

UPSC CSE Mains 2019 Paper 2 September 21, 2019 General Studies I Answer Key

Ques 1. Highlight the Central Asian and Greco-Bactrian elements in Gandhara art.

Solution- Gandhara art is a style of Buddhist visual art that developed between the 1st century BCE and the 7th century CE in what is now northwestern Pakistan and eastern Afghanistan. The region came under the political influence of a variety of kingdoms which resulted in the emergence of a mixed school of art. The sculptural tradition in Gandhara had the confluence of Bactria, Parthia and the local Gandhara tradition. However, the real patrons of this school of art were the Scythians and the Kushanas, particularly Kanishka.

Features of Gandhara art borrowed from Greco-Bactria:

- The Gandhara school drew upon the anthropomorphic traditions of Roman religion and represented the Buddha with a **youthful Apollo-like face**, dressed in garments resembling those seen on Roman imperial statues. Its significance lies in the fact that until then **Buddha** was not **represented in a human-like figure**.
- **Wavy hair in a top knot**, sometimes a moustache on the face, **urna** (a dot or third eye) between the eyebrows, **elongated earlobes**, garment with thick pleats usually covering both shoulders, and muscular formation of the body are other resembling features.
- Other motifs and techniques that Gandhara school incorporated from classical Roman art, include vine scrolls, cherubs bearing garlands, tritons, and centaurs.
- The images having physiognomic features depicting **symbolic expression** such as of calmness, sharp outlines, smooth surface, **expressive images** etc. are the centre point of attraction.

Gandhara art not only assimilated the features of Hellenistic art but also borrowed many West Asiatic and **Central Asiatic features** such as:

- Disc-shaped attribute behind the head of Buddha was associated with solar deities of ancient Persian and Greek art.
- Figures with conical and pointed caps on their heads resemble the Scythian caps of similar design.
- The regular depiction of fire worship in the Gandhara art, a trait which was probably derived from Iranian sources.

The foreign elements imbibed in the Gandhara art not only placed it on a high pedestal of artistic achievements but also made possible the naturalistic depiction of the human form for the first time in the Indian art history.

Ques 2. The 1857 Uprising was the culmination of the recurrent big and small local rebellions that had occurred in the preceding hundred years of British Rule. Elucidate.

Solution- Introduction

- “The Indian Rebellion was not one movement, ... it was many.” **C.A. Bayly** brings to our notice what **Eric Stokes** has written in his book ‘The peasant armed: the Indian Revolt of 1857’.
- During the first century of British rule, there were a series of uprisings which **Kathleen Gough** has called “**restorative rebellions**” as they were started by disaffected local rulers, Mughal officials or dispossessed zamindars.
- The century before 1857 witnessed more than 40 major rebellions apart from hundreds of minor ones. However, these were local in character and effects & isolated from each other because each rebellion had a different motive.

Peasant Uprisings

- **The Faqir and Sanyasi Rebellions, Bengal & Bihar (1770-1820s):** These were widely recurrent confrontations with almost 50,000 participants involved at the height of insurgency.
- **The Revolt of Raja Chait Singh, Awadh (1778-81):** Primary goal was to restore the existing agrarian relations and it kept recurring till 1830s.
- **Polygar Rebellions, Andhra Pradesh (1799-1805):** Polygars (feudal lords appointed as military chiefs) were joined by peasants against Company’s tactics and the rebellion reached a big scale before it was oppressed.
- **Paika Rebellion, Odisha (1817):** An armed rebellion under the leadership of Bakshi Jagabandhu against the Company’s rule.
- **Fairazi Movement, Eastern Bengal (1838-1848):** First ever no-tax campaign led by Shariatullah Khan and Dadu Mian. It was local in nature and kept on recurring till 1870s.

Tribal Uprisings

- **Bhil Uprisings, Khandesh (present day Maharashtra & Gujarat), (1818-31):** Bhils rebelled against the British occupation of Khandesh but were crushed in 1819 but the situation remained unsettled till 1831.

- **Kol Uprising, Chhota Nagpur & Singhbhum region, Bihar & Orissa (1831-32):** Plunder and arson were the chief mode with negligible killings but had a major impact in the region.
- **Santhal Uprising, Eastern India (1855-56):** The most effective tribal movement which spread rapidly covering areas of Bihar, Orissa and Bengal against British infiltrating policies.

Conclusion

The century long economic exploitation, political subjugation, discriminatory policies, religious interference and suppression of uprisings finally culminated in the revolt of 1857 giving a platform to the discontented leaders of the earlier rebellions to raise voices against the Company

Ques 3. Examine the linkages between the nineteenth century's Indian Renaissance and the emergence of national identity.

Solution- Nineteenth century witnessed significant changes in Indian polity and society consequent to the expansion and consolidation of British imperialism in India which made Indians realise that their interests were sacrificed in order to promote the interests of the British authority.

The impact of modern western culture and consciousness of defeat by a foreign power gave birth to a new awakening. The modern educational systems familiarised the educated classes with the ideas of equality, liberty and nationalism. They were impressed by modern science and the doctrines of reason and humanism. Thoughtful Indians who were product of modern education began to look for the strengths and weaknesses of their society aimed at giving back to the nation its lost identity.

This new cultural project, which partly manifested itself through the social and religious reforms was encoded in the phrase 'Indian Renaissance'. It marked a period of transition in values, transformation in social sensibilities and rebirth in cultural creativity.

A defining feature of the movement was an inquiry into the past and an assessment of the traditions to overcome contemporary problems. Ram Mohan Roy's use of Hindu scriptures in his debate with his opponents on Sati, or Ishwar Chandra Vidyasagar's widow remarriage campaign, or Narayana Guru's advocacy of universalism sought to eliminate social obscurantism, religious superstition and irrational rituals. The common feature that they all shared was the urge to transform the existing social and cultural conditions, ranging from irrational religious practices and rituals to the oppressive state of women's lives.

Renaissance 'purified' and 'rediscovered' **an Indian civilisation that was conformant with the European ideals** of rationalism, empiricism, monotheism and individualism. It was meant to show that **Indian civilisation was by no means inferior to that of the West**, rather in one sense, in its spiritual accomplishments it was even superior to it.

Evidence of this search for a superior national culture could be found in the **development of patriotic regional literature**, in the **evolution of new art forms**, in the **search for purer forms of classical music** and in the **construction of new ideals of womanhood**. The literary movement led by Bankim Chandra Chattopadhyay, Tagore, Iqbal and Subramaniya Bharati provided leadership with imagination and fervor.

The movement, thus, not only talked of beauty and nationalism but also revealed to its followers India in terms of its spirit, its philosophy, its arts, its poetry, its music and its myriad ways of life. The sense of pride in the spiritual essence of Indian civilisation, as opposed to the material culture of the West, motivated Indians to confront the colonial state in a newly emerging public space. This, in other words, provided the **ideological foundation of modern Indian nationalism** that developed in the late nineteenth century.

Ques 4. Assess the impact of global warming on the coral life system with examples.

Solution- Coral life system harbour the highest biodiversity of any ecosystem globally and directly support over 500 million people worldwide.

However, over the last three years, coral reefs ecosystem around the world have suffered from mass coral bleaching events. They are now **among the most threatened ecosystems on Earth**, largely due to unprecedented global warming and climate changes, combined with growing local pressures.

Impact of global warming on the coral life system

- As temperature rises, mass coral bleaching events and infectious disease outbreaks are becoming more frequent. The bleaching of the Great Barrier Reef in 2016 and 2017, for instance, killed around 50% of its corals.
- Bleached corals are likely to experience reduced growth rates, decreased reproductive capacity, increased susceptibility to diseases and elevated mortality rates.
- Ocean acidification, or increased CO₂ levels has reduced calcification rates in reef-building and reef-associated organisms, causing their skeletons to become weaker and growth to be impaired.
- Sea level rise may lead to increases in sedimentation for reefs located near land-based sources of sediment. Sedimentation runoff can lead to the smothering of coral.
- Changes in storm patterns, due to climate change, may lead to stronger and more frequent storms that can cause the destruction of coral reefs.
- Changes in coral ecosystem also affect the species that depend on them, such as the fish and invertebrates that rely on live coral for food, shelter, or recruitment habitat.
- Changes in precipitation result in increased runoff of freshwater, sediment, and land-based pollutants contribute to algal blooms and cause murky water conditions that reduce light.
- Altered ocean currents lead to changes in connectivity and temperature regimes that contribute to lack of food for corals and hampers dispersal of coral larvae.
- It is also expected that there will be a gradual decrease in the quantity of marine plants such as phytoplankton in warmer waters, effectively reducing the amount of nutrients available to animals further along the food chain.

- In addition, the collapse of coral life system due to global warming can have direct impacts on tourism, aquaculture, and pharmaceutical industries as well as reduce the overall resilience of coastal communities.

Way forward

- Limiting global average temperature to well below 2°C above pre-industrial levels, addressing local pollution and destructive fishing practices provide chance for the survival of coral life system globally. Also, transformation of mainstream economic systems towards circular economic practices can help in mitigating rising global temperatures.
- According to UNESCO, the coral reefs in all 29 reef-containing World Heritage sites would cease to exist by the end of this century if global warming is not reduced. Reinforcing commitments to the Paris Agreement may be mirrored in all other global agreements such as the Sustainable Development Goals. SDG 13, for instance, calls for urgent action to combat climate change and its impacts.

Ques 5. Discuss the causes of depletion of mangroves and explain their importance in maintaining coastal ecology.

Solution- Mangroves are salt-tolerant vegetation that grows in intertidal regions of rivers and estuaries. They are referred to as 'tidal forests' and belong to the category of 'tropical wetland rainforest ecosystem'.

Mangrove forests occupy around 2,00,000 square kilometres across the globe in tropical regions of 30 countries. India has a total mangrove cover of 4,482 sq km. However, more than 35% of the world's mangroves are already depleted.

Causes of Depletion

- **Clearing:** Large tracts of mangrove forests have been cleared to make room for agricultural land, human settlements, industrial areas, shrimp aquaculture etc. As a result, mangroves get depleted to the tune of 2-8 percent annually.
- **Overharvesting:** They are also overexploited for firewood, construction wood and pulp production, charcoal production, and animal fodder.
- **Damming of rivers:** Dams built over the river courses reduce the amount of water and sediments reaching mangrove forests, altering their salinity level.
- **Destruction of coral reefs:** Coral reefs provide the first barrier against currents and strong waves. When they are destroyed, even stronger-than-normal waves reaching the coast can wash away the fine sediment in which the mangroves grow.
- **Pollution:** Mangroves also face severe threats due to fertilizers, pesticides, discharge of domestic sewage and industrial effluents carried down by the river systems.
- **Climate change:** Unusually low rainfall and very high sea surface and air temperatures caused severe threats to the survival of mangrove forests.

Importance of mangroves in maintaining coastal ecology

- Mangroves are among the most productive terrestrial ecosystems and are a natural, renewable resource. For instance, Sundarbans in the Gangetic delta supports around 30 plant species of mangroves.
- Mangroves provide ecological niches for a wide variety of organisms. They serve as breeding, feeding and nursery grounds for fisheries and provide timber and wood for fuel.
- Mangrove forests act as water filters and purifiers as well. When water from rivers and floodplains flow into the ocean, mangroves filter a lot of sediments, hence protecting the coastal ecology including coral reefs.
- Mangroves act as shock absorbers. They reduce high tides and waves and protect shorelines from erosion and also minimise disasters due to cyclones and tsunami.

Given their importance, strict enforcement of the coastal regulation measures, scientific management practices and participation of the local community in conservation and management are essential for the conservation and sustainable management of the precious mangrove forests.

Ques 6. Can the strategy of regional-resource based manufacturing help in promoting employment in India?

Solution- The National Manufacturing Policy aims to increase the share of manufacturing in the country's GDP to 25% by 2022. However, It has been observed that the rate of development in certain areas is very fast due to some locational advantages with a high degree of industrialization while other areas lag behind. In this regard, regional manufacturing becomes very important.

Employment generation due to Regional-Resource based manufacturing

- Suitably organized industries can utilize raw materials in the area and thereby give a fillip to greater production and processing. This would help in overall regional development.
- Manufacturing creates employment in the industry at various levels of skills. Normally a good proportion of the employment is in the unskilled and semi-skilled labor field who can expect higher wages than the informal sector earning.
- The industry also creates opportunities for entrepreneurship and employment in ancillary industries and services in the secondary and tertiary sectors.
- There would be greater and more varied demand for consumer goods. This creates its own cycle of possible growth in local production, distribution and support in the secondary and tertiary sectors.
- It would also reduce the income gap between rural and urban areas and thereby reducing the distress migration.

Challenges to regional-resource based manufacturing

- While many states like Jharkhand, Chattisgarh have abundant mineral resources, it is the lack of adequate infrastructure — mainly roads and power — that has been a major roadblock.
- Lack of skills amongst people in these manufacturing industries.

- MSME sector which will have lion's share in such a strategy are already facing challenges related to marketing, credit, growth, and non-availability of suitable technology for manufacturing, etc.
- Intellectual Property protection and enforcement are expensive and high risk in India.

In this regard, State and the Union government have come up with various strategies for harnessing the regional manufacturing potential-

- Orissa has also launched '**Odisha Industrial Development Plan: Vision 2025**' the with focussed attention on five sectors that aim to attract investments of Rs. 2.5-lakh crore and generate direct and indirect employment opportunities for 30 lakh people.
- UP government's **One District, One Product scheme** seeks to promote traditional industries synonymous with their respective districts to spur the local economy and create jobs.
- **North East Industrial Development Scheme (NEIDS)** encourages micro, small, and medium enterprises (MSMEs) to set up in the north-east region.
- Forest-based industries and Tribal Products are being encouraged in different states because of its ability to solve the problem of unemployment and poverty.
- Different states and regions harbor GI tagged products that could be manufactured locally and marketed globally.

The overall development of the country can happen only by securing a balanced and coordinated development of the decentralized manufacturing economy in each region.

Ques 7. Discuss the factors for localisation of agro-based food processing industries of North-West India.

Solution- Agro-based food processing industry, aptly recognised as 'sunrise industry', is described as one that adds value to agricultural raw materials. This value addition converts the raw agricultural products into marketable, easy-to-use or edible products like corn flakes, chips, ready to serve drinks, etc.

The Indian food processing industry accounts for 32% of the country's total food market. It is one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth.

However, the North-West India showcases a better-developed agro-based food processing industry. The factors for this localisation are as follows:

- **Geography:** The region is blessed with a diverse agro-climatic zones, fertile soil and undulating plains. These support a multitude of crops, vegetables and fruits round the year which provide ample raw material.
- **Raw material:** Availability of diverse raw materials viz. cereals, fruits, vegetables and livestock provide attractive base for food processing industry in this region. For instance, Punjab accounts for 17% of rice and 11% of wheat production of India. This region also

has the distinction of having the largest population of livestock and largest producer of milk in India.

- **Infrastructure:** Well-connected transportation network, subsidised electricity, irrigation facilities (such as Indira Gandhi canal and Bhakhra Nangal) and ample warehousing and storage facilities contribute to flourishing agro-based industries in the region.
- **Agricultural marketing:** This region has well-developed agri-export zones, market yards, organised APMCs and mandis, etc. which have provided a conducive environment for the establishment of agro-based industries.
- **Socio-economic status:** The population of the region has good literacy rate, including financial literacy, and enjoys an efficient banking network. This helps channel easy availability of credit and capital investment.
- **Policy support:** The Punjab government operates an agricultural mega project policy to facilitate investment in the food processing sector. Additionally, large landholdings, single window clearance, permission to set up private sub e-markets, amendment to APMC Act, etc. have enabled agro-based industries in this region to flourish.
- **Capacity building and R&D:** Capacity building of the manpower in food processing sector in India is spearheaded by the National Institute of Food Technology Entrepreneurship and Management which is located in Sonapat, Haryana. Likewise, a prominent institution for research and development to improve agricultural productivity and business opportunities is the Indian Institute of Maize Research located in Ludhiana, Punjab.

The initiatives taken at the Union level like permitting 100% FDI through the automatic route in food processing sector and Scheme for Mega Food Parks under the Ministry of Food Processing Industries are conducive steps. However, the challenges for the industry remain such as fluctuations in the availability of raw material due to climate change, inadequate implementation of the APMC Act, multiplicity of ministries and laws to regulate food value chain, etc.

Ques 8. What makes the Indian society unique in sustaining its culture? Discuss.

Solution- The notion of *accommodation and assimilation* has been the key feature of Indian society. Since ancient times, India has accommodated different elements of society without letting them lose their separate identity as Jawahar Lal Nehru writes in *The Discovery of India*-Indian Society and Culture “*is like some ancient palimpsest on which layer upon layer of thought and reverie had been inscribed, and yet no succeeding layer had completely hidden or erased what had been written previously*”.

- In course of time, India has evolved its own culture which is *eclectic, externally receptive and heterogeneous*.
- The essence of Indian society lies in harbouring diverse and distinct identities, ethnicities, languages, religions and culinary preferences. History stands witness to the fact that the societies that have struggled to hold differences were shattered in such an attempt.

However, Indian society succeeded and is unique because of its various peculiarities:

- **A Cosmic Vision:** The framework of Indian culture places human beings in the centre of the universe, as a divine creation-which celebrates Individuality and differences of opinion in the society.
- **Sense of Harmony:** Indian philosophy and culture tries to achieve an innate harmony and order in the society.
- **Tolerance:** In India, tolerance and liberalism is found for all religions, castes, communities, etc. Indian society accepted and respected Shaka, Huna, Scythians, Muslim, Christian, Jews and Zoroastrians. Rulers like Ashoka, Akbar have patronized various religions and ensured that there is peaceful co-existence of religions.
- **Continuity and Stability:** The light of ancient Indian culture life is yet glowing. Many invasions occurred, many rulers changed, many laws were passed but even today, the traditional institutions, religion, epics, literature, philosophy, traditions, etc. are alive.
- **Adaptability:** Adaptability is the process of changing according to time, place and period. Indian society has shown fluidity and has adjusted itself with changing times.
- **Caste System and Hierarchy:** Indian Society has evolved systems of social stratification, which in the past helped in accommodating outsiders, but concomitantly it has also been the reason for discrimination and prejudice.
- **Unity in diversity:** Despite inherent difference Indian society celebrates unity in diversity which reflects in modern India's founding principles and constitutional ideals.

In recent times, Indian society has seen surge on multiple divisive issues like communalism, casteism, economic disparity and ethnic violence, which pose a serious challenge to the time-tested ethos of our society.

Despite this, India remains a diverse country, a bewildering mosaic of communities of all kinds; our peculiar societal genius is to fashion a form of coexistence where diversity can flourish and find its place. Principle of Sarva Dharma Sambhava (equal respect for all religions) is rooted in India's tradition and culture.

Ques 9. "Empowering women is the key to control the population growth." Discuss.

Solution- India is set to become the most populous nation in 2027, surpassing China, according to an estimation by the United Nations Department of Economic and Social Affairs. India's population has ballooned from 555.2 million in 1970 to 1,366.4 million in 2017.

There are multiple causes of population growth in India such as child marriage and multi marriage system, religious superstitions, illiteracy and unawareness, poverty etc. However, they are in one way or the other linked to the poor condition of women in the nation.

Thus empowering women can play a crucial role in controlling the population growth

- Women are at times financially weak to pay for needed family planning and health services. Access to and control over productive resources will result in increased voice, agency and meaningful participation in decision-making at all levels from family planning to the time of conceiving.
- The failure of family planning is directly related to large-scale illiteracy that also contributes to the early age of marriage, low status of women, high child-mortality rate etc. They are least aware of the various ways to control population, usage of contraceptives and birth control measures.
- Uneducated families cannot grasp the issues and problems caused by the increasing population rate. Education has a transformative impact on girls. Educated girls tend to work more, earn more, expand their horizons, marry and start having children later with fewer children.
- Fertility rates are high because of misinformation about side-effects of contraceptives, lack of knowledge about the benefits of small families, and religious or male opposition to contraception.
- Any woman with multiple children spends most of her life as a mother and wife. She cannot play any meaningful role in her community and society until she is able to limit her family to a proper size. Family planning will not only improve family welfare but also contribute to achieving social prosperity and personal happiness.
- It is also crucial to sensitize men and boys at a young age, so they become an integral part in bringing about a transformation of women empowerment in Indian society. When men start respecting women and accepting them as equals, a lot of gender-based inequalities will reduce considerably.

The unbridled growth of population is a problem that our country needs to overcome. The government, NGOs and the people of society have to work together to solve the problem of overpopulation in our country. India, however, needs to put more efforts on empowering its women who can help the country curb the growth of its population. As also mentioned by Nehru, to awaken the people, first women need to be awakened, because once a woman has been awakened then the whole nation and family get awakened with her.

Ques 10. What are the challenges to our cultural practices in the name of Secularism?

Solution- India, since Independence, has been following a peculiar nation of secularism, where all religions are treated equally and supported by the State. However, this concept, at present, is undergoing a paradigm change wherein Constitutional morality is being considered a significant component of secularism by the judiciary. Another characteristic of this change is the growth of misguided perceptions about secularism. The ultimate outcome of these changes is the rise of various challenges to our diverse cultural practices.

Thus, we have a logical classification of these challenges under two dimensions:

- **Challenges posed by misguided perceptions**

- **Religiousness is anti-secular and pro-fundamentalist:** Thus perception discourages various religious practices like rituals, clothing, thoughts etc. People who wear the saffron dress, who keep beard and pat skull cap (Taqiyah) and all considered fundamentalists.
 - **Secularism is equated to atheism and apostasy:** Those who do not believe in god or abandon their religious beliefs are marked as secular. This thought is leading to a slow degradation of cultural practices.
 - **Restrictions to food choices:** Some states, through following the majoritarian religious sentiments, restrict the sale of beef.
 - **Judiciopapism:** Sometimes, the judiciary also takes a narrow glimpse of secularism and interferes into religious celebrations and practices. Ex. Rajasthan High Court's ban on Santhara and Supreme Court's ban on the sale of crackers on Diwali.
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- **Challenges due to rise of Constitutional morality**
 - Following are the grounds of objections to several cultural practices as considered by the judiciary.
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- **Right to Equality:** The practice of triple talaq and the ban on entry of women in Sabarimala temple were all declared unlawful by the Supreme Court. Those were done on account of gender inequality and gender exploitation inherent to these practices.
 - **Animal Rights:** Supreme Court banned the traditional practice of Jallikattu because of the cruelty to animals involved in this.
 - **Objection to Harmful Cultural Practices:** The illegality of female genital mutilation (FGM), practices in Dawoodi Bohra Community was brought into the limelight in 2018. The centre and the Supreme Court are having the opinion to ban this practice in India.

Thus, it is obvious that while some of the challenges are the outcome of the misleading notion of secularism, others are due to the exploitative and discriminatory nature of cultural practices only. The solution lies in getting all the stakeholders like religious leaders, judges, right's activists, civil society groups, NGOs and government representatives together over a common platform to discuss the challenges and to bring unanimity for preserving the cultural practices of our country.

Ques 11. Many voices had strengthened and enriched the nationalist movement during the Gandhian Phase. Elaborate.

Solution- Gandhian Phase in Indian freedom struggle is undoubtedly remarkable because of the perspective Gandhiji provided to the masses and the way he guided the freedom fighters with the means of truth and non-violence.

But there were numerous other simultaneous factors which further strengthened Gandhi's efforts and contributed to the nationalist movement.

Voices which strengthened and enriched the nationalist movement:

- **Khilafat Movement (1919-22)** was launched by the Indian Muslims to pressurise the British government to preserve the authority of Ottoman Sultan as Caliph of Islam. Gandhi and Congress leaders viewed it as an opportunity for **cementing Hindu-Muslim unity** and **bringing the Muslims** in the National Movement although this event is said to have brought the issue of religion in the freedom struggle.
- The ideological differences between the **Swarajists and the No-Changers** within the congress led to serious changes and contribution. No-changers continued their **constructive programme** of spinning, temperance, Hindu-Muslim unity, removal of untouchability etc whereas Swarajists won the election of Central Legislative Assembly in november 1923 **filling the political void** while the national movement was regaining its strength.
- **Marxism and other socialist ideas** spread rapidly in 1927 under **J.L. Nehru and S.C. Bose's leadership**. The **left wing** did not confine its concern to freedom struggle only but **raised the question of internal class oppression by the capitalists and landlords**. It strengthened the **voices of the marginalised and poor** of the country and connected them to the movements.
- **Revolutionaries** like **R.P. Bismil, C.S. Azad and Bhagat Singh** among others took the responsibilities of informing people about a necessary revolution to uproot British Empire. The **Terrorist Movement in Bengal led by Surya Sen** is notable because of the role of revolutionary women who participated.
- **Students and peasant parties** got involved and propagated Marxist and communist ideas while remaining an integral part of the national movement and the Congress. In **1928, Bardoli Satyagraha** occurred under the leadership of **Sardar Vallabh Bhai Patel** bringing forward **farmers' concerns**.
- There was rapid growth of **trade unionism** under the leadership of **All India Trade Union Congress** and many strikes took place during 1928 like **Kharagpur, Jamshedpur and Bombay Textile Mill strike** is the most important. The **traders and workers** contributed to the struggle for independence.
- Women from all over India were not left alone. They came forward and equally contributed to the national movement. **Kasturba Gandhi, Vijay Laxmi Pandit, Aruna Asaf Ali, Bhikaji Cama** are some of the most prominent who assumed leadership at different fronts.

Even the **Business class participated** by giving financial assistance and rejecting imported goods Every class, section, age group, political ideology emerged, came forward and contributed to the national movement. Even though it weakened the movement to some extent by the fragmentation and the internal ideological differences, it mainly made the movement strong by diversifying it and adding alternative perspectives to it. This multidimensional nature of the movement is one of the reasons for its success in 1947 when finally all the unheard voices till then were heard.

Ques 12. Assess the role of British imperial power in complicating the process of transfer of power during the 1940s.

Solution- Introduction

Britain never wanted to leave India but the promise to the Indian National Congress of independence in return of Indian resources and army during World War Two; the post war financial and political exhaustion; change in political power at the centre (Labour Party) whose ideology favoured the Congress party; increasing global pressure and the

inability to crush Indian leaders' will and efforts finally led to the Indian independence. However, Britain did succeed in making the process of transfer of power so complicated and hard that India still suffers from them.

Cabinet Mission

- **Sir Stafford Cripps** was responsible for drafting the Cabinet Mission Plan, which proposed a **complicated system** for India with **three tiers- the provinces, provincial groupings and the centre**. The centre's power was confined to foreign affairs, defence, currency and communication only.
- **Three major groups** of provinces: **Group A**, to include the **Hindu-majority** provinces; **Group B**, containing the **Muslim-majority** provinces (**western Pakistan**); and **Group C**, to include the **Muslim-majority** Bengal (**eastern Pakistan**).
- Even though both Nehru and Jinnah eventually refused to accept it, **Lord Wavell** authorised a **cabinet with Nehru as the Interim Prime Minister** which enraged Jinnah who in turn resorted to direct action of sparking **riots and massacres**.

Partition

- In **July, 1947** the British Parliament passed the **Indian Independence Act** which provided for the **demarcation of India and Pakistan** by midnight of August 14–15, 1947, in just **one month**. **Two Nations Theory** was an important factor here and fuelled **communalism**.
- The task of demarcating the boundaries was given to a **British lawyer, Sir Cyril Radcliffe** who had never visited the country before and was clueless about the social and political consequences of his decision. **Two boundary commissions** were set up for it.
- During partition, there was a large-scale **communal violence and forced migration of people**, probably the biggest in history.

Autonomy to Princely States

- The **British paramountcy** on the princely states and all the **existing treaties** of Britain with the princely states before the independence ended in 1947.
- As princely states were not a part of the British India, they became independent and had the **option to either merge with India or with Pakistan or to stay independent**.
- Even after the efforts of **Lord Mountbatten, Nehru** and **Patel**, few princely states like **Kashmir, Junagadh** and **Hyderabad** posed some serious challenges in the already troubled times.

Conclusion

It was hard to let go of the main resource supplier and the market consumer but when the odds were not in favour of Britain, it gave independence to India but made sure to create some contentious issues while leaving India. A lot of current day problems like issue of enclaves with Bangladesh (later resolved through The Constitution 100th Amendment Act, 2015), the migration issue, Kashmir issue between India-Pakistan etc. have their roots in the complications created by the British imperial power during the 1940s.

Ques 13. Explain how the foundations of the modern world were laid by the American and French revolutions.

Solution- The American Revolution and the French Revolution are considered as a cardinal epoch in world history. It gave a death blow to the old orthodox system of governance and installed modern ideals for governing nations.

American Revolution's contribution to Modern World

- **Principles of liberty and democracy:** The declaration of independence proclaimed that “all men are equal”. It provided an impetus to the people of the world to demand liberty and freedom.
- **Constitutionalism:** The revolution led to the first written constitution in the world which served as an inspiration for many nations who borrowed many ideas from the American constitution.
- The American war of independence gave birth to a novel system of government, viz, Federalism. In the course of time, the federal form of government got popularity. This provided a nice template for powersharing in diverse countries that needed complex polities.
- **Promotion of Human Rights:** The American war of independence laid stress on the rights of the human being. The “Declaration of Rights” of Thomas Jefferson awakened the people about their rights.

French Revolution's contribution to Modern World

- **The democratisation of society:** The French Revolution was a pan-European revolution. It hacked the roots of the ancient system in Europe and ended the centuries-old feudal system. Before the revolution, the society was based on inequality, disparity, privileges and concessions. The revolution attacked the roots of this disparity. It initiated a new social organization.
- **Ideals of modernity:** liberty, equality and fraternity brought political awakening in Europe.
- **Secularism:** The revolution ended the sovereignty, despotism and corruption of the Church. The importance of the worship of intellect and reason became more prominent.
- The people demanded not only political freedom but also right to property and freedom of expression. They also demanded voting rights. Women claimed equal rights with men.
- The Revolution aroused the spirit of nationalism. It paved the way for the unification of Italy and Germany. It also popularized the concept of democracy.
- Colonised peoples reworked the idea of freedom from bondage into their movements to create a sovereign nation-state.
- Tipu Sultan and Rammohan Roy are two examples of individuals who responded to the ideas coming from revolutionary France.

French and American revolution not only laid the edifice for a newly emerging egalitarian society and a new way of polity in their respective countries but they also acted as the philosophical basis and aspiration of the people of other nations. The revolutions highlighted the fundamentals of a civilised world which continues to shape the global aspirations of today's time.

Ques 14. What is water stress? How and why does it differ regionally in India?

Solution- Water stress is a situation in which the water resources in a region or country are insufficient for its needs. Such a situation arises when the demand for water exceeds the available amount or when poor quality restricts its use.

Water stress in India

- India is home to nearly 17% of the world's population but has only 4% of the world's freshwater resources.
- According to NITI Aayog's **Composite Water Management Index (CWMI)** report 2018, 21 major cities including Delhi, Bengaluru, Chennai, and Hyderabad are racing to reach zero groundwater levels by 2020, affecting access for 100 million people. Besides, 12% of India's population is already living the '**Day Zero**' scenario.
- According to the Aqueduct Water Risk Atlas of **World Resources Institute**, India is ranked **13th among the 17** most water-stressed countries of the world.

This indicates that India is going through **water emergency**. However, there is regional variation i.e. not all regions are equally water stressed.

- While the northwestern and central parts of the country are severely water stressed, the eastern parts receive abundant rainfall for groundwater recharge.
- The variation is also at the intra-regional level. For example, the areas in north Bihar struggle due to flooding while that of south Bihar finds it difficult to beat the heat. Flooding in Mumbai has become a regular phenomena while the nearby Vidarbha faces drought.

This uneven distribution of water crisis can be attributed to the following reasons:

- **Geographical factors**
 - India has diverse physiography, due to which different regions receive varying degrees of rainfall. For example, winter monsoon along the eastern coast and summer monsoon in northern India.
 - Interior of southern India lies in the rain shadow zone and most of Rajasthan and northern Gujarat have arid climate.
 - Also, the arid and semi-arid areas of northwestern India and central India are naturally occurring waterstressed areas.
- **Climatic factors**
 - Changing climate has led to an increase in the **frequency and intensity** of floods as well as droughts.
 - Erratic monsoon is causing delayed and infrequent rainfall in different parts of India.
- **Agricultural practices**
 - In India, agriculture is **not practised according to the agro-climatic zone**. Groundwater is used to cultivate water intensive crops like paddy and sugarcane in rain deficit states like Punjab and Maharashtra respectively.

- State procurement policy and subsidised electricity in Punjab makes it profitable for farmers to produce rice. Similarly, farmers in Maharashtra cultivate sugarcane because they are assured of marketing.
 - Moreover, flood irrigation is the most common form of irrigation in India which leads to a lot of water loss.
 - All these have led to **excessive groundwater extraction** and have made **India virtual exporter of water**.
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- **Human factors**
 - Rapid **urbanization** has led to the **concentration of population** in and around major cities which usually happen to be located in the rainfall deficient regions (like Delhi-NCR).
 - The situation is aggravated by encroachment, contamination and consequent **destruction of water bodies** which otherwise help recharge the underground aquifers.
 - Above all, there is a lack of awareness about water economy which demands judicious use of water.
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- **Way forward**
 - India's water challenge stems not only from the limited availability of water resources but also its mismanagement.
 - There is a need to follow **conservation agriculture** i.e. farming practices adapted to the requirements of crops and local conditions. Cultivation of less water intensive crops like pulses, millets and oilseeds should be encouraged in water stressed regions.
 - **Rainwater harvesting** needs to be incorporated with urban development projects. **Mission Kakatiya (Telangana)**, which seeks to restore tanks through community-based irrigation management, is commendable.
 - Freshwater sources need to be declared as **water sanctuaries** on the lines of national parks and tiger reserves. Water must be treated **as a resource** rather than a commodity.
 - The efforts like the formation of **Jal Shakti ministry** (to tackle water issues holistically) and the goal to provide **pipled water to all rural households by 2024**, under the **Jal Jeevan mission**, are steps in the right direction.

Ques 15. How can the mountain ecosystem be restored from the negative impact of development initiatives and tourism?

Solution- The Himalayan States, including the Northeast, and the Western Ghats are the most prominent mountain ecosystems in India which are struggling to cope up with the negative impacts of development initiatives and tourism. The **Report of Working Group II Sustainable Tourism in the Indian Himalayan Region** by the NITI Aayog highlights similar concern.

The negative impacts emerge out of the replacement of traditional eco-friendly and aesthetic architecture with inappropriate and dangerous construction, poorly designed roads and associated infrastructure, inadequate solid waste management, air pollution, degradation of water sources, and the loss of biodiversity and ecosystem services. Their repercussions were evident in the Kedarnath floods of 2013.

In this respect, the following steps can be considered:

- The reports by committees on Western Ghats ecology headed by **Madhav Gadgil** and **K. Kasturirangan** need urgent attention. The concept of **ecological sensitive zones (ESZ)** cannot be sacrificed for the sake of development. Likewise, NITI Aayog has suggested setting up of **Himalayan Authority** for coordinated and holistic development of entire Himalayan region.
- There has to be **clear demarcation and planning with respect to the extent of infrastructure development**. It should include a systematic process of urban planning, developing tourist hubs with strict controls, spring mapping and revival etc. For example, provision for no encroachment areas, well-preserved forested areas, etc.
- With respect to tourism, measures like application of **carrying capacity concept** to tourist destinations, implementation and monitoring of **tourism sector standards**, and **performance-based incentives** for States faring well on the standards can be considered. The unregulated tourism movement is a major reason for plastic pollution.
- States should also be encouraged to **spend more on sustainable development of tourism**. For instance, Uttarakhand stands second in tourist arrivals but invests only 0.15% of its total expenditure on this sector. Besides, States can also **adopt and share the best practices**. For example, Sikkim can be a lodestar for sustainable agriculture, **waste management** and **ecotourism**.
- With collaborative and participatory frameworks **capacity building** for conservation is required. Viable enterprises that can provide sustained economic incentives and support local communities need to be promoted. These can help achieve **SDG Goal 8** (decent work and economic growth) and **Goal 12** (responsible consumption and production).

To provide a better standard of living to the mountain communities and to meet the overall needs of the economy, a linkage between development and conservation needs to be formed. Besides, effective implementation of schemes and policies hold significance for any desirable results.

Ques 16. How is efficient and affordable urban mass transport key to the rapid economic development in India?

Solution- Across nations, and through decades, economic development has been correlated to personal mobility. India has witnessed remarkable growth over the last few decades. However, the mobility infrastructure has not kept pace with the demand. As India aspires to be the second largest economy in the world by 2050, we must prepare for a rapid increase in demand for mobility.

Importance of efficient and affordable urban mass transport

- **Supports clusters and agglomerations:** In large metropolitan areas, growth can be slowed with the heavy usage of private vehicles. Effectively planned transportation can overcome this constraint and reinforce agglomerations by allowing more people to come closer together in higher density developments.

- **Increases productivity:** When transportation improvements increase the accessibility of people and businesses to reach jobs, services, and activities, productivity also increases.
- **Enhances job & labor force accessibility:** Another economic benefit of transportation improvements is the resulting larger pool of employees available for the job market.
- **Opens new markets for businesses:** Building a multi-modal facility opens new markets for companies searching for locations with the appropriate transportation infrastructure for their corporate needs.

Towards building an efficient and affordable urban mass transport

- Government has devised various policies for ensuring *affordable, efficient and accessible mobility system* like - National Transit Oriented Development Policy, 2017; Green Urban Transport Scheme, 2016; FAME (Faster Adoption and Manufacturing of (hybrid &) Electric vehicles etc.
- Despite these, Regulations must be introduced to encourage efficient use of existing roads and smarter traffic management. For example, not allowing trucks and large commercial carriers to ply city roads during the day.
- Governments must ensure that the adequate ecosystem is in place before adopting new technologies in mobility. For instance, to adopt electric vehicles, cities must have first installed sufficient number of charging stations.
- A good beginning is being made through the Smart Cities Programme, and all the selected 100 cities have put NMT (non-motorised transport) promotion as one of the goals in their respective Smart City Proposals.

In the coming years, Emerging market cities will play an increasingly large role in the global economy and for their unimpeded contribution. Therefore, India needs to develop **Safe, Adequate and Holistic Infrastructure (SAHI)** for the Indian population including women, elderly and the disabled.

Ques 17. How do ocean currents and water masses differ in their impacts on marine life and coastal environment? Give suitable examples.

Solution- Ocean currents (surface or deep ocean currents) are streams of water flowing constantly in definite path and direction, for example, Gulf Stream (warm current) and Labrador current (cold current). Water masses are the extensive homogeneous body of immense volume of ocean water in terms of temperature and salinity. These are generally characterised by the the downwelling of denser cold water and upwelling of less dense water, for example, the North Atlantic Deep water mass in the Norwegian Sea.

Impacts of ocean currents

- **On marine life**
 - Ocean currents act as distributing agents of nutrients, oxygen and other elements necessary for the existence and survival of fishes and zooplanktons.

- They also transport planktons from one area to the other area. For example, Gulf Stream carries planktons from the Mexican Gulf to the coasts of Newfoundland and north-western Europe. Many significant fishing grounds of the world are developed in these areas.
- Mixing of warm and cold ocean currents bring rich nutrients which support marine organisms. For example, seas north of Japan is a rich fishing ground due to the mixing of warm Kuroshio and cold Kurile currents.
- Sometimes, a few ocean currents destroy planktons. For example, El Nino current destroys planktons off the Peruvian coasts resulting into mass deaths of fishes.

▪ **On coastal environment**

- Ocean currents maintain the horizontal heat balance of the earth. The warm currents transport warm waters of the tropics to colder areas of temperate and polar zones. Cold currents on the other hand bring cold waters of the high latitudes to the areas of low latitudes.
- Surface ocean currents also modify the weather conditions of the coastal areas. The ideal and favourable European type of climate of the western coasts of Europe is due to the moderating effects of the North Atlantic warm currents.
- Cold currents also intensify the desert-like conditions in the coastal areas, exemplified by the presence of some deserts in the western edges of continents, e.g., Namib Desert in Africa.
- The convergence of warm and cold currents causes foggy conditions, e.g., near Newfoundland due to convergence of warm Gulf Stream and cold Labrador current.

Impacts of water masses

▪ **Downwelling of water masses**

- It transports oxygen downward which is much needed by the marine organisms.
- This process discourages enrichment of seawater by bringing nutrients, and hence the areas of downwelling of water masses are not conducive to marine life and hence they are the areas of low marine productivity.

▪ **Upwelling of water masses**

- It is beneficial to the rich marine life because dissolved oxygen and nutrients are brought to the surface through upwelling. For example, the upwelling of nutrient rich cold water off the coast of Peru has made the region one of the richest fishing grounds.

Global warming is disrupting the sinking of cold, salty water as a result of increased melting of glaciers and sea ice. This could slow or even stop the circulation of ocean waters, which could result in potentially drastic impact on marine life and coastal environment. Thus, arresting global warming is the need of the hour.

Ques 18. Do we have cultural pockets of small India all over the nation? Elaborate with examples.

Solution- India has a lot of diversity to offer to the people of this world and to her own people as well. The oldest civilisation has had ample time and experiences to accumulate the cultural practises of everyone who came here with their respective motives whether it was tourism, education, plunder, exploitation or to rule.

- Vast resources attracted people and foreign rulers in our past and they keep attracting people in the present as well. People from smaller cities migrate to urban centres and metropolitan areas in search of employment, education etc and they eventually settle down there. When such diversity of people pools in together at a relatively smaller place, it becomes a cultural pocket.
- **The basic idea is that within a bigger, overarching culture, another smaller and different culture is developed and sustained.** The **metropolitan areas** like National Capital Region of Delhi, Mumbai, Kolkata, Chennai, Bengaluru or **coastal industrial hubs** like Surat, Kochi, Visakhapatnam or **religious centres** like Ajmer, Amarnath, Chardhams etc can be taken as examples of hubs of such cultural pockets within India.
- **Metropolitan areas** represent a culture of their own which is entirely different from each other and can be seen in the banter between Delhi and Mumbai. But they are well diverse within themselves as well depending upon the time and place. The **Ganpati Utsav** and those who celebrate it, form a cultural pocket within Mumbai for ten days. It applies to other places as well. In Delhi, a cultural pocket is formed by the political, defence personnel and the patriotic citizens around the **Independence Day** celebrations.
- **Multi Storey housing societies** in urban areas are also an example of cultural pockets. Diverse people live in the same building exchanging food habits, traditions, indigenous culture and they celebrate all festivals together as if they are a big joint family. Same applies to **multinational organisations and corporate offices** as well where workers represent the diversity of India.
- **Higher educational institutes like universities and colleges** provide us with the same scenario. Students from every corner of the nation irrespective of their hometowns, race, caste, class or any other differences sit and study in the same classroom and take part in extracurricular activities and college festivals together.
- It is very clear to us that India has uncountable cultural pockets all over the nation with different set of values and outlooks towards life enriching Indian cultural heritage and validating the fact that **India is indeed one of the Cultural Superpowers** of the world.

Ques 19. What are the continued challenges for Women in India against time and space?

Solution- Nearly one-sixth of the world's women live in India and many of them had adorned high offices like that of President, Prime minister, Speaker of the Lok Sabha, Leader of the Opposition, yet there are innumerable women who rarely step outside their homes.

Challenges faced by Indian women emanates from **Hegemonic patriarchy**, which is prevalent in Indian society.

- It means the idea that discrimination against women appears to be common sense to such an extent that not only men but even women also become the supporter and perpetrator of the very notion which discriminates against them.

This leads to various problems like:

- Oppression against women starts right from the womb: **Female infanticide**.
- This can be reflected in poor child sex ratio, i.e. 919/1000 according to census 2011.

- Girls are the worst sufferer of **the vicious cycle of poverty and malnutrition**.
- This is augmented by a lack of education and reproductive rights.

- **Motherhood penalty:**
- The primary responsibility of taking care of family and bringing up the child is still on the women.
- This includes unpaid care work such as childcare, elderly care, and household work.
- Many women due to family pressures have to retreat from the workforce.

- **Declining female labour force participation rate (LFPR)**
- Despite increasing levels of education and declining fertility rates, the current female LFPR is 23.7%.

- **Commodification of women**
- The women are either shown as docile homemakers or they are shown as sex symbols trying to convince the public at large to buy the product.

- **Pink collarisation of jobs**
- The women are mostly deemed fit for “pink-collar jobs” only, such as teachers, nurses, receptionist, babysitter, lecturer etc. which have been stereotyped for women.
- This denies them opportunities in other fields

- **Glass ceilings**
- Women in India face artificial barriers like stereotypes, media-related issues, informal boundaries, which prevent them from advancing upward in their organization into management-level positions.
- This can be reflected in an increasing wage gap between men and women.

- **Sexual harassment at the workplace**
- #Metoo movement shed light on numerous instances of sexual harassment at the workplace.
- However, due to the slow judicial system, justice hasn’t been delivered to these women.

- **Lack of political participation of women**
- Indian Parliament currently has 11.8% women representation, and state assemblies have only 9%.
- Even though the 73rd constitutional amendment act mandates 33% of panchayat seats to be reserved for women.
- However, The dichotomy between representation and participation can be reflected by the prevalence of “Sarpanch Pati”.

Way Forward

- Indian Society doesn’t need better laws but better implementation.
- Reservation in parliament for women must be implemented as soon as possible.

- The government must empower women through Self-help groups so that they can become financially independent.
 - Affirmative action should be pursued by the government to induct more and more women into positions of authority.
 - Supreme court judgement of decriminalizing adultery and homosexuality, have reaffirmed women's right to sexual autonomy.
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- However, Society has a larger responsibility to disassociate itself from the stigma attached to women's sexuality.
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- Women's issues are not a political problem but a social issue, Hence it requires a cultural revolution.
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- Movies like Padman and Toilet will help in challenging the hegemonic patriarchy.
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- Apart from it, Beti Bachao Beti Padhao initiative is a step in the right direction.

In order to improve the condition of Indian women, society must remember words of J.L. Nehru: "India To awaken the people, it is the woman who must be awakened. Once she is on the move, the family moves, the village moves, the nation moves".

Ques 20. Are we losing our local identity for the global identity? Discuss.

Solution- Indian society is represented by a set of local cultural traits like local languages, different food choices, dressing styles, classical music, family structure, cultural values, etc. There has been a growing sense of insecurity among the Indian masses regarding the gradual degradation or loss of our local identity. This gradual loss of local identity is popularly attributed to globalization that creates a global culture in which the local identity is amalgamated to bring a homogenous culture throughout the world.

This sense of insecurity is not baseless and is supported through the following facts:

- **Loss of local languages for English:** Under the growing trends of convert culture in education and servicebased economy, English education has developed rapidly at the cost of several vernacular languages.
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- **Loss of classical music for Pop and Jazz culture:** The changing taste of music among Indian youth has put a question mark over the survivability of traditional classical music in India.
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- **Loss of collective identity for individualism:** With rise in metropolitan of Indian population, the individualism is growing and the social relations are now based on commercial benefits.

- **Loss of joint family structure for nuclear family system:** Economic migration and the choice for individual space have broken the joint structure of family in India. At this junction, the old-aged and children are depriving of the required care.
- **Loss of moral education for advanced commercial education:** The growing disorientation between morality and higher education is the greatest demolition of our identity.
- **Degradation of the institution of marriage:** The growing acceptance to the live-in-relationship has questioned the sanctity of the institution of marriage in our society. This represents the dominance of western culture and the Indian way of living.
- **Changing style of clothing:** With the rise in corporate culture, the Indian dressing style has remained merely an occasional stuff that too in cultural occasions only.
- **Loss of traditional food choice:** With the rise of chain restaurants and hotels, the food choice of Indian youth has inclined towards the Italian and Chinese fast foods. This has caused foods that are comparatively healthy and rich in nutrients.
- **Deadline of cultural values:** In the have of freedom of speech, the traditional values of moral decency, respect to elders, following the rituals etc. are all declining.
- Loss of indigenous system of medication like Ayurveda, Yoga etc.

Despite these facts, another dimension of thoughts about globalization points to the universalization of our local beliefs and cultural values rather than demolition. This dimension is also supported equally through various facts like:

- **Indian festivals are now being celebrated all across the world:** The most significant example is the Diya stamps issued by UNO to celebrate Diwali. Even a local religious festival of Chhath Puja is celebrated in Silicon Valley, USA.
- **Observance of International Yoga Day on 21st June:** This has popularized the Yoga throughout the globe.
- Observance of World Hindi Day on 10th January and organization of World Hindi Conference.
- ISKCON foundation has spread the practice of Bhakti Yoga in different Western countries. This promotes religious tourism in our country.
- Indian classical music is being liked all across the world and it is appreciated at Berklee school of music. SPIC MACAY, an NGO has promoted the Indian classical music and culture among youth across the world.
- Taj Mahal is among the seven wonders of the world.

Thus, culture is an ever-evolving entity which constantly changes through diffusion and amalgamation. Of course, we should embrace our cultural identity and values and it is our duty to preserve our cultural identity, however, globalization is not a matter to worry and infusion of global identity should be welcomed.