# UPSC CSE (Main) 2024

# **General Studies Paper-I**

Q1. Underline the changes in the field of society and economy from the Rig Vedic to the later Vedic period. (Answer in 150 words) [10]

# **Approach to Question:**

- **1. Understand the Context:** Familiarise yourself with the timeline and significance of the Rig Vedic and Later Vedic periods.
- **2. Identify Key Areas of Change:** Focus on society, and economy as primary categories for comparison.
- Outline Major Changes: List specific changes in each category:
  - **Social:** Caste system, status of women.
  - Economic: Agriculture, trade.
- **4. Conclude:** Summarise the overall transformation from a less structured society to a more complex and stratified one.

#### Answer:

1. The Vedic period in India is divided into the Rig Vedic (c. 1500–1000 BCE) and Later Vedic periods (c. 1000–600 BCE). Significant shifts occurred during this transition.

# **Social Changes**

- 1. Caste System
  - Rig Vedic: Society was flexible, with varna based on occupation.
  - Later Vedic: The caste system became rigid, determined by birth.

# 2. Position of Women

- **Rig Vedic:** Women held higher status and had educational access.
- Later Vedic: Women status declined with child marriage and restrictions.

# **Economic Changes**

- 1. Agriculture
  - Rig Vedic: Primarily pastoral, with limited farming.
  - Later Vedic: Agriculture became dominant, aided by iron tools.

#### 2. Trade and Commerce

- **Rig Vedic:** Trade was limited and wealth was in cattle.
- Later Vedic: Trade expanded, with coin use and guilds forming.

The transition from the Rig Vedic to the Later Vedic period saw a fundamental shift from a semi-nomadic, pastoral economy and relatively fluid social structures to a settled agricultural society with increasing social stratification and complexity in both economic and religious practices.

Q2. Estimate the contribution of Pallavas of Kanchi to the development of art and literature in South India. (Answer in 150 words) [10]

# **Approach to Question:**

- **1. Introduction:** Briefly introduce the Pallavas and their time period (4th–9th century CE).
- 2. Literature:
  - Mention their patronage of Sanskrit and Tamil literature.
  - Name key scholars and works supported by the Pallavas.

#### 3. Art and Architecture:

- Highlight their role in the development of Dravidian temple architecture.
- Mention important rock-cut and structural temples (Mahabalipuram, Kailasanatha Temple).
- **4. Conclusion:** Summarise the lasting impact of the Pallavas on South Indian culture, focusing on their contributions to art, architecture and literature.

#### Answer:

The Pallavas of Kanchi made significant contributions to the development of art and literature in South India. Their reign, roughly from the 4th to the 9th century CE, marked a golden age in the realms of temple architecture, sculpture and literary achievements.

# Contribution of Pallavas of Kanchi to Art and Literature in South India

# 1. Patronage of Literature:

- The Pallavas were great patrons of both Sanskrit and Tamil literature.
- Scholars like Dandin (author of Dashakumaracharita) and Bharavi (author of Kiratarjuniya) thrived under their patronage.

# 2. Development of Art and Architecture:

The Pallavas were pioneers of the Dravidian style of temple architecture, which set the foundation for future temple construction in South India.

- Rock-cut temples at Mahabalipuram (e.g., Shore Temple, Five Rathas) exemplify their innovation in art and sculpture.
- They also introduced structural temples, with the Kailasanatha Temple in Kanchipuram being a prominent example.

#### 3. Sculptural Excellence:

 The intricate sculptures in these temples, depicting religious and mythological themes, reflect their contribution to South Indian sculptural art.

The Pallavas of Kanchi made a profound impact on the development of art and literature in South India. The Pallavas' legacy in art and literature continues to influence South Indian culture even today.

Q3. What were the events that led to the Quit India Movement? Point out its results.

(Answer in 150 words) [10]

# **Approach to Question:**

- Start with a Brief Introduction: Provide context about the Quit India Movement, mentioning its significance in the Indian independence struggle.
- 2. Outline Key Events Leading to the Movement:
  - World War II context
  - Cripps Mission failure
  - AICC resolution
- 3. **Describe the Results of the Movement:** Highlight the key outcomes and impacts.
- **4. Conclude with a Summary:** Reinforce the importance of the movement in the context of India's independence.

# Answer:

The Quit India Movement, also known as the August Movement, was a significant event in the Indian independence struggle against British colonial rule.

#### **Events Leading to the Movement**

- World War II: The war led to economic hardship and unrest in India.
- Cripps Mission (1942): Sir Stafford Cripps' proposal for limited self-government was rejected, causing disappointment.
- **3. AICC Resolution:** In August 1942, the AICC passed the Quit India Resolution, calling for 'Do or Die'.

# Results of the Movement

- **1. Mass Mobilisation:** The movement sparked widespread protests and strikes across India.
- **2. Impact on British Policy:** Although suppressed, it exposed British vulnerability and influenced their approach to Indian independence.

The Quit India Movement was a pivotal moment in India's struggle for independence. While it faced heavy repression and did not immediately achieve its goals, it united the Indian populace against colonial rule and

significantly impacted British policy, eventually leading to India's independence.

Q4. What is sea surface temperature rise? How does it affect the formation of tropical cyclones? (Answer in 150 words) [10]

# **Approach to Question:**

- **1. Define Key Concepts:** Start by defining "sea surface temperature rise" to establish context.
- 2. Use bullet points to outline how SST rise affects tropical cyclone formation:
  - Increased Energy Availability
  - Enhanced Evaporation
  - Changes in Wind Patterns
- **3. Include Examples:** Provide real-world examples for each effect to illustrate the impact (e.g., specific hurricanes).
- **4. Conclude:** Summarise the main points and their implications for understanding tropical cyclones and climate change.

#### Answer:

Sea Surface Temperature (SST) rise refers to the increase in temperature of the top layer of the ocean. This change is primarily driven by global warming due to greenhouse gas emissions.

#### Effects of SST Rise on Tropical Cyclone Formation

- 1. Increased Energy Availability
  - Example: Hurricane Katrina (2005) intensified rapidly over the warm waters of the Gulf of Mexico, where SSTs were higher than average.
  - Warmer SSTs provide more heat energy, allowing cyclones to develop and strengthen more easily.

# 2. Enhanced Evaporation

- **Example:** Cyclone Idai (2019) formed over warm waters in the Indian Ocean, leading to high moisture content in the atmosphere.
- Higher temperatures increase evaporation rates, adding moisture that fuels cyclone formation.

#### 3. Changes in Wind Patterns

- Example: The changing SST patterns in the Pacific Ocean have affected the frequency and paths of typhoons impacting Southeast Asia.
- Increased SSTs can lead to altered wind shear conditions, influencing cyclone development.
   Low wind shear is conducive to cyclones, while high wind shear can inhibit them.

The rise in sea surface temperatures significantly impacts the formation and behaviour of tropical cyclones, resulting in potentially more intense and destructive storms that pose risks to coastal communities and ecosystems.

**Q5.** Why do large cities tend to attract more migrants than smaller towns? Discuss the conditions in developing countries.

(Answer in 150 words) [10]

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# **Approach to Question:**

- 1. **Introduction:** Briefly state the topic and its relevance.
- **2. Key Factors:** Identify and elaborate on the primary reasons for migration:
  - Economic Opportunities: Discuss job availability and diverse job markets in cities.
  - Access to Services: Highlight educational institutions and healthcare facilities that draw migrants.
  - Infrastructure: Mention the role of transportation and connectivity in facilitating migration
- **3. Examples:** Use specific examples from developing countries (e.g., mention cities like Mumbai, Delhi, or Bengaluru) to illustrate points.
- 4. Conclusion: Summarise the main points, possibly noting the implications of this migration on urban areas, such as overcrowding and resource strain, while also acknowledging the benefits, like economic growth.

#### Answer:

Large cities tend to attract more migrants than smaller towns due to a combination of economic, social and infrastructural factors. In the context of developing countries like India, these reasons can be elaborated as follows:

# 1. Economic Opportunities

 Job Availability: Large cities often have diverse job markets, providing various employment opportunities across sectors like manufacturing, services and technology. For example, cities like Mumbai and Bengaluru are economic hubs where many seek jobs.

# 2. Educational and Healthcare Facilities

- Access to Education: Large cities host better educational institutions, including universities and colleges, attracting students and families seeking quality education. Cities like Delhi and Hyderabad are known for their prestigious universities.
- Healthcare Services: Migrants often seek better healthcare services available in cities, including specialised medical facilities. For example, cities like Chennai have become medical tourism hubs due to their advanced healthcare infrastructure.

# 3. Infrastructure and Connectivity

Transport Links: Large cities usually have better transport infrastructure, including roads, railways and airports, facilitating easier movement for migrants. For example, cities like Delhi have extensive metro systems that improve mobility.

While this migration can lead to challenges such as urban overcrowding and strain on resources, it also contributes to the economic growth and cultural richness of urban areas.

**Q6.** What is the phenomenon of 'cloudbursts'? Explain. (Answer in 150 words) [10]

# **Approach to Question:**

- Define the Concept: Start with a clear and concise definition of cloudbursts.
- **2. Identify Causes:** List and explain the key factors that contribute to cloudbursts, such as topography, temperature and humidity.
- **3. Highlight Key Features:** Discuss the main characteristics of cloudbursts, including rapid precipitation rates and geographical contexts where they are common.
- **4. Discuss Impacts:** Explain the potential consequences of cloudbursts, focusing on their effects on communities, infrastructure and ecosystems.
- **5. Conclude with Importance:** Emphasise the significance of understanding cloudbursts for disaster management and preparedness in vulnerable regions.

#### Answer:

According to the India Meteorological Department (IMD), cloudbursts are sudden, heavy rainstorms where more than 10 cm of rain falls in less than an hour over a small area, of about 10 square km.

# Factors Contributing to Cloudbursts Include:

- 1. Topography: Mountains can force moist air to rise, enhancing precipitation.
- **Temperature:** The presence of warm air can lead to instability in the atmosphere.
- 3. **Humidity:** High moisture content in the air is essential for cloudburst formation.

#### **Key Features of Cloudbursts:**

- 1. Rapid Precipitation: Cloudbursts can produce extremely high rainfall rates, sometimes exceeding 100 mm (4 inches) in an hour.
- 2. Geographical Context: They are common in areas with steep topography, such as the Himalayas, Western Ghats and other mountainous regions where moist air is rapidly lifted, cooling and condensing into rain.

#### Impacts:

Cloudbursts can have devastating effects on communities, including property damage, loss of life and disruption of local ecosystems.

# **Examples:**

- 1. Himachal Pradesh (July 2022): Several regions in Himachal Pradesh experienced cloudbursts that caused flash floods.
- **2. Karnataka (June 2023):** A cloudburst in the Western Ghats region led to heavy rainfall, causing flooding and landslides in parts of Karnataka.

Understanding cloudbursts is crucial for disaster management, especially in vulnerable regions prone to such phenomena.

Q7. What is the concept of a 'demographic winter'?
Is the world moving towards such a situation?
Elaborate. (Answer in 150 words) [10]

# **Approach to Question:**

- Define the Concept: Briefly explain demographic winter as a decline in population growth due to low birth rates and ageing populations.
- 2. Highlight Key Aspects
  - **Declining Birth Rates:** Mention causes like increased education and economic considerations.
  - **Ageing Population:** Explain the impact on dependency ratios and social services.
  - Economic Impacts: Note potential labour shortages and increased costs for pensions and healthcare.
- **3. Discuss Global Trends:** Focus on affected regions, especially: Europe, Japan and China.
- 4. Conclude: Emphasise the significance of understanding demographic winter in addressing socioeconomic challenges.

#### Answer:

Demographic winter refers to a decline in population growth rates, resulting from low birth rates, ageing populations and migration patterns.

# **Key Aspects of Demographic Winter**

- 1. Declining Birth Rates: Many developed countries, especially in Europe, have birth rates below the replacement level of 2.1 children per woman. Factors include increased education and career opportunities for women, economic considerations and changing societal values regarding family.
- 2. Ageing Population: Increased life expectancy coupled with low birth rates leads to a higher proportion of elderly individuals, resulting in a greater dependency ratio. This shift strains social security systems and healthcare services.
- 3. Economic Impacts: A shrinking workforce can cause labour shortages, reduced productivity and increased costs for pensions and healthcare, potentially leading to economic stagnation.

#### **Current Global Trends**

- 1. **Europe and Japan:** Nations like Germany and Italy are grappling with low birth rates and ageing populations, raising concerns about economic stability and labour supply.
- China: After decades of the one-child policy, China faces similar issues with an ageing population and declining birth rates.

While demographic winter is a pressing concern for developed nations, its implications can influence global economic growth, labour markets and social welfare systems.

**Q8.** Distinguish between gender equality, gender equity and women's empowerment. Why is it

important to take gender concerns into account in programme design and implementation? (Answer in 150 words) [10]

# **Approach to Question:**

- Introduction: Briefly state the importance of gender equality, gender equity and women's empowerment in promoting social justice and development.
- **2. Define Key Terms:** Clearly define each concept:
  - Gender Equality: Equal rights and opportunities for all genders.
    - **Gender Equity:** Fair distribution of resources and support to achieve equality.
    - **Women's Empowerment:** Enhancing women's social, economic and political strength.
- 3. Importance in Program Design:
  - Holistic Development: Addressing the needs of all genders leads to more effective solutions.
  - Equitable Outcomes: Preventing the reinforcement of existing inequalities.
  - **Social Justice:** Ensuring marginalised groups have a voice in decision-making.
- **4. Conclusion:** Summarise how integrating gender considerations can create impactful interventions for social change.

#### Answer:

Gender equality, gender equity and women's empowerment are interconnected concepts that play a crucial role in fostering social justice and development.

#### Distinctions:

- Gender Equality: Refers to the equal rights, responsibilities and opportunities for individuals of all genders. It emphasises that everyone should have the same access to resources and opportunities, irrespective of gender.
- 2. Gender Equity: Focuses on fairness and justice in the distribution of benefits and responsibilities between genders. It acknowledges that different genders may need different support to achieve equality, thereby often requiring targeted interventions to address historical and structural disadvantages.
- 3. Women's Empowerment: Involves increasing the social, economic, and political strength of women. It includes fostering a sense of self-worth, the right to make choices and the ability to influence social change for themselves and others.

# Importance of Gender Considerations in Program Design:

- **1. Holistic Development:** Addressing gender concerns leads to inclusive and effective development solutions.
- **2. Social Justice:** Ensures marginalised groups are heard and benefit from development initiatives.

By integrating gender concerns into program design and implementation, organisations can create more impactful and equitable interventions that foster genuine social change.

**Q9.** Intercaste marriages between castes which have socio-economic parity have increased, to some extent but this is less true of inter religious marriages. Discuss.

(Answer in 150 words) [10]

# **Approach to Question:**

- Introduction: Briefly state the rising trend of inter-caste marriages in India and the challenges of interreligious marriages.
- 2. Inter-caste Marriages:
  - **Economic Development:** Improved socioeconomic status reduces stigma.
  - **Legislative Support:** Government initiatives promote equality.
- 3. Interreligious Marriages:
  - **Family Resistance:** Fear of losing cultural practices creates strong resistance.
  - Legal Challenges: More complex legal issues regarding custody and inheritance.
- **4. Conclusion:** Summarise that inter-caste marriages are on the rise, while interreligious unions face significant hurdles.

# Answer:

Inter-caste marriages have seen a gradual increase in India, particularly among castes with similar socio-economic status.

#### This trend can be attributed to several factors:

- Economic Development: As certain castes achieve better economic status through education and employment, the stigma around inter-caste marriages diminishes. Families are more willing to accept unions that can enhance their social standing or maintain economic parity.
- Legislative Support: Government initiatives and legal frameworks that promote social equality and discourage caste-based discrimination have also contributed to the acceptance of inter-caste marriages.

In contrast, interreligious marriages face more significant challenges:

- 1. Family Resistance: Families tend to be more resistant to interreligious marriages, fearing the loss of cultural practices and familial ties. This resistance can lead to severe social repercussions, including ostracisation.
- 2. Legal and Social Challenges: Although inter-caste marriages have legal protections, interreligious marriages sometimes face more complex legal issues, especially concerning child custody and inheritance laws, further complicating these unions.

Overall, while inter-caste marriages are on the rise, the socio-religious complexities surrounding interreligious marriages remain more entrenched, hindering their acceptance and growth in society.

**Q10.** In dealing with socio-economic issues of development, what kind of collaboration between government, NGOs and private sector would be most productive?

(Answer in 150 words) [10]

# **Approach to Question:**

- 1. Introduction: Highlight the significance of collaboration among government, NGOs and the private sector for socio-economic development in India.
- **2. Identify Socio-Economic Issues:** List key challenges (e.g., poverty, education, healthcare, unemployment) with brief examples to illustrate their impact.
- 3. Key Areas for Collaboration:
  - Public-Private Partnerships (PPPs).
  - Health and Nutrition Programs.
- 4. **Conclusion:** Summarise the potential of collaboration for sustainable socio-economic development in India.

#### Answer:

Collaboration between the government, NGOs and the private sector can significantly enhance socio-economic development in India. Such partnerships can leverage resources, expertise and networks to address complex social issues.

# Socio-economic Issues of Development:

- **Poverty and Inequality:** For example: India's richest 10% owns over 70% of wealth.
- **2. Education:** For example: Low literacy rates in rural areas.
- **3. Healthcare:** For example: High maternal and infant mortality rates.
- **4. Unemployment:** For example: Underemployment and structural unemployment.

# **Key Areas for Collaboration:**

- 1. Public-Private Partnerships (PPPs)
  - PPPs involve collaboration between government entities and private sector companies to provide public services or infrastructure.
  - Example: Swachh Bharat Mission- The government partnered with private companies and NGOs to improve sanitation and hygiene across India.

# 2. Health and Nutrition Programs

- Collaborative efforts can tackle public health issues, particularly in malnutrition and maternal health.
- Example: Nourishing India- An initiative involving the government, NGOs like Goonj,

and private sector partners to improve nutrition among children and mothers through awareness, distribution of food, and health check-ups.

Effective collaboration between the government, NGOs, and the private sector can lead to sustainable socio-economic development in India.

Q11. "Though the great Cholas are no more yet their name is still remembered with great pride because of their highest achievements in the domain of art and architecture." Comment. (Answer in 250 words) [15]

# **Approach to Question:**

 Introduction: Briefly introduce the Chola dynasty (9th to 13th centuries) and its significance in South India.

# 2. Artistic Achievements:

- Bronze Sculpture: Highlight mastery in bronze sculptures of deities using the lostwax technique.
- Stone Carvings and Paintings: Mention intricate temple carvings and frescoes reflecting cultural context.

#### 3. Architectural Marvels:

- **Temple Architecture:** Discuss key examples like the Brihadeeswarar Temple.
- **Innovative Techniques:** Emphasise granite usage and temples as cultural centres.

#### 4. Cultural Impact:

- **Influence on Future Dynasties:** Note the impact on later architectural styles and modern designs.
- **Preservation of Tamil Culture:** Describe the promotion of Tamil language and culture through rituals and festivals.
- **5. Conclusion:** Summarise the Chola dynasty's enduring legacy in art and architecture.

#### Answer:

The Chola dynasty, from the 9th to the 13th centuries in South India, is renowned for its significant contributions to art and architecture. Though the dynasty itself has long passed, its contributions have left an indelible mark on the cultural landscape of India. This legacy is celebrated not only for its artistic brilliance but also for its innovative architectural techniques that continue to inspire generations.

# **Artistic Achievements**

#### 1. Bronze Sculpture:

- The Cholas excelled in bronze sculpture, creating lifelike figures of deities, particularly Shiva.
- They utilised the lost-wax casting technique for intricate details.

# 2. Stone Carvings and Paintings:

 Temple stone carvings showcase exceptional artistry and reflect the period's religious beliefs.  Frescoes offer insights into the socio-cultural context of the Chola era.

#### **Architectural Marvels**

# 1. Temple Architecture:

 The Brihadeeswarar Temple in Thanjavur is a UNESCO World Heritage Site, exemplifying Chola architecture with its massive vimana and intricate frescoes.

# 2. Innovative Techniques:

- Use of granite and meticulous planning demonstrate advancements in construction.
- Temples served as cultural and social centres, not just places of worship.

# **Cultural Impact**

# 1. Influence on Future Dynasties:

 Chola architectural styles influenced later South Indian dynasties and inspire modern designs.

# 2. Preservation of Tamil Culture:

- The Cholas promoted Tamil language and culture, fostering pride among Tamil-speaking communities.
- Festivals and rituals related to Chola temples remain significant today.

The legacy of the Chola dynasty in art and architecture exemplifies their innovative spirit. Their achievements continue to evoke admiration, ensuring the name of the great Cholas is remembered with pride.

Q12. How far is it correct to say that the First World War was fought essentially for the preservation of balance of power?

(Answer in 250 words) [15]

#### **Approach to Question:**

- **1. Introduction:** Briefly introduce the First World War and the balance of power theory.
- 2. Factors Contributing to the Outbreak:
  - Nationalism: Explain how nationalist movements, especially in the Balkans, heightened tensions
  - Imperialism: Discuss competition for colonies and its role in escalating rivalries, particularly Germany vs. Britain and France.
  - Militarism: Describe the arms race and the glorification of military strength, creating a war-ready climate.
  - Alliance Systems: Highlight how complex alliances turned localised conflicts, like the assassination of Archduke Franz Ferdinand, into a global war.
  - Crisis Management Failures: Mention how diplomatic mismanagement during crises contributed to tensions.
- **3. Conclusion:** Summarise that while the balance of power theory is relevant, attributing the war's outbreak to it alone oversimplifies the multifaceted causes.

#### Answer:

The First World War, which erupted in 1914, was a complex conflict driven by multiple factors. The balance of power theory posits that national security is enhanced when military capabilities are distributed so that no one nation can dominate others. By the late 19th and early 20th centuries, Europe was marked by alliances aimed at maintaining this balance, notably the Triple Alliance (Germany, Austria-Hungary, and Italy) and the Triple Entente (France, Russia, and Britain).

# Factors Contributing to the Outbreak of War

- Nationalism: Nationalist sentiments, especially in the Balkans, fueled tensions and conflicts among ethnic groups seeking independence.
- **2. Imperialism:** Competition for colonies intensified rivalries, particularly between Germany and established powers like Britain and France.
- Militarism: An arms race and the glorification of military power created a climate conducive to war, with nations rapidly mobilising their forces.
- 4. Alliance Systems: The intricate alliance network meant that localised conflicts could escalate quickly. The assassination of Archduke Franz Ferdinand in June 1914 triggered a series of alliances that drew multiple nations into war.
- Crisis Management Failures: Diplomatic failures exacerbated tensions, with mismanagement of crises, such as the Balkan Wars, contributing to the war's outbreak.

Although the balance of power played a role in the leadup to the First World War, it was not the sole cause. Nationalism, imperialism, militarism, alliance systems, and diplomatic failures all contributed to the war. Therefore, it is too simplistic to attribute the conflict primarily to the preservation of the balance of power, as it resulted from a complex interplay of factors.

**Q13.** How far was the Industrial Revolution in England responsible for the decline of handicrafts and cottage industries in India?

(Answer in 250 words) [15]

#### **Approach to Question:**

- **1. Introduction:** Define the Industrial Revolution and its impact on India.
- **2. Economic Factors:** Mention about factors like Competition with British Goods, Deindustrialisation, Supply Chain Disruption, etc.
- Social Factors: Mention about factors like Loss of Livelihoods, Cultural Erosion, Changing Preferences, etc.
- **4. Political Factors:** Mention about factors- Colonial Policies, Economic Exploitation, etc.
- Conclusion: The Industrial Revolution caused significant decline in India's handicrafts through economic competition and exploitative policies, impacting traditional industries and cultural heritage.

#### Answer:

The Industrial Revolution in late 18th-century England drastically transformed economic production and societal structures, significantly impacting colonies like India. This period saw the decline of traditional handicrafts and cottage industries, resulting in economic dislocation and social changes.

#### **Economic Factors**

- Competition with British Goods: The influx of cheaper, machine-made textiles, such as Manchester cotton, flooded the Indian market, diminishing demand for local handicrafts, particularly in regions like Bengal known for muslin.
- **2. Deindustrialisation:** British policies favoured imported goods. The Bengal silk industry struggled as British silk imports surged, forcing many artisans to abandon their crafts.
- 3. **Disruption of Supply Chains:** Traditional production methods were disrupted by the rise of factory-based manufacturing. For example, the pottery industry in Kanpur declined as factory-produced ceramics gained popularity.

#### **Social Factors**

- Loss of Livelihoods: The decline of industries resulted in widespread unemployment. The hand-loom industry in Varanasi, for instance, suffered as British textiles replaced traditional silk sarees.
- Cultural Erosion: The fading of traditional crafts, such as zari work in Gujarat, led to a loss of skills and cultural identities among artisans.
- 3. Changing Consumer Preferences: British goods altered consumer habits, reducing the market for traditional handmade items.

# **Political Factors**

- **1. Colonial Policies:** British tariffs favoured imports over local textiles, undermining Indian industries.
- **2. Economic Exploitation:** The extraction of resources for British industrial growth harmed local economies, as seen in the Indigo Revolt of 1859, where local farmers faced exploitation.

The Industrial Revolution significantly impacted the decline of handicrafts and cottage industries in India through economic competition, exploitative colonial policies, and shifting social dynamics. Understanding this historical context is essential for analysing the ongoing effects of industrialisation on traditional industries in contemporary India.

**Q14.** The groundwater potential of the Gangetic valley is on a serious decline. How may it affect the food security of India?

(Answer in 250 words) [15]

# **Approach to Question:**

 Introduction: Briefly introduce the significance of the Gangetic Valley for agriculture and state that declining groundwater levels threaten food security.

- Causes of Groundwater Decline: Mention about Over-extraction, Climate Change, Urbanisation etc.
- **3. Impact on Agricultural Productivity:** Mention about Reduced Crop Yields, Increased Costs etc.
- 4. Implications for Food Security: Mention about Higher Food Prices, Vulnerability of Small Farmers, Nutritional Security etc.
- Conclusion: Summarise the key points and emphasise the need for immediate measures to ensure sustainable agriculture and food security.

#### Answer:

The Gangetic Valley, spanning several northern states in India, is renowned for its fertile agricultural land. However, the declining groundwater levels in this region present a serious threat to food security in the country.

#### **Causes of Groundwater Decline**

- 1. Over-extraction: Unsustainable groundwater extraction for irrigation and domestic use has led to falling water tables, crucial during dry spells and the Kharif season.
- **2. Climate Change:** Changing precipitation patterns and rising temperatures exacerbate water scarcity, pushing farmers to rely more on groundwater.
- Urbanisation: Rapid urban growth and industrial demands increase water usage, depleting groundwater resources and reducing recharge areas.

#### Impact on Agricultural Productivity

- Reduced Crop Yields: Lower groundwater levels result in less irrigation water, affecting yields of water-intensive crops like rice and wheat.
- Increased Costs: Farmers may need to invest in water-efficient technologies, raising production costs and potentially lowering profit margins.

# **Implications for Food Security**

- Higher Food Prices: Decreased agricultural productivity can lead to lower food supplies and higher prices, worsening food insecurity for low-income households.
- **2. Marginal Farmer Vulnerability:** Small farmers, reliant on groundwater, may struggle with declining yields, increasing poverty and food insecurity.
- 3. **Nutritional Security:** Shifts in crop patterns due to water scarcity can limit access to diverse and nutritious foods, exacerbating malnutrition.

Immediate measures, such as efficient water management, promoting rainfed agriculture, and adopting watersaving technologies, are essential to protect agriculture and ensure food security for India's growing population. Addressing this issue will require coordinated efforts from the government, agricultural scientists, and local communities.

# **Q15.** What are aurora australis and aurora borealis? How are these triggered?

(Answer in 250 words) [15]

# **Approach to Question:**

- **1. Introduction:** Define auroras as natural light displays in polar regions (southern and northern lights).
- **2. Aurora Australis (Southern Lights):** Briefly explain about its characteristics- Location, Colours, etc.
- 3. Aurora Borealis (Northern Lights): Briefly explain about its characteristics- Location, Colours, etc.
- 4. Trigger Mechanism
  - **Solar Wind:** Charged particles from the Sun initiate auroras.
  - **Earth's Magnetosphere:** Deflects particles toward polar regions.
- **5. Conclusion:** Summarise auroras as beautiful phenomena resulting from solar activity and Earth's atmosphere.

#### Answer:

Aurora australis and aurora borealis, commonly known as the southern and northern lights, respectively, are natural light displays predominantly seen in high-latitude regions near the Arctic and Antarctic.

#### **Aurora Australis**

Commonly referred to as the 'Southern Lights', aurora australis occurs near the South Pole.

- Location and Visibility: This phenomenon is visible in the Southern Hemisphere, particularly in regions like Antarctica, Tasmania, and New Zealand.
- Colour Spectrum: Aurora australis primarily exhibits green and red colours, which arise from the interaction of solar particles with oxygen in the atmosphere.
- 3. Weather and Climate Influence: Clear skies and minimal light pollution significantly enhance the visibility of auroras, making isolated areas like South Georgia Island ideal for experiencing the Southern Lights.

#### Aurora Borealis

Known as the 'Northern Lights', aurora borealis occurs near the North Pole.

- **1. Location and Visibility:** This aurora is visible in the Northern Hemisphere, especially in places such as Alaska, Norway, Canada and Iceland.
- 2. Colour Variations: The northern lights are predominantly characterised by green hues, primarily due to interactions between solar particles and oxygen molecules at altitudes of 100–150 km.
- 3. Geomagnetic Influence: Earth's magnetic field lines direct these solar particles into the atmosphere, allowing them to interact with oxygen and nitrogen, resulting in the vibrant displays.

#### Trigger Mechanism

1. Solar Wind: Both auroras are triggered by solar wind, which consists of charged particles (mainly electrons and protons) emitted by the Sun during solar flares or coronal mass ejections.

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2. Earth's Magnetosphere: When these charged particles reach Earth, they interact with the planet's magnetic field. The Earth's magnetosphere deflects most of these particles, but some are funnelled towards the polar regions.

In essence, aurora australis and aurora borealis are beautiful manifestations of the interaction between solar wind and Earth's magnetic field and atmosphere, resulting in vibrant light displays in the polar regions.

Q16. What is a twister? Why are the majority of twisters observed in areas around the Gulf of Mexico? (Answer in 250 words) [15]

# **Approach to Question:**

- **1. Introduction:** Define a tornado as a rapidly rotating column of air extending from a thunderstorm to the ground.
- 2. Key Factors:
  - Warm, Moist Air: The Gulf of Mexico provides warm, moist air essential for thunderstorm development.
  - Cold, Dry Air: Cold air from the Rockies or Canada collides with warm air, creating atmospheric instability.
  - Weather Patterns: 'Tornado Alley' experiences frequent weather systems that enhance tornado formation.
  - Jet Streams: Jet streams influence conditions for supercell thunderstorms, which can produce tornadoes.
- 3. Conclusion: Summarise how these factors contribute to the high incidence of tornadoes in the Gulf of Mexico, particularly in spring and early summer.

#### Answer:

A twister, commonly known as a tornado, is a rapidly rotating column of air that extends from a thunderstorm to the ground. Tornadoes are characterised by their funnel shape and can cause significant damage due to their high wind speeds, which can exceed 300 miles per hour in the most severe cases.

The majority of tornadoes, including twisters, are observed in areas around the Gulf of Mexico primarily due to a combination of geographical and meteorological factors:

- Warm, Moist Air: The Gulf of Mexico provides a source of warm, moist air. This air is essential for the development of severe thunderstorms, which can produce tornadoes.
- 2. Cold, Dry Air: The presence of cold, dry air from the Rocky Mountains or Canada can move southward, colliding with the warm, moist air from the Gulf. This clash creates instability in the atmosphere, conducive to severe weather, including thunderstorms that can spawn tornadoes.

- 3. Weather Patterns: The region, particularly an area known as 'Tornado Alley', experiences frequent weather systems and fronts that enhance the likelihood of tornado formation. The unique topography and climate of the Central United States allow for these interactions to occur more frequently than in other regions.
- 4. **Jet Streams:** The position of the jet stream can influence tornado activity, with the right conditions leading to the development of supercell thunderstorms that are particularly capable of producing tornadoes.

These factors combined make the areas around the Gulf of Mexico particularly prone to tornado formation, especially during the spring and early summer months when conditions are most favourable.

**Q17.** What is regional disparity? How does it differ from diversity? How serious is the issue of regional disparity in India?

(Answer in 250 words) [15]

# **Approach to Question:**

- **1. Introduction:** Define regional disparity and its implications for economic resources, social services and opportunities within a country.
- 2. Difference Between Regional Disparity and Diversity: Explain the distinction between regional disparity (focus on inequality in development) and diversity (focus on variety among groups without implying inequality).
- 3. Seriousness of Regional Disparity in India: Highlight key aspects of regional disparity like Economic Inequality, Access to Services, Employment Opportunities and Impact on Social Cohesion.
- 4. Provide specific examples Regional Disparity in India
- **5. Conclusion:** Emphasise the importance of addressing regional disparity for balanced economic growth, social equity and national integration in India.

#### Answer:

Regional disparity refers to the uneven distribution of economic resources, social services and opportunities across different regions within a country. It highlights the differences in development, infrastructure, income levels and quality of life among various geographical areas.

# Difference Between Regional Disparity and Diversity

- Regional Disparity: Focuses on the inequality in development and access to resources among different regions. For example, some regions may have better healthcare, education and job opportunities, while others lag behind.
- 2. **Diversity:** Refers to the variety of cultural, ethnic, linguistic or geographical characteristics within a region or country. Diversity emphasises the differences that exist among groups or areas, which can coexist without implying inequality.

# Seriousness of Regional Disparity in India

Regional disparity is a significant issue in India, characterised by:

- Economic Inequality: Certain states, like Maharashtra and Gujarat, experience higher economic growth compared to others like Bihar and Uttar Pradesh, leading to significant income disparities.
- Access to Services: Disparities exist in access to healthcare, education and infrastructure. Urban areas often receive better services compared to rural areas.
- 3. **Employment Opportunities:** Job availability is unevenly distributed, with metropolitan areas attracting more investment and providing more jobs than rural regions.
- 4. Impact on Social Cohesion: Regional disparities can lead to social tensions and unrest, as marginalised regions may feel neglected or discriminated against.

# **Examples of Regional Disparity in India**

- Infrastructure: The National Highways network is more developed in states like Gujarat, facilitating trade and commerce, whereas northeastern states face challenges in connectivity and infrastructure.
- 2. Healthcare: Kerala has high life expectancy and low infant mortality rates, largely due to its robust healthcare system, while states like Uttar Pradesh struggle with healthcare access and outcomes.

Overall, addressing regional disparity is crucial for promoting balanced economic growth, social equity and national integration in India.

Q18. Despite comprehensive policies for equity and social justice, underprivileged sections are not yet getting the full benefits of affirmative action envisaged by the Constitution. Comment.

# (Answer in 250 words) [15]

#### **Approach to Question:**

- 1. Introduction: Define affirmative action and its constitutional basis in India (Articles 15(4) and 46).
- 2. Challenges to Effectiveness
  - Implementation Challenges: Note bureaucratic inefficiencies and lack of awareness among beneficiaries.
  - **Social Prejudice:** Highlight how entrenched biases impede equitable benefits.
  - **Economic Disparities:** Mention limited access to education and jobs for beneficiaries.
  - **Political Will:** Discuss fluctuating political support for affirmative action initiatives.
  - Reservation vs. Empowerment: Contrast short-term benefits of reservations with the need for long-term empowerment through skill development.
- **3. Conclusion:** Emphasise the need for a comprehensive approach to overcome challenges and ensure marginalised groups benefit from affirmative action.

#### Answer:

Affirmative action is a policy framework designed to address historical injustices and systemic inequalities faced by marginalised groups by providing them with preferential treatment in education, employment and political representation. In India, this concept is firmly rooted in the Constitution, for example: Articles 15(4) and 46.

The persistent gaps in the effectiveness of affirmative action policies in India can be attributed to several interconnected factors:

- Implementation Challenges: Despite the existence
  of comprehensive policies, the actual implementation often falls short. Bureaucratic inefficiencies,
  lack of awareness among the target populations and
  inadequate monitoring mechanisms can hinder the
  effectiveness of these policies.
- 2. Social Prejudice: Deep-rooted social biases and discrimination continue to affect the underprivileged. This societal context can impede the equitable distribution of benefits, as privileged groups may resist changes that threaten their status.
- 3. **Economic Disparities:** Economic challenges remain a significant barrier. Many beneficiaries may lack access to quality education, healthcare and job opportunities, which undermines their ability to take full advantage of affirmative action.
- 4. Political Will: The commitment of political leaders to uphold and enhance affirmative action measures can vary. Changing political agendas may lead to fluctuations in support and funding for these initiatives.
- 5. Reservation vs. Empowerment: While reservation policies provide short-term benefits in education and employment, they may not sufficiently address the long-term empowerment of marginalised communities. A focus on skill development, entrepreneurship and holistic support is necessary.

While affirmative action policies are critical for promoting equity and social justice, a multifaceted approach is required to address these challenges. This includes better implementation, societal awareness, targeted outreach and a focus on overall empowerment to ensure that underprivileged sections can fully benefit from the provisions envisaged by the Constitution.

Q19. Globalisation has increased urban migration by skilled, young and unmarried women from various classes. How has this trend impacted upon their personal freedom and relationship with family?

(Answer in 250 words) [15]

# **Approach to Question:**

- **1. Introduction:** Define globalisation and its effect on urban migration among skilled, young and unmarried women.
- **2. Globalisation and Urban Migration:** Highlight economic opportunities and educational advantages that attract women to urban areas.

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# 3. Impact on Personal Freedom

- **Positive:** Discuss financial independence and career opportunities.
- **Negative:** Address work-life balance issues and safety concerns.

# 4. Impact on Relationships with Family

- Positive: Explain increased respect in family decisions and technology's role in maintaining connections.
- **Negative:** Discuss emotional distance and potential family conflicts.
- **5. Conclusion:** Summarise the effects on personal freedom and family relationships, emphasising the need to navigate these dynamics.

#### Answer:

Globalisation has significantly influenced urban migration patterns, especially among skilled, young, unmarried women. This trend has various impacts on their personal freedom and relationships with their families.

# Globalisation and Urban Migration of Skilled, Young, Unmarried Women

# 1. Economic Opportunities in Urban Areas:

- High-paying job prospects attract women from diverse backgrounds.
- Example: Tech hubs like Bengaluru and Hyderabad draw skilled women to roles in IT and startups.

#### 2. Access to Education

- Availability of prestigious universities and colleges enhances educational prospects.
- Example: Women enroll in institutions like IIMs and IITs to gain qualifications and improve employability.

#### **Impact of Trend on Personal Freedom**

# 1. Positive Impacts

- Financial Independence: Urban migration often allows women to secure well-paying jobs, leading to financial self-sufficiency.
- Career Opportunities: Young women in cities can enter high-demand fields like technology, healthcare, or entrepreneurship, significantly enhancing their career trajectories.

# 2. Negative Impacts

- Disturbed Work-Life Balance: The demands of urban jobs can lead to burnout, particularly in high-pressure environments. Example: Women in corporate sectors often face long working hours, which can disrupt their personal lives and lead to mental health challenges.
- Safety Concerns: Urban living can also pose safety challenges, with concerns about harassment and crime affecting women's freedom of movement.

# Impact on Relationship with Family

# 1. Positive Impacts

 Increased Respect and Role in Decision-Making: As women gain financial independ-

- ence and professional success, families may begin to respect their opinions and decisions more.
- Strengthening Bonds Through Technology: Advances in communication technology help maintain family connections despite physical distance. Example: Platforms like WhatsApp and Zoom bridge the gap between urban daughters and their rural families, allowing for regular interaction and support.

# 2. Negative Impacts

- Emotional Distance: Increased physical distance and less frequent interactions with family can lead to emotional disconnect.
- Conflicts Over Independence: Families may struggle to accept the independence of urban women, leading to conflicts over lifestyle choices.

Navigating these dynamics is essential for fostering both personal growth and healthy family connections.

Q20. Critically analyse the proposition that there is a high correlation between India's cultural diversities and socio-economic marginalities.

(Answer in 250 words) [15]

# **Approach to Question:**

**1. Introduction:** Briefly introduce India's cultural diversity and its potential link to socio-economic marginalities.

#### 2. Arguments Supporting the Correlation

- Ethnic Minorities: Highlight challenges faced by the Kuki and Naga tribes in Manipur due to historical neglect.
- Linguistic Barriers: Discuss how Gondispeaking communities in Madhya Pradesh struggle with access to education and jobs due to a lack of resources.
- Religious Discrimination: Explain the economic challenges faced by Christians in Odisha linked to systemic discrimination.

#### 3. Arguments Against the Correlation

- **Cultural Prosperity:** Use the Jain community as an example of successful economic integration despite cultural minority status.
- State Initiatives: Cite Tamil Nadu's effective policies that benefit Muslim and Christian minorities, demonstrating that diversity can coexist with socio-economic progress.
- **4. Conclusion:** Summarise the complex relationship between cultural diversity and socio-economic marginalities, emphasising the need for inclusive policies to address disparities.

# Answer:

India's vast cultural diversity encompasses various languages, religions, ethnicities and traditions, which significantly

impact socio-economic structures. This relationship often results in marginalisation for specific groups.

# **Arguments in Support of Correlation**

# 1. Regional Imbalances and Ethnic Minorities

 Example: The Kuki and Naga tribes in Manipur experience limited access to education, healthcare and employment opportunities. Ongoing ethnic conflicts and historical neglect have hindered their socio-economic development, leading to marginalisation.

# 2. Linguistic Marginalisation

 Example: The Gondi-speaking communities in Madhya Pradesh face challenges related to education and employment due to a lack of resources in their native language. The absence of educational materials in Gondi restricts their access to quality education, contributing to socio-economic disadvantages.

# 3. Religious Minorities and Economic Marginalisation

 Example: The economic status of the Christian community in Odisha, particularly in tribal areas, has been adversely affected by systemic discrimination and limited access to resources, leading to higher poverty levels compared to the general population.

#### **Arguments Against Correlation**

# 1. Cultural Prosperity without Marginalisation

 Example: The Jain community, known for its business acumen and successful enterprises, illustrates how a cultural minority can thrive economically while maintaining a distinct cultural identity.

# 2. Regional Development Initiatives

 Example: In Tamil Nadu, both Muslim and Christian minorities benefit from high literacy rates and lower poverty levels due to effective state policies that promote education and economic inclusion.

#### Way Ahead

#### 1. Inclusive Economic Policies

Example: Expanding initiatives like the Aspirational Districts Programme to target regions with cultural minorities can help address socioeconomic challenges and promote inclusive growth.

# 2. Cultural Integration and Economic Empowerment

Example: Supporting traditional crafts and industries, such as the handloom sector in Assam, can empower local artisans economically while preserving their cultural heritage.

The relationship between India's cultural diversities and socio-economic marginalities is intricate, with evidence supporting both correlation and counter-arguments. Moving forward, focusing on inclusive policies, education and economic empowerment is essential to address the socio-economic disparities faced by culturally diverse communities in India.