General Studies Paper-I

Question 1. What is UNESCO Creative Cities Network? In what ways does the recognition of Indian cities under the UNESCO creative cities program benefit them? (150 Words)

Approach

- > Start by introducing the concept of UNESCO Creative Cities Network (UCCN).
- > Explain the benefit of UCCN to individual nominated cities as well as other cities by taking an example.
- Conclude suitably.

Answer:

The UNESCO Creative Cities Network (UCCN) was created in 2004 to promote cooperation with and among cities that have identified creativity as a strategic factor for sustainable urban development. The 246 cities which currently make up this network work together towards a common objective: placing creativity and cultural industries at the heart of their development plans at the local level and cooperating actively at the international level.

> The United Nations General Assembly has designated the 31st of October as World Cities Day.

Recognition of Indian cities under the UNESCO creative cities program:

- > The network covers seven creative fields: crafts and folk arts, media arts, film, design, gastronomy, literature and music
- > Six Indian Cities are covered under UCCN. These cities are:
 - Srinagar Crafts and Folk Arts (2021)
 - o Mumbai Film (2019).
 - Hyderabad Gastronomy (2019).
 - Chennai- Creative city of Music (2017).
 - Jaipur- Crafts and Folk Arts (2015).
 - Varanasi- Creative city of Music (2015).
- > By joining the Network, cities commit to sharing their best practices and developing partnerships involving the public and private sectors as well as civil society in order to:
 - o strengthen the creation, production, distribution and dissemination of cultural activities, goods and services;
 - o develop **hubs of creativity and innovation** and broaden opportunities for creators and professionals in the cultural sector;
 - o improve access to and participation in cultural life, in particular for marginalized or vulnerable groups and individuals;
 - o fully integrate culture and creativity into sustainable development plans.
- > The Creative Cities **Network is a privileged partner of UNESCO**, not only as a platform for reflection on the role of creativity as a lever for sustainable development but also as a breeding ground of action and innovation, notably for the implementation of the 2030 Agenda for Sustainable Development.

Areas of action

> The **objectives of the UNESCO Creative Cities Network** are implemented both at the level of the member cities and at the international level, notably through the following areas of action:

- o sharing experiences, knowledge and best practices;
- o pilot projects, partnerships and initiatives associating the public and private sectors, and civil society;
- o professional and artistic exchange programmes and networks;
- o studies, research and evaluations on the experience of the Creative Cities;
- o policies and measures for sustainable urban development;
- o communication and awareness raising activities.

Apart from the benefits to the common world, there are several benefits to the Indian Cities like:

- > Aligning the SDGs in cities with the uniqueness of the city and motivating other cities as well.
- > Boost the cultural economy, tourism and innovation for greater monetisation of the physical, aesthetic and ecological environment.
- > Influence policy makers to have especial protection to the intangible heritage of the city and bring its recognition at the global stage.
- > Bring more liberal social structure in the cities and grow as a progressive society.

The UCCN is the unique method to internalise SDGs in the peoples' socio-cultural and economic life and bring paradiplomacy at the cities level and also provide recognition to the skilled workers of the cities that has preserved valuable intangible culture in the society and the world.

Question 2. Discuss the indelible contribution of Rabindra Nath Tagore in modern Indian history. Also compare his ideology with Mahatma Gandhi. (150 Words)

Approach

- > Introduce the answer by writing about Rabindranath Tagore.
- List out the contribution of Rabindranath Tagore in numerous fields.
- Mention the ideological differences between Tagore and Gandhiji.
- Conclude suitably.

Answer:

Rabindranath Tagore, a multi-talented personality, was a Bengali poet, novelist, a painter, and also credited with composing the National Anthem of India and Bangladesh.

He had indelible contribution in modern Indian History like:

- > He was also referred to as 'Gurudev', 'Kabiguru', and 'Biswakabi'.
- > He is regarded as the outstanding creative artist of modern India and hailed by W.B Yeats, Rabindranath Tagore was highly influential in introducing Indian culture to the west.
- > He was an **exceptional literary figure** and a renowned **polymath** who singlehandedly reshaped the region's literature and music.

Rabindranath's contribution to Art and Culture:

- > Fusion of Classical and Folk:
 - Rabindra Sangeet: It recreates the music produced by the Nobel Laureate Rabindranath Tagore. The music is a
 mixture of classical elements and Bengali folk strains. To keep one's country above one's own needs, Bengalis
 sing these songs.
- > **Bengal School of Art:** The idea of the Bengal school came up with the works of Abanindranath Tagore (nephew of Rabindranath Tagore) in the early 20th century.
 - One of the most famous painters of this school was Rabindranath Tagore. Some art historians argue that his paintings can be linked to his writings. Many of his students went on to become famous painters of the Bengal school.

- > Manipuri dance: Rabindranath Tagore brought back this dance form into limelight when he introduced it in Santiniketan.
- > Santiniketan-Education & Rural Reconstruction: On 22nd December 1901, Rabindranath Tagore established his school at Santiniketan (originally named it Brahmacharya Ashram in the tradition of ancient forest hermitages).
 - School aimed to combine education with a sense of obligation towards the larger civic community.

Literary contribution of Rabindranath Tagore:

- He is responsible for modernising Bengali prose and poetry. His notable works include Gitanjali, Ghare-Baire, Gora, Manasi, Balaka, Sonar Tori, He is also remembered for his song 'Ekla Chalo Re'.
- ► He gave the national anthems for two countries, India and Bangladesh.
- > Besides all his literary achievements he was also a philosopher and educationist who in 1921 established the Vishwa-Bharati University, a university that challenged conventional education.
- In 1913 he was awarded the Nobel Prize in Literature for his work on Gitanjali.
- In 1915 he was awarded knighthood by the British King George V.

His ideological contribution:

- > He was a good friend of Mahatma Gandhi and is said to have given him the title of Mahatma, he has also given the title of 'Desh Nayak' to Subhash Chandra Bose in recognition of his service to the nation and its people.
- > He had always stressed that unity in diversity is the only possible way for India's national integration.
- > Tagore, on the other hand, promoted spiritual values and the creation of a new world culture founded in multiculturalism, diversity, and tolerance.

Contribution in Independence movement: Tagore participated in the Indian nationalist movement from time to time in his own non-sentimental and visionary way.

- > Opposed Partition of Bengal: Rabindranath Tagore strongly protested against the partition of Bengal in 1905. Tagore wrote many national songs and attended protest meetings against the decision to partition Bengal.
- In 1919, following the Jallianwalla Bagh massacre, he renounced his Knighthood.

Ideological compare between him and Mahatma Gandhi:

Both of them had a lot of common thoughts and provocations but there were also some basic differences between the two.

Similarities:

- Both prophesied humanism and the love of nature based on non-violence and tolerance to each other.
- ▶ Both were in favour of self-sustenance to alleviate the problems of poor India.
- Gandhiji believed that the god is in 'Truth' but Tagore found his godhead in 'Love'. but their paths were different. Gandhi tried to achieve the 'Truth' through the path of Non-violence but Tagore tried to achieve his God/love through co-operation, mutual respect and tolerance.

Disagreements

Tagore's disagreement with Gandhiji was mainly on three issues:

> Gandhi's Non-Cooperation Movement received harsh criticism from Tagore. Because he thought that the public shouldn't be given the option to refuse participation without any kind of self-control. According to him, the concept of NCM has a negative essence and cannot refrain from violence because violence is a natural byproduct of noncooperation (proved true in the Chauri Chaura Incident).

- > The burning of foreign clothing for the Swadeshi Movement was the issue with which Tagore disagreed. Gandhi, meanwhile, was of the opinion that someone burned their "shame" when they burned foreign clothing.
- > He said, Gandhi's proposal for Charkha, a sustainable way of life for oppressed and impoverished people who lived in poverty, disregarded modern factories and machinery for eradicating poverty.
 - o On Charkha, Tagore predicted that it would drag India back to the mediaeval Ages.
 - He claimed that Charkha ingrained a disrespect for science in people's minds and that Gandhiji ignored the power of science to end extreme poverty and misery through the use of this concept.
 - o In order to thrive and lift the nation out of poverty, he advised India to advance and embrace an innovative and inquisitive attitude.

Despite all the differences both were living saints and idealists and had tremendous mutual respect for each other.

Question 3. Discuss the anti-partition movement of 1905. Illustrate how this movement changed the course of national activities? (150 Words)

Approach:

- > Introduce the anti-partition movement of 1905.
- > Discuss the effect of the anti-partition movement of 1905, Swadeshi and Boycott movement on future national activities.
- Conclude suitably.

Answer:

- ➤ The Anti-Partition Movement (period 1903–05), the leadership was provided by men like Surendranath Banerjea, K.K.Mitra and Prithwishchandra Ray (all Moderates) against the Curzon's decision to Partition Bengal in December 1903.
 - The official reason given for the decision was that Bengal had grown too large to be administered. To some extent, this was correct, but the real reason for the partition plan was the British desire to weaken Bengal, the nerve center of Indian nationalism.
- Moderates' Anti-Partition Campaign includes:
 - Petitions were sent to the government
 - Public meetings were held, and
 - o Ideas were disseminated through newspapers such as Hitabadi, Sanjibani, and Bengalee.

Ignoring a loud public opinion against the partition proposal, the government announced the partition of Bengal in July 1905.

Failure of anti-partition movement/campaign led to emergence of the widespread movement like **Swadeshi and Boycott movement** and influenced the national activities at the greater scale.

Swadeshi and Boycott movement: On August 7, 1905, with the passage of the Boycott Resolution in a massive meeting held in the Calcutta Townhall, the formal proclamation of the Swadeshi Movement was made. Activities were under this:

- > The leaders propagated the message of boycott of Manchester cloth and Liverpool salt.
- > People fasted, bathed in the Ganga, and marched in processions barefoot while singing Vande Mataram.
- > 'Amar Sonar Bangla,' (national anthem of modern-day Bangladesh) which was sung by huge crowds marching in the streets.
- > Rakhis were tied to each other's hands as a symbol of Bengal's two halves' unity.

Soon after, the movement spread to other parts of the country, with Tilak (Pune and Bombay), Lala Lajpat Rai, and Ajit Singh (Punjab), Syed Haider Raza (Delhi), and Chidambaram Pillai (Madras).

The anti-partition movement started as the campaign but became a trio of 3 movements named as anti-partition movement, Swadeshi and Boycott movement. The trio of these movements changed the national activities like:

- Dadabhai Naoroji declared self-government or swaraj at the Calcutta session (1906) to be the goal of the Congress.
- Extremists gave a call for passive resistance in addition to swadeshi and boycott which would include a boycott of government schools and colleges, government service, courts, legislative councils, municipalities, government titles, etc.
 - o "Political freedom is the lifebreath of a nation," declared Aurobindo. Thus, the Extremists gave the idea of India's independence the central place in India's politics.
- New Forms of Struggle emerged due to these movements like:
 - o Boycott of Foreign Goods: Boycott included boycott and public burning of foreign cloth, boycott of foreignmade salt or sugar.
 - o Public Meetings and Processions: Public meetings and processions emerged as major methods of mass mobilisation.
 - o Corps of Volunteers or 'Samitis': As a powerful means of mass mobilisation and to generate political consciousness among the masses through magic lantern lectures.
 - o Imaginative use of Traditional Popular Festivals and Melas: To reach out to the masses and spread political messages. Eg. Tilak's Ganapati and Shivaji festivals became a medium of Swadeshi propaganda.
 - o **Emphasis Given to Self-Reliance:** Self-reliance or 'atma shakti' was encouraged.
 - o Programme of Swadeshi or National Education: The movement to boycott British educational institutions. The National Council of Education was set up to organise a system of education—literary, scientific, and technical on national lines and under national control.
 - Swadeshi or Indigenous Enterprises: The swadeshi spirit also found expression in the establishment of swadeshi textile mills, soap and match factories, tanneries, banks, insurance companies, shops, etc.
 - o Impact in the Cultural Sphere: Tagore's Amar Sonar Bangla written on this occasion.
 - Gandhian techniques practised during the Swadeshi movement such as passive resistance, non-violent noncooperation, the call to fill the British jails, social reform, constructive work, boycott of foreign-made salt or sugar etc.

Other changes brought by the movement:

- > The Swadeshi and boycott movements encouraged mass participation (all sections of the society) in modern nationalist politics by a large section of society.
- For the first time, women came out of their homes and joined processions and picketing of foreign-made goods shops.
- The ideas of non cooperation and passive resistance, successfully applied many years later by Mahatma Gandhi, found their origin in early 20th century Swadeshi and boycott movements.

From above mentioned characteristic of the movement, it seems a turning point in modern Indian history because-

- It proved to be a 'leap forward' in more ways than one. Hitherto untouched sections—students, women, workers, some sections of urban and rural population—participated.
- > All the major trends of the national movement, from conservative moderation to political extremism, from revolutionary activities to incipient socialism, from petitions and prayers to passive resistance and non-cooperation emerged during the Swadeshi Movement.
- > The richness of national movement was not confined to the political sphere, but encompassed art, literature, science, and industry also.

- People were aroused from slumber and now they learned to take bold political positions and participate in new forms of political work.
- The swadeshi campaign undermined the hegemony of colonial ideas and institutions.
- > The future struggle was to draw heavily from the experience gained

All these outcomes of the movement guided the national movement under the numerous ideologies, personalities and techniques in varying strength.

Question 4. Despite India being a secular nation, communalism plays a major role. Analyse the factors contributing to the growth of communism in India. (150 words)

Approach:

- Introduce the answer with secularism and communalism.
- > Bring the number of factors that are responsible for the rise of communalism in India.
- > Mention the possible consequences of communism in India.
- > Suggest way forward to mitigate the menace of communalism.

Answer

- > **Secularism** being a constitutional ideology in India inscribed in the constitution of India. Indian secularism emphasises the Gandhian spirit of **Sarva Dharma Sambhava**.
- ldeology of **Commmunalism** divides the Indian society based on religious belief and emphasises interest of every religion are diverging and even hostile to each other.
- Despite of the constitutionally secular India, communalism grown in India because of several reason:

Factor behind the growth of communalism in India:

Historical Factor:

- Communalism in pre-1947 India: It was Driven by the selfish interest of the politically motivated people for the creation of Pakistan.
- In the 1960s, it had emerged as a separatist movement in the form of secession demand in the State of Punjab, driven by the Pakistan motivated Khalistani groups. Same situation was repeated in the Jammu and Kashmir during 1980s in form of separatist movement backed by the Pakistan on the name of particular religious identity.

Political Factor:

- o Inevitable exhaustion of political idealism (like secularism) generated by the national movement which inspired the people, particularly youth, and gave impetus to the secular ideas.
- o Growing laxity of the state apparatuses, especially the police, in their treatment of communal violence. Ex. Delhi Police were accused of apathy in 2020 Delhi riots.
- o Intrusion of religion into politics: Ex. INC (Secular political party) entered alliance with Mushlim League in Kerala and Akali Dal in Punjab in 1960s.
 - Justification of the minority communalism as understandable, democratic and labled them as less dangerous than majority communalism.
- Decision taken by political parties for vote bank politics in favour of religious orthodoxy by going against the decision of another pillar of Govt. like reversion of SC judgement in Shah Bano case even by means of constitutional amendment.

Socio-Economic Factors:

- o Communalisation of people by communal ideology and communal violence.
- Economic hardship, unemployment, social anxiety, inadequate opportunities for the youth also prevailed, a very fertile ground to direct youth against the interest of the whole society.

- o Contemporary factors like hate speech (Haridwar Dharma Sansad-hate speech 2021), paid news and Fake news increased the communalisation of people. Eg. 2020 Riots of Delhi.
- o Communalism and communal violence also evoked and strengthen by the anti-social elements by acts like eve teasing (2013, Muzaffarnagar riot), sexual asault, rape, etc.

The communal ideology and communalism can be presented and expressed in various ways. But it has very adverse consequences for the society:

Consequences of the communalism:

- > It creates an atmosphere of unrest both in society (communal violence and riots) and the human mind (poisoning rational and just thought processes).
- > The communal violence and ideology destroying lives and property and prevails unproductive atmosphere.
- Communalism also brought obstacles for adopting liberal and productive ideas in the society.
- > Sense of insecurity and violence may prevail migration of people to escape the adverse situations like Kashmiri Pandit migrated from valley and Communal migration from Kairana (a town in U.P.).
- > At ideological level it prevails Xenophobia.
- > In small towns and metros communal ideology brings ghettoization of the people of similar belief.

 Although communalism emerged with the emergence of society, its intensification must be prevented.

Steps must be taken to curtail the communal ideology in Indian Society:

- > Need to practise political idealism by the political parties as per constitutional spirit for the welfare of the society and public and refrain from bringing the religious and communal spirit in the political domain.
- > The law and order must be very agile to tackle the issues like eve teasing, harassment of girls, and communal news to curtail the situation on the spot and prevent a major loss like Muzaffar Nagar.
- Police personnel must be part of social media groups, pages related to their society to be vigilant of what is goingon in the society. Police dept must have ventured on the model of Kerala Police's CyberDome to curtail such issues.
- > Need to provide more teeth to the National Foundation for Communal Harmony established under MHA for composite and order society.
- > Social media giants must be accountable for communal, Fake and Paid news which have potential to ignite greater damage in society.
- > The institutions like the Election Commission must have more teeth to tackle the emerging communal issues in the elections.

Communism cannot be replaced from society but we must be watchful to keep it under control. We must adhere to the spirit of vivekananda i.e. The Christian is not to become a Hindu or a Buddhist, nor a Hindu or a Buddhist to become a Christian. But each must assimilate the spirit of the others and yet preserve his individuality and grow according to his own law of growth.

Question 5. Social empowerment in India need to focus on reinforcing the dignity of different sections of society. Comment. (150 words)

Approach:

- > Describe social empowerment and its importance for the deprived sections of the society.
- Mention the means of reinforcing the dignity of different sections of society.
- Conclude suitably.

Answer:

Social empowerment is the process of developing a sense of autonomy and self-confidence and acting individually and collectively to change social relationships and the institutions that exclude socially disadvantaged sections and keep them in poverty.

The social empowerment of different sections of population removes the age-old discrimination and suffering received by the weaker section and enables creation of a just, egalitarian and democratic society. This reinforces the principles and values of the constitution enshrined in preamble, fundamental rights and various other schedules.

The empowerment also contributes to the overall strength of a nation through economic contribution of all the sections, removing differences and friction among different communities and bringing harmony which works in tandem to social security and economic strength.

The socially disadvantaged groups in India include the SCs, STs, OBC, minorities and women.

Broader goals for ensuring dignity to socially disadvantaged

- > **Providing an enabling environment:** Social empowerment of these sections include creating an enabling environment that is conducive for these groups to exercise their rights freely, enjoy their privileges and be able to lead a life with confidence and dignity. For instance, institutions, public spaces and private relationships are free of biases and discriminations
- ➤ **Removal of disparities:** Ensuring removal of disparities, eliminating exploitation and suppression and providing protection to the disadvantaged groups through laws, institutional set-ups, positive discrimination to create a level playing field for all communities.
- > Inclusive growth: Ensuring that developmental benefits reach the socially disadvantaged through equitable distribution of resources at all levels.
- > Participatory development process: Ensuring the involvement of the socially disadvantaged groups in the process of planning not merely as beneficiaries but also as participants in the formulation of need-based projects, as well as their implementation.

Agents of Social Empowerment

- **Education:** Education is the basic requirement and the most effective instrument of social empowerment. Right to Education Act 2009, declared education as a fundamental right for children of 6-14 years of age.
- > Economic empowerment: Economic empowerment of the weaker sections of SCs, OBCs and minorities is being carried out through promotion of employment and income generating activities e.g. Skill India, Stand Up India for SCs/STs and women.
- > Social Justice: The Protection of Civil Rights (PCR) Act, 1955, and the SC and ST (Prevention of Atrocities) Act, 1989 (PoA Act) are two important legislations to address the problems of social discrimination, prevalence of social evils like untouchability and the increasing cases of exploitation and atrocities against disadvantaged groups
- ➤ **Political Empowerment:** 73rd and 74th constitutional amendments provide reservations for SCs/STs/OBCs/women paving way of their political empowerment by providing reservations in institutions of local governance of both rural and urban areas.
- > **Gender budgeting:** Gender Budgeting is a powerful tool for achieving gender mainstreaming so as to ensure that the benefits of development reach women as much as men. It ensures focused spending on health, nutrition, and education needs of women.
- > **Tribal sub-plan:** The Tribal Sub-Plan (TSP) is a strategy for the rapid Socio-economic development of tribal people. It forms a part of the annual Plan of a State/UT.
- > Minorities social empowerment: Minorities are empowered through schemes like Pradhan Mantri Jan Vikas Karyakram (PMJVK) which is designed to address the development deficits of the identified Minority Concentration Areas, Nai roshni for women by providing knowledge, tools and techniques for interacting with Government systems, banks etc.

Conclusion

- Socially disadvantaged groups often lack the skills and confidence to engage in community decision-making due to traditional social barriers.
- > Therefore, it is important to specifically target marginalised groups in order to ensure that they can be socially empowered ensuring inclusive and sustainable development.

Question 6. Empowerment of women is the panacea for population control. Comment. (150 Words)

Approach:

- Introduce the answer with concept of empowerment.
- Illustrate how women empowerment would help in population control.
- Conclude suitably.

Answer:

Empowerment should be viewed as a process in which all voices are encouraged to be heard for the ultimate goal of securing mutually beneficial solutions. Women empowerment is not only a solution to check population growth but is also important for overall progress of the society.

- > It is the process of becoming stronger and more confident, especially in controlling one's life and claiming one's rights.
- > India is set to become the most populous nation in 2023, 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.

Hence, India needs enough and concrete steps for sustained population growth to mitigate futuristic population explosion.

Lack of empowerment hamper both women's interest in society and create population evil for the society:

- > Women are at times financially weak to pay for needed family planning and health services.
- > 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.
 - o Eg. UNFPA estimates that more than 200 million women in developing countries have an unmet need for modern contraception, meaning they do not wish to become pregnant but are not using safe and effective contraceptive methods.
- Uneducated families cannot grasp the issues and problems caused by the increasing population rate.
- > 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.

Let's examine how women's empowerment in various sectors can help in achieving population control:

> Political Empowerment will increase women's participation in the political processes and enhance her voice at different platforms. Hence, women will be able to raise awareness about the need of small families and birth control and the associated benefits.

- > **Economic Empowerment** will lead to the participation of women in economic activities and will increase the family income and financial autonomy to women. It would check the population growth because a developed society needs less children than a backward one.
- > Subsequently Improved status and boost confidence of the women will lead to **Social Empowerment** of women and ultimately affect the decision- making structure in society and provide qualitative health and reproductive rights to women.
- > More women in STEM will lead her **Technological Empowerment** and address all the needs in a better manner. A working woman tends to have a proportionally lower fertility (TFR) rate than non-working e.g., Women in western Europe and women in Saudi Arabia.
- > Consequently, Self-Sufficiency among the women will result in their Empowered and they can have smaller families, which is suitable for effective population control.
- 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**.
- Family planning will not only improve family welfare but also contribute to achieving social prosperity and personal happiness.
- > Access to and control over re-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 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.

Question 7. What do you understand by learning poverty? Suggest ways how can India achieve SDG4? (150 Words)

Approach:

- Define Learning Poverty.
- > Show India's position in the context of learning poverty and suggest ways to achieve SDG4 and overcome learning poverty.
- Conclude suitably.

Answer:

As per World bank, Learning poverty is defined as being unable to read and understand a simple text by age 10. It is expected that by this age, children should be able to "independently and fluently read simple, short narrative and expository texts," "locate explicitly stated information" and "interpret and give some explanations about the key ideas in these texts." If they can do this, it allows them to 'read to learn' in later years.

It is different from the literacy definition provided by the Indian Govt. As per census 2011, a person aged seven and above, who can both read and write with understanding in any language, is treated as literate. A person, who can only read but cannot write, is not literate.

All foundational skills are important, but we focus on reading because:

- Reading is a student's gateway to learning in every other area
- > Reading proficiency (an easily understood measure of learning) can serve as a proxy for foundational learning in other subjects, in the same way that the absence of child stunting is a marker of healthy early childhood development.
- ➤ World Bank analysis shows that the global learning crisis is still severe one out of every two children in the developing world is not learning to read by late primary school age.

Learning Poverty in India and SDG 4:

- > Sustainable Development Goal (SDGs) 4 is to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".
- > In India, nearly 55% of children are 'learning-poor' today, in spite of high levels of enrolment. However, this is based on data from the country's National Large-Scale Assessment (NLSA) India has not participated in the World Bank's Learning and Assessment Platform (LeAP) diagnostics.

Some of the challenges in India's primary learning sphere:

Lack of infrastructure is a serious issue, as evidenced by dilapidated buildings, single-room classrooms, a lack of drinking water facilities, separate restrooms, and other aspects of the educational infrastructure.

Embezzlement and leaks:

• A large number of intermediaries are involved in the funding transfers from the central to state to local to school systems.

Educator calibre:

- o lack of teachers with the necessary qualifications, abilities, and knowledge to build a high-quality educational system.
 - Eg. Bengal teacher recruitment Scam raised the question on the quality of teachers.

> Non-Pedagogical burden:

• With unnecessary reports and administrative duties, the teachers are overworked. Eg. In the U.P. Teachers of primary school have the responsibility to buy milk and distribute it among the childrens.

> Paying poorly:

o Teachers receive pitiful salaries, which has an impact on their interest in and commitment to their jobs. In order to persuade the pupils to attend, they will look for alternative channels, such as coaching centres or tuition.

> The absence of teachers

• There are frequently teachers absent during class time. The issues are made worse by a lack of accountability and inadequate governance frameworks.

> High rates of dropout

School dropout rates are relatively high, particularly for female students.

Closed schools:

• Due to poor student enrollment, a shortage of teachers, and inadequate infrastructure, many schools are shuttered. Government schools face a lot of difficulty competing with private institutions.

Measures to reduce learning poverty:

- Open Schools and reach every child to ensure that all of them re-enrol.
- > Assess learning to know where kids are today.
- Prioritise teaching the fundamentals.
- > Increase catch-up learning. To achieve this, teachers will need to group students within the classroom not according to the grade or according to the age, but according to where they are.
- > Work on emotional support for both children and teachers.
- Reduce the digital divide by investing in not the software or the hardware but the entire digital ecosystem.
- Government needs to take measures to focus practical knowledge. And ensure all-round creative learning.
- > Various reforms need to recruit and train teachers who are passionate about teaching.
- > Our education must be all round development. It must be based on creativity rather than memorization. Practical or Visualised education must be promoted.

- > As all in-country efforts have failed, we should go in for a radical overhaul of our educational infrastructure with the help of countries that have an amazing record in providing quality school education Finland, for instance. We can surely afford to pay for that.
- > Providing universal quality education depends not on the performance of teachers alone but is the shared responsibility of several stakeholders: governments, schools, teachers, parents, the media and civil society, international organisations, and the private sector.
- > Skilling has to improve across higher education sectors and it has to be diverse. Let's not forget that only about 5% of the Indian workforce is trained in any sort of skills today; we are staring in the face of a demographic disaster if skill development is not undertaken.
- India's education system requires more flexibility between the general and technical tracks. It must focus more on building socio-behavioural skills like self-efficacy and teamwork.
- > Value education be introduced in pre-school and strengthened in primary.

Question 8. Differentiate between tropical and temperate cyclones. Discuss India's vulnerability with respect to cyclones. (150 Words)

Approach

- > Define tropical and temperate cyclones in the introduction.
- Mention the impact of cyclones on India and specifically highlighting India's vulnerability with respect to cyclones.
- > Conclude by giving the importance of mitigation and adaptation techniques as a wayforward.

Answer:

Tropical cyclone:

- > Tropical cyclone is an intense circular storm that originates over warm tropical oceans and is characterised by low atmospheric pressure, high winds, and heavy rain. They are known by different names:
- > Cyclones (Indian Ocean), Hurricanes (Atlantic), Typhoons (Western Pacific and South China Sea), willy-willies (Western Australia).

Temperate Cyclone:

- > Temperate cyclones are also known as Extra-tropical cyclones.
- > The direction of movement is from west to east and more pronounced in the winter seasons. It is in these latitude zones the polar and tropical air masses meet and form fronts.

Body

Major Differences between Temperate Cyclone and Tropical Cyclone

Tropical Cyclone		Temperate Cyclone	
>	It moves from east to west.	>	These cyclones move from west to east
>	It has an effect on a comparatively smaller area.	>	It affects a much larger area
>	Its wind speed is much higher and more damaging.	>	The velocity of air is comparatively lower
>	It forms only on seas with temperature more than 26-27 degree C and dissipate on reaching the land.	>	It can be formed on both land and sea
>	It doesn't last for more than 7 days	>	It can last for a duration of 15 to 20 days

India's Vulnerability with Tropical Cyclones:

> Most of India's cyclones formed the Bay of Bengal due to favourable climatic conditions in the region (cyclones

formed in South China Sea also moved to BoB). It makes the eastern coast of India more vulnerable to cyclones due to westward movement of cyclones under eastern jet streams.

- Low sediment coast, low coastal vegetation along the eastern coast enables most of the cyclone to penetrate inside the mainland and harm both humans and material.
- > On the western coast the region of Gujrat, Kerala and Karnataka are more vulnerable to tropical cyclones due to its curvature movement from Bay of Bengal to Arabian sea and the returning towards mainland India.
- > The infrastructure devoid eastern coast and the industrialised western coast, both have proportional vulnerabilities to cyclones for men and material respectively.
- > Economic losses due to Loss of livelihood for the fishermen and negative impact on the tourism industry.
- > Rural to Urban flood, destruction of the crop, prevalent waterborne disease is a number of challenges posed by the tropical cyclone in India.
 - o Some tropical cyclones like Cyclone Fani (2019), Titli (2018), Phailin (2013).

India's Vulnerability with Temperate Cyclones:

> Temperate cyclones enter India from the Mediterranean Sea in the winter season. These cause rainfall over the Northern plains and snowfall in the mountains in the months of December and January. They are very important for the cultivation of 'rabi' crops.

Vulnerabilities:

- > The Snowfall, avalanches in the hilly area of northern India are influenced by the Temperate cyclones.
- > Hail Storms in the winter season used to destroy the crop of mustard and other Rabi crops.
- > Increased the intensity of the cold due to western disturbance brings several medical complexities ranging from plains to hills like Hypothermia, first bite, chilblains, etc.
- > Occasionally, in hilly areas the rain caused by the western disturbance brings flood like situations (2015, Kashmir).

Measures need to be taken to mitigate the vulnerability of the people against the cyclones:

- India has to constantly upgrade its disaster mitigation and adaptation techniques with modern infrastructure and capacity development of the local people with support of the public agencies.
- > Need to develop coastal green infra as a first line of defence against disasters like cyclones and the tsunami.
- Need to increase cyclone Risk Mitigation project, increased disaster preparations including building shelters, evacuation planning, and strengthening embankments.
- > For adaptation and mitigation for farming communities need to adopt practices like Kuttanad technique and Koraput technique of farming.
 - Cyclones are the natural event we have to adopt ways to reduce its impact on humans.

Question 9. Gaganyaan is India's first manned space mission. How will this mission strengthen India's voice at the international forum for space regulation? Will India's space tourism take a new turn as a result of this? (150 Words)

Approach:

- > Introduce the Mission Gaganyaan.
- > Illustrate how the mission will strengthen India's voice for Space regulation.
- Discuss how the mission will boost India's space activities mainly tourism.
- Conclude suitably.

Answer:

> The Gaganyaan Programme envisages undertaking the demonstration of human spaceflight to Low Earth Orbit (LEO) in the short-term and will lay the foundation for a sustained Indian human space exploration programme in the long run.

Mission Gaganyan and India's voice at international space regulation:

- > India is a cooperative and responsible player in international domain, and her ethos of cooperation to regulate spatial activities reflected by its move for signing the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including:
 - o Moon and Other Celestial Bodies 1967 (the Outer Space Treaty) in 1967
 - o Convention on International Liability for Damage Caused by Space Objects 1972
 - Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space 1968, etc.
- ➤ Its growing space activities by both private players (Economic Survey Report 2022, total start-ups entering the Indian space sector are 101) and govt sector (ISRO, DRDO, etc.).
- India also accounts for a 2% share in the global space economy, and it will take an exponential boost in near future due to liberalised policy of the government and competitive environment by the venture of the private sector.
- India's extraordinary success in space like the moon and mars mission will be complemented by the Gaganyaan Mission and will make India the 4th nation of the world to create history.
- > These milestone and policy endeavour will strength the India's voice to persuade the space regulation policy at international stage in the interest of all and create a competitive environment and bring a new sustainable development goal i.e., "Life Above the Land".

Mission Gaganyaan and India's space tourism:

- > According to a **'Space Report' by Space Foundation**, the global economy rose to \$447 billion which is touted as a hike of 55% higher than a decade ago. **In 2020**, the commercial space activity globally grew 6.6% to nearly \$357 billion, representing close to 80% of the total space economy.
- India's share in the global space economy is only 2% and mostly driven by satellite launching activities.
- > To assume the futuristic growth in the sector and possibility of space tourism beyond the celestial body, the Indian public sector has taken several steps to bring the private players on board and prevail in the environment for space tourism. The steps taken by the public authorities like:
- > Spacecom Policy 2020: By ISRO to promote increased participation of commercial Indian industry.
- > IN-SPACE:
- > IN-SPACe was launched to provide a level playing field for private companies to use Indian space infrastructure.
 - o It acts as a single-point interface between Indian Space Research Organisation (ISRO), and everyone who wants to participate in space-related activities or use India's space resources.
- New Space India Limited (NSIL): Announced in Budget 2019, its aim is to use research and development carried out by ISRO over the years for commercial purposes through Indian industry partners.
- > Indian Space Association (ISpA): ISpA aspires to be the collective voice of the Indian Space industry.
- > **FDI:** Govt planning to introduce FDI in the Space sector.

Along with these policy steps the Mission Gaganyaan will boost the real progress in private space start-ups and space industrial players like:

- > The Human spaceflight programme (Gaganyaan programme) has both tangible and intangible benefits for the nation, which includes:
- > Progress towards a sustained and affordable **human and robotic programme** to explore the solar system and beyond.

- > Advanced technology capability for undertaking human space exploration, sample return missions and scientific exploration.
- > Future capability to actively collaborate in global space station development & to carry out scientific experiments of interest to the nation.
- > Unique opportunity to inspire and excite Indian youth and steer many students toward careers in science and technology towards challenging jobs that encourage knowledge, innovation and creativity.
- > Mission Gaganyaan will introduce new technologies in Indian Space domain like:
 - Human rated launch vehicle
 - Crew escape systems
 - o Crew selection and training and associated crew management activities
- As per the ISRO after the successful completion of Gaganyaan programme, the next step will focus towards achieving capability for a sustained human presence in space by activities associated with the Space station and it will be an extension of Gaganyaan Programme.

All these fusions of public-private, industry-academia, startups-industry, and skill-wisdom will introduce an era in the Indian space domain and it will boost the venture like Space station, Space tourism and other intercelestial space missions.

Question 10. Describe the major factors of soil formation and types of soils. What steps can be taken to mitigate soil degradation in India? (150 Words)

Approach

- > Define Soil, its type and its formation.
- > Suggest what steps can be taken to mitigate soil degradation in India:
- > Conclude suitably.

Answer:

- Soil is the mixture of rock debris and organic materials which develop on the earth's surface.
- A soil profile is a vertical cross-section of the soil, made of layers running parallel to the surface. These layers are known as soil horizons. It consists of three layers which are called horizons.
 - o 'Horizon A' (topmost zone) where organic materials have been incorporated.
 - 'Horizon B' (transition zone) between the 'horizon A' and C', and contains matter derived from below as well as from above.
 - 'Horizon C' is composed of the loose parent material.

There are several factors of the soil formation like:

- > The major factors affecting the formation of soil are divided among the active (Vegetation or life forms and Climate) and passive factors (Relief, parent material and Time).
 - O Besides these, human activities also influence it to a large extent.

Classification of Soils

> On the basis of genesis, colour, composition and location, the soils of India have been classified into: (i) Alluvial soils (ii) Black soils (iii) Red and Yellow soils (iv) Laterite soils (v) Arid soils (vi) Saline soils (vii) Peaty soils (viii) Forest soils.

Alluvial Soils

- > It is widespread in the northern plains and the river valleys (Spread over 40% area of the country).
- They are depositional soils (also called Azonal soil), transported and deposited by rivers and streams.

Black Soil

- > Black soil covers most of the Deccan Plateau. It is also known as the 'Regur Soil' or the 'Black Cotton Soil'.
- > Black soil retains the moisture for a very long time, which helps the crops, especially, the rain fed ones, to sustain even during the dry season

Red and Yellow Soil

- > It develops on crystalline igneous rocks in areas of low rainfall in the eastern and southern part of the Deccan Plateau.
- The soil develops a reddish colour due to a wide diffusion of iron in crystalline and metamorphic rocks. It looks yellow when it occurs in a hydrated form. The fine-grained (normally fertile), & coarse-grained soils (poor in fertility).

Laterite Soil

- > The laterite soils develop in areas with high temperature and high rainfall.
- > Hence, laterites are not suitable for cultivation. It is more suitable for tree crops like cashew nuts.
- ➤ Laterite soils are widely cut as bricks for use in house construction.

Arid Soil:

- Arid soils range from red to brown in colour and sandy in structure and saline in nature.
- > Lower horizons of the soil are occupied by 'kankar' layers because of the increasing calcium content downwards.
- > These soils are poor and contain little humus and organic matter. In some areas, the salt content is so high.

Saline Soils

- > They are also known as Usara soils, contain a larger proportion of sodium, potassium and magnesium, and thus, they are infertile.
- > Saline soils are more widespread in western Gujarat, deltas of the eastern coast and in Sundarban areas of West Bengal.

Peaty/marshy soil:

- Areas of heavy rainfall and high humidity.
- > A large quantity of dead organic matter/humus which makes the soil alkaline.
- Heavy soil with black colour.

Forest soil:

- > Regions of high rainfall.
- > Humus content is less and thus the soil is acidic.

Mountain soil:

- > In the mountain regions of the country.
- > Immature soil with low humus and acidic.

Soil Degradation

> Soil degradation can be defined as the decline in soil fertility. Soil conservation is a methodology to maintain soil fertility, prevent soil erosion and exhaustion, and improve the degraded condition of the soil.

Steps can be taken to mitigate soil degradation in India:

Lands with a slope gradient of 15-25 per cent should not be used for cultivation.

- Stop or limit ploughing experimenting with zero-tillage, also known as conservation agriculture.
- > Organic farmers who add compost and manure to the soil replenish nutrients while reducing flooding risk and capturing carbon.
- > Over-grazing and shifting cultivation: It should be regulated and controlled by educating villagers about the consequences.
- > Contour bunding, Contour terracing, regulated forestry, controlled grazing, cover cropping, mixed farming and crop rotation are some of the remedial measures which are often adopted to reduce soil erosion.
- > Gullies can be prevented by terracing and constructing a series of check dams (for large gullies).
- > In arid and semi-arid areas, efforts should be made to protect cultivable lands from encroachment by sand dunes through developing shelterbelts of trees and agroforestry.

The final responsibility for achieving the conservation of land will rest on the people who operate on it and receive the benefits.

Question 11. The Magadha empire was one of the most powerful and unique kingdoms in ancient times. Discuss. (250 Words)

Approach

- Introduce the answer with Magadha Empire.
- > Illustrate the things which had made the Magadha empire the most powerful and unique kingdoms in ancient times.
- > Conclude suitably.

Answer:

- > Janapada means the land where a Jana (a people, clan or tribe) sets its foot or settles. It is a word used in both Prakrit and Sanskrit.
- > One of the sixteen Mahajanapadas, or "Great Kingdoms" of the Second Urbanisation in the eastern Ganges Plain (600–200 BCE), Magadha was a great kingdom among the sixteen Mahajanapadas.
- ➤ Brihadratha, Pradyota, Haryanka, and the Shishunaga dynasties all ruled over Magadha between 682 and 544 BCE (413–345 BCE). Villages had their own assemblies run by their Gramakas, or local leaders. Executive, judicial, and military responsibilities made up their administrations.
- > Jainism and Buddhism both developed significantly in Magadha.

Magadha empire was one of the most powerful and unique kingdoms: The various factor of that contemporary time contributed to the greatness of the Mahajanapada of Magadha:

- > Ruthlessly ambitious and entrepreneur Kings: Magadha had rational kings which were mostly dedicated to expansion of the empire and causes of the kingdom. The kings were:
 - Bimbisara (558 BC 491 BC) was the first king to have a standing army and used marriage alliance to strengthen the king's relation with Mahajanapadas like Kosala and Lichhavi.
 - He had great diplomatic prestige (sent his physician Jiwak to his rival Ujjain to cure him of jaundice).
 - Availability of iron allowed him to develop advanced weapons and was the first kings to use elephants in the army. He also established a good administration.
 - Ajatshatru followed expansionist policy using modern machines e.g., he used war engines to throw stones like catapults (Mahashilakantaka) and Chariot with mace (Rathamusala).
 - He also conquered Varanasi and Vaishali to his kingdom and convened 1st Buddhist Council.
 - o Udayin: Built a fort at the confluence of the Ganga and Son rivers in Patliputra (now Patna).
 - Sisunaga: annexed Avanti and ended the long-term confrontation between Magada and Avanti.
 - O Kalasoka: presided over the second Buddhist Council in Vaishali.

- Mahapadma Nanda: He is called "India's first historical emperor" and conquered many kingdoms, including Kalinga.
- Dhana Nanda: He is the last ruler of Nanda. Alexander invaded northwestern India but refrained from entering
 in the magadha due to its powerful army.
- > **Geographical Factors:** Magadha was located in the upper and lower part of the Ganges Valley and surrounded by rivers on the three sides of Ganges, Son, and Campa (providing mercantile route and protection from enemy). The soil in this area is fertile.
 - o Rajgir (the capital) is strategically situated in a valley surrounded by seven hills (Cyclopean Wall is a 40 kilometer long stone wall encircling the entire Rajgir. It was built to protect the city from invaders and enemies).
- > Economic Factors: Magadha had huge deposits of copper and iron. It could easily control the trade (due to control over waterways).
 - o It had a large population that could be used for agriculture, mining, city building, and the military. The dominance of the Ganges meant economic hegemony.
- > Cultural Factors: Magadan society has an unorthodox character. Buddhism strengthened the liberal tradition. Society preferred trade and commerce, peace instead of war and rigidity.

> The administrative and Taxation Structure:

- o Parishad (a modified version of earlier Sabha and Samiti) was an advisory council of kings consisting exclusively of Brahmanas. There were Officials like:
 - Kammikas: Custom officials.
 - Shulk-adhyaksha: Toll officials.
 - Rajabhatas: Deputed to safeguard the lives and property of travellers.
- o Rulers had an efficient system to govern cities and collect tax like Bali (Tax) and Balisadhakas (As a tax collector).
- Raids on neighbouring states were recognised as a legitimate means of acquiring wealth, Magadha had dominated all the mahajanapadas of the contemporary time.

> Law and order:

- o In Magadha, first time civil and criminal laws were composed. Eg. Brahmanas began composing Sanskrit texts known as the Dharmasutras. These laid down norms for rulers (as well as for other social categories). Adultery was a criminal act.
- o Kings also collect taxes (one-sixth of the produce) and tribute from cultivators, traders and artisans.

> Trade and commerce:

- Early series of punch-marked coins called Nishka and Satamana were generally made up of Silver, though a few copper coins were also there.
- o Artisans and merchants organised themselves into their respective guilds. Sethi was a high-level businessman.
- Vessas (or merchant streets) where artisans and merchants live in fixed localities.
- Trade routes called Uttarapatha (Taxila to Rajagriha and later extended to Tamrilipti) and Dakshinapatha were under influence of the magadha.

> Social Set up:

- O Society was composed of both urban and rural communities.
 - Typical villages consisted of mixed castes, communities. Most of the villages were of this type:
 - **Suburban villages**: These were Craft villages, Chariotmakers' villages, Carpenter's village (Vaddhakigrama).
 - Border Villages (Aramika-grama): Situated on the periphery of the countryside
 - **Brahmadeyas**: Granted to Brahmanas (Brahamana used to persuade people to abide by the law and respect kings that prevent situations like civil wars).

All the Socio-politico-economic setup and geographical, entrepreneurial advantage made Magadha a dominant kingdom of ancient India. The archeological evidence and the religious texts like Budduhist, jainism and Ajivikas mentioned the grandeur of the Magadha king and kingdom.

Question 12. After 1857, the British used the rebellion as a new opportunity to curtail Indian aspirations and exploit India in order to benefit their selfish interests. Illustrate.

Approach

- Introduce the 1857 revolt.
- > Discuss how the policies of the British due to the 1857 revolt brought a new opportunity to curtail Indian aspirations and exploit India in order to benefit their selfish interests.
- Conclude suitably.

Answer:

- Revolt of 1857 was a product of the character and policies of colonial rule after 1757, and after which noteworthy changes took place in the British policy of ruling over India.
- > Lord Canning at a durbar at Allahabad in the 'Queen's Proclamation' issued on November 1, 1858.
- > As per the Queen's proclamation, there were numerous favourable provisions for the Indians like:
- The British promised to respect the dignity and rights of the native princes.
- > The people of India were promised freedom of religion without interference from British officials.
- > The proclamation also promised equal and impartial protection under law to all Indians, and equal opportunities in government services irrespective of race or creed.

With this proclamation britishers initiated numerous policies and strategies that were only to realise the selfish end of colonial power by exploiting the Indians and further curtail the opportunity for the Indians:

Rebellion as a new opportunity to curtail Indian aspirations and exploit India:

- No Indian was thought fit to deserve the king's commission and a new English recruit was considered superior to an Indian officer.
 - o All higher posts in the army and the artillery departments were reserved for the Europeans.
- > In the Army, the number of Indian soldiers was drastically reduced and European soldiers increased. It decreased employment opportunities for the Indian in the Army.
 - The commissions of 1859 and 1879 insisted on the principle of a one-third white army (as against 14 per cent before 1857).
- > The concept of divide and rule was adopted, separate units being created on the basis of caste/community/region, and labelling recruits as 'martial' races and non-martial race to bring enmity between the armed units and suppress both armed units and civilians, in case revolt raised in any section of the Indian.
- > Keeping the army away from the civilian population was also one of many such steps.
- Revolt of 1857 showed the glaring shortcomings in the Company's administration and its army, which they rectified promptly. It strengthened the army for further suppression of Indians.
- > The conservative reaction in England made the British Empire in India more autocratic; it began to deny the aspirations of the educated Indians for sharing power.
 - Indian Civil Service Act of 1861 rules framed for the conduct of the civil service examination had the effect of keeping the higher services a close preserve of the colonisers. Rules like:
 - Examination was held only in England (till 1921) in the English language, and was based on classical learning of Greek and Latin only.

- o The maximum permissible age was gradually reduced from 23 (in 1859) to 19 (1878).
- o All key positions of power and authority and those which were well-paid were occupied by the Europeans.

On Publication and media front:

- > Due to the emergency caused by the 1857 revolt, Licensing Act, 1857 imposed licensing restrictions in addition to the already existing registration procedure laid down by Metcalfe Act, and the government reserved the right to stop publication and circulation of any book, newspaper, or printed matter.
 - o To further suppress the voice against the bitter legacy of racial bitterness between the ruler and the ruled, after the 1857 revolt, the Vernacular Press Act, 1878 was designed to 'better control' the vernacular press and effectively punish and repress "seditious writing" in "publications in oriental languages". These Acts were directed against the press development in India.
- > Policy of Subordinate Union (1857–1935) on political front.
 - o The policy of annexation was abandoned but pushed a policy to punish or depose but not to annex.
 - Now the ruler inherited the gaddi not as a matter of right but as a gift from the paramount power, Britishers used to interfere in the internal spheres of states for British interest in India.
- > The British government had been encroached by modern developments in communication—railways, roads, telegraph, canals, post offices, press, and public opinion.
- > Curzon adopted a policy of patronage and 'intrusive surveillance' for Indian states.
- > The Butler Committee (1927) on relationship between the princely states and the government, given the following recommendations:

Economic Exploitation: After the 1860s was:

- > Economic analysts Dadabhai Naoroji, the 'Grand Old Man of India', put forward the theory of economic drain.
 - He said that the British transformed India into a supplier of foodstuffs and raw materials to the metropolis, a market for metropolitan manufacturers and a field for investment of British capital.
- > Economic Drain theory incorporated all threads of the nationalist critique that it denuded India of its productive capital.
- One-Way Free Trade and Tariff Policy.
- > The third stage of colonisation (began around the 1860s) is often described as the Era of Foreign Investments and International Competition for Colonies.
- > British rule was declared as permanent 'trusteeship' over the Indians and Indians were declared to be permanently immature-a 'child' people—needing British control and trusteeship (in the name of civilising a barbaric people—"the White Man's burden").

From the above arguments it shows that all these socio-economic, political and administrative changes made after the revolt of 1857 was directed only to exploit India in the selfish interest of colonial Britain and to further curtail the aspiration of Indians in India.

Question 13. Education policy of India is deeply rooted in its colonial past. Discuss how the British shaped India's education policies as per their interest.

Approach

- > Introduce the British interest in India and their education policies.
- Illustrate how the education policy brought by Britishers was mainly in their selfish interest.
- Conclude suitably.

Answer:

- > Britishers came as traders in India and had no intention to promote education in India. With time the politico-economic influence of the East India Company increased and then they initiated the education policy as per their interest in India. Like:
 - The Calcutta Madrasa (by Warren Hastings in 1781) and Sanskrit College (by Jonathan Duncan in 1791) to study of Muslim and Hindu law respectively. Because understanding of socio-religious culture was necessary to form policy so that their interest remained intact in India.
 - Fort William College was set up by Wellesley in 1800 for training of civil servants of the Company in languages and customs of Indians (closed in 1802).
- > Enlightened Indians and missionaries started exerting pressure on the government to promote modern, secular, Western education, as they thought that Western education was the remedy for social, economic, and political ills of the country. Missionaries thought that modern education would destroy the faith of Indians in their own religions and they would take to Christianity.

To realise the above interest Britishers brought education policies like:

- > The Charter Act of 1813, promoting knowledge of modern sciences in the country.
- > Lord Macaulay's Minute (1835) said that limited government resources were used to teach Western sciences and literature through the English medium alone.
 - The British planned to educate a small section of upper and middle classes, thus creating a class "Indian in blood and colour but English in tastes, in opinions, in morals and in intellect" who would act as interpreters between the government and masses.
- **Efforts of Thomson:** James Thomson, governor of NW Provinces (1843-53), brought the scheme of village education through vernacular languages to train personnel for the newly set up Revenue and Public Works Department.
- > Wood's Dispatch (1854): Considered the "Magna Carta of English Education in India", in light of increasing politicoeconomic dominance of East India Company (EIC) in India and unknowingly ideological support of Indians was necessary for the bright future of EIC in India. For mentioned interest it has provisions like:
 - Responsibility for education of the masses
 - Use of vernacular in education
 - Secular education and grants-in-aid to encourage private enterprise
- > In 1857 universities at Calcutta, Bombay, and Madras were set up, and later, departments of education were set up in all provinces.
- > The above-mentioned schemes mostly neglected primary education because it was economically non beneficial to the EIC.
- > Due to agitation in favour of modern education by early nationalist and later by INC (Indian National Congress) britishers taken several policies for education even after the takeover of crown (aftermath of 1857 revolution) Like:
- > **Hunter Education Commission (1882–83):** It recommended state's special care for improvement of primary education, but next two decades saw rapid growth and expansion of secondary and collegiate education with the participation of Indians and no significant progress on primary education by the Britishers.
- Indian Universities Act, 1904: In 1902, Raleigh Commission was set up. Based on its recommendations, the Act was passed in 1904. Act had provided the greater control of government over universities like:
 - the number of fellows of a university and their period in office were reduced, and most fellows were to be nominated by the government;
 - o government was to have powers to veto universities' senate regulations and could amend these regulations or pass regulations on its own;
 - Curzon justified greater control over universities in the name of quality and efficiency, but actually sought to restrict education and to discipline the educated towards loyalty to the government.

- The nationalists saw in it an attempt to strengthen imperialism and to sabotage nationalist feelings. **Gokhale called it a "retrograde measure"**.
- > Government Resolution on Education Policy—1913: It came because, in 1906, the state of Baroda introduced compulsory primary education throughout its territories.
 - National leaders urged the government to do so for British India like Gokhale, who raised the issue in the Imperial Legislative Council. Due to this the government came up with its Education Policy in 1913.
 - The government refused to take up the responsibility of compulsory education, but shifted responsibility to the provincial governments and Private individuals.
- Education Under Dyarchy: Under Montagu-Chelmsford reforms, education was shifted to provincial ministries.
 - o Government grants sanctioned since 1902 were stopped.
 - Financial difficulties prevented any substantial expansion but still education grew, especially under philanthropic Efforts.
- > In 1929 Hartog Committee presented a gloomy picture of primary education.
- > Sargent Plan of Education 1944: It plans to bring similar education in India like in Britain because of the weak position of British and strengthening position of Nationalist leaders in India. The plan was mainly to depict the good interest of Indians by Britishers.
 - o It was brought to the development of Indian education after World War II.
 - o The Sargent plan was not acceptable to many Indian educationists.
 - o The cost of implementing the plan also seemed to be exorbitant.

Although Britishers brought every educational policy only in their selfish interest but unintentionally the policy brought various noble values in the Indian society and the education system like secularism, equal opportunity of education for all irrespective of gender, religion and caste. Eventually, due to the effect of these policies, Indian society adopted various western-liberal values.

Question 14. Post World War II, there was a trend of decolonisation. Discuss the factors and objective behind decolonisation. Do you agree that the world has achieved decolonisation in a real sense? (250 Words)

Approach

- Introduced concepts of colonisation and decolonisation.
- > Discuss the factors behind the decolonisation and objective behind them.
- > Analyse whether the decolonisation has provided self-rule, in real sense, to the newly independent countries.
- Conclude suitably.

Answer:

Colonialism is a process of a nation establishing and maintaining its dominations of overseas territories. Decolonisation is the undoing of colonialism. The concept of decolonisation, in particular, applies to the dismantlement of European colonies in Africa and Asia towards the second half of the 20th century.

The great colonial powers divested themselves of their subordinate possessions, not because internal pressures within their colonies left them with no other choice, but in the wake of a revisionist process whereby imperial roles came to be seen as incongruent with more 'modern' goals in the fields of foreign and economic policy.

> Several European countries had colonies in Africa and Asia like Belgium (Congo, Rwanda), Portuguese (Angola, Mozambique and Guinea), Britain (Largest empire in Asia from middle east to east and southeast Asia including India and China.) etc.

Factor and Objective Behind Decolonization:

- Nationalist movement in colonial countries like India (against Britain), Vietnam (against French), Etc. it had forced colonial power to grant significant power sharing with natives like formation of Interim govt in India.
- The Effects of World War 2 (WW2) weakened the colonial powers and also revealed their weakness from military, ideological and economic context (colonial powers were unable to sustain the empire anymore, by force). E.g., In WW2, Militarily, Japan and Egypt defeated Britain and Italy respectively.
- African and African had demanded greater social and political rights due to their participation in WW2 for European
- > Effect of liberal ideas like 1941 Atlantic Charter between the USA and Britain regarding prevention of imperialism and colonialism, right to choose their own form of government. It raises demand for implementation of the spirit of Atlantic charter in the colonies as well e.g. In India by nationalist leaders.
- > Pressure on European colonial powers by other victors of WW2 like USSR, China and USA for the decolonisation on the name of free trade. Process was accelerated by the formation of UNO.
- > Pan-Africanism, the idea that unified peoples of African descent for common interests. Pan-Africanism as a political or cultural movement by African global diaspora ignited demand for independence and de-colonialism.
- > Politico-Economic interests of powers like the USA raised demand for decolonisation for colonies to prevent the spread of communism and to facilitate free trade.

After the effort of various stakeholders, the colonies got independence sooner or later after WW2. Although prima facie it seems that all the nations of the world have sovereign authority over its people and their decisions but in reality, countries (less developed and developing) yet to achieve sovereignty and independence.

Factors which reflect the present conditions of the countries:

- Neo-colonialism is the practice of (mainly economic) exploitation and domination of independent but economically backward countries, by powerful countries. E.g., the Suez Canal Crisis of 1956 was due to opposition to Neocolonialism by Egypt.
- Neo-imperialism is domination and sometimes even hegemony over others primarily by way of formally free legal agreements, economic power, and cultural influence. E.g. Western economic and cultural dominance on Asian and African countries like Japan and South Korea completely westernised themself. Many African nations have lost their native languages and became Francophone countries.
- Dominance of western nations over international financial (World Bank), monetary (IMF), Judicial (ICJ) and Institution for Peace and Security (UNSC) to extract undue advantage from newly independent nations in financial and economic terms. Like the US led Iraq invasion on the name of Weapon of mass destruction, non-implementation of the verdict of ICJ like China in case of South China Sea.
- Lobbying and campaigning to realise the selfish interest by the stronger nation and violate the sovereign decision making of the newly independent countries. Eg. Like propagation of free market economy in eastern europe and southern america though it harmed the nation in form of shock therapy, it destabilised the local economy.
- Newly predatory techniques in international relations like Debt Trap diplomacy bringing generations in the poverty of smaller nations buy the stronger one. Eg. Economic crisis of SriLanka and Pakistan.

It is crystal clear from the above arguments that the international system works in the form of predator and prey philosophy and not in zeal of cooperation among the nations for the wellbeing of the respective society. So, we need to develop independent and neutral international organisations that must work by considering individuals in the centre of policy and refrain from campaigning and lobbying for or against the particular ideology.

Question 15. Highlighting the causes and associated issues with internal migration in India, discuss the need for a national policy on internal migration. (250 words)

Approach:

- > Define Migration and give its types with special emphasis on trend of internal migration
- Also list down the causes of migration, issues faced by migrants and steps taken by the government to address the issue of migrants.
- > Discuss how a national migration policy will help tackle migration issues.
- Conclude suitably.

Answer:

As per UN, a migrant is any person who is moving or has moved across an international border or within a State away from his/her habitual place of residence.

Migration is the movement of people from one place to another. It can be over a short or long distance, be short-term or permanent, voluntary, or forced, intranational or international.

According to the Economic Survey 2016-17 in the last five years from 2011 to 2016, an average of nine million people migrated between states within India every year for either education or work. There are several factors responsible for migration, like:

Push and pull factors

- A pull factor is a feature or event that attracts a person to move to another area.
 - Pull factors include things like better opportunities in that area like education, job prospects, higher quality of life, security, freedom etc.
 - o The core pull factors of migration are employment (in context of men) and marriage (in context of women).
- > Push factors are those that drive people away from that place such as war, famine, natural hazards such as earthquakes, tornadoes, and hurricanes, threat to life, repressive state, no job or educational facilities, difficult and harsh living conditions etc.
 - o Insurgency, Naxalism, terrorism and militant groups in modem times force people to move out of their home.

Trend of Internal Migration in India:

- > As per census of India 2011, spatial Variation in Migration
 - Some states like Maharashtra, Delhi, Gujarat and Haryana attract migrants from other states such as Uttar Pradesh, Bihar, Rajasthan, etc. Maharashtra occupied first place among migrants, followed by Delhi, Gujarat and Haryana.
 - O Uttar Pradesh had the largest number of net out-migrants from the state.

Benefits of migration

- > The areas of destinations benefit due to the reduction in the cost of production, availability of the human resource, rising productivity, size of consumer and capital market.
- > At the same time, areas of origin also benefit through the flow of remittances, information, and innovations influencing the households and people left behind.

Issues related to migration

- ➤ **Low quality jobs**: Migrants mostly dominate the low-paying, hazardous and informal market jobs in key sectors in urban destinations, such as construction, hotel, textile, manufacturing, transportation, services, domestic work etc.
- Access to employment: Certain states have introduced domicile requirements with regard to employment. This puts migrants at a disadvantage.

- > Housing and sanitation: One of the key issues with regard to housing is poor supply, for both ownership and rental. Short-term migrants do not have access to short-duration accommodation. So, migrants live in overcrowded colonies in unhygienic conditions.
- > Exploitation and intimidation: Usually migrants are exploited at the behest of majoritarian native populations, they are targets of social profiling, stereotyping, abuse and are made to work under exploitative conditions with no social security cover. For ex: Gujarat migrant crisis.
- > Lack of portability of benefits: Migrants registered to claim access to benefits at one location lose access upon migration to a different location. This is especially true of access to entitlements under the PDS. Ration card is required to access benefits under the PDS is issued by state governments and is not portable across states.

Steps taken by govt to tackle the issue of migration:

- > Shyama Prasad Mukherji Rurban Mission (SPMRM): to deliver integrated project-based infrastructure in the rural areas, and prevent rural to urban migration.
- > One Nation One Ration Card (ONORC): To make food security portable throughout the country under National Food Security Act (NFSA) beneficiaries, especially migrant beneficiaries.
- > Skill India Mission: to train people in different skills of vocational training and certification of Indian youth for a better livelihood and respect in the society.
- > ShramShakti- a National Migration Support Portal: launched to collect data related to tribal migrant workers and link them with the existing welfare schemes.

Although govt has taken several steps in context migrants but need of a comprehensive National Migration Policy is yet to formulated:

Need for National Migration Policy

- To address the issues related to migration it is necessary to have a national policy on migration.
- > A national policy will help in addressing the issues related to the working condition of the migrants, their wages.
- > It will help ensure social protection and medical benefits to migrant workers in the place they migrated to.
- > It will help in addressing the issue of access to benefits such as PDS under legal and social entitlements (such as PDS) at their source location.

Thus, a National Policy on internal policy must be framed to address all the issues faced by migrants and other stakeholders involved in facilitating the benefits to migrants including public, private and civil society and change the migration as an issue to movers of economy as a whole.

Question 16. The caste system, in Indian society, has changed in its form and representation in recent times. Do you agree? (250 words)

Approach

- Describe the caste system as a salient feature of Indian society.
- Highlight change in form and representation of the caste system through illustrations.
- Conclude suitably.

Answer:

Caste as a social stratification system is a salient feature of Indian society. Traditionally, caste system is defined as a system of hierarchically arranged endogamous social groups according to purity and pollution of occupation which is hereditarily fixed in India. To a very large extent the caste system has changed in its form and representation in recent times.

Change in Caste system's Form and Representation:

- > Change in the occupational role: Due to industrialisation and urbanisation, the hereditary association between occupation and caste has been broken. An individual is free to choose his occupation as per his/her merits and skills.
- > Inter-caste marriage: The relevance of endogamy feature of caste is decreasing as there is an increase in inter-caste marriages.
- > Caste as a tool for political mobilisation: Caste identity is being used for political mobilisation. E.g. Bahujan Samaj Party. Further, most of the political parties allot tickets after taking careful analysis of caste arithmetic of the region.
- > Caste as pressure groups: Caste is being used as pressure groups for seeking favourable changes in policies e.g., demands for affirmative action by Patels of Gujarat, Marathas of Maharashtra and Jats of Haryana.
- > Social and behaviour change: Traditionally, under the caste system, elaborate restrictions related to food sharing have been followed. In recent times, these restrictions are getting diluted due to various factors like migration, modern values, westernisation, globalisation etc.
- > Constitutional safeguards for equality (Article 14), against untouchability (Article 17) and discrimination (Article 15) have largely attempted to remove the hierarchical manifestations of the caste system in the country. Supported by these measures, in recent times the legislative orientation towards the caste system is changing.
- > Increasing caste associations: Caste is playing an important role as a basis for the formation of new groups. These caste associations are important agencies for the mobilisation and coordination of collective effort to achieve the goals of their members.

Conclusion

- > While the manifestation of the caste system has changed to a large extent in recent times, the system itself has not changed much.
 - For example even though untouchability and caste-based discrimination is barred under the Constitution of India, occupations like manual scavenging have the majority of workers from lower castes.
- > Though caste groups **like Khap Panchayats** have been brought under the scrutiny of the judiciary, the expression of social exclusion and maintaining the caste-based division by the communities has however not vanished but has changed to become more subtle. For example-
 - The matrimonial advertisements are frequent in the newspapers that especially demand brides and grooms from particular communities.
- Even religions that do not follow caste systems like Muslims and Christianity have observed caste-like discrimination.

 Dalits who have converted to Christianity have separate graveyards in States like Kerala.
 - Considering that these divisions offer solidarity and psychological strength to various marginalized groups, even if the caste-based discrimination is diffused through the legislative enforcement the divisions of identity will be difficult to erase.

Question 17. It is not only the destruction of law and order that is perpetrated by mob violence but also the malignation of society's history and civics. Comment. (250 words)

Approach

- > Briefly highlight the current spate of mob violence in introduction.
- > Discuss the phenomenon of mob lynching vis-à-vis law and order, violation of rights (civics) and India's traditional pluralistic and composite culture characteristic.
- > Give way forward.

Answer:

Introduction

- > There has been a spate of mob lynchings in recent times on mere suspicion of beef-eating, child kidnapping etc. in various parts of the country, fuelled by agency of social media, fake news, increased radicalisation and fanaticism in society, apathetic or incapable administration and a mercurial population.
- These events have raised questions on not only the institutional capacity to enforce law and order but wider questions regarding history and civics of Indian society, its social fabric and spirit of tolerance, brotherhood.

Body

Reasons:

- > It is the state's responsibility to enforce rule of law rather than people enforcing vigilantism resulting in mob violence. Moreover, state agencies should be proactive against any such vigilantism and prevent such crimes at first instance.
- > However, the problem of mob violence has continued to grow due to the following reasons:
 - o Complicity or indifference of law enforcement agents.
 - o Police reforms despite Model Police Act 2006 and SC instructions in Prakash Singh case remain unimplemented keeping police inept and under political pressure.
 - o Failure of administration in taking timely and adequate action against such incidents, has allowed these crimes to grow with impunity in pockets of the country.
 - o Failure of authorities to contain circulation of misleading messages and rumours, through social media.
 - o Lack of awareness among masses who get influenced by such fake news and misleading rhetoric.

Concerns:

- > India has always prided itself on being a peaceful nation with a composite cultural ethos, where, since centuries different communities have resided alongside peacefully.
- > However, the recent spate of mob lynchings has served to polarise this communal harmony. Mob lynching based on identity discriminates against a whole community and violates Fundamental Rights provided by the Constitution of India.
- Certain groups, religious minorities and Dalits, are particularly vulnerable to such crimes due to social prejudices and institutional apathy to weaker sections, which is a blot on secular, inclusive cultural fabric of India and question mark on the ethos of our constitution. India's historical image as a tolerant, pluralist society is negatively impacted.
- > Being a democratic, secular and plural society, India can ill afford to let such crimes continue with compunction, and the responsibility falls on both the government and society to bring in the sense of justice and security to its marginalised and minority sections.

Way Forward:

- As recommended by the Supreme Court, the Parliament should enact a new anti-lynching law.
- > The Court has directed state governments to appoint police officers, not below the rank of SP as nodal officers in charge of preventing mob violence. The implementation of this direction should be followed diligently.

Question 18. How would you describe Operational Oceanography? Describe how it would benefit a country such as India. (250 words)

Approach:

- Define the term Operational Oceanography and its applications.
- > Substantiate with examples, the benefits that India can have from Operational Oceanography
- Conclude by stating recent steps taken by India in this direction.

Answer:

The operational oceanography is an activity of conducting systematic oceanographic studies towards providing information services to various sectors viz. fisherman, disaster management, shipping, ports, coastal states, navy, coast guard, environment, offshore industries for conducting their day-to-day operations.

In simple terms, it is like weather monitoring and forecasting for the ocean which can provide estimates of essential ocean variables like sea level, temperature, currents, salinity etc. of the present and the future, as well as for the past.

- Operational Oceanography can help countries multidimensionally like:
 - Providing potential fishing zones advisories to fishermen, ocean state forecasts for mariners, tsunami & storm surge early warnings
 - o Providing warnings about hazards like coastal floods due to cyclones, storm impacts, harmful algal blooms and contaminants.
 - o Providing information about sea state conditions, optimum routes for ships, prediction of primary productivity, ocean currents, ocean climate variability, and modelling of and response to oil spills and dredging.
- Apart from these benefits, Operational oceanography can aid India in various sectors like:
 - o It can help India to forge cooperation and improve engagement among the countries of the Indian Ocean, including South Asian and African states bordering the Indian Ocean.
 - It can also help India in achieving Sustainable Development Goal-14 (SDG 14) related to building marine scientific research capacity which will further fulfil India's commitment to support Small Island Developing States, Least Developed Countries.
- Also, operational oceanography is expected to increase ancillary development leading to employment generation in India.

Thus, citing the importance of operational oceanography, the Indian government has inaugurated a UNESCO Category 2, International Training Centre for Operational Oceanography.

The establishment of the centre would respond to the worldwide increasing need to build technical and management capacity to address marine and coastal sustainability issues and prepare the region for and react efficiently to marine natural hazards.

Question 19. Analyse the various theories tried to explain the distribution of ocean and the continents? (250 Words)

Approach

- Introduce the concept of distribution of first order feature on the earth.
- > Illustrate the number of theories to explain the distribution of the continents and oceans on the earth with the contribution and weakness of each theory as well.
- Conclude Suitably.

Answer:

- > Continents and Ocean basins being fundamental relief features of the globe are considered as 'relief features of the first order'.
- The distribution of the continents and the oceans is explained by the number of hypotheses and theories ranging from tetrahedral hypothesis, Continent Drift theories, and Plate Tectonic theory, etc.

Some of the theories:

Tetrahedral Hypothesis of Lowthian Green (1875):

- > It is based on geometrical principles and characteristics of tetrahedral. It has explained:
- Dominance of land in the northern and water areas in the southern hemisphere.

- Triangular shape of the continents and oceans.
- Ocean at north pole and Continents at the south pole.
- Location of the chain of folded mountains around the pacific oceans.
 - o Balance of earth in the form of tetrahedral shape, permanency of continents and oceans are some of the arguments that criticised the theory and paved the way for the Continent Drift Theory of Taylor.

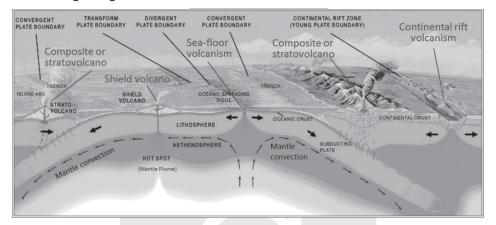
Continent Drift Theory of Taylor:

- > F.B. Taylor's concept of 'horizontal displacement of the continents' to explain the origin of the folded mountains of the tertiary period.
- He said:
 - o In the Cretaceous period, there were two land masses called Laurasia and Gondwanaland along with north and south poles respectively.
 - o Taylor's continents moved towards the equatorward and westward under the tidal force of the moon.
 - o Movement of land mass resulted in tensional forces which caused stretching, splitting and rupture in the landmass.
 - o Gondwana splitted into a number of the continents and islands.
 - Movement of Laurasia towards the south formed the Alps, Caucasus, and Himalayan.
- ➤ The theory of Taylor was criticised on the following grounds like:
 - He made the continents move at a very large scale but it required little movement to build present mountains.
 - o If the tidal force of the moon can move such large continents, then it might put a break on the rotary motion of the earth.
- > Although the theory of F.B. Taylor is not acceptable but his hypothesis raised a voice against the concept of permanency of continents and ocean basins.

Continent Drift Theory of Wegener (1912):

- > Main objective behind his displacement hypothesis was to explain the global climate changes that took place in geological time of earth.
- > Continental or sialic masses were floating on sima without any resistance offered by sima.
- ► He had also advocated the concept of a single landmass (Pangaea).
- Subsequent division in Pangaea eventually resulted in the present distribution of the landmass.
 - Evidence in Support of the Continental Drift
 - The Matching of Continents: E.g. The shorelines of Africa and South America (in reality both of the continents can't be refitted).
 - Rocks of Same Age Across the Oceans as per radiometric dating.
 - Tillite: The sediments from India are known to have its counterparts in six different landmasses of the Southern Hemisphere.
 - Placer Deposits: The occurrence of rich placer deposits of gold in the Ghana coast came from the gold bearing veins in Brazil.
 - Distribution of Fossils: When identical species are found on either side of the marine barriers, a problem arises regarding accounting for such distribution.
- > Wegner's hypothesis assumed that equatorward movement of the sialic (continental) block was caused by the gravitational differential force and force of buoyancy (Earlier he said that Sial is floating on the sima without any friction, a contrasting view).
- > Westward movement was caused by the tidal force of the sun and the moon (in reality not sufficient to drag continents).

- > Horizontal displacement of the continents, a central theme of Wegener's theory retained and leads to the Plate Tectonic Theory.
 - Plate Tectonic Theory (PTT): H. Hess postulated the concept of the plate tectonic theory in 1960.
- > Concept of the continental drift and the sea floor spreading were the main concepts behind the PTT.
- > Theory postulated the **Paving Stone Hypothesis** where ocean crusts are newly formed at mid-oceanic ridge and destroyed at the trenches.
- > It divides the plates margins (All tectonic activities occur along the plate margins) in to:
- > Constructive Plate Margins: Eg. Mid Oceanic Ridge of Atlantic.
- > Destructive Plate Margins: Eg. Ring of Fire around the Pacific.
- > Conservative Plate Margins: Eg. Plates of Indian and Antarctica.



- > The moving molten magma is considered as the driving force behind the motion of the plate in the plate tectonic theory.
- > The hypothesis of plate tectonics is considered the most reasonable and acceptable theory till date to explain the motion of plates and formation of the different relief features of the first order.

Hence, we can conclude that the PTT is last in the chain of the theories and the most acceptable one as well.

Question 20. How far do you agree that cultivation of agroclimatic specific crops and formalisation of local food processing industries/units mitigate twin challenges of unremunerative farming and problem of food wastage? (250 Words)

Approach

- > Introduce the food wastage in India and unremunerative farming in India.
- Mention the significance of the cultivation of the crops as per Agro-climatic region and formalization of local food Units to make the farming more remunerative. Conclude Suitably.

Answer

- ➤ The UN Food and Agriculture Organisation has highlighted that around 40% of the food produced in India is either lost or wasted. It is further estimated that the value of food wastage in India is around ₹92,000 crores per annum.
- ➤ The "Land and Livestock Holdings of Households and Situation Assessment of Agricultural Households" survey of NSO revealed average monthly income per agricultural household is ₹ 10218 in 2021.
- > Crop income shares only 37 % of farmer's income and it is less than wage income of the farmer i.e., 40%. Data shows farmers as labour due to its income source. It shows the unremunerative farming in India.
- Farmers in India mainly face two challenges like higher input cost and lower remuneration of the agri-produce. These twin challenges can be tackled by the practices of the regional cropping pattern as per the agro-ecology of the

region and formalisation of local food processing industries/units to maximise the realisation of the value of the agri-produce.

- > Crops as per Agro-climatic region: It has immense potential to reduce the input cost in the farming due to inherent qualities and advantage of the crops like:
 - It reduces the inputs cost in the crops which could have been required if crops of the different ecological region have been grown in the different region like Rice in the drought prone region of Punjab and Haryana required immense irrigation facilities and subsequent drop in the water level may disturb the generational water equity for the future need.
 - E.g., growing millets in the RAJ, PJ, HR and growing rice in WB, Odisha, and Kerala need very less input and highest percentage growth.
 - o It will reduce the chances of the uncertain change in nature like mysterious dwarfing disease hitting paddy crops in Punjab & Haryana (affecting height growth and yield), Changes in monsoonal rain patterns like (delay arrival, early withdrawal, low rainfall or rain pouring etc.) even when same paddy crop is flourishing in the original agro-ecological region of the paddy and same is also true for the other crops.
 - o Increasing hybridisation and emergence of the genetic modified (GM) seeds, apart from being economic cost, these seeds bring farmers dependency on the Agri-corporates due to emergence of suicide seed, and threat to the Agri-ecology by the GM seeds. The preference to the regional crops with indigenous seed (they are more tolerant to the regional adverse climate and disease) the above-mentioned problem could be solved.
 - The crops of different regions have large residual remains of the chemicals and bring rare diseases to the masses like cancer problems in the Punjab and increased the out-of-pocket expenditure on health and reduced the absolute income.
 - o The emergence of the competitive and marketing concept like Geographical indication in Agri-Products and produce, the regional and organic crops can be monetising at the lucrative rate even with little effort and increase the value realisation to the farmers. Eg. Manipuri Black Rice, Kandhamal Haldi Odisha.

Formalisation of local food processing industries/units (FPI):

- > The Food Processing Industry (FPI) is promoting linkages between the two pillars of the economy, i.e. agriculture and industry. Eg. Amul cooperatives.
- > **Doubling of farmers' income:** With the rise in demand for agri-products there will be commensurate rise in the price paid to the farmer, thereby increasing the income.
- > Reduce malnutrition: Processed foods when fortified with vitamins and minerals can reduce the nutritional gap in the population.
- > Reduce food wastage: UN estimates that 40% of production is wasted. Similarly, NITI Aayog estimated annual post-harvest losses of close to Rs 90,000 crore.
- > Boosts Trade and Earns Foreign exchange: It is an important source of foreign exchange. For e.g., Indian Basmati rice is in great demand in Middle Eastern countries.
- > **Curbing Migration:** Food Processing being a **labour-intensive industry** will provide localised employment opportunities and thus will reduce the rural to urban migration.
- > Curbing Food Inflation: Processing increases the shelf life of the food thus keeping supplies in tune with the demand thereby controlling food-inflation. For e.g., Frozen Safal peas are available throughout the year and farmers have a choice either to sell or store for sale in off season.
- > **Crop-diversification:** Food processing will require different types of inputs thus creating an incentive for the farmer to grow and diversify crops, **it directly supports regional cropping patterns.**

All the above-mentioned arguments show that regional cropping patterns and FPIs have immense potential either in decreasing the input cost of the farmers in the crops or will increase the marketing value of the produce and solve the twin challenges of the Indian farming sector.