



**Q1. Evaluate the nature of the Bhakti Literature and its contribution to Indian culture.
(Answer in 150 words)**

Introduction:

- Give brief introduction about the emergence of Bhakti literature in India.

Body:

- Discuss about the contribution of bhakti literature in India.
- Mention contribution in North and South Indian culture.

Conclusion:

- Conclude by provide a positive impact of Bhakti literature on Indian society.

Model answer:

Introduction:

- The Bhakti Literature can be traced back to both the Brahmanical and Buddhist traditions, as well as to the the ancient literature like Vedas, Upanishads and Gita. It is present in India long before the growth and arrival of Sufism in India. However, it was for the first time in South India between the 7th and the 10th century that Bhakti emerged from a religious doctrine into a popular movement based on equality.

Nature of the Bhakti Literature:

- Emphasis on local and regional languages: Bhakti saints wrote and preached in vernacular languages.
- For eg. Alvars and Nayanars used local Tamil language instead of Sanskrit. Surdasa preferred Brijhasha. Due to this factor, they got acceptance by people easily.
- Reduced evils in society: The Bhakti literature began to be composed in the sixth century AD in south India by the Tamil poet-saints. Many social abnormalities existed in the society.
- For e.g. caste rigidity, irrelevant rituals and religious practices, blind faiths, and social dogmas. The bhakti literature preached against all such evils.
- Egalitarian approach: It disregarded caste and gender, and carried their message of love and personal devotion to God to various parts of India. The bhakti literature is devotional and religious.
- For eg. Kirtanas, Dohe, Padas, Ghosha, Thirumurais etc.
- Simple approach to religion: The sophisticated philosophy of Vedas and Upnishadas literature was very difficult for ordinary people to understand. People were looking for a simple form of worship, religious activities, and social norms. Bhakti literature was an alternative—a basic form of devotion that provided salvation from the material life.
- Secular, non-sectarian and tolerant: Although, the bhakti literature was of bhakti literature propagated by Hindu saints, it was tolerant to other religions. Secularism is visible in it. It saw religion as a loving tie based on love between the worshipped and the worshipper, rather than a cold formal worship.

Contribution of the Bhakti Literature to Indian culture:

- Mass spreading: The Bhakti literature spread easily among masses and influenced local culture. It led to disgorgement of immoral acts such as infanticide and sati, as well as the prohibition of wine, tobacco etc.



- Solidarity: Another notable influence was the creation of solidarity between the Hindu and Muslim communities. The secular character of bhakti literature, along with the sufi literature reduced the religious conflicts.
- Maintaining relationship: The movement attempted to bridge the gap between the two by reducing the growing bitterness between them. The Sufi saints and Bhakti saints transmit a message of friendliness, amity, tolerance, peace, and equality to all.
- Religious ideas: The bhakti literature promoted diversity of religious ideas in religion.
- Poetry evolution: It played a crucial role in the emergence of modern poetry in India.
- Singing and dancing: It contributed in growth of dance and music. Bhakti literature was used for devotional singing and devotional dances, like Kirtanas and Sattariya.

Conclusion:

- Although the bhakti literature did not depart from the orthodoxy, and it failed to create the political awakening, it made a wider appeal to the common people. The popularisation of the Bhakti cult was aided by Bhakti literature. It made a critical departure from the previous devotional writings, which were largely written in Sanskrit and concentrated on ceremonies and rituals. It also contributed to the growth of regional languages.

Extra marks maximization information:

Contribution of the Bhakti Literature to South Indian Culture:

- Contribution of Alvars: They promoted Vaishnavism in South India through devotional poetry.
- For eg. Divya Prabandha.
- Tiruvaymoli by Nammalvar is a high regard book.
- Andal was the sole female among the Alvars. Her Tiruppavai poems are recognised for the emotional ardour and simplicity. She has a cult following till today.
- Contribution of Nayanars: They promoted Shaivism in South India.
- Thirumurai is a collection of their religious poetry, which is also known as the Tamil Veda. Its first seven books Thevaram, are widely accepted as a sacred literature today.
- In the south, the Bhakti movement aided the establishment of regional languages such as Telugu and Kannada.
- Nannaya translated Mahabharata into Telugu in the 11th century AD. This is considered as the start of Telugu literary culture.
- The popularity of Telugu grew due to the kirtans of the Vaishanava poet-saint Annamacharya.
- Vallabhacharya's writings have enhanced Telugu literature.
- For eg. Bhagvata Tika and Subodhami.
- The Kannada trinity of *Pampa, Ponna, and Ranna* had contributed to the language's progress.
- The Virashaiva sect gained popularity under Basavesvara in the 12th century AD. He promoted the use of Kannada as a medium of instruction. His contemporaries, Allama Prabhu and Akkamahadevi, produced a new kind of literary creation – the Vachanas.

Contribution of the Bhakti Literature to North Indian Culture:

- Ramananda popularised Bhakti in the 12th century AD. As a result, literary works in Hindi, Marathi, Gujarati, Bengali, Punjabi etc. become popular.
- Tulsidas wrote in Avadhi, which marked a departure from the Sanskrit tradition.



- He made spiritual literature easily accessible to the common man.
- For eg. Ramcharitmanas and Hanuman Chalisa.
- Kabir did not follow the stringent rules of grammar. His Dohe are used to spread his philosophy. Many of his verses are found in the Guru Granth Sahib also. He promoted secularism. He is respected by Hindus, Muslims, and Sikhs in northern India, wrote in local dialects.
- Mirabai was a prominent female saint. Her songs represent passion, sexuality, and utter submission to her master Lord Krishna.
- Surdas wrote in Braj Basha. This Hindi dialect was later elevated to the rank of a literary language.
- The Gita Govinda by Jayadeva paved the way for the development of Bengali literature. It is regarded as the Bhakti period's most Sanskrit poetic composition.
- Bengali poets Chaitanya and Chandidasa created Vaishnava literature. These poetries combines sexuality with spiritual zeal.
- Shankaradeva and Madhavadeva promoted Vaishnavism in Assam.
- Kirtana-ghosa is the collection of their devotional songs.
- Bhattadeva enriched the Assamese prose by translating the Bhagavadgita into Assamese.
- Narasimha Mehta, Bhalana, and Akho contributed for the growth of Gujarati literature and Vaishnava Bhakti. Narasi Mehta is known as the Father of Gujarati Poetry.
- Bhakti literature contributed in the growth of Marathi.
- For eg. by Namdev and Tukaram's writings.
- The Dnyaneshwari or Bhavartha Deepika and Amrutanubhava by Saint Dnyaneshwar are venerated as sacred scriptures in Marathi. Dnyaneshwari is a commentary on the Bhagavad Gita.
- The Sufi movement's mysticism and the bhakti movement's spirituality influenced the development of Punjabi literature.
- Guru Nanak Dev's work belongs to the Nirguna school of philosophy in high respect.
- Guru Arjan Dev composed the Sikhs' holy scripture Adi Granth. His Sukhamani is widely regarded as one of the greatest mystic books of mediaeval times.

Q2. Trace the rise and growth of socio-religious reform movements with special reference to Young Bengal and Brahmo Samaj. (Answer in 150 words)

Introduction:

- In the introduction briefly explain about the socio-religious reforms of the 19-20th century.

Body:

- Discuss the rise and growth of socio-religious movements.
- Mention about Young Bengal and Brahmo Samaj movements.

Conclusion:

- Conclude with the positive impacts of the reforms on Indian society.

Model answer:

Introduction:

- The socio-religious reform movements arose among all Indian communities during the 19th century. They challenged the British supremacy and the power of the priestly class. They



campaigned for the abolition of castes and untouchability, purdah system, sati, child marriage, social inequalities, and illiteracy. The religious reform was a pre requisite for social reforms as social life of both Hindus and Muslims were influenced by religious tenets.

The reform movements could broadly be classified into two categories:

- Reformist movements like the Brahma Samaj, the Prarthana Samaj, the Aligarh Movement.
- Revivalist movements like Arya Samaj and the Deoband movement.

Reasons behind the rise and growth of Socio-religious reforms:

- Presence of colonial government on Indian soil: When the British came to India they introduced the English language as well as certain modern ideas. These ideas were those of liberty, social and economic equality, fraternity, democracy and justice which had a tremendous impact on Indian society.
- Depressing Position of Women: The most distressing was the position of women.
- The killing of female infants at birth was prevalent.
- Child marriage was practiced in society.
- Spread of Education and increased awareness of the World: From the late 19th century a number of European and Indian scholars started the study of ancient India's history, philosophy, science, religions and literature. This growing knowledge of India's past glory provided to the Indian people a sense of pride in their civilization.
- Awareness of the outside World: During the last decades of the nineteenth century, the rising tide of nationalism and democracy also found expression in movements to reform and democratise the social institutions and religious outlook of the Indian people.
- Educated class: People from elite class who were educated through modern English education provided the backbone of religious reform movements.
- For example: Raja Ram Mohan Roy, the founder of Brahma Samaj.
- Inspiration from outside movements: Radical intellectual movement inspired by the French revolution emerged under Derozio as Young Bengal movement. It challenged orthodox restrictions on diet and social interactions and promoted free thinking, rationality, questioning the authority and ideals of liberty, equality and freedom.

Contribution of Young Bengal Movement: Derozio motivated his students to think freely and rationally by drawing inspiration from the French Revolution. Below was the ideology of the movement.

- The young Bengal movement was a movement led by thinkers of the Hindu College of Calcutta. These thinkers were also known by the name Derozians. This name was given to them after one teacher of the same college, Henry Louis Vivian Derozio.
- Derozio promoted radical ideas through his teaching and by organizing an association for debate and discussions on literature, philosophy, history and science.
- They cherished the ideals of the French Revolution (1789 A.D.) and the liberal thinking of Britain.
- The Derozians also supported women's rights and education.

Contribution of Brahma Samaj:

- Condemn polytheism and idolatry.
- Faith in divine avatars was abandoned.
- It rejected the idea that any text could have ultimate power over human reason and conscience.



- The caste system was criticised.
- On the doctrines of karma and soul transmigration, Brahma Samaj took no firm stance.
- The Samaj maintained its focus on human dignity, resistance to idolatry, and condemnation of societal ills such as Sati.
- The Samaj advocated for widow remarriage, women's education, the eradication of polygamy, and the improvement of ryots' living conditions.

Conclusion:

The reform movements of the 19th and 20th centuries made significant contributions to the development of contemporary India. They represented societal democratisation, the abolition of superstition and heinous habits, the spread of enlightenment, and the development of a reasonable and modern worldview.

Q3. Assess the main administrative issues and socio-cultural problems in the integration process of Indian Princely States. (Answer in 150 words)

Introduction:

- In the Introduction, try to briefly write about the princely states and their integration.

Body:

- You can mention various administrative and socio-cultural problems in the integration of Indian princely states.

Conclusion:

- Try to write the overall importance of integration of princely states.

Model answer:

Introduction:

- Princely states were those states that were ruled by the local rulers but were in a subsidiary alliance with the British Crown. After the independence these princely states were given freedom to either join India or Pakistan or remain independent. Despite the fact that the English ruled over much of British India, there were several official districts that were not directly controlled by the English. After India and Pakistan were divided, there were still more than 500 smaller provinces in India that were not part of the two countries.



Administrative Issues in Integration Process Of Indian Princely States:

- Large no of princely states: There were more than 560 princely states at the time of independence.
- Negotiating terms for integration with each of them was itself a humongous task.
- Territorial Contiguity or lack of it such as in Patiala, Kapurthala etc. which were combined into PEPSU, or Jammu and Kashmir whose connectivity was threatened due to disruption of railway and roads passing through areas under Pakistan.
- Lapse of British paramountcy created a lacuna of sovereignty.
- Residual Powers: Princely states surrendered only rights enumerated in Instrument of Accession and retained administrative roles as rulers.
- Authoritative role: The question of authority versus popular will as the legitimate deciding factor divided opinions, such as in Junagadh, Hyderabad and J&K.
- Princely Privileges: The extent of privileges to be retained, nature of compensation and hierarchy among princes, privy purses etc. were points of contention.
- Religious role of Kings: Such as of Travancore in management of Padmanabhaswamy temple and its assets were complex problems.

Socio-cultural Problems In Integration Of Indian Princely States:

- Peasant discontent: Hyderabad had problems of peasant discontent. For example, the Telangana movement.
- Social discontent: J&K had social discontent against the king, and a communal divide in economic status.
- Language basis: There was cultural difference between Telugu-speaking parts of Hyderabad and Urdu-speaking and Marathi speaking regions.
- Division between groups: There was economic divide between regions to be integrated such as between Baroda and other princely states of Saurashtra region.



Measures for overcoming these challenges:

- Negotiations: To ensure that the provinces did not succeed in their bid for independence, Viceroy Lord Mountbatten and Congress leaders began negotiations with the governors.
- Role of leadership: Sardar Patel, chief architect of the Union of India, has called for a patriotic fervor for the rulers to join the Indian state in defense, communications and foreign affairs.
- Institutional Instruction: The Instrument of Accession (IoA) was drafted according to which the rulers agreed to transfer control of Defense, Foreign Affairs and Communications.
- Individual status of provinces: Various provinces had joined the Indian Union but some were left out indifferently.

Conclusion:

- The series of well planned execution of diplomacy plebiscite and force had helped to integrate the princely state into a United yet diverse Union of India. All these steps taken by Sardar Patel and V.P Menon led to unification of India. The idea of India, thus had been strengthened and enriched with diversity.

**Q4. Differentiate the causes of landslides in the Himalayan region and Western Ghats.
(Answer in 150 words)**

Introduction:

- Explain what landslides are – Landslides are mass movement of soil or rocks along the slopes of mountains

Body:

- Explain the causes of such landslides.
- Natural causes such as earthquakes, rainfall, slope.
- Man made causes such as deforestation, jhum cultivation, illegal mining and industrial activities etc
- Differentiate the causes in Himalayan region and Western Ghats.

Conclusion:

- Comment on the general environmental degradation taking place in Himalayas and Western Ghats and discuss way forward.

Model answer:

Introduction:

- The movement of a mass of rock, rubble, or dirt down a slope due to gravity is known as a landslide. Landslides are particularly dangerous in areas with steep slopes, such as hilly regions. Landslides include things like earth flow, mass movement, mudflow, rotational slip, and avalanches.



Recent cases:

- A landslide has struck the Kinnaur district of Himachal Pradesh, the 2nd time within 15 days, killing at least 14 people and burying several others. The catastrophe has been severe, with mud, rocks, and debris raining down on vehicles, including a state transport corporation bus on National Highway 5.

The causes of landslides in the Himalayan region and Western Ghats can be discussed as:

Himalayan region	Western Ghats
<ul style="list-style-type: none"> • Himalayan region is tectonically active as the Indian Plate is moving towards the north at the rate of 5 cm/year. This movement leads to collision of the Indian Plate with the Eurasian Plate that causes frequent tremor and isostatic imbalances. • The Himalayan region is the source of many rapid flowing rivers such as the Ganges, the Indus, the Brahmaputra etc. These running rivers cause a large scale erosion of mountainous region which also a cause of landslide. • Anthropogenic activities in the Himalayan region gave rise to anomalous slopes, is composed of a sedimentary rock which is more prone to denudation and erosion as compared to the other rocks. • Himalayas are young, fragile mountains still growing, hence susceptible to natural landslides. 	<ul style="list-style-type: none"> • The Western Ghats are tectonically more stable as compared to the Himalaya. • In the Western Ghats, perennial rivers are rare. • While, the major part of Western Ghats is composed of basalt rocks which shows great resistance to erosion and denudation. • Heavy mining activities in the western ghat region is a major factor leading to landslides. • Anthropogenic cause: The creation of roads, railways, dams, etc. in the mountainous region can result in landslides. For instance, the development of Konkan Railways in western ghats is considered a significant reason behind the frequent occurrence of landslides in the region.

Steps taken by government to deal with landslide:

- National Landslide Risk Management Strategy (2019): It covers all aspects of landslide disaster risk reduction and management, such as hazard mapping, monitoring, and early warning systems.
- National Disaster Management Authority (NDMA) Guidelines on Landslide Hazard Management (2009): It outlines the steps that should be taken to avoid or reduce the risk of landslides. Identifying regions that are prone to landslides.

Conclusion:

- Landslide as a challenge has grown in the recent years, due to anthropogenic activities. In this light, along with sustainable development policies, indigenous knowledge should be leveraged. Construction in eco-sensitive zones need to be checked. Recommendations of Kasturirangan/ Madhav Gadgil reports and guidelines of NDMA on landslides need to be followed.



Q5. Despite India being one of the countries of the Gondwanaland, its mining industry contributes much less to its Gross Domestic Product (GDP) in percentage. Discuss. (Answer in 150 words)

Introduction:

- Write about the mining sector and its contribution in GDP in Indian economy.

Body:

- Discuss the regions behind the less contribution of mining sector despite having the part of Gondwanaland.

Conclusion:

- Conclude by mentioning the potential of mining sector and its growth in India.

Model answer:

Introduction:

- The mining sector's contribution to the country's GDP is 2.3-2.5 % at present. Mineral production in India grew at a compound annual growth rate (CAGR) of 5.72% between 2013-14 and 2017-18 and India is the 3rd largest steel producer, with a production of 101.4 million tonnes of crude steel in 2017. India being a part of Gondwanaland, is richly endowed with mineral wealth such as coal, iron, mica, aluminium etc., however, mining sector of India contributes only 2.2% to 2.5% to the GDP of the country.

Reasons for low contribution are as under:

- Issues: The mining sector is encountering issues such as depleted output, squeezed margins, high taxation, lack of green clearances, and poor investment in fresh exploration. The sector is also facing with other issues such as delays in operationalizing mines.
- Location: Minerals are located in forested tribal areas. Democratic polity with a mandate for welfare creates conflicting priority of mineral exploitation and tribal development.
- Loss of Public Revenue: Driven by lobbying, political donations, and corruption, minerals are frequently sold at prices significantly lower than the actual worth price. Illegal mining has a similar effect while additionally causing loss of public revenues.
- Multiple clearances and Legal hurdles: The mining sector ails from the requirement of multiple clearances, which makes the sector unviable/unprofitable. For example, Environmental/forest clearances. The mining sector is also susceptible to various legal pronouncements.
 - For example, SC judgement on coal block allocation affected coal mining output.
- Large Number of Small Mines: In India, many small mines operate in most states. These present difficult challenges for sustainable development as their financial, technical, and managerial limitations restrict their ability to take adequate corrective measures.
- High levies: Mining sector in India is subjected to much higher levies than other mining geographies. For example, high royalties, double taxation etc.
- Poor exploration: Highly restricted licensing regimes, disincentivises private players to indulge in mineral exploration.
- Monopoly of PSUs: Mining sector suffers from problem of unproductive usage of assets, due to monopoly of PSUs. For example, coal India's monopoly in coal sector.
- Higher public spending on infrastructure and transportation, particularly on rail, roads, and ports is a government priority.



- Economic growth and modernisation driving the energy demand, particularly coal: Energy demand over the next 25 years is estimated to grow at 4% per annum.
- Growing economy: India is still at an early stage on the mineral consumption curve which implies that as the GDP of the country increases, its mineral consumption would grow at a rapid pace in line with the growth witnessed in other emerging markets like China and Brazil.

Conclusion:

- It is necessary to widen the exploration basket through increased reconnaissance and prospecting operations and requires an infusion of funds to achieve this. The mining sector of India, hold immense potential to reduce import dependence and hurl industrial development. In this light faster administrative clearances need to be ensured and security challenges like Naxalism etc., in the mining belt need to be checked.

Q6. What are the environmental implications of the reclamation of the water bodies into urban land use? Explain with examples. (Answer in 150 words)

Introduction:

- Define water bodies. Mention facts/figure/data/statistics related to it.

Body:

- Discuss about the environmental implications of reclamation of water bodies.
- Give way forward.

Conclusion:

- Conclude on a positive note

Model Answer:

Introduction:

- United Nations and NITI Aayog reports says that the demand for water will reach twice the available supply, and 40 per cent of India's population will not have access to clean drinking water by 2030. India is endowed with extraordinarily diverse and distinctive traditional waterbodies found in different parts of the country, commonly known as ponds, tanks, lakes, vayalgam, ahars, bawdis, talabs and others.

The reclamation of waterbodies and its environmental implications:

- Decline in number of waterbodies: Bangalore had 262 lakes in the 1960s; now only 10 of them hold water. At least 137 lakes were listed in Ahmedabad in 2001; construction work started on 65 of them. Hyderabad has lost 3,245 hectares of its wetlands.
- Concretization: Natural streams and watercourses, formed over thousands of years due to the forces of flowing water in the respective watersheds, have been altered because of urbanisation.
- Encroachment of water bodies: There have been large scale encroachments on the natural drains and the river flood plains. Consequently, the capacity of natural drains has decreased, resulting in flooding. Urban water bodies have been a victim of unplanned urbanisation in India, because of which they face several threats such as encroachment, disposal of sewage, groundwater decline leading to fall in the level of water, unplanned tourism and absence of administrative framework.



- For example: A major cause of flash floods in Mumbai (2005), Uttarakhand (2013), Jammu and Kashmir (2014) and Chennai (2015).
- Pollution: There has been an explosive increase in the urban population without corresponding expansion of civic facilities such as infrastructure for the disposal of waste.
- The water bodies have been turned into landfills in several cases: Guwahati's Deepor beel, for example, is used by the municipal corporation to dump solid waste since 2006. Even the Pallikarni marshland in Chennai is used for solid waste dumping.

Case study: Adding to the sorry state of urban water bodies is the misuse by local communities for their cultural or religious festivals such the immersion of idols. Heavy metal concentration can be found in lakes in Nagpur and Bhopal and the Hussainsagar Lake in Hyderabad after idol immersion every year.

- Illegal mining activities: Illegal mining for building material such as sand and quartzite on the catchment and bed of the lake have extremely damaging impact on the water body.
- For example, the Jaisamand Lake in Jodhpur, once the only source of drinking water for the city, has been suffering from illegal mining in the catchment area for the last 20 years despite a court order to stop mining in 1999.
- Badkhal Lake in Faridabad has dried up in the same way. Unmindful sand mining from the catchment of Vembanad Lake on the outskirts of Kochi has decreased the water level in the lake.

Way forward:

- Urban planning needs to be engaged more critically with the city's terrain, along with propagation of knowledge about the local history of lakes, meaningful community engagement and ownership of waterbodies.
- Waterbodies being an important source of water, their protection through community management and the need of a comprehensive act for the protection of urban waterbodies.
- No one size fits all approach: Depending on the purpose, ecological services, livelihood and socio-cultural practices, the approach need to be varied from one water-body to another.
- Emphasis on long-term goals, operation and maintenance should be included along with the allocation of budget to attain stability.
- Invest in governance, capacitating our institutions, strong regulations and their enforcements.

Conclusion:

- Water bodies play an important part in sustaining the ecology. In this light their conservation through waste water treatment, non-encroachment, reduced anthropogenic stress etc., is an imperative.

Q7. Mention the global occurrence of volcanic eruptions in 2021 and their impact on regional environment. (Answer in 150 words)

Introduction:

- Give brief introduction about the volcanic eruptions and mention the recent events of it.

Body:

- Mention the impact on the regional environment



Conclusion:

- Conclude by writing the importance of these occurrences.

Model answer:

Introduction:

- A volcano is an opening in the Earth's crust that allows molten rock, gases, and debris to escape to the surface. Volcanism is the phenomenon of eruption of molten rock (magma) onto the surface of the Earth or a solid-surface planet or moon, where lava, pyroclastics and volcanic gases erupt through a break in the surface called a vent. Volcanoes have significant impact on the regional environment, as can be seen from the examples of following volcanoes in 2021:

Occurrence of Volcanic eruptions in 2021:

- Hunga Tonga-Hunga Hapai: The submarine volcano erupted in December, 2021.
- Taal volcano: The volcano near Manila, experienced eruptions in 2021.
- Nyiragongo: The violent/explosive eruption of this volcano in Democratic Republic of Congo affected the local population, as it killed dozens of people.
- Iceland: The volcanic system of Iceland, erupted in 2021. It filled the valley with dark black lava for months before the eruption ceased.
- La-Palma: The volcanic system in the canaries to saw eruption of an explosive volcano in 2021.

Impacts on local environment:

Negative impacts:

- Huge volcanic eruptions: It can sometimes cause temporary global cooling as sulfur dioxide is pumped into the stratosphere. But in the case of the Tonga eruption, initial satellite measurements indicated the amount of sulfur dioxide released would only have a tiny effect of perhaps 0.01 Celsius global average cooling.
- The eruption altered atmospheric pressure that may have briefly helped clear out the fog in Seattle, in the United States.
- The waves crossed the Pacific, drowning two people in Peru and causing minor damage from New Zealand to Santa Cruz, California.
- The US Geological Survey estimated the eruption caused the equivalent of a magnitude 5.8 earthquake.
- Ashes can stay in the stratosphere for about two to five years, and within this period, there are chemical reactions that destroy the stratospheric ozone molecules.
- Volcanoes contribute about 18%-20% of Chlorine entering the atmosphere, this also destroys ozone.
- Volcanoes also cause global warming by releasing greenhouse gases such as water vapour and carbon dioxide into the atmosphere.
- Lava can kill plants and animals. This also contributes to global warming by reducing carbon sink.
- Plumes of volcanic ash can spread over the large areas of the sky, reducing visibility.
- Carbon dioxide and fluorine gas can get collected in volcanic ash, and can pollute the regional environment, making it difficult for animals and humans to breathe.



Positive impacts:

- Volcanic ash reflects incoming solar radiation leading to a localised cooling effect in the temperature. For example, Mt. Krakatau brought mini ice age.
- The volcanic ashes are known to increase the soil productivity of the region.
- Most of the particles spewed from volcanoes cool the planet by shading incoming solar radiation. The cooling effect can last for months to years causing cooling over large areas of the Earth.
- Some ash and lava breakdown become soils that are rich in nutrients and become good areas for crop planting activities and growth of the forest.
- Volcanic eruptions are also known to stimulate earthquakes in the region.

Conclusion:

- A volcano eruption is one of the most impressive events in the planet and the effects of volcano and their eruptions could be felt as far as a different continent. The type of effects of volcanoes depends on the size of the eruptions.

Q8. Why is India considered as a sub-continent? Elaborate your answer. (Answer in 150 words)

Introduction:

- Give brief introduction about the subcontinent.

Body:

- Mention why it is called as subcontinent.

Conclusion:

- Conclude on a positive note.

Model answer:

Introduction:

- The Indian plate is a separate tectonic plate that covers the majority of the sub continental Indian land area. This Indian plate is found in the northern part of the Indo-Australian plate. This is considered to be due to the current isolation from other regions and separation from other parts of Asia due to mountain barriers. The Indian tectonic plate was fused with the Eurasian plate before being divided into a small continent.

Here's 5 reasons why India is regarded a subcontinent in Asia:

- It covers 2.4% of the earth's total land area. It has a long land frontier of about 15,200 km and coastline of about 7516.6 km.
- It's natural frontiers like the Himalaya's in the North and the Deccan Peninsula in the South give it a unique identity on the globe.
- From a political perspective, the Indian subcontinent consists of at least 7 countries: India, Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka, and the Maldives.
- The people of the Indian subcontinent have shared ethnic, linguistic, cultural and historical connections.
- Historically, India used to be a continent. Later due to continuous movement of land and continental drift, it became a part of Asia.



- This natural physical landmass in South Asia has been relatively isolated from the rest of Eurasia. The Himalayas (from Brahmaputra River in the east to Indus River in the west), Karakoram (from Indus River in the east to Yarkand River in the west) and the Hindu Kush mountains (from Yarkand River westwards) form its northern boundary.
- In the west it is bounded by parts of the mountain ranges of Hindu Kush, Safed Koh, Sulaiman Mountains, Kirthar Mountains, Brahui range, and Pab range among others, with the Western Fold Belt along the border (between the Sulaiman Range and the Chaman Fault) is the western boundary of the Indian Plate, where, along the Eastern Hindu Kush, lies the Afghanistan–Pakistan border.
- In the east, it is bounded by Patkai, Naga, Lushai and Chin hills.
- The Indian Ocean, Bay of Bengal and Arabian Sea forms the boundary of the Indian subcontinent in the south, south-east and south-west.
- India and neighbouring countries lie in the Indian subcontinent located in the South of Asian continent. It is considered a subcontinent because it covers an expansive area of land that includes the Himalayan region in the north. It is surrounded by the Indian Ocean on the south, the Arabian Sea on the south-west, and the Bay of Bengal on the south-east. It shares land borders with central Asia in the north, Iran in the west, Indo-china in the east and China in the north-east.
- India's subcontinent is a huge, relatively self-contained landmass that forms a subdivision of the continent. This is a vast landmass, similar to Greenland, but smaller than most of the known continents. For example, Asia is a continent, whereas India is a subcontinent inside Asia.

Conclusion:

- Within the subcontinent itself, there is a wide variety of peoples, languages and religions. Their distribution is largely a result of physical aspects of the land itself, which in turn shaped historical events such as migrations and invasions. However, in spite of numerous differences, at the root there are numerous similarities in the socio-cultural-economic way of life which are unique and makes this region a proper subcontinent.

Q9. Examine the uniqueness of tribal knowledge system when compared with mainstream knowledge and cultural systems. (Answer in 150 words)

Introduction:

- Give brief introduction about tribal knowledge in India.

Body:

- Mention about the uniqueness of tribal knowledge system when compared with mainstream knowledge and cultural system.

Conclusion:

- Conclude by mentioning the government schemes of tribal.

Model answer:

Introduction:

- Indigenous peoples around the world have preserved distinctive understandings their cultural experience, that helps them in guiding the relations among human, non-human, and other-than human beings in specific ecosystems. These understandings are called as the traditional knowledge or aboriginal knowledge. Tribal knowledge systems represent inter-



generational wisdom in band societies passed on to the present times through centuries of experience and learnings.

While similar characteristics can be seen in evolution of mainstream knowledge and culture, tribal knowledge systems are unique due to following reasons:

- **Interaction:** They call for reliance upon local resources and carefully interact between living beings and natural processes within an ecosystem in order to ensure human survival.
- **Contemporary knowledge:** Tribal societies have contemporary knowledge of nature due to continued closeness to forests, flora and fauna. Mainstream societies have moved on to agricultural basis of society, and their cultural knowledge represents impressions of their tribal past, which no longer exists.
- **Traditional knowledge:** They are essentially the Knowledge Keepers as the traditional understandings are shared by all members of a tribal community, ethnic group, kin network, or family. They specialize as the preserver of information are notably called as the gatekeepers as the tribal leaders, ritual Practitioners, medicine people.
- While mainstream knowledge systems are based on rigorous refining and questioning of ideas through discussions and scientific verification, tribal methods are based on conservation of knowledge.
- For example, the awareness among tribals of Andaman & Nicobar about a wall of sea helped them against Tsunami in 2004.
- They also help in maintaining unique floral and faunal communities through measured harvests and ritual activities.
- **Sacred culture:** Indigenous groups also pay much attention to the local spirits and also preserve the environment through the sacred groves.
- **Non exclusionary:** Tribal knowledge systems are non-exclusionary and marked by equity. Mainstream knowledge systems are mired in barriers like cost of education, patent protections, social exclusion etc.
- **Ecological awareness:** They have religious tenets of ecological awareness and sacred ecology through instructive narratives and dynamic interactions with local environments, intended to ensure long-term survival. It is often regarded that the Human health is a natural by-product of environmental health.
- **Ancestral knowledge:** Traditional ecological knowledge provides for practical measures that are intended to preserve cultural heritage and protect ancestral landscapes and lifeways.
- Oral traditions also pass on to the traditional scope of knowledge that can teach, carry, and reinforce other knowledge as the tribal tends to live in the corpus of the whole society and assures of the community involvement.

Conclusion:

- Tribal and mainstream societies are not mutually exclusive systems. Constant interaction and mutual dependence have enriched both. The way forward should be based on mixture of mutual learning and preservation through salad bowl model instead of assimilation. Recent initiatives like India's Traditional Knowledge Digital Library initiative or the Nehruvian model of Tribal Panchsheel are some other approaches.



Q10. Examine the role of ‘Gig Economy’ in the process of empowerment of women in India. (Answer in 150 words)

Introduction:

- Briefly define about the Gig Economy by quoting some examples.

Body:

- Examine the role of gig economy in the process of empowerment of women in India.

Conclusion:

- Conclude by mentioning the potential of gig economy.

Model answer:

Introduction:

- The Gig economy has been a driving force in shaping the future of work. Its unique employment relationship that upends the traditional ways of working as it refutes for a conventional employer-employee relationship. The Gig economy also provides an answer to the increasing unemployment in the country and around the world. The Ola, Uber, Amazon giants which provide an effective employment opportunity to the multitudes of the generation and the millenials.

Gig economy can help in process of empowerment of women in India in following ways:

- Gig employment allows part-time work and flexible working hours which allows women to balance their traditional roles (homemakers and care giver) with employment.
- Gig employment complemented by work-from-home (WFH) and technology has addressed the issue of safety during travel and night shifts. Also, new employment opportunities for women in tier 2 and 3 cities have emerged.
- It provides women with on-demand work allowing her join and drop-out of work force as per her own will.
- Gig employment helps women earn extra income, boosted her confidence and gives decision making power all of which are important component of women empowerment.

Challenges in gig economy:

- Gig economy works purely on market principle of demand and supply. It views humans just as another resource. Easily replaceable low skill gig laborers are exploited by employers. There is also lack of certainty regarding availability of work and stability of career.
- Lack of benefits: Flexi-workers usually are not entitled to minimum wages, insurances, PF, retirement plans, paid leave, maternity benefits, etc.
- Pay difference: Permanent employees have a grade-pay plus benefits like travel allowance, etc. Gig workers are paid strictly as per the amount of work.
- Restricted growth: Low skill gig workers cannot move-up the organizational hierarchy and not considered for promotions.

Way Forward:

- Increasing and effective sensitisation of men will help in dealing with the women related issues better. Uplifment of women is a joint prerogative of both men and the women.



- Women as a sole bread winner is yet to find a place in society as whatever she earns is always calls as an additional income.
- The government needs to step in to implement radical changes in labour laws or implement tax rebates and concessions that can be passed on directly to drivers or delivery partners as health or insurance benefits.
- With a population of over 1.2 billion, and a majority of them below the age of 35, relying on the “gig economy” is perhaps a bastion to create employment opportunities for a large semi-skilled and unskilled workforce.

Conclusion:

- In short term, gig economy can be a step towards increasing female labour force participation and women empowerment. But, in long run, predictable and formal employment with opportunities of upskilling is required.

Q11. To what extent did the role of the moderates prepare a base for the wider freedom movement? Comment. (Answer in 250 words)

Introduction:

- Write about the moderates and its phase.

Body:

- Role played by moderates in freedom movement.

Conclusion:

- Conclude by giving emphasis on importance of moderates in freedom struggle.

Model answer:

Introduction:

- The moderate period, which lasted from 1885 to 1905, was crucial in the promotion of moderate nationalism in India. They took a variety of public issues and demands and set the ground for the next phase of the national movement. The moderates contributed significantly in Indian freedom struggle. The main objective of the Moderates was to achieve self-government within the British Empire. They followed a middle path and not an extreme path against British Empire.

Moderates' methods for spreading their views include:

- Prayer, petition, persuasion, and philanthropy:
- Their demands, like their agitation, were constitutional.
- Their tactics were dubbed “Passive Resistance.” Their method of operation was based on boycott.

The moderates prepared a base for the wider freedom movement in following ways:

- Critique of British dominance from an economic standpoint:
- The moderate phase leaders revealed the truth about British colonialism’s harmful effects on India’s economy. In his book Poverty and UnBritish Rule in India, Dadabhai Naoroji proposed the drain theory to explain India’s economic exploitation.



- According to the theory, the British exported a portion of India's wealth to Britain for which India received no advantage. The wealth of India was exported to Britain in the form of wages and pensions paid to British officials, interest paid on British loans, and payments for services like as shipping and banking.
- Demand for economic reforms:
- Reduce land revenue and protect peasants from zamindars' illicit revenue collecting.
- With the support of agricultural banks, give lower-cost credit to peasants.
- They asked that Indian industry be developed and protected by increasing tariffs on imports and government assistance.
- Demands for constitutional reforms and propaganda in the legislative councils:
- Increase the number of Indians in the councils.
- They requested more control over financial problems such as the budget.
- Demand for administrative reforms:
- There is a need to increase the number of Indians in government jobs. They said that because British bureaucrats and officers are paid well, an increase in the number of Indians would lessen the government's financial burden.
- They demanded the separation of the Executive and Judiciary to prevent arbitrary police and bureaucratic operations. They also chastised the bureaucracy for being repressive and authoritarian, as well as the judiciary for being expensive and time-consuming.
- They requested that several unjust laws, such as the Arms Act and the License Act, be repealed.
- Demands for protection of civil rights in India:
- The British government in India had an authoritarian character and more than often it tried to curtail the Civil rights of Indians through draconian laws. The moderates demanded protection of rights like right to free speech and liberty, right to association, freedom for free press etc.
- They demanded for the removal of Preventive Detention Acts, which was arbitrarily used by the British. Leaders like Bal Gangadhar Tilak and several journalists were arrested on sedition charges for making provocative statements. This led to increase in the protests due to increased awareness among the masses.

Criticism of moderates:

- The moderate phase leaders were criticized for the methods they used i.e. 3 P's -prayers, petitions and protests. These methods were criticized as being inadequate for challenging the British might in India.
- Further the lack of participation of masses in the movement has been criticized as the major drawback as the leaders were mainly educated middle class professionals like lawyers, teachers, journalist and civil servants etc.

Conclusion:

- Although, the moderates failed to appeal the wider population and to convince the government, they laid a crucial foundation base, on which the future of the freedom struggle was based. Extremists, Gandhi Ji, and other freedom fighters used this base to finally achieve the independence in 1947. This helped in generating anti-imperialist sentiments among the public. But, at the same time, the nationalists failed to widen the democratic base of the movement by not including the masses, especially women, and not demanding the right to vote for all.



Q12. Bring out the constructive programmes of Mahatma Gandhi during Non-Cooperation Movement and Civil Disobedience Movement. (Answer in 250 words)

Introduction:

- Give brief introduction about the constructive programme.

Body:

- Mention about the constructive programme of Mahatma Gandhi during Non-Cooperation Movement and Civil disobedience movement.

Conclusion:

- Conclude as per the demand of the question.

Model answer:

Introduction:

- The constructive programme was the product of Gandhi's vision of a non-violent society. It grew out of the knowledge he had grasped of the naked reality of our country at that time through his intense travels throughout the nation. These programmes were not a passing thought but a creation of well-planned and thoughtful strategy of his mind. It was Gandhi's firm conviction that self-reliant villages form a sound basis for a just, equitable and non-violent social order, which can be a guiding principle for all citizens, constructive workers and policy makers in India.

Components of Gandhi's constructive programme during Non-cooperation:

- Satyagraha Sabha: made from members of Home Rule Leagues was organized before non-cooperation movement. Methods of strike were combined with fasting and praying.
- Communal unity: According to Gandhi, communal unity does not merely mean political unity but should be an unbreakable unity of hearts, and can be achieved only by living like people and living with them as they live.
- He wanted them to cultivate personal contacts and friendship with people of different faith other than his own, and to have the same respect for their faith as for his own.
- Removal of Untouchability: Gandhi held that untouchability was a blot and curse upon Hinduism. It was an age-old social evil which had to be removed to establish social equality in the society. Gandhi endeavoured to abolish this evil.
- He started the 'Harijan' newspaper to explain his ideas to people and he travelled throughout the country to raise funds for Harijans.
- Promotion of Khadi: Gandhi presented Khadi as a symbol of nationalism, economic freedom, equality and selfreliance. It was his belief that reconstruction of the society and effective Satyagraha against the foreign rule can be possible only through Khadi. Khadi is the core of the constructive activities as recommended by him. He called Khadi the sun of the solar system of the village economy.
- Prohibition: In Gandhi's scheme of constructive programme, prohibition was a vital social and moral reform. Gandhi attached much importance to this because the people in villages and cities would be incapable of moral effort which was necessary for Satyagraha unless they were free from the grip of intoxicants.

Components of Gandhi's constructive programme during Civil disobedience movement:



- **Village industry:** For Gandhi, Khadi is the sun of the village solar system and other village industries are the planets. Khadi takes the Central place in the upliftment of village economy. Without khadi, the other industries cannot grow.
- Similarly, without the revival of other essential industries khadi cannot make satisfactory progress. In order to make the villages self-reliant, the development of both the industries is essential as they are inter-dependent.
- **Basic education:** Gandhi was clear that the education of citizens is a backbone of any society. So he envisaged a new educational system for non-violent society of his dream and experimented it for many years. Basic Education should be connected with life and should lead to the development of mind, body and soul. It was Gandhi's unflinching faith that there are abundant power and potentiality in children.
- **Upliftment of Women:** In his mission of Swaraj, Gandhi needed the cooperation of women, kisans, labourers and students. So, he had planned to work amongst them through constructive programme, which was a concrete plan to generate awareness in them and get their support in the freedom struggle.
- **Economic equality:** Gandhi holds that economic equality is the master key and the only solution to non-violent independence. So long as there is a gulf between the rich and the poor the construction of non-violent society is clearly impossible.
- **Kisan:** India being an agricultural country, kisans are in majority in its population. Gandhi believed that if they are made conscious of their strength, no power on earth can resist them. The effective method of organising kisans is displayed by Gandhi's kisan movement in Champaran, Kheda, Bardoli and Borsad.
- **Students:** According to Gandhi, the current education is unnatural and to acquire knowledge in foreign language in the place of mother tongue is a waste of time for students. Gandhi set out a clear programme to train and prepare the students, who are the future leaders of the nation, as to what they should do and should not do.

Conclusion:

- Constructive programme of Mahatma Gandhi provided the cadre for freedom struggle, created training arena for them and expanded the social basis of the national movement.

Q13. "There arose a serious challenge to the Democratic State System between the two World Wars." Evaluate the statement. (Answer in 250 words)

Introduction:

- Briefly introduce about the beginning of World Wars.

Body:

- Discuss about the serious challenges to democratic state system between the two World Wars.

Conclusion:

- Conclude by mentioning its relevance in present world.

Model answer:

Introduction:

- At the beginning of the 21st century, independent observers agreed that more than one-third of the world's nominally independent countries possessed democratic institutions



comparable to those of the English-speaking countries and the older democracies of continental Europe. In an additional one-sixth of the world's countries, these institutions, though somewhat defective, nevertheless provided historically high levels of democratic government. The world wars have been analysed from multiple perspectives of causes and factors leading to the crisis.

Challenges to the Democratic State System between the two world wars:

- Rise of Fascism: The rise of fascism in Italy began during World War I, when Benito Mussolini and other radicals formed a political group (called a fasci). The people of Italy are living under a dictatorship; living oppressed and under someone else's beliefs without having your own freedom and limited rights.
- Rise of Nazism in Germany: The Treaty of Versailles was also a huge blow to the economy so the country could not afford to be a democracy. Hitler and the Nazis had succeeded in dismantling democracy and laying the foundation for dictatorship in Germany.
- Persecution of Jews: After the Nazis took power and implemented their antisemitic ideology and policies, the Jewish community was increasingly persecuted. In 1936, Jews were banned from all professional jobs, effectively preventing them from participating in education, politics, higher education and industry.
- Spanish Civil War: Spanish Civil War, (1936–39) was a military revolt against the Republican government of Spain, supported by conservative elements within the country.
- Iron Guard: The name most commonly given to a far-right movement and political party in Romania in the period from 1927 into the early part of World War II. It was ultra-nationalist, antisemitic, anti-communist, anti-capitalist, and promoted the Orthodox Christian faith.
- Rise of Japan as Colonial Powers: Japan underwent a period of industrialization and militarization, the Meiji Restoration being the fastest modernisation and contributed to Japan's emergence as a great power and the establishment of a colonial empire.

Conclusion:

- As a conclusion it can be stated that challenges were many because Universal constitutional values were not established till half of 20th century but around the second world war democratic institution were proved that they can ensure peace and prosperity in the world if nurtured by people of the region through their popular leaders.

Q14. Briefly mention the alignment of major mountain ranges of the world and explain their impact on local weather conditions, with examples. (Answer in 250 words)

Introduction:

- Give brief introduction about the mountains and its formation.

Body:

- Mention about the mountain ranges with examples.
- Write about the impact of mountain ranges on the local weather conditions.

Conclusion:

- Conclude as per the demand of the question

Model answer:

Introduction:



- A mountain is an elevated portion of the Earth's crust, generally with steep sides that show significant exposed bedrock. A mountain differs from a plateau in having a limited summit area, and is larger than a hill, typically rising at least 300 metres (1000 feet) above the surrounding land. A few mountains are isolated summits, but most occur in mountain ranges. Mountains are formed through tectonic forces, erosion, or volcanism, which act on time scales of up to tens of millions of years.

Alignment of Mountain ranges of the world:

- The Andes (South America): The Andes is the longest continental mountain range in the world. The Andes is the world's highest mountain range outside of Asia with an average height of 4000 m.
 - They extend from North to South through seven South American countries.
 - The north, east and the South West part of the Andes is rainy and moist.
 - Andes acts as the rain shadow for the Atacama Desert.
- The Alps: (Europe): The mountains were formed as the African and Eurasian tectonic plates collided.
 - Extreme folding caused by the event resulted in marine sedimentary rocks rising by thrusting and folding into high mountain peaks such as Mont Blanc (4,810 m) (French–Italian border).
 - It is the highest mountain range system of Europe, stretching for 1200 km, west to east, across 8 alpine countries, such as: France, Switzerland, Italy etc.
 - It influences precipitation patterns, in South Europe and Eurasia.
 - Alps influence presence and direction of local winds like, Foehn, Mistral etc.
- The Atlas:
 - The Atlas Mountain range stretches through Morocco, Algeria and Tunisia in a South West to North East direction.
 - It separates the Mediterranean region from the Sahara Desert.
 - It causes high rainfall in the region between them and the Mediterranean Sea by capturing the moisture laden winds
 - They also act as a rain shadow, preventing the rainfall in the desert region of Sahara.
- The Himalayas (Indian Subcontinent): The Himalayan range is home to the planet's highest peaks, including the highest, Mount Everest.
 - Himalayas extend for a 2500 km from west to east, in an arc shaped manner.
 - They protect the Indian subcontinent from the frigid, dry winds blowing from the Tibetan plateau.
 - It acts as barrier for monsoon winds, causing rainfall in India, it also is responsible for the for the Taklamakan and Gobi Desert as they fall in the rain shadow area.
 - Its western anchor, Nanga Parbat, lies just south of the northernmost bend of Indus river, its eastern anchor, Namcha Barwa, just west of the great bend of the Brahmaputra river (Tsangpo river).

Impacts of mountain ranges on local weather:

- Topography and climatic changes: Mountains are specific ecosystems, characterised by their diversity and complexity. Steep topographic, climatic and biological gradients combined with sharp seasonal contrasts favour the triggering of extreme climatic and geomorphic events, which may in turn strongly affect ecological and human environments. Eg. Deserts: Patagonian (cold).



- Mountain populations are quite diverse in their way of life: Traditional rural activities, such as agriculture, livestock grazing and forestry, coexist with mining extraction, hydropower production and tourism. Depending on the socio-economic and demographic context of each country, such activities are nowadays either declining or in full expansion.
- Social and economic life: 12 percent of the world's population live in mountains, the great majority live in marginalised (physically and economically) developing countries so that any change in environmental conditions may have an impact on poverty and food security.
- Mountains also play an important role in their adjacent lowlands: they are “water towers storing and delivering fresh water to downstream areas, and producing energy through hydropower potential.
- Urbanisation: However, mountain environments are “fragile”, they can be damaged by many factors such as deforestation, overgrazing by livestock, cultivation on marginal soils, and progression of urbanisation,

Conclusion:

- Mountain ranges play an important role in influencing the local weather patterns and lifestyles of the people. For this reason, they are important for not only the geography but also the various cultural and economic factors.

Q15. How do the melting of the Arctic ice and glaciers of the Antarctic differently affect the weather patterns and human activities on the Earth? Explain. (Answer in 250 words)

Introduction:

- Give brief introduction about the climate change and its impact.

Body:

- Discuss about the melting of ice and glaciers impact on human activities.

Conclusion:

- Conclude by giving a way forward approach.

Model answer:

Introduction:

- Climate change has led to Global warming, which in turn affects the melting of the cryosphere, i.e. the global ice cover. Arctic is an ocean covered by thin layers of perennial sea ice and surrounded by land while Antarctica is a continent covered by very thick ice cap. Melting of Arctic and Antarctica glaciers are posing serious threats to policy makers of Global North and South since it leads to rise in sea level. Apart from that, it affects the air circulation pattern and other weather patterns which can lead to extreme climate change events which affects millions of people.

Impact of melting of ice and glaciers on the weather pattern and human activities:

Arctic	Antarctic
<ul style="list-style-type: none"> • On jet stream: Warming of the Arctic has seen to be related by the scientists to slowing of the jet stream, and its looping southwards. 	<ul style="list-style-type: none"> • AMOC: It will lead to slowing of Atlantic Meridional Overturning Circulation, disrupting gulf stream. • On seasons: It will cause colder winters



<ul style="list-style-type: none">• ENSO: It has made the ENSO cycle erratic, and higher emergence of El-nino events.• On Cyclone: It is linked to Central Pacific Trade wind intensification, weakening of extra-tropical cyclones.• On weather: It will lead to extreme weather events in the middle latitudes.• On trade: It might lead to opening of North Sea route for global trade, saving both time and cost.• Hunting and fishing: Reduced opportunities for the native population for subsistence hunting, fishing and herding.• Stress: Rise in temperature is likely to cause physiological stress in people adapted to be living in cooler climates.	<ul style="list-style-type: none">• and hotter summers in North Atlantic.• On Weather: It is linked with extreme weather events in Europe.• Global warming: The warming of Antarctica Circumpolar Current can aggravate the effects of global warming.• Sea level: It could raise the sea levels substantially, affecting the people on SIDS.• Human lives: It will enhance the incidences of coastal erosion and storm surges, causing loss of life/livelihood for the coastal people.
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- Melting of Arctic will lead to condition of weak polar jet stream, which leads to extreme climatic events.
- Rising temperature: The chain of events that connects the melting Arctic to weather to the south starts with rising global temperatures, which cause more sea ice to melt. Unlike on the Antarctic continent, melting ice in Arctic region exposes the dark ocean beneath, which absorbs more sunlight than ice and thus warms even more. Because of this feedback loop, the Arctic is warming much faster than the rest of the planet.
- Blockage patterns caused by slow-moving jet stream meanders have been strongly associated with some devastating events, including the 2010 summer flooding in Pakistan, which killed 2,000 people and affected 20 million, and a heat wave in Russia that same year. resulting in 50,000 deaths and \$ 15 billion (£ 12 billion) worth of crops destroyed.
- Sea level rise: Also, in addition to displacement, sea level rise will increase nuisance flooding, saltwater intrusion, and higher storm surges during hurricanes. These kinds of disruptions are already occurring around the world, destroying homes and livelihoods and claiming thousands of lives. However, as the planet continues to warm, millions more people will face greater dangers.

Conclusion:

- The Arctic and Antarctic are the vital part of earth as an ecosystem. Nations around the world are upping their game in the fight against climate change. We, as individual human being should also take actions to make the positive changes to reduce the environmental impact of global warming. *“Every drop in ocean counts.”*



Q16. Discuss the multi-dimensional implications of uneven distribution of mineral oil in the world. (Answer in 250 words)

Introduction:

- Briefly define about mineral oil and its distribution in the world.

Body:

- Discuss about multidimensional implications of uneven distribution of mineral oil.

Conclusion:

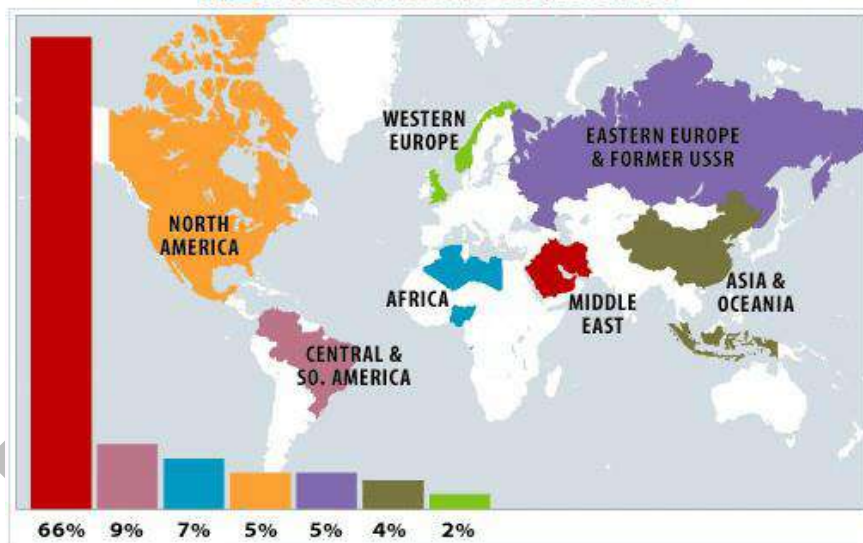
- Conclude by providing the importance of mineral oil.

Model answer:

Introduction:

- Mineral oil is unevenly distributed across the world. The Middle East contains more than half of the world's proven oil reserves. Canada, the United States, Latin America, Africa, and the former Soviet Union's region contain less than 15% of the world's proven reserves. India is highly dependent on west Asia for its energy needs. This uneven distributions of mineral oil in the world has various social, economic and political implications.

Where Are the World's Oil Reserves?



The immense strategic importance of mineral oil and its lop-sided distribution across the globe have many multi-dimensional implications such as:

- **Economic implications:** Uneven distribution of the mineral oil across the world, leads to economic consequences like inflation, for the importing country.
- For example, India is susceptible to global shocks in oil prices.
- **Regional conflict:** As the mineral oil resource is strategic in nature, its uneven distribution leads to great power conflict over the control of the region.
- For example, disputes in oil rich regions of middle East.
- **Political Implication:** World has witnessed various wars to acquire the mineral oil reserves by considering its economic value. USA's interference in the geo politics of West Asia is also one of the reasons of uneven distribution of oil mineral.
- According to the survey, Oil-producing countries are 50% more likely to be autocratic, and civil wars are more than twice as likely in oil-producing countries as in non-oil-producing



countries. These political and military consequences are linked to statistics indicating that these states are more secretive, financially volatile, and discriminate against women in economic and political opportunities.

- **Energy Security:** The un-even distribution of the mineral energy resource has led to high degree of energy insecurity in the oil deficient countries. It also, directly affects their strategic autonomy.
- **Diplomatic leverage:** The lop-sided distribution of the vital mineral oil resource is a vital factor in leveraging its availability for diplomatic gains.
- For example, India's major dependence on Middle East for oil, provides it with a diplomatic bargain over India.
- **Balance of Trade:** The un-even distribution of the mineral oil resources affects the balance of trade between the importing and the exporting countries. This in turn affects the Foreign-exchange reserves of the country.
- **Growth:** Un-even distribution of mineral oil also has led to un-even growth across the globe. Rise in import prices directly hamper the capabilities of the government to spend on welfare objectives.
- **Environmental Implication:** Even though Oil resources are unevenly distributed, but it does not have a direct correlation with environmental degradation. For Example, USA following china and India are the largest contributors to greenhouse gas emissions, but they are not the major oil producing nations.

Conclusion:

- Thus, the un-even distribution of the mineral oil resources leads to various implications ranging from economic to energy security and adoption of renewable energy sources. This highlights the need for India to diversify its energy basket both in terms of content and geography.

Q17. What are the main socio-economic implications arising out of the development of IT industries in major cities of India? (Answer in 250 words)

Introduction:

- Briefly introduce by writing importance of IT industries.

Body:

- Discuss about the main socio-economic implications arising out of development of IT industries.

Conclusion:

- Conclude by giving emphasis on the importance of IT industries.

Model answer:

Introduction:

- The twenty-first century is expected to be dominated by information technology, with India at the center of global attention and regarded as a knowledge powerhouse. IT services, IT-enabled services (ITES), e-commerce (online business), software, and hardware products are all part of the IT industry. In this competitive world, IT-based services are essential for



any organization to increase productivity, ease of doing business, and grow efficiently and economically.

Facts related to IT industries:

- Cities house nearly 31% of India's current population and account for 63% of GDP (Census 2011). By 2030, urban areas are expected to house 40% of India's population and contribute 75% of India's GDP. This necessitates the creation of comprehensive physical, institutional, social, and economic infrastructure.
- All of these factors contribute to improving the quality of life and attracting people and investment, thereby initiating a virtuous cycle of growth and development. India's IT sector will play an immense role to make it a reality.

Socio- Economic Implication arising out of the development of IT Industries in Indian Cities:

- Demographic Dividend: India's IT sector has huge potential. Due to high demand majority of Indian youth are acquiring skill sets on par with IT sector. Due to this India is moving towards to direction of skills economy. More youth are getting employment in this sector, which will contribute to the overall growth of the Nation.
- Good Governance: India's strong IT sector opens the door for policymakers to utilize ICT technologies to solve the socio economic issues of the nation. JAM, Digital India, Smart cities program etc. are the steps in the direction of Good governance, which would not have implemented efficiently without strong IT Industries.
- Economic empowerment: Development of IT industries in major cities, have led to the economic empowerment, rise of new middle class through higher employment opportunities and development of ancillary businesses.
- Gender parity: As the labour force participation of women in quality jobs is comparatively more in major cities, due to development of IT industries, it has led to their financial independence and empowerment.
- Cultural changes: The concentration of IT industries in major cities has also seen cultural changes. A marked shift towards accepting western language, rise in nuclear families, shift in food choices and modes of recreation could be seen.
- For example, café culture of Bengaluru.
- Improving criminal Justice system: IT sector has various positive implications. Digitalization of criminal justice system has the potential to address various social problems.
- Boost to Start ups: IT sector has brought the startup culture. Cities like Bangalore and Hyderabad are tagged as start-up hubs of India. This generates immense employment opportunity. India can also become major power in services sector if India startups are getting a conducive environment to grow.
- Migration: As these cities have become the centre of knowledge economy, there is a marked preference in youths to migrate into these cities for better career opportunities leaving senior citizens behind in tier 2-3 cities.
- Un-balanced development: Concentration of IT industry in a handful of cities, have led to the neglect of many tier 2, tier 3 towns. This has created an un-healthy development divide in the country. There is also a huge wage gap between IT workers and other workers.
- Addressing environmental issues: Industry 4.0 has the potential to solve the prevailing climate change problems. Air and water pollution are the most alarming problems in various Indian cities. Growth of IT sector will lead to innovations, which in turn solve these alarming issues.



Conclusion:

- India is the world's most popular offshoring destination for IT firms. After demonstrating its ability to deliver both on-shore and off-shore services to global clients, emerging technologies now provide a plethora of new opportunities for top IT firms in India. *By 2025, the Indian IT and business services industry is expected to be worth US\$ 19.93 billion.* All the stake holders must work collectively to nurture India's IT sector.

Q18. Discuss the main objectives of Population Education and point out the measures to achieve them in India in detail. (Answer in 250 words)

Introduction:

- Write about the meaning of Population Education.

Body:

- Discuss about the objectives of population education.
- Mention need associated with it.
- Suggest some measures and way forward.

Conclusion:

- Conclude on a positive note.

Model answer:

Introduction:

- One of the most formidable problems that India faces is the rapidly increasing population, which negates any attempt at development. There is a pressing need to disseminate factual information about population dynamics so that the next generation understands the nature and magnitude of the burden imposed by rapid population growth.

Objectives of Population Education are:

- It helps to understand how family size can be controlled as population limitation can facilitate the development of a higher quality of life in the nation.
- To develop an understanding of the influence of population trends on the various aspects of human life – social, cultural, political and economic.
- It helps to understand that a small family size can contribute materially to the quality of living for the individual family.
- To develop an understanding of scientific and medical advancement enabling to get an increasing control over famines, diseases and ultimately death and the imbalance thus created between death rate and birth rate

Need of Population Education in India:

- **Hunger Issue:** India ranked 101st out of 116 Nations in the recently published Global Hunger Index. Despite the green revolution's spectacular success, the food crisis persists due to a massive increase in population. The nutritional value of the food consumed is also low.
- **Per capita consumption:** Over the last five decades, there has been remarkable progress in both the industrial and agricultural sectors. However, their per-capita consumption has not increased.



- Immense burden on environment: An increasing number of people cannot survive just on agriculture. They move to cities, big cities, and industrial districts. This condition is causing issues such as water and air pollution, transportation, a lack of housing, overcrowding in schools, and the emergence of slums.
- Education and Healthcare issues: India growing population is adversely affecting the human resources indicators like education and healthcare. During the COVID-19 pandemic it was visible that, India's fragile healthcare is not component to accommodate India's growing population.

Measures to be taken:

- Minimum age of Marriage: Because fertility is affected by the age of marriage. As a result, the marriage age should be raised. The minimum age for marriage in India is 21 years for men and 18 years for women, as mandated by law. This rule should be strictly enforced, and people should be made aware of it through public awareness. For eg: schemes like UJJAWALA, Mudra Yojana and Pradhan Mantri Jan-Dhan Yojana have shown women as the largest section of beneficiaries of government schemes.
- Women Empowerment: Women continue to face discrimination. They are imprisoned within the four walls of the house. They are still limited to childrearing and childbearing. As a result, women should be offered opportunities for social and economic development. They should be provided with free schooling. For eg: BBBP, One stop centre scheme, Working women hostel etc.
- Promoting Family Planning: People can control the birth rate by taking preventive measures. This strategy is widely utilized; its success is dependent on the availability of low-cost contraceptive devices for birth control. For eg: National population policy.
- Government reforms: The government can provide several forms of incentives to people in order to encourage them to use birth control methods. Monetary incentives and other benefits, such as paid leave and promotion, can be offered to the working class that adheres to modest family standards. For eg: National family planning Indemnity scheme
- Communication media such as television, radio, and newspapers are effective means of disseminating the benefits of planned families to the uneducated and illiterate, particularly in rural and disadvantaged sections of the country.
- Cooperation among people: Population policy should touch the lives of ordinary people and involve a broader range of stakeholders, including legislators, bureaucrats, the media, professionals, teachers, and the general public. For eg: Emphasis on Postpartum Family Planning (PPFP) services

Conclusion:

- India is projected to become the most populous nation by 2027 overtaking China. This huge population can become a bane if not engaged properly. So, it is imperative for the policy makers to adopt population education initiatives to devise policies and educate people about them to ensure that this huge population remains as an asset.



Q19. What is Crypto-currency? How does it affect global society? Has it been affecting Indian society also? (Answer in 250 words)

Introduction:

- Define crypto currency and its status in India.

Body:

- Discuss its effects on global society.
- Mention its impact on Indian society.

Conclusion:

- Conclude by giving its importance in present world.

Model answer:

Introduction:

- A crypto-currency or crypto is a virtual currency secured by cryptography. It is designed to work as a medium of exchange, where individual ownership records are stored in a computerised database. The crypto-currency works on block-chain technology and is free from control of government agencies. Crypto-currency is a new emerging technology which is revolutionizing the way people make monetary transactions.

Crypto has affected global society in both positive and negative way as discussed below:

- Increasing usage of Cryptocurrency is economically integrating the global society. Currently, the world is divided in terms of different currencies. Crypto bypasses this division and is increasingly becoming a sought-after way of transacting.
- Cryptocurrencies take away the sovereign power of issuing currency. Thus, making economic policy ineffective and diluting the bond between citizen and government.
- The transactions in crypto are cheap and faster. Thus, it makes capital more mobile/volatile posing risk to macroeconomic stability and consequent social consequences.
- Cryptocurrency has emerged as a new asset class (alternative of gold). However, fluctuation in the value of cryptocurrency has made both kings and beggars.
- Crypto is used by terrorist organization, drug cartels to smuggle contrabands which negatively impacts society at large. Anonymity in cryptocurrency has potential to increase crime in society.
- With increasing acceptance of crypto, people who are digitally illiterate are being left behind. Thus, it can lead to a disproportionate rise in inequality.

Impact of Crypto on Indian Society:

- Crypto is still in a nascent phase in India, with a huge uncertainty about its future. As RBI initially banned crypto trading in 2018, which was reversed by the Supreme court later. The following are the effect of crypto on Indian society
- With the rise of crypto-currency, a new crypto community has emerged – that includes amateur investors, professionals and jobs have come up in the society.
- For Example: Multiple crypto-exchanges have come up.
- India is the largest receiver of remittances. However, the people lose money on conversion, processing charges, and switching to crypto will help people to get rid of these expenses.



- As an asset, crypto-currency has offered huge returns in the past, so it has become a fad among Indian youth to invest in these volatile assets, overlooking the risk associated with it.
- India became victim to ransomware attacks like Wannacry etc. and the ransom was collected in crypto-> may promote culture of digital extortion.

Other Impacts of Crypto-currency on society:

- **Privacy Concerns:** The privacy of users' data is at stake. There is concern regarding privacy of users data in using cryptocurrencies as all the transaction information is stored in distributed ledger (called blockchain), which is publicly visible. Thus Hacker can easily observe how the money flows.
- **High Volatility:** The price of Bitcoin suddenly rose to almost \$20,000 and then dropped to \$6,000. Due to such incidents, it is complicated for the investors to trust the ecosystem.
- **Cyber-security Concerns:** Crypto-currencies are prone to cyber-security breaches and hacks. Various attacks are common, even companies and governments are not full proof to them.
- For example, the Swiss block-chain company, Trade .i.e, has recently reported that crypto tokens worth almost \$8 million have been stolen from their cold wallet.
- **Dark activities:** The possibility that the new money will nurture illicit activities and markets like drug selling, weapons etc through dark net is always high using cryptocurrency anonymously. It also increase risk for being in various terrorist activities across the border.
- **Monetary control and economic behavior:** It could dramatically change global monetary policymaking. People will exchange their national currencies—dollars, euros, Renminbi and rupees—for the new digital coin in order to buy and sell the many products that will be priced in it. This will further impact profit of banks and will put stress on their balance sheet.
- **Inflation:** Governments and policymakers will have reduced ability to control inflation. Usually, when inflation picks up, central banks take steps to control it through various monetary rates. Crypto-currency will be out of control of central bank so liquidity control will be an issue. Also the effectiveness of such policies could be vastly diminished if one of the biggest money-creating authorities is a private organization.

Conclusion:

- Thus the financial crisis that the world faced was pan world as its ripples were felt almost everywhere whether be the Great Economic Depression, 2008 crisis thus crypto-currency and its negative side effects will to be pan global society, thus individual countries along with the multilateral world must come in together to eliminate the negative consequences of the crypto currency and usage of the blockchain technology well. But it must be held true that the conventional sovereign money economy can't be replaced as a whole.

Q20. How does Indian society maintain continuity in traditional social values? Enumerate the changes taking place in it. (Answer in 250 words)

Introduction:

- Write about the traditional social values of Indian society.

Body:

- Discuss the balance maintained by Indian society in keeping these tradition and values intact.



- Enumerate the changes taking place in it.

Conclusion:

- Conclude on a positive note.

Model answer:

Introduction:

- Indian society is a pluralist society been build on the aspect of the unity in Diversity. It is a very accommodative aspect, whose existence is allowed through the freedom and the fertility of ideas and mutual tolerance and the idea of love that we have gathered as values throughout generations and as the guarantee for future.
- The cultural beliefs, rituals and traditions are an inherent and intrinsic value in a human being. Along with that there is an obscurantist version in the form of the superstitions that the society faces. That further leads to the promotion of ignorance.

Indian society has maintained continuity in traditional social values through:

- Institution of family: It ensures the traditional values pass from one generation to next through socialization.
- Social gathering: Collectively celebration of festivals reinforces values like Brotherhood, purity, fraternity etc.
- Marriage: Sometimes inter-caste, has helped in preserving community values.
- Rich tradition and knowledge: Indian values that is based on the ideas of Vasudeva Kutumbakam and Athithi Devo Bhava and that Satyamev Jayate that helped us together end the 200 years of the deplorable British rule.
- Traditional belief and value system: It must be practiced to attach humanity with human prism and rationality. That further enhances our well being and welfare. The need is to incorporate it in our education system further to make life of the human race better.
- Spirit of enquiry reform has also been accrued in our constitutional values like Liberty, Equality, Fraternity and secularism. The uniqueness of the Indian society is maintained through coexistence of various religions that have provided for breathing spaces due to tolerance and liberalism.
- These values have been imbibed well by ancient rulers like Ashoka and Akbar. The most unique aspect in the culture is the receptivity which has made our culture as an ocean accepting all good points from all the cultures.

Social values are changing under the influence of technological, political and economic forces.

Following changes are taking place:

- Decline of tolerance: Incidents like the issue of Namaz in Gurugram and Haridwar Dharma Sansad show a trend of rising intolerance.
- Rise of individualism and decline in collective values. Materialism and excessive competition have led to an increase in selfish pursuit of personal goals while the collective need of society is often ignored.
- Nuclearization of family and decline of joint family as an institution.
- Modern education has made progressive values like gender equality, non-discrimination on caste lines etc. a part of the value system.
- Information technology has facilitated quick transfer of information and changed the traditional way of socialization obsolete. Now social media is influencing our social values both in a good and bad way.



- For example, the MeToo campaign or the recent Bulli Bai case.

Conclusion:

- Although, the forces of modernization have altered the balance of Indian traditional social values. However, the interaction between the two is dynamic. The traditional Indian values like 'Vasudev Kutmbakam' continue to assert their significance and their role in maintaining harmony in the world. The need is to use those values for promoting the larger idea of the growth and development where there is Sabka Sath Sabka Vikas, Ek Bharat Shreshtha Bharat. These values are a unique possession of ours we must make sure that they help in us rising with all the glory and splendour.

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