

# UP Board 10 Science - 825-FB - 2023 Question Paper with Solutions

Time Allowed :3 Hours 15 Minutes	Maximum Marks :70	Total Questions :96
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## General Instructions

Read the following instructions very carefully and strictly follow them:

1. The test is of 3 hours 15 Minutes duration.
2. The question paper consists of 96 questions.
3. In Section - B, there are 20 short Solution type questions, each carrying 2 marks, out of which any 10 questions are to be Solved. Apart from these, there are 6 long Solution type questions, each carrying 5 marks, out of which any 3 questions are to be Solved.
4. Minimum 30% marks in each subject (30 out of 100 for theory, adjusted for practicals where applicable).
5. Use of any electronic appliances is strictly prohibited.

### 1. When did the French Revolution begin?

- (A) 1779
- (B) 1789
- (C) 1780
- (D) 1799

**Correct Answer:** (B) 1789

**Solution:** The French Revolution began in 1789. It was a period of major social, political, and economic upheaval in France that fundamentally changed the course of French history. The Revolution led to the end of absolute monarchy, the rise of democracy, and the establishment of the First Republic of France.

## Quick Tip

The French Revolution marked the end of feudalism in France and inspired a wave of revolutionary movements across Europe.

### 2. Napoleon was related to:

- (A) France
- (B) Germany
- (C) Italy
- (D) None of the above

**Correct Answer:** (A) France

**Solution:** Napoleon Bonaparte is most famously associated with France. He rose to prominence during the French Revolution and became the Emperor of France, playing a crucial role in shaping European and global politics during the early 19th century.

#### Quick Tip

Napoleon's leadership and military campaigns significantly reshaped the European continent and led to the establishment of the Napoleonic Code, a foundation for modern civil law.

**3. When did the Jallianwala Bagh incident take place?**

- (A) 8 April, 1919
- (B) 10 April, 1919
- (C) 13 April, 1919
- (D) 25 April, 1919

**Correct Answer:** (C) 13 April, 1919

**Solution:** The Jallianwala Bagh massacre occurred on 13 April, 1919. In this tragic event, British troops, under the command of General Dyer, opened fire on a large crowd of unarmed Indian civilians, resulting in hundreds of deaths. This incident became a significant turning point in the Indian struggle for independence.

#### Quick Tip

The Jallianwala Bagh massacre became one of the most poignant symbols of British colonial brutality, fueling further resistance against British rule in India.

**4. Who is the author of the song "Vande Mataram"?**

- (A) Bankim Chandra Chatterjee
- (B) Rabindranath Tagore
- (C) Sarat Chandra Chatterjee
- (D) Abanindranath Tagore

**Correct Answer:** (A) Bankim Chandra Chatterjee

**Solution:** The patriotic song "Vande Mataram" was written by Bankim Chandra Chatterjee in 1870s and became a rallying cry during the Indian independence movement. The song was later adopted as the national song of India.

#### Quick Tip

"Vande Mataram" was first written as a part of Bankim Chandra Chatterjee's novel "Anandamath" and is an iconic symbol of India's fight for freedom.

**5. When was the IMF established?**

- (A) 1940
- (B) 1942
- (C) 1945
- (D) 1944

**Correct Answer:** (C) 1945

**Solution:** The International Monetary Fund (IMF) was established in 1944 during the Bretton Woods Conference. It came into existence in 1945 with the goal of promoting international monetary cooperation and securing financial stability globally.

**Quick Tip**

The IMF plays a crucial role in stabilizing the global economy by providing financial support to countries in need and ensuring the stability of the international monetary system.

**1. How many Union Territories are there in India?**

- (A) 6
- (B) 7
- (C) 8
- (D) 9

**Correct Answer:** (B) 7

**Solution:** India currently has 7 Union Territories. These are: Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli and Daman and Diu, Lakshadweep, Delhi, Puducherry, and Jammu Kashmir (which became a Union Territory in 2019 after the abrogation of Article 370).

**Quick Tip**

Union Territories are regions governed directly by the Central Government, unlike States, which have their own governments.

**2. In a federal system of government, there is a division of powers:**

- (A) between the Centre and the States
- (B) between one State and other States
- (C) between the Legislature and the Executive
- (D) between the Legislature and the Judiciary

**Correct Answer:** (A) between the Centre and the States

**Solution:** In a federal system of government, powers are divided between the Centre (or Union Government) and the States. This allows for a balance of power and prevents any single entity from becoming too powerful.

**Quick Tip**

Federal systems like that of India ensure decentralization of powers, providing autonomy to states while maintaining unity at the national level.

**3. When was the Treaty of Vienna organized?**

- (A) 1814
- (B) 1815
- (C) 1816
- (D) 1817

**Correct Answer:** (B) 1815

**Solution:** The Treaty of Vienna was signed in 1815. It was held after the defeat of Napoleon Bonaparte to restore the European political order that had existed before his rise to power, marking the end of the Napoleonic Wars.

**Quick Tip**

The Treaty of Vienna led to the creation of the Congress of Vienna, which aimed to establish a balance of power and prevent future conflicts in Europe.

**4. When was Panchayati Raj established in India?**

- (A) 1980
- (B) 1990
- (C) 1992
- (D) 2004

**Correct Answer:** (C) 1992

**Solution:** The Panchayati Raj system was established in India through the 73rd Constitutional Amendment Act of 1992, which aimed at decentralizing power and empowering rural local bodies to promote self-governance at the grassroots level.

**Quick Tip**

Panchayati Raj plays a vital role in strengthening rural democracy and ensuring that the development needs of villages are met through local decision-making.

**5. Which of the following is the challenge before Indian democracy?**

- (A) Regional imbalance
- (B) Social tension and violence
- (C) Change of Party
- (D) All of the above

**Correct Answer:** (D) All of the above

**Solution:** India's democracy faces several challenges, including regional imbalance, social tension, and violence. These factors often undermine social harmony and development, posing significant obstacles to the functioning of the democratic system.

#### Quick Tip

Democratic stability in India relies on addressing these challenges through inclusive policies, social harmony, and stronger institutional frameworks.

### 6. What type of resource is iron ore?

- (A) Renewable
- (B) Flow
- (C) Biotic
- (D) Non-renewable

**Correct Answer:** (D) Non-renewable

**Solution:** Iron ore is a non-renewable resource because it cannot be replenished naturally within a human lifetime. It is mined from the earth and is finite in supply.

#### Quick Tip

Non-renewable resources, like iron ore, are finite and can lead to resource depletion if not managed sustainably.

### 1. In which of the following States is black soil mainly found?

- (A) Jammu and Kashmir
- (B) Rajasthan
- (C) Maharashtra
- (D) Jharkhand

**Correct Answer:** (C) Maharashtra

**Solution:** Black soil, also known as Regur soil, is predominantly found in the Deccan Plateau, especially in Maharashtra, parts of Madhya Pradesh, and Karnataka. It is highly fertile and is suitable for growing crops like cotton.

### Quick Tip

Black soil is rich in minerals like iron, lime, magnesia, and alumina, which make it highly suitable for crops that require well-drained, nutrient-rich soils, such as cotton and groundnut.

## 2. Which of the following is a leguminous crop?

- (A) Pulses
- (B) Jowar
- (C) Coarse grains
- (D) Wheat

**Correct Answer:** (A) Pulses

**Solution:** Leguminous crops are those that belong to the family Leguminosae, which are characterized by their ability to fix nitrogen in the soil through a symbiotic relationship with bacteria. Pulses like lentils, chickpeas, and beans are examples of leguminous crops, which help improve soil fertility.

### Quick Tip

Leguminous crops are essential for sustainable farming as they add nitrogen to the soil, reducing the need for chemical fertilizers.

## 3. Which of the following minerals is found in monazite sand?

- (A) Mineral oil
- (B) Uranium
- (C) Thorium
- (D) Coal

**Correct Answer:** (C) Thorium

**Solution:** Monazite sand is a mineral that contains significant amounts of Thorium. It is often used in nuclear energy production due to its potential for use in thorium reactors.

### Quick Tip

Thorium, derived from monazite sand, is considered a cleaner alternative to uranium for nuclear energy because it produces less radioactive waste.

## 4. Which of the following words refers to the trade between two or more countries?

- (A) Internal Trade
- (B) International Trade

- (C) External Trade
- (D) Local Trade

**Correct Answer:** (B) International Trade

**Solution:** International trade refers to the exchange of goods and services across national borders. It enables countries to access products they cannot produce themselves and promotes economic growth.

#### Quick Tip

International trade is a key driver of globalization, enabling countries to specialize in what they produce best and benefit from global supply chains.

**1. In general, on what basis can the development of a country be determined?**

- (A) Per Capita Income
- (B) Average Literacy Rate
- (C) Health status of people
- (D) All of the above

**Correct Answer:** (D) All of the above

**Solution:** The development of a country can be determined using various indicators, such as:  
- Per Capita Income: This helps to measure the average income of a person in the country.  
- Average Literacy Rate: A higher literacy rate indicates better access to education.  
- Health status of people: Good health and life expectancy also show a country's level of development.  
Therefore, all these factors collectively determine a country's overall development.

#### Quick Tip

To assess a country's development, a combination of economic (income), social (education), and health indicators is used.

**2. Which of the following neighbouring countries has a better position than India in terms of human development?**

- (A) Bangladesh
- (B) Sri Lanka
- (C) Nepal
- (D) Pakistan

**Correct Answer:** (B) Sri Lanka

**Solution:** In terms of Human Development Index (HDI), Sri Lanka ranks higher than India due to better performance in health (life expectancy) and education indicators. Sri Lanka's literacy rate and life expectancy are relatively higher than India's, contributing to its better human development position.

### Quick Tip

The Human Development Index (HDI) is a composite index measuring a country's level of human development based on life expectancy, education, and per capita income.

### 3. Public and Private sector is divided on the basis of:

- (A) Terms of employment
- (B) Nature of economic activity
- (C) Ownership of enterprises
- (D) Number of workers employed in the enterprises

**Correct Answer:** (C) Ownership of enterprises

**Solution:** The distinction between the public sector and the private sector is based on the ownership of enterprises. In the public sector, the government owns and operates enterprises, while in the private sector, ownership is in the hands of private individuals or companies.

### Quick Tip

The public sector generally includes industries like defense, education, and healthcare, while the private sector involves businesses like retail, manufacturing, and services.

### 4. Most of the decisions related to savings and loans are taken in Self-Help Groups:

- (A) By Bank
- (B) By members
- (C) By non-government organisation
- (D) None of the above

**Correct Answer:** (B) By members

**Solution:** In Self-Help Groups (SHGs), decisions related to savings, loans, and group activities are taken collectively by the members. The members of SHGs contribute a fixed amount towards savings, and they decide how loans should be disbursed among the group.

### Quick Tip

SHGs empower communities by promoting self-reliance and allowing them to make financial decisions together, reducing dependency on banks and moneylenders.

### 5. The major production of a product of natural process belongs to which sector?

- (A) Primary
- (B) Secondary
- (C) Tertiary
- (D) Information Technology

**Correct Answer:** (A) Primary

**Solution:** The primary sector involves activities that extract or harvest natural resources, such as farming, mining, fishing, and forestry. The production of raw materials like crops, minerals, and timber belongs to this sector as they are directly derived from natural processes.

#### Quick Tip

The primary sector forms the base of the economy, providing raw materials for the secondary sector (manufacturing) and tertiary sector (services).

**1. Why is Otto von Bismarck called the father of the Unification of Germany? Give two reasons.**

**Solution:** Otto von Bismarck is known as the father of the Unification of Germany due to his crucial role in bringing together the various German-speaking states into a unified German Empire in 1871. Two primary reasons for this are:

1. Master of Diplomacy and Realpolitik: Bismarck employed Realpolitik, which was pragmatic and power-based diplomacy. He used a series of alliances and wars to isolate Austria and France, making it easier for the Kingdom of Prussia to lead the unification process. Through careful manipulation of international relations, he avoided any significant foreign intervention in the process.
2. Strategic Wars: Bismarck cleverly orchestrated three important wars: the Danish War (1864), the Austro-Prussian War (1866), and the Franco-Prussian War (1870-71). These wars not only helped expand Prussia's territory but also fostered a sense of nationalism and unity among the German-speaking people, eventually leading to the formation of the German Empire.

#### Quick Tip

Bismarck's political strategy was rooted in Realpolitik, which involved taking actions based on practical and material factors, rather than ideological considerations. His careful diplomacy and calculated wars were key to the success of German unification.

**2. How was Britain's food problem solved after the 'Corn Law' repeal? Clarify.**

**Solution:** The Corn Laws in Britain, which were enacted in 1815, imposed tariffs on imported grain (corn) to protect domestic agricultural interests. However, these laws led to higher food prices and hardships for the urban poor. The repeal of the Corn Laws in 1846, under Prime Minister Sir Robert Peel, had several important consequences that solved Britain's food problem:

1. Lower Food Prices: The repeal of the Corn Laws allowed cheaper grain imports, particularly from countries like the United States and Ireland. This led to a significant reduction in food prices, making food more affordable for the working class, especially in urban areas.
2. Expansion of Free Trade: The repeal marked a shift towards free trade policies in Britain. It encouraged international trade and the flow of cheaper goods, not just food, which benefited British industries and led to economic growth. The move was a major step in the development of modern capitalism in Britain.

### Quick Tip

The repeal of the Corn Laws is seen as an early victory for free trade principles, promoting international commerce and reducing protectionism in Britain. It also laid the foundation for the future economic policies of globalization.

## 1. What is the impact of caste system on politics and society in India?

**Solution:** The caste system in India, though officially abolished, continues to have a significant impact on both politics and society. It has shaped the social structure, political alignments, and even the economic status of various groups in India. The key impacts are:

1. **Political Impact:** - **Vote Bank Politics:** Political parties often cater to specific caste groups for votes. This leads to the rise of vote bank politics, where politicians promise benefits to certain castes in exchange for their votes. For example, caste-based reservations have become a key political tool, with parties forming alliances based on caste considerations. - **Rise of Caste-Based Political Parties:** In response to the dominance of certain castes in political power, many caste-based parties have emerged, such as the Bahujan Samaj Party (BSP), which primarily represents the Dalits. These parties often challenge the mainstream parties and play a major role in the political landscape.

2. **Social Impact:** - **Discrimination and Social Exclusion:** The caste system has perpetuated social inequalities and discrimination, especially towards the Scheduled Castes (SC), Scheduled Tribes (ST), and Other Backward Classes (OBCs). Even though the Indian Constitution prohibits caste-based discrimination, many people from lower castes still face untouchability and social exclusion. - **Impact on Education and Employment:** The caste system also affects access to quality education and employment opportunities. While reservations in education and jobs aim to uplift the lower castes, they also sometimes create divisions and feelings of resentment among higher castes.

3. **Social Mobility:** - The caste system restricts social mobility. People born into lower castes often face limited opportunities for upward mobility. However, affirmative action policies like reservations have created some avenues for social mobility, though debates continue regarding their long-term effectiveness.

### Quick Tip

The caste system in India is deeply embedded in social and political practices. While affirmative action policies have aimed to reduce its impact, caste-based identities continue to influence political affiliations, social relationships, and economic opportunities.

## 2. A democratic government is a responsible government. Write the answer with examples.

**Solution:** A democratic government is inherently responsible to its citizens because it derives its legitimacy from the people through free and fair elections. The government is accountable for its actions and must justify its policies, actions, and expenditure. Here are the key characteristics of a responsible democratic government:

1. **Accountability to the People:** - In a democracy, the government is responsible for ensuring that it meets the needs and aspirations of the people. If the government fails to do so, it can

be voted out in the next elections. For example, in India, if the government fails to address important issues like inflation, unemployment, or education, the electorate has the power to elect a new government through elections.

2. **Transparency in Governance:** - A responsible government ensures transparency in its decisions and policies. For example, the Right to Information (RTI) Act in India enables citizens to request information from the government about its activities and decisions, ensuring that the government remains answerable for its actions.

3. **Rule of Law:** - A democratic government is committed to upholding the rule of law and ensuring that laws are applied equally to all citizens, regardless of their social or economic status. The Indian Constitution guarantees fundamental rights, and the judiciary acts as a check on the powers of the executive and the legislature.

4. **Protection of Rights:** - A democratic government must protect the rights of its citizens, including freedom of speech, right to privacy, and freedom of assembly. For example, the Indian government is responsible for safeguarding the fundamental rights of all citizens, as enshrined in the Constitution.

5. **Checks and Balances:** - The system of checks and balances ensures that no single branch of government (executive, legislature, judiciary) becomes too powerful. Each branch acts as a check on the others, ensuring that power is not concentrated in one entity. For instance, in India, if the executive (the government) passes a law, the judiciary can review it for constitutionality.

#### Quick Tip

A democratic government is responsible when it serves the interests of its people, is accountable for its actions, upholds the law, and ensures the protection of individual rights. A responsible government works in transparency and is answerable to the citizens.

### 1. How has technology and economic development led to over-consumption of resources?

**Solution:** Technology and economic development have played significant roles in the over-consumption of natural resources. With advancements in technology and the growth of the global economy, the demand for resources has increased drastically. The main reasons are:

1. **Increased Industrialization:** - As economies grow, industrial sectors expand, leading to increased extraction and consumption of raw materials like minerals, fossil fuels, and water. The Industrial Revolution and modern manufacturing processes have required vast amounts of energy, particularly from non-renewable sources like coal, oil, and natural gas.

2. **Agricultural Expansion:** - With the rise in technology, farming practices have become more mechanized, increasing crop yields. However, this has also led to excessive land use, deforestation, overuse of chemical fertilizers and pesticides, and depletion of soil fertility. For example, the Green Revolution in India significantly increased food production but also led to overuse of groundwater for irrigation and increased soil degradation.

3. **Increased Consumerism:** - Economic development has raised the standard of living for many, leading to increased demand for consumer goods. This demand drives more production, leading to over-exploitation of natural resources. The rise of fast fashion, electronic gadgets, and single-use plastics all contribute to over-consumption. Products are often designed to be replaced quickly, creating a culture of disposable consumption.

4. **Transportation and Energy Demand:** - With the development of modern transportation systems, there is an increased demand for fuel, especially petroleum products. The expansion of cities and urban areas leads to more vehicle usage, which further accelerates the consumption of energy and resources. Additionally, global supply chains require large amounts of resources for transport and packaging.
5. **Technology-driven Extraction:** - Technology has made resource extraction more efficient, which, paradoxically, accelerates depletion. For example, deep-sea mining, fracking for oil and gas, and artificial intelligence used in resource exploration make it easier to extract resources, but at the cost of quicker depletion of these resources.

#### Quick Tip

Technology and economic development, while contributing to progress, have also increased demand and consumption of natural resources. Industries, agriculture, consumerism, and transportation all contribute to over-exploitation of resources.

## 2. Write a note on the impact of globalization on Indian agriculture.

**Solution:** Globalization has had a profound impact on Indian agriculture, bringing both opportunities and challenges. The key impacts are:

1. **Market Access:** - Globalization has opened up new international markets for Indian agricultural products. Farmers can now export crops such as rice, wheat, spices, and fruits to other countries. This has helped Indian agriculture grow by providing farmers access to global demand. For example, India's export of basmati rice has increased due to the demand from countries like the USA and Europe.
2. **Introduction of New Agricultural Practices:** - With the influence of global agricultural practices, there has been an increase in the use of high-yielding varieties (HYVs) of seeds, modern irrigation systems, and chemical fertilizers. These technologies have led to higher productivity and helped India achieve food security, especially in the post-Green Revolution era.
3. **Corporate Farming and Contract Farming:** - With globalization, there has been an increasing shift towards corporate farming and contract farming in India. Companies now contract with farmers for large-scale production, providing them with technology, seeds, and markets. However, this has led to monopolization of the agricultural sector, with large companies gaining control over production and pricing, often to the disadvantage of small farmers.
4. **Competition and Price Volatility:** - Global competition has exposed Indian farmers to international market fluctuations. For example, prices of cotton, sugarcane, and oilseeds are often determined by global prices, which can lead to price volatility and income uncertainty for farmers. For instance, the global demand for certain commodities may fall, leading to losses for Indian farmers.
5. **Environmental Impact:** - Globalization has also brought environmental concerns to the forefront. The increased use of chemical inputs like fertilizers and pesticides has led to soil degradation, water pollution, and loss of biodiversity. The push for monoculture farming, such as the extensive cultivation of genetically modified (GM) crops, has reduced the variety of crops grown, further affecting biodiversity.
6. **Dependency on Global Factors:** - Indian agriculture has become more dependent on international factors such as climate change, global commodity prices, and international trade policies.

For example, India's reliance on imports for edible oils has increased due to the global market's control over the production of these commodities.

#### Quick Tip

While globalization has benefited Indian agriculture by providing new market opportunities and technological advancements, it has also led to challenges like price volatility, environmental degradation, and increased dependence on global markets.

### 1. In what aspects is the UNDP's criteria for measuring development different from the World Bank's criteria?

**Solution:** The UNDP (United Nations Development Programme) and the World Bank both measure development, but their criteria and approaches are different in several key aspects.

1. Human Development Index (HDI) vs. Economic Growth: - The UNDP uses the Human Development Index (HDI) to measure development, which is a composite index that includes three key dimensions: health (life expectancy), education (mean years of schooling and expected years of schooling), and standard of living (GDP per capita). The emphasis is on the quality of life and human well-being. - In contrast, the World Bank often uses economic growth indicators, particularly GDP (Gross Domestic Product) as a measure of development. Economic growth is primarily concerned with the increase in the economic output of a country.
2. Focus on Income vs. Quality of Life: - The World Bank's primary criterion for development is the increase in income, focusing mainly on per capita income to gauge the economic progress of a country. It sees development as the ability of an economy to increase its national income. - The UNDP, on the other hand, looks beyond income and includes factors such as education, health, and life expectancy, reflecting a more holistic view of development that prioritizes the improvement of human well-being rather than just income levels.
3. Approach to Inequality: - The World Bank focuses on aggregate national measures like GDP per capita, which may overlook income inequality within countries. It often does not address how the benefits of economic growth are distributed among different sections of society. - The UNDP considers inequality as an important factor in its measurement. It adjusts the HDI to create an Inequality-adjusted Human Development Index (IHDI), which takes into account the distribution of achievements in each dimension of human development.
4. Measurement of Sustainable Development: - The World Bank focuses heavily on economic sustainability, assessing whether a country's economic growth is sustainable over time. However, this is often measured in terms of economic output rather than social or environmental sustainability. - The UNDP's approach integrates the concept of sustainable human development, emphasizing not just economic growth but also environmental sustainability and social inclusion.

#### Quick Tip

The key difference between UNDP and the World Bank lies in their approach: the UNDP emphasizes human development (health, education, and standard of living), while the World Bank focuses on economic growth and income indicators.

### 2. How is the tertiary sector different from other sectors? Explain with example.

**Solution:** The tertiary sector is one of the three main sectors of the economy, along with the primary and secondary sectors. Each sector has a distinct role in the economy, and the tertiary sector differs from the others in several key ways:

1. **Nature of Activities:** - The primary sector involves the extraction and production of raw materials from natural resources, such as farming, mining, and forestry. - The secondary sector is concerned with manufacturing and processing raw materials into finished goods, such as textiles, automobiles, and electronics. - The tertiary sector, in contrast, involves providing services rather than goods. It includes activities like education, healthcare, banking, transportation, tourism, entertainment, and retail. The focus is on delivering services to meet the needs of individuals and businesses.
2. **Economic Role:** - The primary and secondary sectors are typically associated with the production of goods, whereas the tertiary sector is focused on providing services that facilitate or enhance the functioning of the primary and secondary sectors. Services in the tertiary sector support the entire economy and are often referred to as service-based industries. - As economies develop, the tertiary sector tends to grow, while the share of the primary and secondary sectors in the economy declines. This reflects the shift from manufacturing-based economies to service-oriented economies.
3. **Examples of Tertiary Sector:** - **Health Services:** Hospitals, clinics, and medical practitioners fall under the tertiary sector because they provide services to maintain and improve health. - **Education:** Schools, colleges, and universities are part of the tertiary sector, providing education to students. - **Banking and Finance:** Banks and financial institutions provide services such as loans, savings accounts, and insurance. - **Transportation:** Public transport services like buses, trains, and airlines, as well as logistics and courier services, are part of the tertiary sector.
4. **Contribution to GDP:** - In modern economies, the tertiary sector often becomes the largest contributor to GDP. For example, in countries like the United States and India, the services sector accounts for a significant portion of GDP, reflecting its growing importance in the economy.
5. **Employment Opportunities:** - The tertiary sector generates a large number of employment opportunities, especially in urban areas. For example, people are employed as teachers, doctors, bankers, and tourism operators. With the rise of technology, the tertiary sector also includes IT services and digital platforms.

#### Quick Tip

The tertiary sector is different from the primary and secondary sectors as it focuses on services rather than goods. It includes activities like healthcare, education, banking, and transportation that support the economy and improve the quality of life.

#### 1. Write a short note about the process of German Unification.

**Solution:** The German Unification was a process that led to the unification of the various independent German states into a single nation-state under the leadership of Prussia. This unification took place in 1871, and the key events and figures involved in this process are as follows:

1. **Background:** Before unification, Germany was divided into over 39 states that were part of the German Confederation. These states were loosely connected but had their own rulers and

policies. The unification movement aimed to consolidate these fragmented states into a single, powerful nation.

2. Role of Otto von Bismarck: The main architect of German unification was Otto von Bismarck, the Prime Minister of Prussia. He used a combination of diplomacy, political skill, and military force to unify Germany under Prussian leadership.

- Danish War (1864): Bismarck first aligned Prussia with Austria to defeat Denmark and gain control over the duchies of Schleswig and Holstein.

- Austro-Prussian War (1866): Bismarck then turned against Austria, a leading member of the German Confederation, and defeated it quickly. As a result, Prussia took control of northern Germany, and many northern German states joined the North German Confederation under Prussian leadership.

- Franco-Prussian War (1870-71): To unite the southern German states, Bismarck manipulated tensions with France. The Franco-Prussian War united the northern and southern German states against a common enemy. After defeating France, the southern states agreed to join the North German Confederation, leading to the creation of the German Empire in 1871, with King Wilhelm I of Prussia as the Emperor (Kaiser).

3. Conclusion: The German Unification was completed through a combination of military victories, strategic alliances, and Bismarck's diplomatic maneuvering. This event reshaped the map of Europe and led to the emergence of Germany as a major European power.

#### Quick Tip

The unification of Germany in 1871 was a result of strategic wars and diplomatic efforts under Bismarck's leadership, culminating in the establishment of the German Empire.

## 2. Evaluate the contribution of Gandhi ji in the freedom struggle of India.

**Solution:** Mahatma Gandhi played a pivotal role in the Indian freedom struggle. His contributions were not limited to political leadership but also encompassed moral, social, and philosophical dimensions. Below are the key contributions of Gandhi ji in the fight for India's independence:

1. Non-Violent Resistance (Satyagraha): - Gandhi's concept of Satyagraha (truth force) was the cornerstone of his resistance against British colonial rule. He advocated for non-violent methods of protest, which proved to be highly effective in mobilizing masses for the cause of independence. - The first major Satyagraha was organized by Gandhi in Champaran (1917) for the rights of indigo farmers. His success in this movement earned him widespread recognition.

2. Non-Cooperation Movement (1920-22): - In response to the Jallianwala Bagh massacre and the oppressive measures of the British government, Gandhi launched the Non-Cooperation Movement in 1920. He urged Indians to boycott British goods, educational institutions, and civil services. The movement united people across India, transcending caste, religion, and region.

3. Salt March (1930): - One of the most famous movements led by Gandhi was the Salt March (or Dandi March) in 1930. Gandhi and his followers marched 240 miles to the coastal town of Dandi to make salt from the sea, defying the British monopoly on salt production. This act of civil disobedience gained global attention and symbolized the Indian struggle for independence.

4. Quit India Movement (1942): - In 1942, during World War II, Gandhi launched the Quit India Movement, demanding an immediate end to British rule. The movement was marked by

mass protests and demonstrations, and despite Gandhi's arrest, it accelerated the demand for independence.

5. Social Reforms: - Gandhi also fought against social injustices such as untouchability, the caste system, and the subjugation of women. He championed the cause of Harijans (untouchables), calling them the "children of God" and advocating for their inclusion in society.

6. Philosophical Contributions: - Gandhi's philosophy of Ahimsa (non-violence) and truth deeply influenced the Indian struggle for independence. His belief in the power of self-reliance (Swadeshi), simplicity, and self-discipline became key aspects of his leadership.

7. Legacy: - Gandhi's leadership not only united Indians across the subcontinent but also inspired global movements for civil rights and freedom. His methods of non-violence and peaceful protest have had a profound impact on later movements, including the Civil Rights Movement in the United States and the anti-apartheid movement in South Africa.

### Quick Tip

Mahatma Gandhi's contributions to India's independence were centered around non-violence, civil disobedience, and social reforms. His leadership and principles of Satyagraha and Ahimsa continue to inspire movements worldwide.

## 1. Describe any four features of federalism.

**Solution:** Federalism is a system of government in which power is divided between a central (national) government and various regional (state) governments. The following are the key features of federalism:

1. Dual Government Structure: - In a federal system, there are two levels of government: the Central Government and the State Government. Each level of government has specific powers, and they operate within their jurisdiction. For instance, the Union Government in India deals with national issues, while the State Governments manage regional matters like education and health.

2. Written Constitution: - Federal systems usually have a written constitution that defines the powers and responsibilities of each level of government. It also outlines how conflicts between the two levels will be resolved. For example, the Indian Constitution clearly defines the Union List, State List, and Concurrent List, specifying which areas each government can legislate upon.

3. Division of Powers: - The key feature of federalism is the division of powers between the central government and the states. Some powers are exclusive to the central government (like defense), while others are reserved for the states (like police). There is also a Concurrent List where both levels of government can legislate on certain matters (such as education).

4. Independent Judiciary: - In a federal system, there is usually an independent judiciary that ensures the laws and actions of both central and state governments are in accordance with the constitution. The judiciary acts as an arbitrator when disputes arise between the two levels of government. In India, the Supreme Court plays this role by resolving conflicts between the Union and States.

### Quick Tip

Federalism divides power between a central government and regional governments. It ensures unity while accommodating diversity within a country.

## 2. Describe any two major challenges of democracy.

**Solution:** Democracy, while being the most popular form of governance, faces several challenges in its functioning. Two of the major challenges are:

1. Inequality and Poverty: - In many democratic nations, inequality and poverty are significant challenges. Even though democratic principles promise equality for all, economic disparities often persist, making it difficult for many citizens to fully participate in the democratic process. Poverty can restrict access to education, healthcare, and basic services, preventing marginalized communities from having an equal voice in elections and decision-making.

- In India, for instance, a large portion of the population still lives below the poverty line, which hampers their ability to participate fully in the democratic process. Lack of resources can lead to disenfranchisement, making it harder to break free from the cycle of poverty.

2. Corruption: - Corruption is a pervasive issue in many democratic countries. When government officials use their power for personal gain rather than serving the public, it erodes trust in democratic institutions. Corruption can distort decision-making, divert public resources, and result in inefficient or unjust policies.

- In India, corruption at various levels of government remains a serious concern, with instances of bribery and misuse of power hindering the effective functioning of democracy. It undermines the principles of accountability and transparency, making it harder for citizens to hold their elected representatives accountable.

### Quick Tip

Democracy faces challenges like inequality and corruption, which hinder its ability to serve all citizens equally. Addressing these challenges is vital for ensuring the health of a democratic system.

## 1. Suggest measures for the conservation of wildlife in India.

**Solution:** Conservation of wildlife is crucial for maintaining ecological balance and biodiversity. In India, where rich biodiversity is found, several measures can be taken to conserve wildlife:

1. Establishment of Protected Areas: - One of the most effective ways to protect wildlife is by creating protected areas, such as national parks, wildlife sanctuaries, and biosphere reserves. These areas help in preserving the natural habitat of endangered species and allow for scientific research and sustainable tourism.

- Example: The Kaziranga National Park in Assam is a well-known sanctuary for the one-horned rhinoceros, helping to increase its population significantly.

2. Strict Enforcement of Wildlife Protection Laws: - India has a Wildlife Protection Act (1972), which aims to safeguard endangered species and their habitats. The enforcement of these laws should be strengthened to curb illegal poaching, wildlife trade, and habitat destruction. More awareness should be created about the legal consequences of wildlife crimes.

- Example: The Project Tiger initiative was launched to protect tigers in India, and it has helped in significantly increasing the tiger population.

3. Community Participation: - Involving local communities in wildlife conservation efforts can lead to better outcomes. Community-based conservation programs can engage people in the protection of local wildlife, encourage sustainable practices, and reduce human-wildlife conflicts.

- Example: The Joint Forest Management (JFM) program allows local people to collaborate with the government in forest management, which helps in the conservation of forest-dwelling species.

4. Awareness and Education: - Raising public awareness about the importance of wildlife conservation is essential. Schools, NGOs, and government organizations should run campaigns to educate the masses about the significance of wildlife and the need for its protection.

- Example: The Save the Tiger campaign has created significant awareness about the declining tiger population and garnered widespread public support.

5. Mitigating Human-Wildlife Conflict: - The increasing human population and expanding urbanization often lead to conflicts between humans and wildlife. Effective management of these conflicts through eco-friendly infrastructure, like wildlife corridors and underpasses, can reduce the risks to both humans and animals.

#### Quick Tip

Conserving wildlife is crucial for biodiversity and maintaining ecological balance. Protected areas, stronger laws, community involvement, and education are key measures for effective conservation.

## 2. Is the future of solar energy bright in India? Explain.

**Solution:** The future of solar energy in India looks promising due to several favorable factors:

1. Abundant Solar Energy Potential: - India is one of the countries that receives abundant sunlight throughout the year. With an average of 300 sunny days, India is well-positioned to harness solar energy effectively. The solar energy potential in the country is enormous, with the ability to generate solar power even in areas with limited access to conventional energy resources.

- Example: The Bhadla Solar Park in Rajasthan is one of the largest solar parks in the world, demonstrating India's capacity to harness solar energy on a large scale.

2. Government Support and Policies: - The Indian government has been promoting the use of renewable energy, particularly solar power, through initiatives like the National Solar Mission. The government aims to achieve 100 GW of solar power capacity by 2022, with additional targets set for the years ahead. Financial incentives, subsidies, and tax benefits are being offered to both individuals and companies to encourage solar energy adoption.

- Example: The Pradhan Mantri Kisan Urja Suraksha Evam Utthaan Mahabhiyan (PM-KUSUM) scheme aims to promote solar power installations among farmers.

3. Technological Advancements: - Technological improvements in solar panel efficiency, energy storage systems, and the decreasing cost of solar power generation make it increasingly cost-competitive. Over time, solar energy has become more affordable, making it a viable option for households, businesses, and even large-scale power plants.

- Example: The cost of solar power has fallen significantly in recent years, making it more affordable compared to traditional fossil fuels.

4. Environmental Benefits: - Solar energy is a clean and renewable source of energy that does not contribute to air pollution or greenhouse gas emissions. As India works towards reducing its carbon footprint and addressing the challenges of climate change, solar energy provides a sustainable solution.

- Example: The adoption of solar energy can significantly help India meet its climate targets as per the Paris Agreement.

5. Job Creation and Economic Growth: - The solar energy sector is creating numerous job opportunities in manufacturing, installation, and maintenance. This can contribute to economic growth, particularly in rural and remote areas where solar energy can play a key role in electrification.

- Example: The growing solar industry is providing employment opportunities in manufacturing solar panels, system integration, and maintenance services.

### Quick Tip

India's abundant sunlight, government support, technological advancements, and environmental benefits make solar energy a viable and sustainable option for the future.

## 1. Explain the objectives of MGNREGA 2005.

**Solution:** The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005 is an Indian labor law and social security measure that aims to enhance the livelihood security of rural households. The main objectives of MGNREGA are as follows:

1. Employment Generation: - MGNREGA aims to provide at least 100 days of guaranteed wage employment per year to every rural household whose adult members volunteer for unskilled manual work. This is especially targeted at rural areas with high unemployment rates.

2. Reduction of Rural Poverty: - By ensuring employment opportunities, the scheme seeks to alleviate poverty in rural areas. The wages provided under MGNREGA are intended to help improve the economic condition of poor rural families and contribute to the overall development of rural areas.

3. Creation of Rural Infrastructure: - MGNREGA focuses on the creation of durable and sustainable rural infrastructure. This includes the construction of rural roads, irrigation facilities, water conservation structures, and afforestation. These projects not only provide employment but also contribute to the development of rural areas.

4. Empowerment of Women and Marginalized Groups: - The Act mandates that one-third of the workers must be women, thereby promoting gender equality in rural employment. It also encourages the participation of socially and economically disadvantaged groups, such as Scheduled Castes (SC), Scheduled Tribes (ST), and backward classes.

5. Decentralized Planning and Implementation: - The Act promotes decentralized planning through Panchayati Raj institutions, which allows local communities to participate in decision-making about the types of work to be undertaken, enhancing local accountability.

### Quick Tip

MGNREGA focuses on providing employment, reducing poverty, creating rural infrastructure, empowering marginalized communities, and decentralizing decision-making.

## 2. Explain any three ways by which producers can be exploited in the market.

**Solution:** Producers, especially in developing countries, can often face exploitation in the market in several ways. Here are three common ways producers can be exploited:

1. Unfair Pricing by Middlemen: - One of the most common forms of exploitation of producers is when middlemen (who act as intermediaries between producers and consumers) buy goods from producers at a very low price and then sell them at much higher prices in the market. Producers are often forced to sell at low prices due to the absence of direct market access.

- Example: Farmers selling their crops at very low prices to middlemen who then sell the produce at significantly higher prices in the market, reducing the farmers' income.

2. Monopoly and Price Fixing: - Producers may be exploited by monopolistic firms or powerful buyers who dominate the market. These firms can manipulate prices, forcing producers to accept lower prices for their goods or services. This happens when there is a lack of competition, and the producer has limited options for selling their products.

- Example: A single large corporation controlling the sale of agricultural produce, forcing farmers to sell at prices below their production costs.

3. Non-Transparent Contracts: - Producers, particularly small-scale producers, often face exploitation when they enter into contracts with large buyers without fully understanding the terms. Unclear contracts with unfair clauses, such as delayed payments or deducting arbitrary fees, lead to financial losses for producers.

- Example: A small-scale manufacturer enters into a contract with a retailer that has hidden clauses, such as delayed payments or unfair penalties, leading to financial exploitation.

### Quick Tip

Producers can be exploited in the market through unfair pricing, monopolistic practices, and non-transparent contracts, which reduce their income and financial stability.