negative growth due to the 1918–19 influenza epidemic.
- **Post-Independence (1961–1981):** The growth rate surged to 2.2%, reflecting a period of increased population expansion.
- **Post-1981:** Although the growth rate has decreased since 1981, it remains one of the highest among developing nations.



1.3.2 Demographic Transition Impact

- **Transition Phase (1921–1931):** Before 1931, both birth and death rates were high. The death rate sharply declined after 1921, primarily due to better control over famines and epidemic diseases. However, the birth rate decreased only slightly during this transition.
- **Epidemics:** The **influenza epidemic of 1918–19**, known as the "**Spanish Flu**," significantly impacted India, causing widespread mortality.

1.3.3 Contemporary Trends

- **Improvements in Healthcare:** Advances in medical cures, mass vaccination programs, and sanitation efforts have helped control epidemics.
- **Famines:** Efforts to improve agricultural productivity, transportation, and relief measures have reduced deaths from famines, although some regions still report starvation deaths.
- **Birth Rate and Fertility:** The birth rate, influenced by sociocultural factors, has not experienced a sharp decline**. Prosperity, education, and awareness contribute to falling family sizes.**

1.3.4 Regional Variations

- **Fertility Rates:** Wide variations exist across Indian states. States like Andhra Pradesh, Himachal Pradesh, Punjab, Tamil Nadu, and West Bengal have achieved lower Total Fertility Rates (TFRs), **indicating smaller family sizes.** In contrast, states like Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh still have high TFRs.
- **Population Pyramid:** India's population pyramid exhibits a demographic dividend, where a large working-age population supports a smaller elderly population. However, harnessing this advantage requires conscious policy efforts.

1.3.5 Changing Age Structure

- **Young Population:** India has a predominantly young population, with a significant proportion below 15 years of age.
- Projected Changes The age structure is expected to change in the coming decades, with a reduction in the 0–14 age group's share and an increase in the 60+ age group.
- **Dependency Ratio:** The demographic dividend is **contingent on utilizing the growing working-age population through education and employment.** Challenges include unemployment and underemployment.

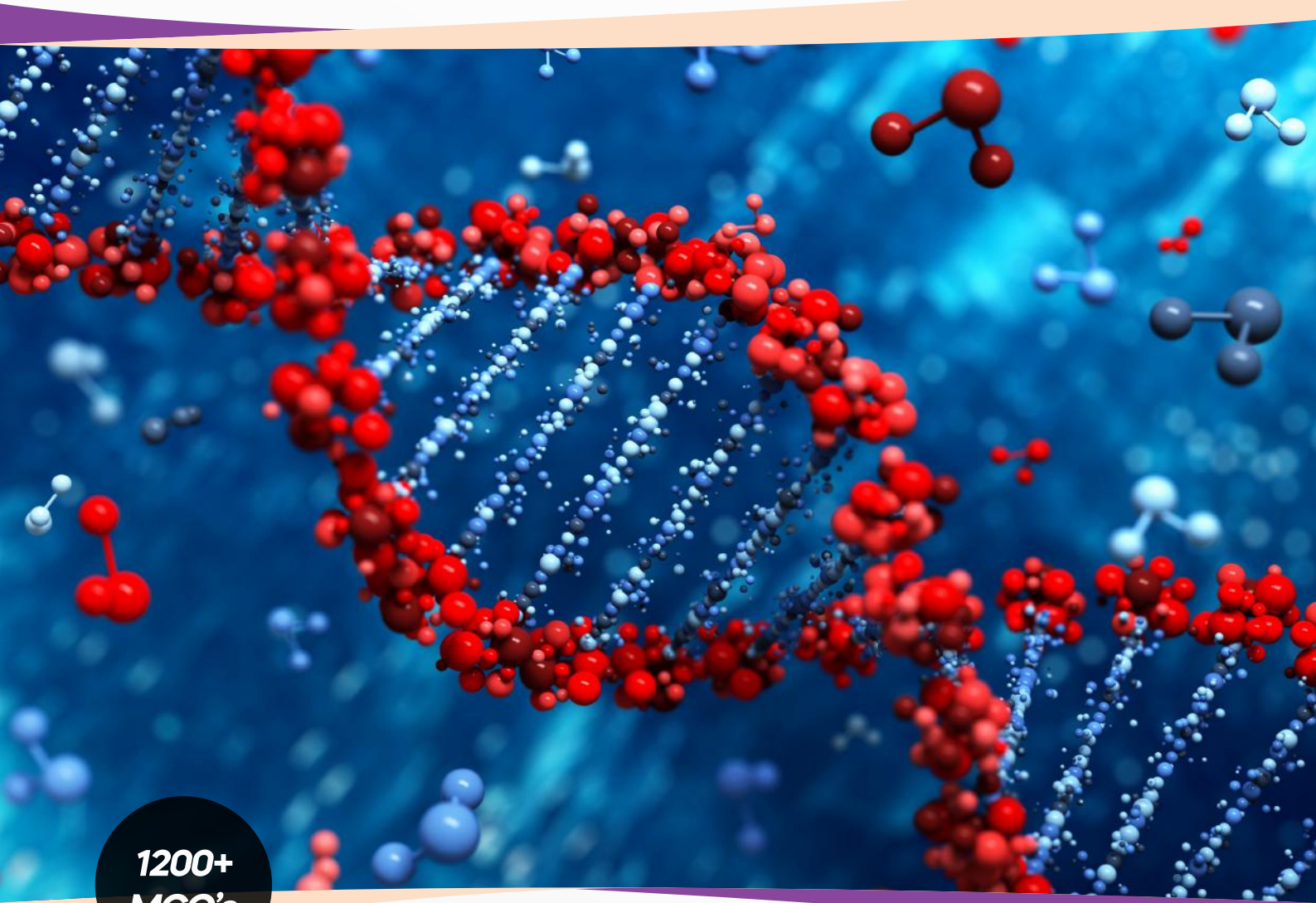
LFINITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

BIOLOGY



1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

INDEX: BIOLOGY

1 PHYSIOLOGICAL FUNCTIONS IN HUMANS

1. 1 Introduction

How can one distinguish between living and non-living entities?

Visible Movement is a limited indicator of life as this criterion becomes less reliable when considering situations where organisms are not actively moving, such as when they are asleep. Therefore, using visible movement as the sole defining characteristic of life is insufficient. Molecular movement, even at microscopic scales, is an essential aspect of life. This microscopic movement, including that of molecules, is considered necessary for life.

Controversy Regarding Viruses: Viruses do not exhibit visible movement until they infect a cell. The debate on whether viruses are truly alive is linked to the absence of molecular movement in their dormant state.

Importance of Molecular Movement for Maintenance: Living organisms are well-organized structures, and the ordered nature of these structures tends to break down over time due to environmental effects. To prevent this breakdown, organisms must continually repair and maintain their structures. Since all structures are composed of molecules, constant molecular movement is necessary for maintenance.

1. 2. 1 Introduction to Life Processes

These are the set of activities that organisms perform for maintenance, even when not actively engaged in specific tasks.

Energy Requirement and Nutrition: Energy is required for maintenance processes, and this energy comes from outside the organism in the form of food. The process of transferring this external energy source into the organism is referred to as nutrition.

Challenges in Multi-cellular Organisms: As organisms become more complex and multi-cellular, challenges arise in supplying nutrients and oxygen to all cells. The need for specialized tissues and a transportation system to carry substances throughout the body is emphasized.

1.2 Nutrition

It is the process by which living organisms obtain energy and materials for their growth, development, and maintenance.

1.2.1 Energy Usage and Source:

Energy is required for various activities, even when organisms are not actively engaged in apparent activities. It emphasizes the need for materials from outside for growth, development, and synthesis of essential substances in the body.

1.2.2 Food as a Source of Energy and Materials:

The source of energy and materials for living things is identified as the food they consume.

1.2.3 Autotrophs and Heterotrophs:

Autotrophs are organisms that use simple inorganic substances like carbon dioxide and water for food, including green plants and some bacteria. On the other hand, heterotrophs utilize complex substances, and their survival depends directly or indirectly on autotrophs. Examples of heterotrophic organisms include animals and fungi.

1.2.4 Autotrophic Nutrition and Photosynthesis:

Photosynthesis is a complex biochemical process in which autotrophs (organisms capable of producing their own food) synthesize carbohydrates from carbon dioxide and water, utilizing sunlight as an energy source. This process primarily occurs in the chloroplasts of plant cells.

Steps of Photosynthesis:

- **Absorption of Light Energy by Chlorophyll:** Chlorophyll, a green pigment present in chloroplasts, absorbs light energy from the sun. This energy absorption occurs in the thylakoid membrane of the chloroplast.
- **Conversion of Light Energy to Chemical Energy**: The absorbed light energy is converted into chemical energy through a series of complex reactions. This energy conversion involves the movement of electrons and the generation of energy-rich molecules like ATP (adenosine triphosphate).
- **Reduction of Carbon Dioxide to Carbohydrates**: In the stroma of the chloroplast, the chemical energy generated is used to reduce carbon dioxide (CO_2) to carbohydrates. This involves a series of enzymatic reactions known as the Calvin cycle. Example: For instance, consider a green leaf exposed to sunlight. The chlorophyll in the leaf captures sunlight, initiating the process of photosynthesis. The plant takes in carbon dioxide from the air through tiny pores called stomata, and water is absorbed from the soil through the roots. These raw materials are then transformed into glucose (a type of carbohydrate), releasing oxygen as a byproduct.
- **Guard Cells and Stomata:**
  - **Role of Stomata:** Stomata are tiny pores present on the surface of leaves. They play a crucial role in the exchange of gases, allowing the entry of carbon dioxide needed for photosynthesis and the release of oxygen and water vapor.
  - **Role of Guard Cells:** Guard cells surround each stoma and control its opening and closing. When the guard cells swell with water, they cause the stomatal pore to open, facilitating the entry of carbon dioxide. Conversely, when the guard cells shrink, the stomatal pore closes to prevent excessive water loss.
  - **Example**: Imagine a plant in a sunny environment. The guard cells respond to environmental cues, ensuring that the stomata are open during daylight hours when photosynthesis occurs. This allows the plant to absorb carbon dioxide and release oxygen while minimizing water loss.

1.2.5 Heterotrophic Nutrition:

Heterotrophic nutrition is the mode of nutrition in which organisms obtain ready-made organic substances by consuming other living organisms or their by-products. This stands in contrast to autotrophic nutrition, where organisms can produce their own food through processes like photosynthesis.

1.2.6 Strategies for Obtaining and Using Food:

- **Fungi and External Digestion**: Some organisms, like fungi, employ external digestion. They release enzymes into the external environment, breaking down complex organic matter into simpler forms. The fungi then absorb these simpler substances, serving as an example of heterotrophic nutrition.
- **Ingestion and Internal Digestion**: In contrast, various organisms ingest food and digest it internally. This can involve breaking down complex substances into simpler ones within the body.

1.2.7 Diversity of Digestive Systems:

- **Single-Celled Organisms**: In single-celled organisms like Amoeba, food is taken in through temporary extensions of the cell surface, forming a food vacuole. The complex substances are broken down inside the vacuole and then diffused into the cytoplasm. Paramoecium, another unicellular organism, has cilia that move food to a specific spot for ingestion.
- **Multi-Cellular Organisms**: Digestive Systems in Multi-Cellular Organisms: As organisms become more complex, different parts of the body specialize in various digestive functions. For example, the digestive system in humans includes the mouth, esophagus, stomach, small intestine, and large intestine, each with specific roles.

1.2.8 Nutrition in Human Beings:

- **Alimentary Canal and Digestive Process**: In humans, the digestive system consists of the alimentary canal, a long tube extending from the mouth to the anus.
- **Digestive Process**: Mouth and Saliva- Food is initially processed in the mouth, where chewing breaks it down mechanically. Saliva, containing enzymes like amylase, begins the chemical breakdown of starch into simpler sugars.
- **Peristaltic Movements**: The food, now called bolus, moves through the esophagus to the stomach via peristaltic movements — rhythmic contractions of muscles in the digestive tract.
- **Stomach Digestion:** In the stomach, gastric glands release hydrochloric acid and enzymes like pepsin to break down proteins. The stomach's acidic environment aids in digestion.
- **Small Intestine Absorption:** The partially digested food then enters the small intestine, where further digestion occurs. The pancreas and liver contribute digestive juices, and villi in the small intestine facilitate nutrient absorption.
- **Large Intestine and Waste Elimination**: The unabsorbed material passes into the large intestine, where water absorption occurs. The remaining waste is then eliminated through the anus.

Example:

Dental Caries: *Dental caries, commonly known* ***as tooth decay,*** *is an example related to the digestive process. Bacteria acting on sugars produce acids that can demineralize the enamel, leading to tooth decay. Proper oral hygiene, including brushing to remove dental plaque, is essential to prevent dental caries.*

This detailed exploration illustrates the diverse strategies organisms employ for obtaining and processing food, from single-celled organisms to multi-cellular organisms like humans. The digestive process in the human alimentary canal exemplifies the complexity of heterotrophic nutrition.

LFIMITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

CHEMISTRY

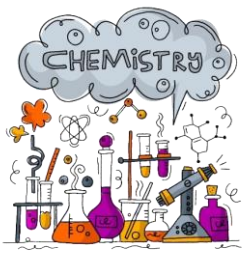
1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

CHEMISTRY

INDEX



1 CHEMICAL REACTIONS, ACIDS & BASES, METALS & NON-METALS

1.1 Chemical Reaction:

A chemical reaction is a process in which **one or more substances (reactants) are transformed into new substances (products) with different properties**. During a chemical reaction, the bonds between atoms are broken and new bonds are formed to create the products. The chemical identity of the substance's changes, and this change is often accompanied by observable effects such as changes in color, formation of gas, temperature changes, or the production of light.

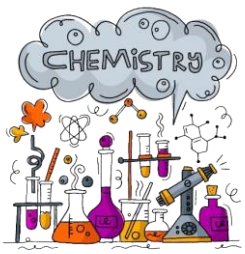
Types of Chemical Reactions:

- **Combination Reaction**: In a combination reaction, two or more substances combine to form a single product.
  - **Example**: ($CaO(s) + H_2O(l) \rightarrow Ca(OH)_2(aq)$ + Heat) *(formation of slakedlime)*
- **Decomposition Reaction**: In a decomposition reaction, a single substance breaks down into two or more simpler substances.
  - **Example**: ($2H_2O_2(l) \rightarrow 2H_2O(l) + O_2(g)$) *(decomposition of hydrogen peroxide)*
- **Displacement Reaction**: In a displacement reaction, one element displaces another element from a compound, leading to the formation of a new compound.
  - **Example**: ($Zn(s)+2HCl(aq) \rightarrow ZnCl_2(aq)+H_2(g)$) (displacement of hydrogen from hydrochloric acid zinc)
- **Double Displacement Reaction**: In a double displacement reaction, the positive and negative ions of two compounds exchange places to form two new compounds.
  - **Example**: ($Na_2SO_4(aq)+BaCl_2(aq) \rightarrow 2NaCl(aq)+BaSO_4(s)$) *(formation of barium sulfate precipitate)*
- **Oxidation Reduction Reaction (Redox Reaction):** In oxidation reduction reactions, electrons are transferred between reactants, leading to changes in oxidation states.
  - **Example**: ($2Mg(s) + O_2(g) \rightarrow 2MgO(s)$) *(oxidation of magnesium)*

Effect of Oxidation Reactions in Everyday Life:

- **Corrosion**: Corrosion is the gradual deterioration of metals due to their reaction with substances in the environment, such as oxygen and moisture.
  - **Example**: Rusting of iron (($4Fe(s) +3O_2(g) \rightarrow 2Fe_2O_3(s)$))
- **Rancidity**: Rancidity is the development of undesirable odors and flavors in fats and oils due to the oxidation of their unsaturated fatty acids.
  - **Example**: Oxidation of fats in food, leading to the development of a rancid taste and smell.

Oxidation reactions, whether in the form of corrosion or rancidity, can have significant impacts on the durability of materials and the quality of food products. Preventive measures, such as the use of protective coatings for metals or antioxidants in food, are often employed to minimize the effects of oxidation in everyday life.



1.2 Acids and Bases:

- **Acids:** Acids are substances that release hydrogen ions (H^+) when dissolved in water.
  - **Properties**: Sour taste, turn blue litmus paper red, and have a pH less than 7.
  - **Examples**: Hydrochloric acid (HCl), Sulfuric acid (H_2SO_4), Citric acid (found in citrus fruits).
- **Bases:** Bases are substances that release hydroxide ions (OH^-)when dissolved in water.
  - **Properties**: Bitter taste, feel slippery, turn red litmus paper blue, and have a pH greater than 7.
  - **Examples**: Sodium hydroxide (NaOH), Potassium hydroxide (KOH), Ammonia (NH3).

Reaction of Acids and Bases with Metals:

1. Acids react with metals to produce salt and hydrogen gas.
   - **Example**: ($2HCl(aq) + Zn(s) \rightarrow ZnCl_2(aq) + H_2(g)$)
2. Bases do not react with metals under normal conditions.

Reaction of Acids with Metal Carbonates and Metal Hydrogen Carbonates: Acids react with metal carbonates and metal hydrogen carbonates to produce salt, water, and carbon dioxide.

Example: ($CaCO_3(s)+2HCl(aq) \longrightarrow CaCl_2(aq)+H_2O(l)+CO_2(g)$)

Reaction of Acids and Bases with Each Other (Neutralization): Acids react with bases to form salt and water. This process is called neutralization.

Example: ($HCl(aq) + NaOH(aq) \rightarrow NaCl(aq) + H_2O$ (1))

Reaction of Metallic Oxides with Acids and Non-metallic Oxides with Bases:

1.**Metallic Oxides with Acids**: Metallic oxides react with acids to form salt and water.

Example: ($CuO(s) + 2HCl(aq) \rightarrow CuCl_2(aq) + H_2O$ (1))

2. **Non-metallic Oxides with Bases**: Non-metallic oxides react with bases to form salt and water.

Example: $CO2(g) + 2NaOH(aq) \rightarrow Na_2CO_3(aq) + H_2O$ (1)

pH Scale: The pH scale is a measure of the acidity or basicity of a solution. It ranges from 0 to 14, with 7 being neutral, below 7 acidic, and above 7 basic.

Determining pH:

- pH < 7: **Acidic**
- pH = 7: **Neutral**
- pH > 7: **Basic**

Importance of pH in Everyday Life:

1. **Plants and Animals**: pH affects the growth and health of plants and animals.
2. **Soil**: Soil pH influences plant growth and nutrient availability.
3. **Digestive System**: pH plays a crucial role in the digestive process.
4. **Tooth Decay**: Acids can lead to tooth decay by eroding enamel.
5. **Self-Défense**: Some plants and animals use acidic or basic substances for self-defence.

Salts: Salts are ionic compounds formed by the neutralization of an acid and a base.

Family and pH:

1. Salts derived from strong acids and strong bases are neutral (pH = 7).
2. Salts derived from a strong acid and weak base are acidic (pH < 7).
3. Salts derived from a weak acid and strong base are basic (pH > 7).

Crystals of Salts Drying (Plaster of Paris): When crystals of salts are formed, they may trap water molecules. Plaster of Paris is an example where Calcium sulfate hemihydrate ($CaSO_4 . \frac{1}{2}H2O$) captures water during crystallization. The process of setting and hardening involves the gradual release of water, making it appear as if the crystals are drying.

Physical Properties of Metals:

- **Lustre**: Metals have a shiny appearance.
- **Malleability**: Metals can be hammered into thin sheets.
- **Ductility**: Metals can be drawn into thin wires.
- **Conductivity**: Metals are good conductors of heat and electricity.
- **High Melting and Boiling Points**: Metals generally have high melting and boiling points.
- **Density**: Metals are dense.
- **Hardness**: Metals are generally hard.

Physical Properties of Non-metals:

1. **Lack of Luster**: Nonmetals are not shiny.
2. **Brittleness**: Nonmetals are often brittle.
3. **Poor Conductors:** Nonmetals are poor conductors of heat and electricity.
4. **Low Melting and Boiling Points**: Nonmetals generally have low melting and boiling points.
5. **Low Density**: Nonmetals are less dense than metals.

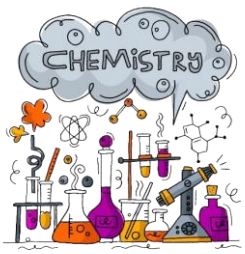
Chemical Properties of Metals:

- Reaction with Oxygen (Burnt in Air): Metals react with oxygen to form metal oxides.
  - Example: ($4Na(s) + O_2(g) \rightarrow 2Na_2O(s)$)
- Reaction with Water: Active metals react with water to form metal hydroxide and hydrogen gas.
  - Example: ($2K(s) + 2H_2O(l) \rightarrow 2KOH\ (aq) + H_2(g)$)
- Reaction with Acids: Metals react with acids to produce salt and hydrogen gas.
  - Example: ($Zn(s) + 2HCl(aq) \rightarrow ZnCl_2(aq) + H_2(g)$)
- Reaction with Solutions of Other Metal Salts: Metals can displace less reactive metals from their salts in solution.
  - Example: ($Cu(s) + 2AgNO_3(aq) \rightarrow Cu\ (NO_3)_2(aq) + 2Ag(s)$)

Reactivity Series: The reactivity series is a list of metals arranged in order of their decreasing reactivity.

Example: (K > Na > Ca > Mg > Al > Zn > Fe > Pb > H > Cu)

- Potassium (K)
- Sodium (Na)
- Calcium (Ca)
- Magnesium (Mg)
- Aluminium (Al)
- Zinc (Zn)
- Iron (Fe)
- Lead (Pb)
- Hydrogen (H)
- Copper (Cu)



LFINITE
Read LESS Learn MORE

Boost Your Fundamentals With

EXAM READY
NCERT CAPSULES

Only for Beginners With **4000+ MCQ's** for practice (Chapter-Wise)
through **Test - Portal (AI POWERED)**

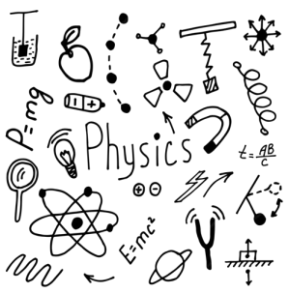
PHYSICS

1200+ MCQ's

HIGHLY USEFUL FOR
UPSC, STATE PCS
AND OTHER COMPETITIVE EXAMS

Based on New & Old NCERT Class 6-12th
The Best Way to READ NCERT...

INDEX



1 LIGHT: REFLECTION & REFRACTION

1.1 Visibility in Light and Reflection

We can see objects in a well-lit room, but not in a dark room. Objects become visible when light illuminates them.

Explanation: Light enables visibility by reflecting off objects. When light falls on an object, it interacts with its surface. The object reflects light in various directions, and some of this reflected light enters our eyes, allowing us to see the object. Transparency allows light to pass through, making objects visible on the other side.

1.2 Laws of Reflection

Mirrors reflect most of the light falling on them.

Explanation: The laws of reflection govern how light behaves when it strikes a surface:

- The angle of incidence is equal to the angle of reflection.
- The incident ray, the normal to the mirror at the point of incidence, and the reflected ray, all lie in the same plane.

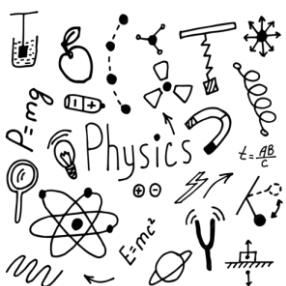
1.3 Curved Mirrors - Concave and Convex

A spherical mirror has a reflecting surface that is part of a sphere.

- **Concave Mirror**: Curved inward, facing the center of the sphere.
- **Convex Mirror**: Curved outward.

Key Terms

- **Pole (P):** The center of the reflecting surface.



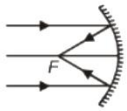
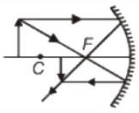
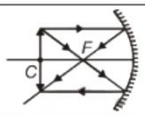
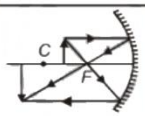
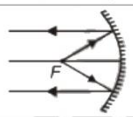
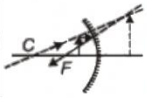
- **Center of Curvature (C):** The center of the sphere of which the mirror is a part.
- **Principal Axis**: A line passing through the pole and the center of curvature.
- **Radius of Curvature (R):** The distance from the pole to the center of curvature.
- **Focal Length (f):** The distance from the pole to the principal focus.

Image Formation by Concave Mirrors

Observation: Image characteristics depend on the object's position relative to P, F, and C.

Location, size and nature of image formed by Spherical Mirrors

Concave Mirror

Position of object	Figure	Position of image	Nature of image
1. At infinity		At the principal focus or in the focal plane	Real, inverted, extremely diminished in size
2. Beyond the centre of curvature		Between the principal focus and centre of curvature	Real, inverted and diminished
3. At the centre of curvature		At the centre of curvature	Real, inverted and equal to object
4. Between focus and centre of curvature		Beyond centre of curvature	Real, inverted and bigger than object.
5. At the principal focus		At infinity	Extremely magnified
6. Between the pole and principal focus		Behind the mirror	Virtual, erect and magnified

Ray Diagrams for Concave Mirrors

- Rays parallel to the principal axis converge at the principal focus for a concave mirror.
- Rays directed towards the principal focus reflect parallel to the principal axis.
- Rays directed at the center of curvature reflect back along the same path.
- Obliquely incident rays follow the laws of reflection at point P.

Image Formation by Convex Mirrors

Observation: Image formed by a convex mirror is virtual, erect, and diminished.

Ray Diagrams

- **Object at infinity**: Parallel rays diverge as if coming from the principal focus.
- **Finite distance**: Divergent rays appear to come from the virtual focus.

Uses of Concave and Convex Mirrors

- **Concave Mirrors:** Torches, search-lights, vehicle headlights, shaving mirrors, dentistry, solar furnaces.
- **Convex Mirrors:** Rear-view mirrors in vehicles due to erect and wider field of view.

Sign Convention

1.Object always left of the mirror.

2.Distances measured from the pole, along the axis are positive (right) or negative (left).

3.Distances measured above the axis are positive; below are negative.

Mirror Formula and Magnification

Formulas:

1.Mirror Formula: $(\frac{1}{f} = \frac{1}{v} + \frac{1}{u})$

2.Magnification: $(m = -\frac{v}{u}) or (m = \frac{h'}{h} = -\frac{v}{u})$

1.4 Refraction of Light

Light seems to travel along straight-line paths in a transparent medium. Refraction of light is observed when light enters from one transparent medium to another.

Observations: Common observations include the apparent raising of the bottom of a tank or a pond containing water and the apparent displacement of objects like a pencil in water.

Experiences: Experiences like the raised appearance of letters when viewed through a glass slab or the apparent size change of a lemon in water showcase the effects of refraction.

Examples:

- Pencil partly immersed in water appears displaced at the interface of air and water.
- Letters appear raised when seen through a glass slab.

Refraction through a Rectangular Glass Slab: Light ray changes its direction at points separating two transparent media. The refracted ray emerges parallel to the incident ray but is shifted slightly.

1.5 Laws of Refraction

- Incident ray, refracted ray, and the normal lie in the same plane.
- **Snell's Law:** The ratio of the sine of the angle of incidence to the sine of the angle of refraction is a constant for light of a given color and a given pair of media.

The Refractive Index: Refractive index is the ratio of the speed of light in one medium to the speed of light in another medium. Absolute refractive index is the refractive index of a medium with respect to air or vacuum.

More to Know:

- **Optical density** is related to the refractive index.
- **Rarer medium** has a lower refractive index, and denser medium has a higher refractive index.
- **The speed of light is higher in a rarer medium and lower in a denser medium.**

1.6 Refraction by Spherical Lenses:

- **Introduction to Lenses:** Lenses are transparent materials with one or both surfaces being spherical. A lens may be double convex (thicker at the center, converging), double concave (thicker at the edges, diverging), or a combination of both.
- **Lens Components and Nomenclature**: A lens has two spherical surfaces forming parts of spheres with centers called centers of curvature (C1 and C2). The line passing through the centers of curvature is the principal axis, and the central point is the optical center (O). The imaginary straight line passing through the centers of curvature is the principal axis.
- **Focal Points and Focal Length:**
  - Convex lens converges light rays to a principal focus (F).
  - Concave lens diverges light rays, and the diverging rays appear to come from a principal focus (F).
  - Focal length (f) is the distance from the optical center to the principal focus.
  - Convex lenses have two principal foci (F1 and F2).
- **Sign Convention for Spherical Lenses**: Focal length of a convex lens is positive, while that of a concave lens is negative.
- **Lens Formula and Magnification:**
  - Lens formula: $(\frac{1}{v} - \frac{1}{u} = \frac{1}{f})$
  - Magnification: $((m)) : (m = \frac{h'}{h} = \frac{v}{u})$
- **Power of a Lens:**