

Mains Marathon Compilation

January, 2020

GENERAL STUDIES 1

- Q.1) Explain various types of revolutions that have taken place in Agriculture after Independence in India. How have these revolutions helped in poverty alleviation and food security in India?
- Q.2) With a coastline expanding around 7500 Km India needs to replicate the successes in space exploration to the oceans as well. Discuss the need and importance of ocean exploration for India.
- Q.3) The leadership provided by the USA in shaping the global order post WW2 is somewhat on a decline. Discuss various reasons for the declining power of the U.S. and its implications for India.
- Q.4) Discuss the contribution of Maulana Abul Kalam Azad to pre-and post-independent India.
- Q.5) Discuss the need and importance of preserving India's linguistic diversity. What measures are needed for the same?
- Q.6) What do you understand by the term radicalisation? What are various reasons for growing radicalisation in the society? Discuss its consequences and measures needed.
- Q.7) What is the Indian Ocean Dipole? What are its characteristic features? Discuss its impact on Indian monsoon.
- Q.8) What are the major varieties of coal in India? Discuss various issues associated with coal mining in India?
- Q.9) Analyse the elements of urban civilisation in the Harappan Culture. What factors were responsible for its decline?
- Q.10) Write about major teachings of Swami Vivekananda. Discuss its relevance in present time.
- Q.11) Buddhism played an important role in spreading Indian culture across the globe in ancient times. Elaborate.
- Q.12) What are various types of volcano? Also, explain what a complex volcano is and its salient features.
- Q.13) Discuss various reasons for pollution of lakes in India. What should be done to make water bodies in India clean?
- Q.14) What are dead zones? Discuss various consequences of the spreading of 'Dead Zones' on marine ecosystems?
- Q.15) Elaborate the role of Subhash Chandra Bose in India's struggle for independence.
- Q.16) What is vertical farming? How does it work? Discuss its advantages and disadvantages
- Q.17) What are various reasons for increasing land degradation and desertification across India? Discuss its consequences and suggest some measures.
- Q.18) Discuss various land reforms in India before and after independence.
- Q.19) 'Current climate crisis has led to an increase in the number of intense 'hydro-meteorological' disasters'. Comment. What policy measures can be taken to counter this?
- Q.20) What is de-globalisation? Discuss its consequences and impact on India.

GENERAL STUDIES 2

- Q.1) Access to Internet must be recognised as a fundamental right to free speech, basic freedoms and the right to life. Do you agree?
- Q.2) Discuss the role of CAG (Comptroller and Auditor General) as an anti-corruption body.
- Q.3) Discuss various provisions of Sansad Adarsh Gram Yojana' (SAGY). What are various challenges in realising the goals of this scheme?
- Q.4) Poor sanitation is a major reason for poor health of the population in Indian cities. Elaborate. Also suggest some measures to improve the situation.

- Q.5) Discuss the reasons behind the success of Swachh Bharat mission. How the success of this campaign against open-defecation can act as a model for other schemes and policies?
- Q.6) What are the key areas of reforms if the WTO has to survive in the present context of unilateralism and protectionism?
- Q.7) What do you understand by the term 'Social Audit'? Discuss how it aids in good governance.
- Q.8) Recent Citizenship Amendment Act, has a significant impact on India's secular image with deeper foreign policy implications. Do you agree?
- Q.9) Implementation of information and Communication Technology (ICT) based Projects/Programmes usually suffers in terms of certain vital factors. Identify these factors, and suggest measures for their effective implementation.
- Q.10) What is quasi-federalism? Is India a quasi-federal state?
- Q.11) Despite differences, India and China need to come together for a multilateral, rules-based world order. Comment.
- Q.12) Discuss the role and significance of Chief of Defence Staff (CDS). How it would help in India's security?
- Q.13) What are various new age threats to Indian security? Discuss how India should prepare itself for these threats.
- Q.14) What are the reasons for the high child mortality rate in India? Suggest some measures to control child mortality in India.
- Q.15) What do you understand by 'The String of Pearls'? How does it impact India? Briefly outline the steps taken by India to counter this.
- Q.16) What is meant by middle powers in international relations? How aligning with other middle powers would help India rise in the new global order?
- Q.17) Discuss the importance of NGOs in India's development process. Do you think present legal and regulatory mechanisms are adequate for efficient working of NGOs?
- Q.18) What is the importance of good early childhood education in child development? Discuss various provisions regarding primary education in draft National Education Policy
- Q.19) In the coming decade, India's cities need to focus on governance and sustainable development. In light of this, discuss various reasons for the poor performance of urban local bodies in India. What should be done to improve urban local governance?
- Q.20) Recent NCRB report has shown a rise in crimes against women over the years. Discuss various reasons for this. Suggest some measures to improve the situation.
- Q.21) What are parliamentary standing committees? Discuss their need and significance in Parliamentary democracy.
- Q.22) Discuss the significance of Supreme Court judgement in Shreya Singhal case. Examine whether Draft Intermediary Rules by the Ministry of Information and Technology is against the principles of this judgement.
- Q.23) What is mob-lynching? What are various reasons for a rise in mob-lynching incidents in India. Suggest some measures to prevent mob-lynching.
- Q.24) The Indo-US relation has reached new heights in recent times. In light of this, discuss the significance and various issues in Indo-US relationship.
- Q.25) What are various malpractices in the medical and healthcare system in India? Discuss its consequences
- Q.26) Progress made under the BharatNet initiative is not impressive. Examine. Suggest some measures to reduce digital divide in India.
- Q.27) What are self-help groups? Discuss various socio-cultural hurdles faced by Self Help Groups (SHGs) in promoting increased participation in development programmes.
- Q.28) In a democratic polity the fundamental rights and duties of citizens are correlated. Comment in the Indian context.

- Q.29) Discuss the significance of Article 131 of the Indian constitution. Can States challenge the validity of central laws? Examine.
- Q.30) Do government's schemes for up-lifting vulnerable and backward communities by protecting required social resources for them, lead to their exclusion in establishing businesses in urban economies? Examine.
- Q.31) Critically examine the effectiveness of electoral bonds to make Indian elections more transparent. What other reforms are needed to make Indian election process more fair.
- Q.32) What do you understand by the term 'participatory democracy'? How important is the participation of people in a democratic setup?
- Q.33) Discuss various provisions of disqualifications under Representation of people's Act. Do you think these provisions have helped in decriminalising Indian politics?
- Q.34) Bringing public health under concurrent list and declaring health as a fundamental right can improve India's healthcare system. Discuss.
- Q.35) There is a view that the Official Secrets Act is an obstacle to the implementation of the Right to Information Act. Do you agree with the view? Discuss.
- Q.36) What do you understand by manual scavenging? Why does it still persist in India? Do you agree that state governments have failed to stop manual scavenging altogether?
- Q.37) 'Right to self-identification is a part of the right to life under Article 21 of the Constitution'. In light of this critically examine various provisions of Transgender (Protection of Rights) Act, 2019.
- Q.38) 'Increased use of Facial recognition technology is dangerous in the absence of privacy and data security laws'. Comment.
- Q.39) Examine the role of the Supreme Court as the final interpreter and guardian of the Indian Constitution.
- Q.40) Discuss in brief about the role of National Commission of Women. Do you think it is a toothless organisation?
- Q.41) Critically examine whether the MGNREGA scheme has been able to address the issue of rural distress.
- Q.42) Discuss the issue of rise in suicidal deaths among Indian youth. Suggest some measures to prevent such tendencies among Indian youth.
- Q.43) Explain the pardoning powers of the President. How is it different from the Governor's pardoning power?
- Q.44) Critically examine various provisions of the Medical Termination of Pregnancy (Amendment) Bill, 2020. Do you think it will enable women's right to health?
- Q.45) Discuss various issues in Indo-Australian relationship. How bilateral relations among two nations can be strengthened?
- Q.46) Discuss various reasons for decreasing quality of scientific research in Indian universities. Suggest some measures to boost scientific research in India.

GENERAL STUDIES 3

- Q.1) What is Demographic dividend? Argue whether Indian demographic dividend is turning into a demographic disaster or not?
- Q.2) Discuss the problems faced by the power sector in India. Suggest some measures to tackle these problems
- Q.3) What is National Infrastructure Pipeline? Discuss its need and significance in light of India's aim to become a \$5 trillion economy.
- Q.4) What is digital signature? What are various types of digital signature? Discuss its working mechanism and various benefits.
- Q.5) What are the advantages of offshore wind energy projects to onshore projects? What are the challenges for offshore projects in India?

- Q.6) What are the major causes of forest fires in India? Discuss its impact on the forest ecosystem. Suggest some measures to tackle it.
- Q.7) What are the various reasons for the failure of Tuberculosis control in India? Suggest some measures to prevent Tuberculosis in India.
- Q.8) With millions suffering from hunger and tonnes of food grains rotting in massive accumulation of grain stocks Indian needs to reform their grain management system. Comment.
- Q.9) What is the importance of Gaganyaan mission to India? Discuss various challenges related to the mission.
- Q.10) A focus on developing human capital and employment generation can help India to become a \$5 trillion economy. Comment.
- Q.11) What do you understand about the Integrated Farming System? How far is the Integrated Farming System helpful in sustaining agricultural production?
- Q.12) What is strategic disinvestment? Discuss its need and significance for Indian economy.
- Q.13) Livestock rearing has a big potential for providing non-farm employment and income in rural areas. Discuss suggesting suitable measures to promote this sector in India.
- Q.14) What is carbon tax? Do you think carbon tax can help in reducing air pollution in India? Suggest some measures to reduce air pollution in India.
- Q.15) What is financial inclusion? What are the challenges to financial inclusion in India? Discuss various government measures for the same.
- Q.16) The spread of dengue in India has been related to unplanned urbanisation, changes in environmental factors, and a host of other factors. Elaborate.
- Q.17) Subsidies are not a sustainable solution to underlying problems, rather it is a burden on fiscal purse. Comment.
- Q.18) What is stagflation? What steps should be taken to control stagflation in Indian economy?
- Q.19) Why is artificial intelligence one of the key developments of the 21st century? Discuss government efforts regarding artificial intelligence in India and the scope of its application in the development process of the country.
- Q.20) What is blockchain technology? Discuss its advantages and potential applications.
- Q.21) How globalisation has led to the reduction of employment in the formal sector of the Indian economy? Is increased informalisation detrimental to the development of the country?
- Q.22) Discuss various efforts made by India and various states to improve ease of doing business in India. What else needs to be done?
- Q.23) Critically examine whether the 'Make in India' initiative has met its objectives or not. Suggest some measures needed to improve its outcomes.
- Q.24) The Move to cash transfers will put agriculture on a sustainable growth path. Do you agree? Also, suggest some measures to make agriculture more sustainable and productive.
- Q.25) How can the 'Digital India' programme help farmers to improve farm productivity and income? What steps has the Government taken in this regard?
- Q.26) Give an account on different strategies for implementation of National Mission for Sustainable Agriculture.
- Q.27) Assess the need and significance of strengthening intra-BRICS trade for Indian economy. What should be done to boost Indian trade with other BRICS countries?
- Q.28) Discuss whether the introduction of Bt cotton has benefitted Indian farmers or not. Do you think genetically modified crops can help farmers' cause?
- Q.29) The 'Act East' policy has not brought the expected gains for India. Do you agree?
- Q.30) Give an account of coral reef In India. Why are coral reefs so important? Discuss various methods of coral restoration.

Q.31) How does illegal trans-border migration pose a threat to India's security? Discuss the strategies to curb this, bringing out the factors which give impetus to such migration.

Q.32) Discuss the need and significance of recent railways reforms. Examine whether private roles in railways should be increased.

Q.33) Discuss India's achievements in the field of Space Science and Technology. How the application of this technology has helped India in its socio-economic development?

GENERAL STUDIES 4

Q.1) What is 'emotional intelligence' and how can it be developed in people? How does it help an individual in making ethical decisions?

Q.2) What is Corporate Governance? What are the weaknesses in corporate governance in India? Also, discuss the importance of ethically-based corporate governance.

Q.3) Young people with ethical conduct are not willing to come forward to join active politics. Suggest steps to motivate them to come forward.

Q.4) "The good of an individual is contained in the good of all." What do you understand by this statement? How can this principle be implemented in public life?

Q.5) What do you understand by the term 'moral conscience'? Discuss the role of moral conscience in ethical behaviour.

General Studies 1

Q.1) Explain various types of revolutions that have taken place in Agriculture after Independence in India. How have these revolutions helped in poverty alleviation and food security in India?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Various types of revolutions in Agriculture after Independence in India. Significance of these revolutions in poverty alleviation and food security.

Conclusion. Way forward.

India is primarily an agricultural economy and majority of people are still dependent on agriculture for their livelihood. As per 2018, agriculture employed 50% of the Indian work force and contributed 17–18% to country's GDP. After independence, development of agriculture has been assured by various revolutions supported by government.

Various types of revolutions in Agriculture after Independence in India:

Green Revolution	<ul style="list-style-type: none"> This revolution led to tremendous rise in production of food grains, especially wheat, by the use of high-yielding varieties of seeds, fertilisers and pesticides. In the agriculture sector in the decade of 1960 India started green revolution, and high yielding variety seeds were used in wheat, rice, maize. This experiment gave success and extended to most parts of the country.
White Revolution	<ul style="list-style-type: none"> Operation Flood (1970), an initiative of the National Dairy Development Board has led to revolution in milk production in India. The world's largest dairy development programme transformed India from a milk deficient nation to world's largest milk producer. This has introduced in the new breeding technologies, high quality fodder, vaccination, veterinary facilities improved.
Blue Revolution	<ul style="list-style-type: none"> This revolution focussed on the management of fisheries sector. It has led to phenomenal increase in both fish production and productivity from aquaculture and fisheries resources of the inland and marine fisheries.
Other revolutions	<p>Other revolutions are also significant includes:</p> <ul style="list-style-type: none"> Yellow revolution (oil seed production). Golden fibre revolution (jute). Golden revolution (horticulture). Silver fibre revolution (Cotton). Red revolution (meat production).

Significance of these revolutions in poverty alleviation and food security:

- Poverty:** These innovations in agriculture have lifted millions of people out of poverty by generating rural income opportunities for farmers, farm labourers, and also reduced prices for consumers.
- Food security:** India has become self-sufficient in food grain production with the help of green revolution. Green revolution increased the amount food grains enormously, with this India came out of PL-480 agreements, through which India imports food grains from USA.

3. **Nutritional security:** The exponential rise in milk production has led to nutritional security among the masses. Milk production in India has increased from 22 million tonne in 1970 to 156 million tonnes in 2015-16. As a result, the per capita availability of milk in India is 337 gram/day as compared to average world per capita availability of 229 gram/day. Blue revolution increased the sea food production. With this fishermen community get benefited and also provide food and nutritional security.

4. **Women empowerment:** Also, these revolutions provided income and employment to women leading to women empowerment helping millions to come out of poverty.

To further carry on the momentum of these programmes and assure food security in the long run in the face of ever-increasing population, there is an urgent need for an 'evergreen revolution' that should focus on all round development of the agriculture sector. Recently govt started ever green revolution which focuses all aspects of agriculture pertaining to various products, it is also called as rainbow revolution. It also extends the results of green revolution eastern part of the country; it is a technology driven scheme.

Q.2) With a coastline expanding around 7500 Km India needs to replicate the successes in space exploration to the oceans as well. Discuss the need and importance of ocean exploration for India.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss the need and importance of ocean exploration for India.

Conclusion. Way forward.

India has an exclusive Economic Zone (EEZ) of 2.02 million sq.km and a long coastline of 7500 Km with rich and diverse marine living resources. Government of India is promoting 'Blue Growth Initiative' which focus on utilisation of wealth from the marine and other aquatic resources of the country for improving the lives and livelihoods of fishermen and their families.

Need of ocean exploration for India:

1. **Fishery:** Marine fisheries wealth around Indian coastline is estimated to have an annual harvestable potential of 4.4 million metric tonnes.
2. **Minerals:** Indian Ocean contain vast amount of minerals, including cobalt, zinc, manganese and rare earth materials. These minerals are needed for the electronic industry to make smart phones, laptops and car components etc. This can help Make in India initiative.
3. **Energy resources:** The main energy resources present in Indian Ocean are petroleum and gas hydrates. Petroleum products mainly includes the oil produced from offshore regions. Gas hydrates are unusually compact chemical structures made of water and natural gas.
4. **Salts:** Seawater contain economically useful salts such as gypsum and common salt. Gypsum is useful in various industries.
5. **Manganese Nodules and Crusts:** Manganese nodules contain significant concentrations of manganese, iron and copper, nickel, and cobalt all of which have a numerous economic use.
6. **Disaster preparedness:** Information from deep-ocean exploration can help predict earthquakes and tsunamis.

7. **Nation's Security:** It will play a significant role in the security of the nation as many critical military technologies rely heavily on rare earth elements which are abundant in Ocean.
8. **Technological advancements:** It can also help us in innovating technologies from underwater vehicles to underwater robotics.
9. **Health industry:** Unlocking the mysteries of deep-sea ecosystems can reveal new sources for medical drugs, food, and other products

Importance of these resources in Indian socio-economic progress:

1. **Sustainable development:** Marine resources from Indian Ocean can serve as the backbone of India's economic growth and can help India to become a 5 trillion-dollar economy by 2022. Blue economy, through sustainable use of oceans, has great potential for boosting economic growth.
2. **Employment generation:** It will provide jobs and will improve livelihood. This will help in inclusive growth. E.g. improving fishery resources exploitation can provide livelihood to many.
3. **Food security:** It will lead to food security through fishery sector and other sea food resources. It would also help in reducing malnutrition issue in India as fishes are good source of nutrition.
4. **Energy security:** It will help in diversification of energy resources and will provide new resources for energy e.g. gas hydrates.
5. **Efficient transportation and logistics:** Indian Ocean is a major gateway of trade with 80% of global oil trade happening through it. Better connectivity in the region will significantly cut the transport costs and will reduce logistics inefficiencies.
6. **Women empowerment:** It will help in women empowerment especially fishery sector by providing them jobs. As these jobs do not require high skills, women will find it easy to earn a livelihood.
7. **Climate Change:** Oceans provide an alternate and cleaner source of energy. It also acts as an important carbon sink. This will help in mitigating climate change.

Sustainable Development Goal (SDG 14), calls to conserve and sustainably use the oceans, seas and marine resources for sustainable development. India should expedite its efforts to exploit oceanic resources in Indian Ocean. What is required is the use of technology to exploit oceanic resources in Indian Ocean. India has rightly launched O-SMART scheme aiming at regulated use of oceans, marine resources for sustainable development in this direction.

Q.3) The leadership provided by the USA in shaping the global order post WW2 is somewhat on a decline. Discuss various reasons for the declining power of the U.S. and its implications for India.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. What are various reasons for the declining power of the U.S.? Discuss its implications for India.

Conclusion. Way forward.

American decline is a term used to describe the diminishing power of the United States geopolitically, militarily, financially, economically. Recently it was reported that worldwide

approval of U.S. leadership has plunged from 48% in 2016 to a record low of 30% in 2018, in part due to the increasingly isolationist stance of America.

Reasons for the declining power of the U.S.:

1. **Economic decline:** The economic rise of developing economies and China which will be the largest economy by 2030, this has led to a decline in the economic power of the USA. With manufacturing bases shifted to China, economic power of U.S. is declining.
2. **Rise of BRICS:** For at least a decade, it has been debated whether the global center of power and leadership is gradually shifting away from the 'declining' West towards 'rising' powers like the BRICS and what consequences this may have for global order, governance and leadership. China's challenging U.S. for global predominance constitutes the core part of the debate over the American decline. Further, India is another emerging economy creating a multi-polar world.
3. **Asian Century:** In the coming years, Asian economies will become larger than the rest of the world combined in PPP terms, for the first time since the 19th century. More importantly, it is also coalescing as a constructive force for global governance.
4. **Wars:** The costs of the Bush-Obama wars in Iraq and Afghanistan are now estimated to run as high as \$4.4 trillion. The 2018 military budget, almost matching that of the rest of the world combined is higher in real terms than at any time since World War II and is slated to go even higher. The deficit crisis is largely manufactured as a weapon to destroy hated social programs on which a large part of the population relies.
5. **Failure of institutions:** International bodies dominated by US like WTO; IMF are failing. A lack of leadership or consensus hampers the much-needed reform of global institutions such as the WTO, IMF and UN. But meanwhile, Asia has become the locus for new multilateral initiatives. This is evident in new trade pacts and institutions such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), Asian Infrastructure Investment Bank (AIIB) etc.
6. **Diplomacy failure:** American diplomacy has been essential to multinational agreements on trade, climate, regional security and arms control. But withdrawal from important institutions like UNESCO has eroded its influence.
7. **Rise of Middle-East Asia:** The power shifts are increasingly visible. In the Middle East, the U.S. hoped for decades to isolate Iran and weaken the regime. Iran remains an increasingly assertive and influential power in the region, defending and promoting its interests and competing with the Saudi regime. Turkey is another rising regional power, acts increasingly independent of the preferences of the U.S., its NATO ally, playing its own hand in the regional power game.

Its implications for India:

Opportunities	Issues
Economic growth: <ul style="list-style-type: none"> • Current global economic order will be dismantled. Thus, it provides India to boost its exports and imports impacting its economic growth. • As the focus is moving to other rising powers, especially in Asia, it is an opportunity for India. The move in India is a right step in this direction. 	China rise: <ul style="list-style-type: none"> • The rise of China as a South Asian and Indian Ocean power will challenge India's ambitions in the region. • China has already displaced India as the top trading partner of some South Asian states (such as Bangladesh), and it is fast narrowing the trade gap with India in others (such as Nepal).
Rise of India: <ul style="list-style-type: none"> • By giving India a stake in the American world order, the United States will be 	Influence in South Asia: <ul style="list-style-type: none"> • China's influence in South Asia/Indian Ocean states surrounding

<p>able to shape India's choices, even in the absence of a formal alliance between the nations.</p> <ul style="list-style-type: none"> For example, the LEMOA will give India access to American military facilities in the Indian Ocean (Diego Garcia) and East Asia (Guam). This is significant in the context of India's Act East policy (which makes relations with East Asia neighbours a foreign policy priority) and its strategic foray into East Asia. 	<p>India will further increase as China's One Belt One Road Initiative (OBOR) takes off, even if this takes 10 to 15 years.</p> <ul style="list-style-type: none"> India's quest for regional primacy will be a significant challenge for Indian diplomacy and will be tested on a case-by-case basis across different policies and issues.
<p>Relation with other US allies:</p> <ul style="list-style-type: none"> With US decline India would need the support of other countries. India is likely to work in coordination with the United States and its friends and partners in East Asia, most notably Japan. 	<p>Pakistan Influence:</p> <ul style="list-style-type: none"> With the decline of US, India will find it difficult to put pressure on Pakistan through lobbying in the US. Further rise of China, will further strengthen Pakistan whom China supported from starting.
<p>Better India-China relations:</p> <ul style="list-style-type: none"> Emerging India and declining US will create uncertainty in China, especially as India emerges as the 3rd largest global economy over the next decade behind China and the United States. While such uncertainty will have to be diplomatically managed to prevent any undue Chinese fears, it may contribute to more cooperative Chinese behaviour in the years ahead. It will encourage China to take India more seriously in Asian strategic affairs. 	

Although the United States supports the rise of India, and US-India relations have come a long way since the end of the Cold War, US role as superpower has considerably declined. Ultimately, India's ability to emerge at the top of the regional hierarchy in South Asia/Indian Ocean region will be a function of its ability to rapidly expand its economy while integrating its neighbours through infrastructure, trade, and investment links.

Q.4) Discuss the contribution of Maulana Abul Kalam Azad to pre-and post-independent India.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Contribution of Maulana Abul Kalam Azad to pre-and post-independent India.

Conclusion. Way forward.

Maulana Azad was an Indian Scholar and Muslim Leader of Indian National Congress during Indian Independence Movement. Post Indian Independence, he became the First

Minister of Education in Indian Government. He played an important role in Hindu-Muslim unity and never supported India's partition.

Contributions of Maulana Azad:

A. Before independence:

1. **Hindu-Muslim unity:** During his young age, he rose to prominence through his work as journalist, publishing works critical of British Raj and espousing causes of Indian nationalism. He worked for Hindu-Muslim unity through the Al-Hilal newspaper.
2. **Khilafat movement:** Maulana Azad was a prominent Leader in Khilafat Movement in which he came in close contact with National Leaders such as Mahatma Gandhi, Vallabh Bhai Patel and Jawahar Lal Nehru.
3. **Non-cooperation movement:** Maulana Was disheartened by the Rowlatt Act of 1919 and worked to organise the Non-Cooperation Movement and Protests in opposition of the Act. He Organised several agitations and worked in the able guidance of Gandhi Ji and his principles.
4. **Dharasana Satyagraha:** He was one of main organisers of the Dharasana Satyagraha in 1931 and emerged as one of the most important national leaders of the time, prominently leading causes of Hindu-Muslim unity as well as espousing secularism and socialism.
5. **Protest against Two Nation Theory:** Maulana criticised Jinnah over Two Nation Theory and believed that Hindu and Muslims can co-exist in Independent India.
6. **Quit India Movement:** He played a significant role in the Quit India Movement by meeting a large number of People in rallies and led agitations and protests against Colonial Government. He served as the Congress president from 1940 to 1945, during which the Quit India movement was launched.
7. **India's independence:** He negotiated with the British Cabinet mission for India's independence. Further, he was strictly against India's partition even after acceptance of partition by Gandhiji.

B. Post-Independence:

1. **Member of Constitution assembly:** He was a member of constituent assembly and helped in shaping the Constitution of India.
2. **Education:** He was the first Union Minister of education. He played a pivotal role in foundation of IIT, UGC, AICTE, Sahitya Academy, Lalit Kala Academy, Sangeet Natak Academy and many other educational initiations in India.
3. **Research:** He held portfolios of Natural resources and scientific research. He played a pivotal role in foundation of CSIR and scientific research laboratories in India.

Maulana's contributions in Indian Independence are very significant and vital. He considered Gandhiji as his Ideal and worked on his principles and political lines. His contributions will be remembered and acknowledged by generations to come. For his service to the nation, he was posthumously awarded the country's highest civilian award, the Bharat Ratna.

Q.5) Discuss the need and importance of preserving India's linguistic diversity. What measures are needed for the same?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Need and importance of preserving linguistic diversity. Government efforts. Measures needed.

Conclusion. Way forward.

India is one of the unique countries in the world that has the legacy of diversity of languages. The Constitution of India has recognised 22 official languages under the 8th schedule. People in different parts of the country speak more than one language since their birth. Though officially there are 122 languages, People's Linguistic Survey of India has identified 780 languages, of which 50 are extinct in the past five decades. Examples of such languages are Wadari, Kolhati, Golla, Gisari.

Need and importance of preserving linguistic diversity in India:

1. **Cultural Identity:** For individuals, language is constitutive of cultural identity. We are what we speak. Any destruction to language impact identity of individuals leading to identity crisis. This impact their ability to grow and develop as an individual.
2. **Cultural Diversity:** Diversity in languages reflects and enhances cultural diversity. This in turn enriches the world. Unwritten languages rich in oral traditions, stories, songs, poetry, and ritual passed down through the generations constitute cultural diversity of a nation.
3. **Human rights:** Since language is central to identity, one's freedom to use one's language is seen as inherent in the dignity of the human person. Many people don't know English and thus fail to enjoy rights provided due to lack of understanding.
4. **A glimpse of our past:** Languages provides a glimpse of our history. Once a language is lost it is a loss of history and culture associated with that language. Many languages have not been preserved and thus many traditions have lost due to this.
5. **Environment:** Languages are closely connected to the environment they are spoken in, so in such areas they contain rich, detailed and technical knowledge about the flora, fauna, and habitat of that area. These languages are ecological encyclopaedias. The biological diversity and linguistic diversity go hand in hand. If one is threatened, then so is the other.
6. **Cognitive abilities:** Research has shown a strong correlation between improved cognitive abilities in children when they are taught in their mother tongue in primary school. If a child is not taught in the language that he or she uses at home, then he suffers poor learning and critical abilities.

Government efforts:

1. **Technology development:** Government has initiated Technology Development for Indian Languages with the objective of developing information processing tools and techniques. This will facilitate human machine interaction without language barrier; creating and accessing multilingual knowledge resources.
2. **Mandatory inclusion:** The Government of India under the vision of digital India has mandated the mobile phones sold from July 2017 should support all Indian languages. This will pave the way for bridging the digital divide, empowering one billion people who do not speak English. This will also enhance the capacity of large numbers of people to be part of e-governance and e-commerce.

Measures to preserve linguistic diversity:

1. **Engage indigenous people:** To realise the rights and aspirations of indigenous people, it would be necessary that the government should engage and support indigenous people in determining their own development through policies that are inclusive, equitable and accessible.
2. **Education:** About 8% of Indian population belongs to tribal communities. Their identity and culture is linked with their languages. The only way to ensure that these languages do not become extinct from this multilingual country is to give them their place in school education for at least 5 to 8 years as a language. This could be achieved making special provisions for regions/districts where the tribal and minor language population is concentrated.
3. **Promoting universal acceptance for international domain names:** According to UNESCO, Internationalised Domain Names (IDNs) can help to foster the growth of local languages online by allowing Internet users to use non-Latin scripts to access domain names. IDNs which consist of characters from non-Latin scripts form a vital part of the ecosystem necessary to foster the growth of local languages online.
4. **Awareness:** The internet can be used to raise awareness about the issues of language extinction and language preservation. It can be used to translate, catalog, store, and provide information and access to languages. New technologies such as podcasts can be used to preserve the spoken versions of languages, and written documents can preserve information about the native literature and linguistics of languages.

In recent years the language diversity is under threat as speakers of diverse languages are becoming rare and major languages are adopted after abandoning the mother tongues. The problem needs to be addressed at societal level, in which the communities have to take part in conservation of language diversity that is part of cultural wealth.

Q.6) What do you understand by the term radicalisation? What are various reasons for growing radicalisation in society? Discuss its consequences and measures needed.

Ans.

Demand of the question

Introduction. What is radicalisation?

Body. Various Reasons for growing Radicalisation in society. Consequences of radicalisation and measures needed.

Conclusion. Way forward.

Radicalisation is a process in which an individual or group adopts extreme political, social, or religious ideals and aspirations. It rejects or undermines the status quo or contemporary ideas and expressions of the nation. Recent rise of ISIS and its penetration across Asia is an example of such a radicalisation.

Reasons for growing Radicalisation in society:

1. **Socio-Economic Factors:** Socio-economic factors like poverty, social exclusion, marginalisation and discrimination, limited education and employment etc. is a cause of growing radicalisation. The poor and illiterate provides a fertile ground for radical agencies for recruitment.
2. **Political Factors:** Various political factors including weak and non-participatory political systems lacking good governance and regard for civil society are leading to people turning towards radicalisation. Apathy of government, authoritarian tendencies lead to shattering of

hopes and sense of anger against the government and established regime. For example, naxalism was fuelled by the sense of apathy of local politicians against the local people.

3. **Social media:** Social media provides virtual participation and a platform for like-minded extremist views, accelerating the process of radicalisation. Internet is used by terrorists as an effective tool for radicalisation and terror financing. Terror groups use the internet to advocate the use of violence to further a religious, ideological or political cause.

4. **Displacement:** Often development is accompanied with displacement. People are displaced due to land acquisition but often are not adequately compensated. This led to the development of feelings of injustice and anger against the state, often leading to tilt towards radicalisation.

5. **Religious intolerance:** Rising religious intolerance, hate crimes, mob lynching is further leading to radicalisation. Minorities are feeling unsafe. With rising hatred and intolerance, minorities are turning towards radicalisation.

6. **Illegal migration:** Porous borders especially towards West Bengal and North Eastern States have led to thousands of Bangladeshi migrants which has increased tensions among ethnic communities. e.g. Kokrajhar riots of Assam, Dimapur lynching of a rape accused.

Consequences of radicalisation:

1. **Economic costs:** A sense of fear reduces economic investment and hinders economic progress of a country. Loss of trade and access to markets have a negative impact on people's livelihoods. E.g. youth in Kashmir being radicalised has led to a sense of fear in the valley, leading to low economic development of the area.

2. **Social costs:** Using resources for conflict-related purposes means that public expenditures on social services decrease. This impact spending on social causes like education, health etc.

3. **Impact on children:** Children face particular vulnerabilities as a result of armed violence such as orphanhood, psychological damage. They also face a threat of recruitment as young soldiers. These factors often lead to a disruption to education, and thereby the reduction of a child's capacity to recover from poverty.

4. **Impact on women:** Women are affected in many ways in the event of violence. Sexual violence, recruitment as combatants and an expanded economic/household role, which is often transferred onto young girls.

Steps to tackle radicalisation:

1. **Strengthening Institutions:** Educational and political institutions should be strengthened at ground level so that people of state feel empowered. Also, intelligence agencies, law enforcement agencies and Judicial Courts need to act in unison on this matter.

2. **Employment:** Enough number of job opportunities should be provided to people to decrease their chances of joining any radical organization. Emploem would help in providing livelihoods and directing youth energy towards productivity.

3. **De-radicalisation:** It is necessary to de-radicalise people. There is a need to ensure that people who have been de-radicalised feel safe and secure in the country. Provisions can be made to skill them for employment.

4. **Social development:** The cornerstone for radicalisation is poverty, deprivation and isolation and standard education opportunities. These need to be addressed by the government and policies to be formulated for inclusive participation and facilitation of all means for their development.

5. **Regulation:** There is a need to draw guidelines to regulate the internet. This must be done without damaging the privacy of an individual. An effort is needed to place an effective mechanism to trace the activity of radical groups.

Radicalisation is a danger to internal security and polarises the Indian society deepening the sectarian differences. Thus, it is imperative to fight radicalisation on all fronts. Initiatives like UDAAN are important. A pragmatic and responsible civil society can ensure that Indian cultural harmony remains intact. Social security measures, speedy justice for poor can go a long way in strengthening it.

Q.7) What is the Indian Ocean Dipole? What are its characteristic features? Discuss its impact on Indian monsoon.

Ans.

Demand of the question

Introduction. What is Indian Ocean Dipole?

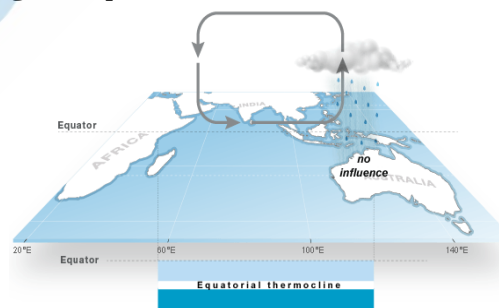
Body. Characteristics of Indian Ocean Dipole. Its impact on Indian monsoon.

Conclusion. Way forward.

Indian Ocean Dipole (IOD) is an atmosphere-ocean coupled phenomenon in the Indian Ocean, characterised by a difference in sea-surface temperatures. IOD is the difference between the temperature of eastern (Bay of Bengal) and the western Indian Ocean (Arabian Sea). Indian monsoon depends upon not only El Nino La Nina but also IOD and other such ocean phenomena.

Characteristics of IOD:

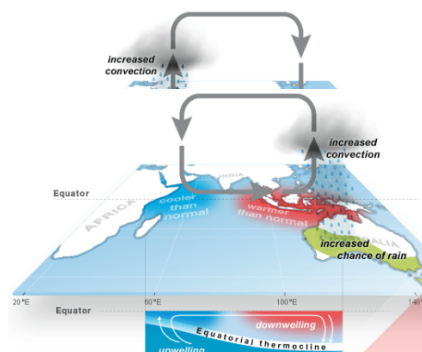
1. **Temperature difference:** IOD occurs because of temperature difference. This temperature difference results into pressure difference which results in flowing of winds between eastern and western parts of Indian Ocean.
2. **Development:** IOD develops in the equatorial region of Indian Ocean from April to May, peaking in October.
3. **Three Phases:** The IOD has three phases such as Neutral, Positive and Negative IOD.
 - a) **Neutral Phase of IOD:** During this phase water flows from the Pacific between Indonesia's islands, keeping seas warm to the northwest of Australia. Air rises above this area and falls across the western half of the Indian Ocean basin, blowing westerly winds along the equator.



- b) **Positive Phase of IOD:** During this phase the Westerly winds weaken along the equator, allowing warm water to move to Africa. Changes in the winds also allow a rise of cool water from the deep ocean in the east. This creates a temperature difference across the tropical Indian Ocean with cooler than normal water in the

east and warmer than normal water in the west. This event has been found to be beneficial for the monsoon.

- c) **Negative Phase of IOD:** During this phase westerly winds intensify along the equator, allowing the concentration of warmer waters near Australia. This creates a



Indian Ocean Dipole (IOD): Negative phase

temperature difference across the tropical Indian Ocean, with warmer than normal water in the east and cooler than normal water in the west. This event obstructs the progression of monsoon over India.

How does it impact the southwest monsoon?

1. **Increased rainfall due to positive IOD:** There is no established correlation between Indian summer monsoon rainfall and IOD. But studies have shown that a positive IOD year sees more than normal rainfall over central India. It was demonstrated that a positive IOD index often negated the effect of El Nino Southern Oscillation (ENSO), resulting in increased Monsoon rains in several ENSO years.
2. **Droughts Due to negative IOD:** A negative IOD, on the other hand, complements El Niño leading to severe drought.
3. **Cyclones:** At the same time, positive IOD results in more cyclones than usual in Arabian Sea. Negative IOD results in stronger than usual cyclogenesis (Formation of Tropical Cyclones) in the Bay of Bengal. Cyclogenesis in Arabian Sea is suppressed during this time.

Thus, an IOD can either aggravate or weaken the impact of El Nino on Indian monsoon. If there is a positive IOD, it can bring good rains to India despite an El Nino year. For example, positive IOD had facilitated normal or excess rainfall over India in 1983, 1994 and 1997 despite an El Nino in those years. Similarly, during years such as 1992, a negative IOD and El Nino had cooperatively produced deficient rainfall.

Q.8) What are the major varieties of coal in India? Discuss various issues associated with coal mining in India?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Types of coal found in India. Various issues associated with coal mining in India.

Conclusion. Way forward.

India holds the 5th biggest coal reserves in the world. Around 7% of the world's proven coal reserves are located in India. It is found in sedimentary rocks and is formed over millions of years through geological pressure. Although the heat value of coal reserves in our country

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(Gross Calorific Value), is lower than that of international coal reserves, Coal still remains the main source of energy in India. It fulfils almost 67% of the total commercial energy consumed in the country.

Types of coal found in India:

Types of coal on the basis of carbon content	Types of coal on the basis of a time period
Anthracite: It is the highest grade of coal containing a high percentage of 80 to 95% carbon content. It is hard and brittle. It is found in smaller quantities in regions of Jammu and Kashmir.	Gondwana coal: Around 98% of India's total coal reserves are from Gondwana times. This coal was formed about 250 million years ago.
Bituminous: It is a medium grade of coal having high heating capacity and carries 60 to 80% of carbon content and a low level of moisture content. It is the most commonly used type of coal for electricity generation in India. Most bituminous coal is found in Jharkhand, Odisha, West Bengal, Chhattisgarh, and Madhya Pradesh.	Tertiary coal: It is of younger age. It was formed from 15 to 60 million years ago.
Lignite: It is the lowest grade coal with the least carbon content. It carries 40 to 55% carbon content. It is found in the regions of Rajasthan, Tamil Nadu, and Jammu & Kashmir.	
Peat: It has less than 40% carbon content. It is in the first stage of transformation from wood to coal. It has low calorific value and burns like wood.	

Various issues associated with coal mining in India:

- 1. Uneven coal distribution:** Coal distribution is highly uneven throughout India. Most of the coal deposits occur in the north-eastern part of the Indian peninsula. Other parts of the country either have no coal deposits or limited reserves of poor-quality coal.
- 2. Poor transportation:** Most coal lies in inaccessible areas of the country. Hence, transporting it to the location of its use posed additional challenges. Though trains are the most economical way of transporting coal, a large number of mines are not connected to a rail network. Thus, coal has to bear a very high cost of transportation from the mines to the consuming centres.
- 3. Manual labour:** The coal mining techniques are old and outdated and most of the work is done through manual labour. This leads to high production costs in India. The burning of coal in factories and thermal plants releases many toxic gases which are harmful for labour. For example, the recent collapse in the coal mine of Meghalaya led to the death of 11 workers.
- 4. Delays in receiving approval and clearances:** Environment and forest clearance are extremely cumbersome, involving numerous layers of bureaucracy. The process of seeking clearances is a long-drawn process involving central and state ministries, and sometimes also lack clarity. This causes significant delays in production from the allotted blocks.
- 5. Poor quality of captive blocks offered to private players:** The blocks offered to private players for captive mining are of poor quality and are generally not good. The blocks are often located in remote and undeveloped areas, which have challenging geographies. Sometimes the blocks are not divided scientifically.
- 6. Opaque & flawed policies:** The process of allocation of captive coal blocks has been a source of controversies in the sector. This induced subjectivity in the process of allocation.

There is lack of accountability and transparency, weak planning and inter-agency coordination. The recent coal-gate scam was the outcome of such opaqueness.

Way forward:

1. **Transparency:** Currently, it is not easy to obtain data or information regarding many aspects of the coal sector. This makes it difficult for citizens to demand accountability from the sector. Therefore, complete transparency in the form of regular publication of information related to all aspects of the sector is needed. This would help in improving accountability.
2. **Better policies:** It is important to increase the level of public participation and inputs in decision making. All policies must be published in draft form and must be finalised after comments are invited from citizens and the feedback is incorporated.
3. **Local involvement:** Local citizens must be involved in coal mining related activities. Before the mine starts, there should be meaningful public hearing processes regarding environmental and social impacts, and associated compensation mechanisms. During the mine's operation, local citizens can help to oversee the operations and ensure its compliance to existing norms.
4. **Rehabilitation:** Innovative approaches such as long-term lease of land, offering equity should be tried in rehabilitation processes. Proper compensation must be ensured to the displaced people.
5. **Strengthening Institutions:** The capacity of the relevant institutions must be enhanced. Plans must be developed to increase capacities of coal industry. This would help in improving the planning, operations and oversight of the sector.

India is taking many steps to gradually reduce its dependence on coal, though coal will remain an important part of the energy resource for the short and medium term. Thus, it is critical to address the challenges of the coal sector.

Q.9) Analyse the elements of urban civilisation in the Harappan Culture. What factors were responsible for its decline?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Various elements of urban civilisation in the Harappan Culture. Possible factors responsible for its decline.

Conclusion. Way forward.

Indus Valley civilisation is the oldest urban civilisation discovered till date. It flourished in the basins of the Indus River. The civilisation is noted for their urban planning, baked brick houses, elaborate drainage systems, water supply systems, large and new techniques in handicraft.

Elements of urban civilisation in the Harappan Culture:

1. **Planned towns:** The Harappan culture was distinguished by its system of town planning. Both Harappa and Mohenjodaro had a citadel, and this was possibly occupied by members of the ruling class. Below the citadel in each city lay a lower town with brick houses, that were inhabited by the common people.

2. **Drainage system:** The drainage system was very impressive. Sometimes these drains were covered with bricks and sometimes with stone slabs. Sewers were connected to the whole city.
3. **Grid system:** The arrangement of the houses in the cities is followed by a grid system, with roads at virtually right angles to each other. Every house had a tiled bathroom and its own well. Evidence of the flush system has been found.
4. **Burnt bricks:** Fired Bricks were used for foundation, and unfired bricks were used for walls. The most important public place of Mohenjodaro seems to have been the great bath, is a fine example of beautiful brickwork. The floor of the bath was made of burnt bricks. They even had shower systems.
5. **Technology and Crafts:** The rise of towns in the Indus was based on agricultural surplus, the making of bronze tools, various other crafts, and widespread trade and commerce. The people of Harappa used many tools and implements of stone, but they were very well acquainted with the manufacture and use of bronze. Several other important crafts flourished in Harappan towns.
6. **Trade and Commerce:** The importance of trade in the life of the Indus people is supported by granaries found at Harappa, Mohenjodaro, and Lothal. Numerous seals, a uniform script, and regulated weights and measures covering a wide area were found. The Harappan conducted considerable trade in stone, metal, shell, etc., within the Indus culture.
7. **Social organisation:** Excavations indicate a hierarchy in urban habitation. Two localities are attributed to the city of Harappa. The citadel or the first locality was where the ruling class lived and the lowest tower was where the common people lived. However, whether hierarchy in settlements corresponded to occupational divisions or socio-economic differentiation is not clear.

Possible factors responsible for its decline:

1. **Foreign Invasion:** Many historians believe that the Aryan invasion is the reason for the decline of Harappan culture. There is archaeological proof of genocide with unburied skeletal remains scattered everywhere in Mohenjodaro. An autopsy on these skeletons reveals damages that must have been caused by sharp objects or weapons.
2. **Floods:** The massive floods in the Indus can be one of the causes for the extinction of the Harappan culture. Repeated floods must have forced the people to flee the inundated places and set up permanent habitat elsewhere. As a consequence, came the decline of Harappa.
3. **Droughts:** Many historians believe that there was a fall in the average rainfall in the cities leading to the formation of desert-like conditions. This led to the decline in agriculture on which most of the trade was dependent. Owing to this, people of the Indus Valley started shifting to some other location leading to the decline in the entire civilisation.
3. **Tectonic disturbances:** Geographically, the Harappan culture occupied an area that was prone to earthquakes. Repeated seismographic vibrations might have led to decline of Harappan culture.
4. **Change in the Course of the river Indus:** Some Historians attribute the decline of the Harappan culture to the river Indus changing its course frequently. Water scarcity must have led to the migration of the Harappan people to other places.
5. **Epidemic:** Outbreak of the plague epidemic is claimed to be the possible reason for the decline of Harappan civilisation. The scattered skeletal remains suggest an epidemic like plague. Though there is no concrete proof of the outbreak of plague in the region.

The multiple causes, enumerated above were responsible for the decline of Harappan culture. Although no concrete evidence is present that can lead to any conclusion. The Harappa was one of the greatest and oldest civilisations, that reflects how old and deep are

roots of civilisation and urbanisation in India. How and when the civilisation came to an end remains uncertain.

Q.10) Write about major teachings of Swami Vivekananda. Discuss its relevance in present time.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Major teachings of Swami Vivekananda and its relevance today.

Conclusion. Way forward.

Swami Vivekananda was a great social reformer of the 19th century. Swami Vivekananda's contribution to India's renaissance is profound. He was deeply moved by the appalling poverty and backwardness of the masses. Swami Vivekananda gave Indians proper understanding of the country's great spiritual heritage and thus gave them pride in their past and strengthened the sense of unity as a nation.

Major teachings of Swami Vivekananda:

1. **Tolerance:** Swami Vivekananda preached tolerance and peace for humankind. His idea of peace and tolerance included people of all religions and sects. According to him, if humans are to thrive and prosper, they need to tolerate the diversified views and strive for the prosperity of all.
2. **Right Education:** He stressed that good education is not merely learning of facts but also development of character. He redefined the concept of education which was not limited to exploring means of earning only. For him education was a way to build one's character, strength, intellect etc.
3. **Strength:** Swami Vivekananda stresses on the importance of being strong in life. Weakness comes with a number of difficulties for one in a life. Whether personal goals or professional goals, a person needs to be fearless and firm to achieve them.
4. **Compassion for Weaker Sections:** He stressed that success at the cost of poverty is not worth it. He emphasised the need to have empathy and compassion for the weaker sections of the society.
5. **Religion:** He argued in favour of religious reforms. He stressed that rationality must be applied to root out evils in religion. His meaning of religion had no place for superstitions, unending rituals and practices and religion that was adrift of spiritual content.
6. **Fraternity:** Swami Vivekananda focused on the values like love, patience, perseverance in one's life. This would increase the brotherhood and fraternity among the people, reduce conflicts among them and would bind the society as a whole.

Relevance of Swami Vivekanand's teaching today:

1. **Fearlessness required to oppose injustice:** Swami Vivekanand wanted people to be fearless. Understanding Swami Vivekananda and his message is important for removing our fears to fight any injustice. To defeat casteism, economic inequalities and other social injustice like women discrimination, it is important to fight against these injustices with courage.
2. **Brotherhood:** Swamiji's teaching of universal brotherhood is most relevant today. The world needs to realise that to bring peace, there is no other ideology more proper than this. Vasudev Kutumbakam i.e. belief in the world as a family has become necessary in the growing era of protectionism and de-globalisation.

3. **Education:** He believed that education should be freed from the stranglehold of the upper class and spread to every section of the society. He was not in favour of just career-oriented education. Unfortunately, that kind of education is not available today. Emphasis on true education, would surely help youth of today to excel in various fields especially in jobs that need skills.

4. **Women empowerment:** He emphasised on the women's education and believed that it will lead to greater development of society as a whole. He also advocated the need to impart martial arts training to women. Considering the sexual crime against women, girl dropouts from school and also reducing female labour force participation, Swami's teaching is still relevant.

It is high time for the youth to come forward by shedding their fears to shape up India. Swamiji laid great stress on Vasudev Kutumbakam. His teachings are relevant today since many problems remained the same. His teachings reflect a path to these problems.

Q.11) Buddhism played an important role in spreading Indian culture across the globe in ancient times. Elaborate.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. How Buddhism played an important role in spreading Indian culture?

Conclusion. Contextual conclusion.

Buddhism originated in India. Though Buddhism disappeared from India, yet, it had exerted great influence on the culture of India across the globe. Buddhism established an intimate contact between India and foreign countries. Many travellers have helped spread Buddhism outside India. The Buddhist monks carried the gospel of the Buddha to the foreign countries and contributed largely to the spread of Indian culture.

How Buddhism played an important role in spreading Indian culture?

1. **Spread of Hindu faith:** The foreigners who came to India were influenced by the rich culture of India. They gave up their names and creeds and adopted Hindu names and Hindu faith. Thus, in a way, Buddhism helped in spreading Indian way of living.

2. **Learning from universities:** The universities were the most important centres of cultural interaction. The scholars coming from abroad often visited the library of Nalanda University. Students and teachers from such universities carried Indian culture abroad along with its knowledge and religion. The Chinese pilgrim Huien-tsang has given ample information about the universities he visited in India.

3. **Spread of literature:** The Buddhist monasteries were used for education purposes. In the Buddhist monasteries the beginnings of vernacular or Prakrit literature were made which later on developed into an extensive body of literature. Buddhism promoted Indian literature through these monasteries.

4. **Spread of philosophy:** Many Chinese and Indian scholars travelled through these routes in search of wisdom and propagate the philosophy of Buddhism and Hinduism. Along the route there were resting places for Monks and Missionaries, for pilgrims and merchants. Later these became famous centres of Buddhist learning. The trade route transmitted religion and philosophy, ideas and beliefs, languages and literature, and art and culture.

5. **Spread of Indian art:** King Ashoka made great efforts to propagate Buddhism outside India. He sent his son Mahendra and daughter Sanghamitra to Sri Lanka to spread the

message of the Buddha. With Buddhism, Indian Art forms also reached Sri Lanka, where the themes, styles and techniques of paintings, dance, folklores and art and architecture were taken from India. The most renowned paintings of Sri Lanka are found in the cave-shelter monasteries at Sigiriya. Figures painted in the cave are in the Amaravati style of India.

The transmission of Indian culture to distant parts of Central Asia, China, Japan, and especially Southeast Asia is certainly one of the greatest achievements of Indian history. One can find some magnificent temples like Pagan in Burma, Angkor in Cambodia, Borobudur in Java which are the evidence of influence of Buddhism.

Q.12) What are various types of volcano? Also, explain what a complex volcano is and its salient features.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various types of volcano. Explain complex volcano and its salient features.

Conclusion. Way forward.

A volcano is an opening in the Earth's surface where molten rock can escape from underneath. Volcanoes are typically found at the fault lines between tectonic plates. Volcanic activity is an example of endogenic process.

Types of volcano:

A. Based on the nature of eruption:

1. **Active volcanoes:** Active volcanoes are those volcanoes which are currently, or have recently erupted.
2. **Dormant volcanoes:** Dormant volcanoes are those volcanoes which haven't erupted recently, and extinct volcanoes, which will never erupt again.

B. Based on the the form developed at the surface:

1. **Shield Volcanoes:** The shield volcanoes are the second largest of all the volcanoes on the earth.
 - These volcanoes are mostly made up of basalt and are not steep.
 - They become explosive if water enters into the vent, otherwise, they are less explosive.
 - The associated lava develops into cinder cones. The Hawaiian volcanoes are the most famous example.
2. **Composite Volcanoes:** These volcanoes are characterised by eruptions of cooler and more viscous lavas than basalt and often result in explosive eruptions. Along with lava, large quantities of pyroclastic material and ashes accumulates in the vicinity of the vent openings leading to formation of layers. This makes the mounts appear as composite volcanoes.
3. **Caldera:** These are the most explosive of the earth's volcanoes. When they erupt, they tend to collapse on themselves rather than building any tall structure. The collapsed depressions are called calderas. Their explosiveness indicates that the magma chamber supplying the lava is not only huge but is also in close vicinity.
4. **Flood Basalt Provinces:** These volcanoes outpour highly fluid lava that flows for long distances. The Deccan Traps from India, presently covering most of the Maharashtra plateau, are an example of large flood basalt province.

5. **Mid-Ocean Ridge Volcanoes:** These volcanoes occur in the oceanic areas. There is a system of mid-ocean ridges more than 70,000 km long that stretches through all the ocean basins. The central portion of this ridge experiences frequent eruptions.

Complex volcano and its salient features:

Complex Volcanoes sometimes called compound volcanoes are volcanoes that have multiple features associated with it, that includes stratovolcanoes, craters, conical hills, etc. They are called complex because they have numerous features. In most cases, they occur because of changes either in eruptive habit or in location of the principal vent area. Following are its salient features:

1. **Stratified:** They are made from stratified deposits of sticky lava together with fragmental solids. These solids erupt from the earth's interior and flow through the strata into the earth surface.
2. **Overlapping constructions:** Majority of these complex volcanoes are multifarious structures constructed by manifold eruptions, resulting in overlapping constructions.
3. **Crater:** Numerous composite volcanoes contain a crater at the top, which contains a fundamental vent or a gathered cluster of vents. Lava cools and solidifies in the crevices, forming dikes, which significantly reinforce the cone to be compact. Once this lava cools below one degree, it forms these magnificent features.
4. **Channel system:** The important characteristic of a composite volcano is a channel system over which magma from a basin deep in the Earth upsurges to the surface. The volcano is structured by the accretion of solid exploded through the channel and rises in scope as lava, cinders, residue and others materials are added to its inclines.

Recently erupted, Taal Volcano in the Philippines is a complex volcano. Complex volcanoes are commonly experienced in the USA, especially Mt. St. Helens and Mt. Shasta, Italy, Philippines, Japan Ecuador, and Canada.

Q.13) Discuss various reasons for pollution of lakes in India. What should be done to make water bodies in India clean?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various reasons for pollution of lakes in India. Measures to make water bodies in India clean.

Conclusion. Way forward.

Lakes are the lifeline of cities. It is not only home to aquatic life but has various human uses. With rising industrial activities and urbanisation and rise in population stress on these water bodies has increased. Many lakes are in poor state due to pollution caused by anthropogenic activities and need urgent efforts at all levels.

Various reasons for pollution of lakes in India:

1. **Sewage and Wastewater:** The treatment and disposal of wastewater has been a major issue in this regard. Sewage, garbage and liquid waste of households, agricultural lands

and factories are discharged into lakes. These wastes contain harmful chemicals and toxins which make the water poisonous for aquatic animals and plants.

2. **Uncontrolled urbanisation:** The single biggest reason for water pollution in India is urbanisation at an uncontrolled rate. The rate of urbanisation has only gone up at a fast pace in the last decade and has left an indelible mark on India's aquatic resources. This has led to several environmental issues in the long term like paucity in water supply, generation and collection of wastewaters.
3. **Encroachment:** Encroachment of lakes endangers the very existence of the lakes. A recent study on lakes titled 'Wetlands: Treasures of Bangalore' conducted by a team of researchers surveyed 105 lakes in Bangalore. The study found that 98% of the lakes were encroached by the mafia. None of the lakes had water that was fit for drinking according to standards set by the Central Pollution Control Board (CPCB).
4. **Dumping:** Dumping of solid wastes and litter in water bodies causes huge problems. Litters include glass, plastic, aluminium etc. Different things take different amounts of time to degrade in water. They affect aquatic plants and animals.
5. **Industrial Waste:** Industrial waste contains pollutants like asbestos, lead, mercury and petrochemicals which are extremely harmful to both people and environment. Industrial waste is discharged into lakes by using fresh water making the water contaminated.
6. **Acid Rain:** Acid rain is pollution of water caused by air pollution. When the acidic particles caused by air pollution in the atmosphere mix with water vapour, it results in acid rain. This acid rain pollutes water bodies.
7. **Global Warming:** Due to global warming, there is an increase in water temperature. This increase in temperature results in the death of aquatic plants and animals. This also results in bleaching of coral reefs in water. With aquatic life loss, their remains turn water bodies toxic and harmful for others.

Measures to make to make water bodies clean in India:

1. **Industrial Treatment:** Point source pollution is generally chemical and industrial waste from industries or domestic sewage from towns and cities. The raw sewage is needed to be treated correctly in a water treatment plant before it can be safely released into the environment.
2. **Minimise Chemical Use:** Eliminating or minimising use of harsh chemicals provides the surest way to protect water bodies from chemicals. When chemicals leach into a body of water, they can devastate ecosystems.
3. **Dispose of Hazardous Materials Correctly:** Proper disposal of hazardous materials such as paints, motor oil and pharmaceuticals is important to keep them out of the water supply.
4. **Denitrification:** Conversion of nitrates in gas is called denitrification. It is an ecological approach to prevent leaching of nitrates in soil. It stops ground water from getting contaminated.
5. **Sewage treatment:** In-situ treatment is simple and easy-to-operate and does not require major modification of the drain. This system should be used at the individual building level. The sewage should be separated into solid and liquid components and treated separately.
6. **Eliminating agricultural pollution:** Pollution in water bodies through non-point source such as agricultural runoff, need to be controlled. Incentivising farmers to shift to organic cultivation is not just a necessity for our rivers, it is also essential to ensure the food security of the nation and the well-being of hundreds of millions of farmers.
7. **Public private partnership:** To tackle water pollution, public-private partnerships need to be established and run efficiently. PPP should be encouraged for recycling, water treatment, sewage treatment etc.

Water bodies conservation is needed for the hour. A collaborative effort is needed by the government, states, private bodies, civil society and local communities. With looming water crisis it is important to keep our water bodies clean.

Q.14) What are dead zones? Discuss various consequences of the spreading of 'Dead Zones' on marine ecosystems?

Ans.

Demand of the question

Introduction. What are dead zones?

Body. Discuss various consequences of the spreading of 'Dead Zones' on marine ecosystems.

Conclusion. Way forward.

Dead zones are low-oxygen or hypoxic areas in the oceans and lakes. As most organisms need oxygen to live, few organisms survive in this condition. That is why these areas are called dead zones. Dead zones are generally caused by significant nutrient pollution. Falling ocean oxygen levels due to rising temperatures and influence from human activities such as agrochemical use is an increasingly widespread problem.

Reasons for spread of dead zones:

1. **Pollution:** Rise in water pollution activities has led to increase in concentration of nutrients in water bodies. Aquatic and marine dead zones are caused by an increase in nutrients (particularly nitrogen and phosphorus) in the water (eutrophication). Use of chemical fertilisers, runoff from sewage, urban land use, and fertilisers contribute to eutrophication.
2. **Climate change:** Changes in ocean circulation triggered by ongoing climate change also leading to and magnifying oxygen reductions in the ocean leading to dead zones. Warming sea temperatures have also quadrupled the spread of dead zones in the open ocean, which is less exposed to the nutrient pollution that can wreak such havoc with coastal waters.
3. **Meat industry:** In August 2017, a report suggested that the US meat industry and agro-economic system are predominantly responsible for the largest-ever dead zone in the Gulf of Mexico. Soil runoff and leached nitrate, exacerbated by agricultural land management practices and synthetic fertiliser usage, contaminated water. A large portion of the crops grown in this region are used as major feed components in the production of meat animals for agribusiness companies.

Consequences of spreading of dead zones on marine ecosystems:

1. **Threat to marine life:** Eutrophication (excess nitrogen and phosphorus) causes an overgrowth of algae in a short period of time, also called algae blooms. The overgrowth of algae consumes oxygen and blocks sunlight from underwater plants. When the algae eventually dies, the oxygen in the water is consumed. The lack of oxygen makes it impossible for aquatic life to survive. For example, Chile's 2016 toxic tides wiped out 20% of its salmon stock.
2. **Reduced reproduction:** Low oxygen levels reduce reproductive capacity. Low oxygen levels recorded along the Gulf Coast of North America have led to reproductive problems in fish involving decreased size of reproductive organs, low egg counts and lack of spawning.

3. **Coral death:** Ocean regions with low oxygen levels have a huge impact on aquatic organisms and can even destroy entire ecosystems. The low oxygen levels (around 2 milligrams of oxygen per litre of water or less), endangered coral reefs and can kill them.
4. **Contaminated drinking water:** Elevated nutrient levels and algal blooms can also cause problems in drinking water in communities nearby and upstream from dead zones. Harmful algal blooms release toxins that contaminate drinking water, causing illnesses for animals and humans.
5. **Overfishing:** A rise in dead zones means fish have a smaller area in which to swim, which could lead to concentrations of fish in certain areas. This would help in fish resources for short-term. However, this could soon lead to overfishing.
6. **Food insecurity:** Dead zones endanger seafood. Seafood causes less of a strain on the natural resources that are used to produce and distribute meat. If sea animals are poisoned in their natural habitat, they will become unsafe for consumption and will no longer be a viable option for food. As result, our economy would be forced to place a strain on other food sources.

So the current growth of dead zones could leave drastic and long-lasting changes to marine life biodiversity. Halting climate change requires a global effort. Local actions can help in reducing nutrient discharge in water bodies. Tackling climate change is critical for stemming the decline of oxygen in our oceans, and for nearly every aspect of life on our planet.

Q.15) Elaborate the role of Subhash Chandra Bose in India's struggle for independence.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss the role of Subhash Chandra Bose in India's struggle for independence.

Conclusion. Contextual conclusion.

Subhash Chandra Bose was a prominent figure in India's freedom struggle. He was not only an efficient leader but played an important role in the freedom struggle. He is remembered for his active and aggressive role in Indian freedom struggle. His style of leadership was not only attractive but was a motivating factor for many to take up the cause for Indian freedom struggle.

Role of Subhash Chandra Bose in India's struggle for independence:

1. **Political leadership:** Subhash Chandra Bose played a very active role in India's political life during most of the 1930's. He was jailed in 1921-1922 because of his political activities.
 - Immediately upon his release, he organised the All-Bengal Young Men's Conference.
 - He was twice elected President of the Indian National Congress (1938 and 1939).
 - He established a separate political party, the All India Forward Bloc and continued to call for the full and immediate independence of India from British rule.

During his political career, India's liberation from British rule remained Bose's foremost political goal. By 1930, Bose had formulated the broad strategy to throw off the yoke of British imperialism and assume its rightful place as a leader in Asia.

2. **Work with other nations:** Both before and during the second world war, Bose worked tirelessly to secure German and Japanese support in freeing his beloved homeland of foreign rule.
 - **The Indian National Army:** In July 1943 in Singapore, with Japanese assistance, he reorganised and later led the Indian National Army. It was formed from Indian prisoners of war and plantation workers from British Malaya, Singapore, and other parts of Southeast Asia, against British forces.
 - **Azad Hind Government:** With Japanese monetary, political, diplomatic and military assistance, he formed the Azad Hind Government in exile.
3. **Mass mobilisation:** Subhash Chandra Bose played an important role in mass mobilisation and rousing feeling of independence among them. Realising that manpower was India's greatest resource, he proclaimed that all Indians should actively participate in the fight for freedom. With the formation of provincial government of Azad Hind, he appealed directly for total mobilisation to the mass of Indians.
4. **Women mobilisation:** Bose called on both men and women for freedom struggle. Bose believed that women were equals of men, and should therefore be likewise prepared to fight and sacrifice for India's liberation. Throughout the 1920's and 1930's he had campaigned in India to bring women more fully into the freedom struggle of the nation. After his return to Asia in 1943 he called on women to serve as soldiers in the Indian National Army. A women's regiment (Rani of Jhansi Regiment) was formed in 1943, and came to number about 1,000 women.
5. **Youth leadership:** Bose was also deeply committed to the youth movement. Convinced that young people were by nature idealistic, restless and open to new ideas, Bose worked with and put efforts to the new Youth Leagues that were formed in a number of provinces during the 1920's. He motivated youth to join the cause of Indian freedom struggle. Bose believed that India's liberation would be achieved only through the efforts and sacrifices of the conscious younger generation.

Subhash Chandra Bose advocated complete freedom for India at the earliest, even when the Congress wanted it in phases, through a Dominion status. The organisation of the Azad Hind forces and INA are a milestone in the history of the Indian struggle for freedom, the formation of which was the brainchild of Subhash Chandra Bose.

Q.16) What is vertical farming? How does it work? Discuss its advantages and disadvantages.

Ans.

Demand of the question

Introduction. What is vertical farming?

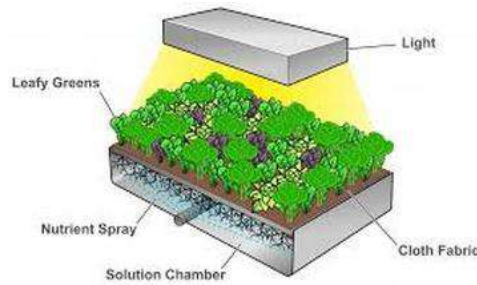
Body. Discuss how it works, its advantages and disadvantages.

Conclusion. Way forward.

Vertical farming is the practice of growing crops indoors, on vertically inclined surfaces, under artificial conditions of light and temperature. It is done in a controlled environment, with the aim of optimising plant growth. It aims at higher productivity in smaller spaces and uses soil-less methods such as hydroponics, aquaponics and aeroponics.

How Vertical farming works?

Vertical farms have following main features:



1. **Lighting:** In vertical farming crops are cultivated in stacked layers in a tower-like structure. A perfect combination of natural and artificial lights is used to maintain the perfect light level in the room. Technologies such as rotating beds are used to improve lighting efficiency. This increases the amount of sunlight absorbed, therefore making photosynthesis very efficient.
2. **Growing medium:** In vertical farming instead of soil, aeroponic, aquaponic or hydroponic growing mediums are used. Peat moss or coconut husks and similar non-soil mediums are very common in vertical farming. Plants are grown in a soilless mist that is sprayed from internal micro jets. Since in vertical farms the roots are uncovered and exposed to more oxygen, the plants/crops will be able to grow at a faster rate.
3. **A cloth medium:** Finally, the cloth medium is used for seeding, germination (when seeds sprout), growing and harvesting of plants.

Advantages of vertical farming:

1. **Increased crop yield:** The main advantage of utilizing vertical farming technologies is the increased crop yield that comes with a smaller unit area of land requirement. The increased ability to cultivate a larger variety of crops at once is because crops do not share the same plots of land. Vertical farming allows for, in some cases, over ten times the crop yield per acre than traditional methods.
2. **Resistant to weather disruptions:** Crops are resistant to weather disruptions because of their placement indoors. In other words, less crops are lost to extreme or unexpected weather occurrences. The issue of adverse weather conditions is especially relevant for countries depending upon monsoon like India.
3. **Prevent ecosystem disruption:** Because of its limited land usage, vertical farming is less disruptive to the native plants and animals, leading to further conservation of the local flora and fauna. Traditional farming is often invasive to the native flora and fauna because it requires such a large area of arable land.
4. **Environment conservation:** Vertical farming can help in preventing climate change and conserve the environment. Deforestation and desertification caused by agricultural encroachment on natural biomes could be avoided. Producing food indoors reduces or eliminates conventional plowing, planting, and harvesting by farm machinery, protecting soil, and reducing emissions.
5. **Water conservation:** Vertical farming allows to produce crops with 70-95% less water than required for normal cultivation. In addition, with the plants being grown in huge vertical greenhouses, the transpiration that will occur naturally will be harnessed and reused again for irrigation.

Disadvantages of vertical farming:

1. **Economic Viability:** This type of farm depends heavily on modern engineering and architecture, as well as the application of different technologies. Building vertical farms in expensive buildings add to the total investment and operational costs.
2. **Interfere with Pollination:** Vertical farming takes place in a controlled environment without the presence of insects. As such, the pollination process needs to be done manually, which will be labor intensive and costly.
3. **Labor Costs:** In vertical farming, labor costs can be even higher due to their concentration in urban centres where wages are higher, as well as the need for more skilled labor. Automation in vertical farms, however, may lead to the need for fewer workers. Manual pollination may become one of the more labor-intensive functions in vertical farms.
4. **Disruption to the Rural Sector:** Another foreseen challenge and disadvantage of vertical farming involves the potential for disrupting the rural sector, especially those communities with economies that are dependent on agriculture. Vertical farms can render traditional farming jobs obsolete. Farmers who do not have competencies in vertical farming would be left jobless. Communities dependent on agriculture would certainly suffer.

By 2050, around 80% of the world population is expected to live in urban areas, and the growing population will lead to an increased demand for food. The efficient use of vertical farming may perhaps play a significant role in preparing for such a challenge.

Q.17) What are various reasons for increasing land degradation and desertification across India? Discuss its consequences and suggest some measures.

Ans.

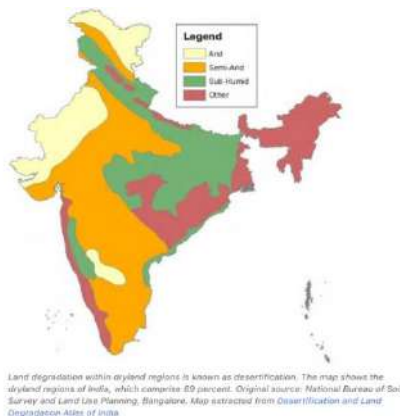
Demand of the question

Introduction. What is land degradation?

Body. Discuss reasons for increasing land degradation and desertification in India. Mention its impact.

Conclusion. Way forward.

According to the UNCCD, land degradation refers to the loss of biological or economic productivity of land resulting from land uses or from a combination of factors including human activities. According to 'Desertification and Land Degradation of Selected Districts of India', an atlas published by the ISRO'S Space Application Centre (SAC), in 2018, some 96 million ha, or about 30% of the country's total area, is undergoing degradation an increase of 0.58% as compared to 2003-2005.



Various reasons for increasing land degradation:

1. **Growing Demand:** Growing demand for food, fodder, fuel and raw materials is increasing the pressure on land and the competition for natural resources. This has led to stress on land usage and has led to over-exploitation of land resources like overgrazing, and conversion to other land uses.
2. **Unsustainable agricultural practices:** About 141 million hectares of land is used by agriculture in India. Faulty land and water management practices in agriculture have significantly contributed to land degradation. Intensive irrigation and high chemical use (fertilisers, pesticides, etc.) adds to degradation.
3. **Increasing population:** With rise in population, stress on natural resources is increasing. People are looking to move into new areas and are invading new land in order to make houses. This is contributing to the rise in desertification and land degradation.
4. **Unplanned urbanisation:** Economic development has led to expansion of urban and industrial land. Much of the present urban and industrial development has taken place on agricultural land. The expansion of cities has resulted in the encroachment of forest areas and wetlands. For example, rapid urbanisation triggered by a population increase in coastal areas has caused coastal land degradation.
5. **Climate Change:** Climate change plays a huge role in desertification. As the days get warmer and periods of drought become more frequent, desertification becomes more and more eminent. Further rise in incidents like forest fires are destroying forests and leading to rise in desertification.

Various consequences of desertification:

1. **Reduction in agricultural productivity:** Land degradation exacerbates climate change and threatens agricultural productivity. It reduces soil health, water quality and damages crops. Thus, in turn impact the livelihood of rural people.
2. **Water crisis:** Land degradation has resulted in a deterioration in the quantity and quality of both surface and groundwater resources. Less vegetative cover leads to soil erosion. Runoff increases and flooding becomes more frequent and extensive. Groundwater recharge decreases, and the water table also drops.
3. **Endanger food resources:** With land degradation, the food production is endangered and reduced. With reduced agricultural activities and productivity, land degradation endangers future nutrition.
4. **Decrease in population:** Land degradation adversely impacts the population as it leads to increased health risk due to lack of nutrition and water. It reduces human settlement as land becomes non-productive for livelihood. This would lead to internal and external migration.

Way forward:

1. **Afforestation:** Forest degradation accounts for the major share of land degradation costs of India highlighting the need to prevent forest degradation. Further, strategy to reduce forest dependence for fuelwood, fodder and non-timber forest products should be made. Efforts must be made for afforestation.
2. **Using alternative fuels:** A major focus for reducing forest degradation is encouraging rural households dependent on forests to switch to alternative fuel sources or at the minimum utilise fuel-efficient devices. The Ujjwala scheme is a positive measure but requires a relook to ensure its sustained uptake and success.
3. **Preventing overgrazing:** Farmers should be discouraged from overgrazing activities. They must be made aware of the harm of overgrazing to land productivity.

4. **Sustainable agriculture:** Climate resistant crops need to be developed and used. Efforts must be made to make farmers aware of overuse of chemical fertilisers. Subsidy may be removed for the same and replaced by Cash transfer.

As a signatory to the United Nations Convention to Combat Desertification (UNCCD), India is committed to reducing its land degradation and desertification. India's goal is to achieve land degradation neutral status by 2030 whereby increases in land degradation would be offset by gains in land reclamation. The Green India Mission (GIM) under the National Action Plan on Climate Change is important that focuses on sustainable land management and restoration of degraded areas.

Q.18) Discuss various land reforms in India before and after independence.

Ans.

Demand of the question

Introduction. What are land reforms?

Body. Discuss various land reforms in India before and after independence.

Conclusion. Way forward.

Land reforms refers to various reforms in regulations regarding land ownership and property rights for the benefit of the community as a whole. The main objective of the land reforms is to do away with the existing inequalities in the system of landholding and to increase the agricultural productivity.

Land reforms before independence:

1. **Rent Act of 1859:** The Bengal Rent Act of 1859 was the first legislative attempt at defining the rights of tenants and protecting them against frequent enhancement of rent and arbitrary ejection. The law applied to all provinces included in the Bengal presidency.
2. **Tenancy and Rent Act, 1885:** The Famine Commission (1880) noted that the Rent Acts failed to bring noteworthy improvement in the economic condition of tenants. Bengal witnessed large-scale agrarian conflicts and anti-Zamindar riots during the years 1872-76. Thus, the Tenancy and Rent Acts were passed in Bengal in 1885, with a view to conferring occupancy rights upon ryots who were in continuous possession of land for 12 years.
3. **Subsequent tenancy acts:** Similar to 1885 Bengal's tenancy act, the Bihar Tenancy Act of 1885 and Orissa Tenancy Act of 1914 granted occupancy rights to tenants. The Agra Tenancy Act 1926 granted a statutory life tenancy to everyone formerly classified as tenant-at-will. The C.P. Act abolished 'Begar' while the Bombay Act of 1938 specified the grounds on which tenants could be ejected. It also allowed compensation for improvements made.

Land reforms after independence:

1. **Abolition of Intermediaries:** Intermediaries like Zamindars, Talukdars, Jagirs and Inams had dominated the agricultural sector in India by the time the country attained independence. Soon after independence, measures for the abolition of the Zamindari system were adopted in different states. The first Act to abolish intermediaries was passed in Madras in 1948. By 1955, the progress for the abolition of intermediaries had been completed in almost all the states.

2. **Tenancy Reforms:** To protect tenants from ejectment and to grant them permanent rights on lands, laws have been enacted in most of the states. The tenancy legislations in India are not uniform throughout the country. Each state has its own legislation. For example, in Orissa, a limit has been imposed on the landlords for resuming land for personal cultivation.
3. **Ceiling on land holdings:** The third important land reform was the imposition of ceiling on land holdings. Ceiling on land holdings implies the fixing of the maximum amount of land that an individual or family can possess. Ceiling legislation in India has been enacted and implemented in all states.
4. **Consolidation of Holdings:** Consolidation of Holdings means bringing together the various small plots of land of a farmer. Attempts have been made in India for consolidation of holdings in some areas. It formed an integral part of our land reforms policy since the inception of the Planning in 1951. 15 states have passed laws in respect of consolidation of holdings. In Orissa, the Consolidation Act was passed in 1972. The work of consolidation has been completed fully in Punjab and Haryana. So far 51.8 million hectares of land have been consolidated in the country.
5. **Compilation and updating of land records:** Compilation and updating of the land records are an essential condition for the effective implementation of land reforms programme. In recent years the states have taken all measures for updating land records with the utmost urgency by adopting a time-bound programme. Efforts are also being made to maintain the land records through computerisation.
6. **Digitisation:** It began around the mid or late 1960s and saw the gradual ushering in of the green revolution. Making land records available to all, to contain/check property frauds in the late 1980s. The Digital India Land Records Modernisation Programme (DILRMP) was launched by the government of India in 2008 to computerise all land records.

The purpose of land reform is to help weaker sections of society and do justice in land distribution. Government land policies are implemented to make more rational use of the scarce land resources by affecting conditions of holdings, imposing ceilings and grounds on holdings so that cultivation can be done in the most economical manner.

Q.19) 'Current climate crisis has led to an increase in the number of intense 'hydro-meteorological' disasters'. Comment. What policy measures can be taken to counter this?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss how climate change is leading to rise in frequency of floods? Suggest some measures to tackle the situation.

Conclusion. Way forward.

Hydro-meteorological disaster is a phenomenon of atmospheric, hydrological or oceanographic nature that cause loss of life, social and economic disruption and environmental damage. It includes floods, droughts, cyclones, avalanches, heatwaves etc. With climate-change along with decline in ecological assimilative capacities there is an increase in number and intensity of such disasters. Immediate impacts already being felt in form of the increased frequency of climate related hazard events such as floods, increased occurrence of drought, cyclones etc.

Rise in hydro-meteorological disasters:

1. **Floods:** Climate change has had extreme impacts in India. Rise in average global temperatures have led to a trend of no rain for long periods and then a sudden bout of excessive rainfall, causing floods. As a result of the changing climate, monsoon rainfall in 2018 was the sixth lowest since 1901, according to the India Meteorological Department (IMD). In 2019 India saw three major floods in Karnataka, Kerala and Bihar.
2. **Droughts:** Higher sea temperatures, linked to climate change, have doubled the likelihood of drought. Regionally, the driest parts of the earth are getting drier, while the wettest parts are getting wetter. Severe droughts in 2011, 2017 and 2018 have repeatedly wiped out crops and livestock.
3. **Cyclones:** With climate change frequency and intensity of cyclones have increased. An Intergovernmental Panel on Climate Change (IPCC) report a rise in frequency and intensity of cyclones. The Atlantic and Indian Ocean basins appear to be increasing at the fastest rates. Recent Cyclone Fani, cyclone Okchi, has devastated large parts of and has left behind a trail of massive destruction.
4. **Heatwaves:** With rising temperatures heat waves have increased. Across the globe, hot days are getting hotter and more frequent, with fewer cold days. Heat waves are becoming more common, and intense heat waves are more frequent in many parts of the country.
5. **Forest fires:** The start of 2020 found Australia in the midst of its worst-ever bushfire. Last year Amazon forests faced forest fires. The fires have burned through more than 10 million hectares, razed entire communities to the ground, taken the homes of thousands of families, and left millions of people affected by a hazardous smoke haze. More than a billion native animals have been killed, and some species and ecosystems may never recover.

What should be done?

1. **Disaster preparedness:** As the number of disasters and intensity is increasing, there is a need to change the disaster mitigation approach. A bottom up approach is needed with an emphasis on training of local communities, tribal people, local governments in disaster management. Further, efforts must be made to follow Sendai framework.
2. **Tackling climate change:** Without global efforts to reduce climate change, any effort would be in vain. It is important to achieve Paris climate targets as soon as possible. More efforts are needed to reduce dependence on fossil fuels.
3. **Afforestation:** An afforestation effort is must with an aim to reduce carbon in climate and making impact of disasters minimal. Trees are a natural way to reduce the impact of disasters. It will also help in cooling the planet and reducing heat waves.
4. **Green policies:** Government must emphasise green policies and initiatives. Efforts must be made to switch to renewable resources as soon as we can. There is a need to put a carbon tax to reduce carbon emissions.
5. **Policy for forest fires:** There is a need to frame forest fire policy. It is important to reduce human activities near forest fires. Camping should be disallowed nearby forest fires. Forest rangers must be trained to prevent and stop forest fires effectively.

With rising temperatures and climate change, the risk of disasters is a cause of concern. It is dangerous especially for poor people as they are one who suffer most. There is a need to put a collaborative effort with emphasis on reducing carbon emission and mitigating immediate risks of increasing disasters.

Q.20) What is de-globalisation? Discuss its consequences and impact on India.

Ans.

Demand of the question

Introduction. What is de-globalisation?

Body. Discuss reasons for rising tendency towards de-globalisation by some countries. Mention impact of de-globalisation on India.

Conclusion. Way forward.

De-globalisation is the process of diminishing interdependence and integration between nations around the world. It is characterised by decline in economic trade and investment between countries. This decline reflects that economies become less integrated with the rest of the world economies with rise in tendencies of protectionism.

Reasons for rising tendency towards de-globalisation by some countries:

1. **Rise of Asia:** Developing nations like India, China and Japan have grown rapidly over the last few decades. The economic power has been shifting from the West to these Asian Nations. Thus, developed nations have started turning inward in order to put a check on the rise of other powers.
2. **Protectionism:** Although western nations have benefitted immensely from globalisation by expanding the reach of their economy and by the acquisition of talented individuals, public support towards it has been waning fast. Developed nations think they have more to lose than to gain. The people of these nations are worried about the consequences of globalisation like loss of employment, increased migration and crimes etc.
3. **Security concerns:** One of perceived consequences of globalisation is rising security concerns. Increased exchange and mutual trade between nations have made it increasingly tough to maintain global security. Each terrorist attack that takes place in these developed nations brings more people in support of de-globalisation. The Financial Times data collected by the United Nations claims that a million fewer people a year are moving to another country on average every year after 2010. This further reduces the free movement of goods and people.
4. **Refugee crisis:** Another factor that plays a role in support of de-globalisation is the refugee crisis. The constant unrest in western Asian nations has caused a severe refugee crisis. The majority of the citizens from these nations have taken refuge, legally or illegally in European nations. This is a huge cause of concern for these debt-stricken economies. As these economies are unable to grow and create enough employment opportunities for their own people, the voice against globalisation grows stronger.

Impact of de-globalisation on India:

<p>Economic impact</p>	<ol style="list-style-type: none"> 1. Growth: De-globalisation will lead to reduction in the rate of economic growth of India. It will lead to protectionism with reduced cooperation among countries that will hurt Indian trade and exports. In the successive monetary policies in 2018-19, RBI has observed that protectionism poses a challenge to India's growth rate, because it affects the demand of Indian exports, especially in the textile, pharmaceutical, gems-jewellery and service sector. 2. Competition: De-globalisation will lead to reduction in competition and rise in general prices of the goods and services. For example, Brexit will give rise to higher tariffs and quotas that will have an impact on British business as well as on the rest of the world leading
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	<p>to price rise.</p> <p>3. Employment: It will destroy employment opportunities as it will prevent outflow of skilled people due to protectionist measures like visa regulations. This will impact their employability and remittance to the nation. Recently, the USA has increased H1B visa norms stringent to Indians, as Indians are occupying major posts in the USA.</p> <p>4. Increased costs: It may lead to increased import costs due to lesser choice and options and manufacturers and producers would have to pay more for equipment, commodities, and intermediate products from foreign markets.</p>
Social impact	It will lead to decrease in standards of living as it will impact exports and economic growth impacting welfare of poor and their standard of lives. It may further lead to rise in conflicts economically and politically.
Political impact	It would affect polity leading to instability in the political framework of nations due to rise in prices and cost of living may lead to civil unrest.
Hinder technological development	These tendencies limit technological advancement of the world as a whole and of developing countries in particular. Limited knowledge sharing, lack of flow of technology to developing countries limit advancement in science.
Impact on Environmental conservation	<p>1. Due to non-cooperation among nations it will impact environment conservation efforts in India.</p> <p>2. It will reduce required funding and would jeopardise efforts to conserve environment and tackle environment change.</p> <p>3. It would lead to lack of coordination at international organisations like UN where countries may not come at a common point to various problems like environmental change.</p>
Impact on women empowerment	De-globalisation would impact women empowerment efforts as it will impact women movements across the globe. Lack of coordination will reduce opportunities for women across the world.
Impact on security	Due to lack of coordination among various nations, security around the world along with India would impact. It will not only increase economic risks, but would provide an opportunity for terrorists to carry out violence due to lack of coordination among various law enforcement agencies.
Impact on agriculture	<p>1. A less coordinating world means impact on agricultural exports and Indian farmers. Indian farmers would face double whammy of environment change and de-globalisation.</p> <p>2. It will impact economic development in India and would hurt the welfare of Indian farmers.</p>

Multiple factors are causing this shift from globalisation to de-globalisation. As economic power shifts from the Western to Asian nations, the U.S. and the U.K. have adopted self-protection policies. Rising security concerns and refugee crisis also play a role in creating support for de-globalisation. What is required is to develop self-sufficiencies so as to prevent major impact of such tendencies.

General Studies 2

Q.1) Access to Internet must be recognised as a fundamental right to free speech, basic freedoms and the right to life. Do you agree?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss the need of recognising Right to Internet as a right in itself. Mention the significance of right to internet being recognised as a right in itself.

Conclusion. Way forward.

Today we live in a global digital era, where boundaries carry no meaning when it comes to internet. Internet is a must in today's world if one has to enjoy various rights and services. In the present digital world where almost every service is being digitised, it is important to recognise the right to Internet access as an independent right.

Need for recognising Right to Internet as a right in itself:

1. **Social injustice:** Digital inequalities lead to gross social injustice and hinder development of the individuals. With non-availability of Internet many Indian citizens especially poor are unable to access many services. It also prevents them many employment opportunities.
2. **Preventing exclusion:** In recent times, several government and private sector services have become digital. Some of them are only available online. Thus, internet access is a must to avail these services. Internet is a right in a way to enjoy other rights.
3. **Digital economy:** We are moving to a global digital economy where knowledge of digital processes will transform the way in which people work, collaborate, consume information, and entertain themselves. This has been acknowledged in the Sustainable Development Goals as well as by the Indian government and has led to the Digital India mission.
5. **Good governance:** Accountability and transparency are two pillars of good governance. Lack of internet hinder this. For example, the Internet helps people know what government is doing and enable them to keep government accountable through various platforms like Twitter or grievance portals.
6. **Employment opportunities:** Lack of internet access prevents many people from equal employment opportunities. For example, a rural seller could earn more by selling online through e-commerce like amazon, which he may not enjoy due to lack of internet. Further digital illiteracy lead to lack of required skills, as digital skills are must nowadays to get any job.
7. **Women empowerment:** Digital literacy and internet access helps in furthering women's rights and helps them to be aware of their rights. It helps in educating women. Also, it provides employment opportunities for them, as many women work from home through the internet.

Significance of right to internet being recognised as a right in itself:

1. **Positive obligation:** A positive obligation to create infrastructure for a minimum standard and quality of Internet access as well as capacity-building measures which would allow all citizens to be digitally literate.
2. **Negative obligation:** A negative obligation prohibiting it from engaging in conduct that impedes, obstructs or violates such a right. Thus, it will prevent unwarranted internet shutdowns.

3. **Accountability:** Recognising the right to internet will also make it easier to demand accountability from the state, as well as encourage the legislature and the executive to take a more proactive role in furthering this right.

4. **Reducing inequalities:** A right to Internet access would also further provisions given under Articles 38(2) and 39 of the Constitution reducing inequalities and furthering right of every individual.

Recently, in *Faheema Shirin v. State of Kerala*, the Kerala High Court declared the right to Internet access as a fundamental right forming a part of the right to privacy and the right to education under Article 21 of the Constitution. Some states including Kerala have included internet in the list of essential services. It is an important step to recognise the right to Internet as a fundamental right, and allow citizens increased access to information, services, and the creation of better livelihood opportunities. Internet is a right in itself today which one should be available to all.

Q.2) Discuss the role of CAG (Comptroller and Auditor General) as an anti-corruption body.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss the role of CAG as anti-corruption institution. Various issues related to CAG.

Conclusion. Way forward.

Comptroller and Auditor General is an important constitutional body that ensures government accountability in India. Article 148 of the Constitution provides for a CAG with the status of a Supreme Court judge. Constitutionally, it has been mandated to enhance the accountability of the Executive to the Parliament and State legislatures by carrying out audits in the public sector.

CAG as anti-corruption institution:

1. **Accountability:** The accountability of the executive (council of ministers) to the parliament in the sphere of financial administration is secured through audit reports of the CAG.

2. **Ensure financial transparency:** The CAG ascertains whether money shown in the accounts as having been disbursed was used for the purpose to which they have been charged. Thus, it ensures proper use of money.

3. **Fiscal watch:** In addition to this legal and regulatory audit, the CAG can also conduct the propriety audit, that is, he can look into the wisdom, faithfulness and economy of government expenditure and comment on the wastefulness and extravagance of such expenditure.

4. **Effective check:** It is the duty of the CAG to audit all receipts which are payable into the Consolidated Fund of India. The rules and procedures are designed to ensure an effective check on the assessment, collection and proper allocation of revenue.

5. **Financial administration:** His duty is to uphold the Constitution of India and laws of Parliament in the field of financial administration. The accountability of the executive (the council of ministers) to the Parliament in the sphere of financial administration is secured through audit reports of the CAG.

6. **Expose corruption:** CAG reports play an important role in exposing corruption and misuse of government money. For example, CAG role played an important role in exposing coal scam.

Some issues faced by CAG:

1. **Government Inaction:** The CAG mostly finds his reports hitting the junk pile of government records. Many times, government just ignore CAG findings.
2. **Periodicity:** There is no deadline for the production of documents and replies nor any contempt proceedings for their denial.
3. **Less independence:** The CAG doesn't have the right to release these reports in the public domain if they are not presented in the legislature within a month of their submission. Nor can CAG enforce any of its findings by decree, akin to Parliament's Public Accounts Committee.
4. **Post-expenditure Audit:** The CAG does the audits post-expenditure, so it is more of an auditor than being a comptroller like the British CAG.
5. **Proprietary Audits:** The propriety audits are discretionary for CAG which is also another issue.

The CAG has to some extent achieved what he set out to do, especially when it comes to redefining the role of the office and the public perception of auditors. Despite the severest limitations, the CAG still creditably survives in the defence of accountability, a knight in shining armour amidst the overwhelming rot. The office is a unique combination of knowledge, integrity, commitment and fearlessness. Indeed, the Comptroller and Auditor-General is India's second remaining pillar of democracy.

Q.3) Discuss various provisions of Sansad Adarsh Gram Yojana' (SAGY). What are various challenges in realising the goals of this scheme?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various provisions of Sansad Adarsh Gram Yojana' (SAGY). Mention various issues in realising the goals of this scheme.

Conclusion. Way forward.

The Saansad Adarsh Gram Yojana was launched for clean and developed villages of rural India. This is a prestigious village development project, which focuses on the all-round development of specific villages, including economic, social and cultural growth and development. In this each Member of Parliament (MP) will take up the responsibility of providing infrastructure and developing 3 villages. In the same manner, the State Governments should also create schemes and more and more villages can be covered under this.

Main Objective of Saansad Adarsh Gram Yojana:

1. **Gandhi's dream:** The scheme is based on the concept of rural development of Mahatma Gandhi which revolved around creating model villages for transforming swaraj (self-rule) into su-raj (good governance).
2. **Holistic development:** The objective is to create holistic development of all the adopted villages by the MPs in all aspects- human, personal, social, economic and environmental

development, including provision of basic amenities, services, security and good governance.

Features of Saansad Adarsh Gram Yojana:

1. **Village adoption:** Each MP would adopt a village of his choice, which should not be his own or his in-laws. This should be turned into a model village. Then two more villages should be chosen and developed. After 2019, one village should be taken up every year until 2024.
2. **Poverty alleviation:** Villages should be adopted not from urban constituencies but from nearby rural areas. Emphasis on empowering the poor families to get rid of poverty by implementing a proper plan for every identified gram panchayat.
3. **All round development:** Focuses on transforming villages into model villages by providing all round infrastructural development along with emphasis on gender equality, women empowerment and dignity, social justice, cleanliness, community service, peace, harmony and eco-friendliness.
4. **Housing and education:** Each village will have pucca houses for homeless villagers and proper sanitation facilities. Each village will have smart schools with IT-enabled classrooms, e-libraries and web-based teaching.
5. **Healthcare:** The plan also aims to provide basic health care facilities to all with health card, medical examination, and total immunisation.
6. **Other benefits:** Other benefits to be provided are piped drinking water, connectivity to the main road, electricity supply to all households, libraries in the village, telecom and broadband connectivity including CCTVs in public areas. Emphasis is also be given on e-governance. SAGY will ensure the provision of Aadhaar cards to all villagers.
7. **Insurance:** SAGY will also provide insurance schemes like Aam Aadmi Bima Yojana and universal access to the Public Distribution System to eligible families for social security, old-age, disability and widow pensions.
9. **Personal development:** Besides these, SAGY also lays focus on “personal development” which includes training and awareness on hygienic behaviour, physical exercise and reducing alcoholism, smoking and substance abuse.

Challenges to the scheme:

1. **Monitoring:** The biggest challenge is difficult for MPs to monitor the on-ground development on a regular basis, in the absence of a platform where they can oversee the progress on different interventions.
2. **Implementation:** While the SAGY talks about convergence and effective utilisation of available Central and state schemes, most MPs raise the point that it is extremely difficult to know about the provisions under each scheme and the structure and framework for its implementation on the ground.
3. **Fund scarcity:** The biggest challenge in SAGY is the lack of any specific fund allocation for the programme. Sarpanch are not able to get any work initiated because of lack of funds. They claimed that funds may have been held up by other authorities, or possibly that the MP was blocked from releasing funds by the government, and may have thus precluded any development in earnest.
4. **Coordination:** Activities under SAGY are so diverse that close coordination and convergence will be required across different ministries, departments, schemes of the Government of India, MPLADS, state government and the private sector to implement the scheme successfully. The coordination is the biggest challenge.
5. **Village selection:** Another problem is related to the selection of the village. Guidelines provide that an MP can select any village except his own village or his spouse's village. This

puts MPs in dilemma. If they select a village, then voters from other villages may question the move.

6. Political will: Some MPs whose constituency is in an urban area (e.g. Delhi) have to select a village from some other rural constituency. They are often unwilling to do so because, then they will have to spend their MPLAD funds outside their constituency which won't bring any political benefits for them.

SAGY presents an opportunity to Parliamentarians to comprehensively focus on the development of villages initiating a bottom up approach of development. After the launch of this scheme, many states such as Andhra Pradesh, Gujarat, Chhattisgarh, Rajasthan, Karnataka and Maharashtra have launched programmes for rural development on similar lines. The Smart Village-Smart Ward programme initiated by the Government of Andhra Pradesh is an extremely innovative and unique model as it promotes active private and corporate participation in the development of villages. More such efforts are needed.

Q.4) Poor sanitation is a major reason for poor health of the population in Indian cities. Elaborate. Also suggest some measures to improve the situation.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. How poor sanitation is a major reason for poor health in Indian cities? Provide some measures to improve the situation.

Conclusion. Way forward.

Safe and clean drinking water and sanitation is a human right as recognised by the UN General Assembly in 2010. It is evident that Indian cities have poor WASH services i.e. Water, Sanitation, and Hygiene. This leads to threat of infections and prevention of disease is severely compromised. An estimated 4 lakh children die of diseases such as cholera, dysentery and suffer from stunted growth as a result of poor sanitation each year. Although substantial gains have been made through Swachh Bharat mission in increasing access to improved sanitation in India, many families still lack these facilities.

Sanitation and health

1. **Diseases:** Poor sanitation is linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio and exacerbates stunting. Inadequate sanitation is estimated to cause millions of diarrhoeal deaths annually.

2. **Socio-economic impact:** Poor sanitation reduces human well-being, social and economic development due to impacts such as anxiety, risk of sexual assault, and lost educational opportunities.

3. **Malnutrition:** Poor sanitation also contributes to malnutrition. Open defecation perpetuates a vicious cycle of disease and poverty. The countries where open defecation is most widespread have the highest number of deaths of children aged under 5 years as well as the highest levels of malnutrition and poverty, and big disparities of wealth.

4. **Impact on livelihood:** A World Bank study estimates that inadequate sanitation accounts for a loss of \$53.8 billion (as estimated for 2006) in India, which includes economic losses recorded from tourism, access time, water use and health related economic impacts. This push many into poverty that lead to poor nutrition and a risk to health further. Also, it prevents them to access health services.

5. **Demographic dividend:** India is going through the phase of demographic dividend. Demographic dividend depends on keeping our population healthy, and sanitation is an important aspect of the same.

Reasons of India's failure at sanitation:

1. **Not enough focus on Urban areas:** With respect to urban and rural areas there are different types of problem. Most of the schemes focused only on rural area despite knowing that open defecation is not only rural phenomenon, considering India contributes to 46% of global open defecation in urban areas.
2. **Population rise:** Population increase, rising incomes, and industrial growth are also responsible for poor sanitation. With the rise in migration towards urban cities, it became difficult to manage household wastes especially from urban slums. Population residing in urban areas in India, according to 2011 census, was at 31.16%. In 2017, the numbers increased to 34%, according to The World Bank.
3. **Lack of Effective and efficient monitoring:** There is no effective monitoring of municipal bodies and their funds. Municipalities have become new temple of corruption, where allocated funds are not properly used.
4. **Top-down approach:** The mistake of the programmes adopted thus far has been the lack of local involvement. This has led to a variety of issues like slow implementation, misplaced priorities of local government and complete dissatisfaction of the communities.
5. **Poor Urban governance:** A major factor for growth of slums and poor sanitation is use of rigid, often outdated urban planning regulations, which are typically bypassed by slum dwellers to meet their housing needs. Further, only 30% of the generated wastewater and generated sewage gets treated before being let into rivers and streams due to lack of proper planning.

Some government initiatives:

1. **Swachh Bharat Abhiyan:** Swachh Bharat Abhiyan (SBA) is a campaign in India by the government of India. It aims to clean up the streets, roads and infrastructure of India's cities, smaller towns, and rural areas.
2. **Swachhata Pakhwada:** Swachhata Pakhwada aim to engage all Union Ministries and Departments in Swachhata-related activities. An annual calendar is pre-circulated among the Ministries to help them plan for the Pakhwada activities.
3. **Namami Gange:** The Namami Gange Programme is an initiative of Ministry of Water Resources (MOWR). As an inter-ministerial initiative, making villages on the bank of river Ganga ODF and interventions dealing with solid and liquid waste management (SLWM) is undertaken.
4. **GOBARDhan scheme:** The Galvanising Organic Bio-Agro Resource dhan or "GOBARDhan" scheme scheme is aimed at keeping villages clean while increasing the income of farmers and cattle owners by promoting local entrepreneurs to convert cattle dung, and other organic resources, to biogas and organic manure.

Some measures to improve the situation:

1. **Civil society participation:** Sanitation Policies and Programs should facilitate the participation of civil society (including women) in the design, implementation and monitoring of local priorities in rural and urban areas.
2. **Effective monitoring:** Strengthening of institutions, efficient monitoring and evaluation for improved accountability and implementation is needed.
3. **Behavioural Change and culture of cleanliness:** Authorities should work towards developing a culture of cleanliness and safety in all places. A behaviour change must be instilled among community towards WASH and its benefits.

4. **Conduct situation analysis and assessment-** An analysis to examine policies, governance structures, and funding is needed. An assessment is necessary for updated figures on WASH coverage and compliance in health facilities. Together, these documents form the basis for prioritising policies and mobilising resources.
5. **Improve and maintain infrastructure-** Health facilities' infrastructure should be improved to meet national standards. It should be accompanied by various policies inputs. It is important to treat waste before they enter the river.

Sanitation is intrinsically linked to health. Poor sanitation systems are among the leading causes of the spread of preventable diseases in developing nations. Access to safe drinking water and basic sanitation facilities are not only central to health and sustainable development, they are central to eradication of poverty as well. It is thus important to formulate and implement concrete plans to improve sanitation facilities in urban centres.

Q.5) Discuss the reasons behind the success of Swachh Bharat mission. How the success of this campaign against open-defecation can act as a model for other schemes and policies?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Various reasons for Swachh Bharat mission achievement. How success of campaign against open-defecation is a model for other schemes and policies?

Conclusion. Way forward.

From being home to the highest number of open defecators in the world, India is now being claimed as an open defecation free nation, in the last 5 years. Even many decades after independence the cumulative sanitation coverage in rural part of the country was just about 38%. Since the launch of Swachh Bharat Mission (SBM) in 2014, almost all the rural households in the country have been provided toilets making it a grand success.

Various reasons for Swachh Bharat mission achievements:

1. **Political Push:** Primary importance was given to cleanliness and sanitation by all the political identities including the Prime Minister of India. The cause was championed by giving the country a time-bound goal to work towards achieving clean and ODF India by October 2, 2019. This gave significant prominence to SBM.
2. **Public Finance:** For the ambitious program, the government released funds in a time-bound manner. India's rural sanitation budget in excess of \$20 billion is the largest in the world. The government provides Rs 12,000 per eligible household to economically weaker sections across the country to build the toilets.
3. **Partnerships:** The government has built several strategic partnerships to mainstream sanitation in all sectors, which have helped it achieve the goal. As part of the mission, all ministries are putting efforts to improve sanitation in their respective spheres of influence, such as hospitals, schools, anganwadis, highways and railways. Also, several developmental agencies and corporates like Dabur, TCS, Indian Oil, GAIL and others have also participated in and supported the mission.
4. **People's participation:** The mission has brought together all section of society from film stars to sportspersons to the common man. A sense of responsibility has been evoked among the people through the Clean India Movement. With citizens now becoming active

participants in cleanliness activities across the nation, the dream of a 'Clean India' once seen by Mahatma Gandhi has begun to get a shape.

5. Behavioural change: Scheme focused on behaviour change and led to change in habits and attitude of people. Without change in behaviour SBM could not have been a success, as it is a must for people to use toilets and instil a behaviour of cleanliness. Swachhta doots have been appointed for behavioural change under the scheme.

How success of campaign against open-defecation is a model to follow for other schemes and policies?

1. Political leadership: Mission showed how political leadership can lead to a major social revolution and transformation. Thus, other policies if pushed by the same political will, would lead to exemplary results. When Prime minister himself engaged in the mission, people followed.

2. Community participation: Mission is a model that shows how community and people's participation can lead to a major policy success. For example, an increased public participation in Umthli village in East Khasi Hills, Meghalaya is a perfect example of community involvement. Taking the message of Swachhta seriously, this village has completely got itself rid of liquid waste and the problem of litter within a period of 4-5 months.

3. Behavioural aspect: It showed that for a scheme or policy that require a development of new habit must be on instilling a behaviour change that would ensure the success of any policy and scheme. For example, Vidya Balan in an advertisement for Swachh Bharat, urged the women to not marry if there were no toilets in the households.

4. Grass-root work: It reflect that for a change that require massive efforts grass-root level workers trained in community approaches and involved in triggering a behavioural change can help in making a policy massive success. For example, to take its Clean India campaign to grass roots level, the Centre made "active participation" of millions of MGNREGA workers for the ambitious cleanliness drive.

5. Cultural context: It also showed that deeply entrenched cultural contexts must be taken into account for successful policy outcomes. India needs to change perceptions of ritual purity through education and awareness in rural areas.

Thus, SBM which turned out as an overall success showed how political will and community efforts together can bring out wonders. SBM can act as model policy for other policies and showed how a policy must be approached successfully that aim to instil a behaviour change at a massive scale.

Q.6) What are the key areas of reforms if the WTO has to survive in the present context of unilateralism and protectionism?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Problems faced by WTO. And reforms needed.

Conclusion. Way forward.

The World Trade Organization (WTO) is the principal forum for setting the rules of international trade. In its two decades, it has helped reduce barriers to trade in both goods and services and created a dispute resolution system that has reduced the threat of trade wars. However, the institution is under considerable pressure. The recent trade wars,

unilateralism and protectionism evoke the need of reform in the WTO if it has to survive in the present context.

Problems facing the WTO:

1. **Unilateralism and protectionism:** For years, the multilateral system for the settlement of trade dispute has been under intense scrutiny and constant criticism. The U.S. has systematically blocked the appointment of new Appellate Body members and de facto impeded the work of the WTO appeal mechanism. This unilateralism has raised questions about the authenticity of WTO.
3. **Disputes settlement:** Dispute settlement cases continue to be filed for the time being and are being litigated. A dispute over trade issues persists and has not reached a consensus. This has led to continuous violation of WTO principles.
4. **Trade distortion:** Many WTO members bear responsibility for the use of trade-distorting domestic subsidies. Agricultural and industrial subsidies have caused blockages in the system and prompted protectionist reactions in a number of WTO members. Blockage and deadlock in the Appellate Body stage of the WTO dispute settlement system triggered the present crisis.
5. **Tariff manipulation:** The US and the EU have not been able to counter China's tariff manipulation. They are also bound by the commitments made under the WTO rules so they cannot raise import duties without violating WTO rules. But they do not want to meet the WTO obligations such as reducing agriculture subsidies.
6. **Lack of consensus:** The developed nations game plan is to put the old obligations on the back-burner and push the WTO to form rules on e-commerce, an area where the US firms have a clear edge. Most WTO member countries want them to first deliver on the agreed issues like reduction in agriculture subsidies.

The key areas of reforms are:

1. **Reforming the voting process:** Majority of negotiations are usually blocked by dissenting countries. Therefore, guidelines should spell out clear criteria for when a country may use its veto power. Veto usage needs to be weighed against the interests of all, and in light of the WTO's mandate.
2. **Independent panel as arbiter:** An independent panel could play the role of arbiter, evaluating the competing claims and helping to overcome the political deadlock.
3. **Framing New rules:** GATT/WTO rules in a number of areas are outdated. New rules are required to keep pace with changes in the market and technology. Rules and disciplines on topics ranging from trade-distorting industrial subsidies to digital trade require updates.
4. **Appointment process:** The appointment process to dispute settlement body should be made independent of political control.
5. **Plurilateral negotiations:** Plurilateral negotiations should be promoted as they allow like-minded members come together to deliberate on a specific issue. This makes it easier and faster to negotiate than multilateral accord like passage of Trade Facilitation Agreement in 2013.
5. **Dispute settlement reform:** This includes expanding the Appellate Body panel from seven to nine judges, redefining membership of the Appellate Body from part-time to full-time, and allocating more resources to the Appellate Body Secretariat.
6. **Increasing transparency:** WTO members should proactively disclose their subsidies to develop trust and transparency among WTO members.

The WTO is at a crossroads. Not only are the multilateral trade negotiations stuck, but overall rule-making has made little progress while alternative trade pacts, not least the

mega-regional arrangements, have clearly challenged the position of trade multilateralism. WTO need to modify its vision in accordance with present challenges.

Q.7) What do you understand by the term 'Social Audit'? Discuss how it aids in good governance.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. How it aids in good governance? Related issues.

Conclusion. Way forward.

Social Audit is the critical assessment of government programmes and activities by the community with active involvement of the primary stakeholders. The people in coordination with local administration conduct social audit. It includes audit of the quality of work being executed at different levels along with the details of disbursements made, the number of labourers employed and materials used. Social auditing creates an impact upon governance. It values the voice of stakeholders, including marginalised/poor groups whose voices are rarely heard.

How it aids in good governance?

1. **Reduces corruption:** Social audit uncovers irregularities and malpractices in the public sector and maintains oversight on government functioning, thus reducing leakages and corruption. Civil society organisations, political representatives, civil servants and workers of Anantapur district of Andhra Pradesh collectively organise such social audits to prevent mass corruption under the MGNREGA.
2. **Monitoring and feedback:** It monitors social and ethical impact of decisions and provides feedback on the work. Official records obtained using RTI are used by the public to identify irregularities and thus monitor an organisation and give feedback which help in better performance.
3. **Accountability and transparency:** Social audit ensures accountability and transparency in working of local government bodies and reduces trust gap between people and local governments. Social audit measures enhance transparency by enforcing the Right to information in the planning and implementation of local development activities. Transparency in public schemes reduces corruption and increases outcomes.
4. **Encourages community participation:** Social audit creates awareness among beneficiaries and providers of local social and productive services. Local community becomes important stakeholder in success of public welfare schemes thus improving outcomes through periodic evaluation of outcomes of policies. For example, in MGNREGA, social audits led to proper entries in job cards, increased knowledge about the wage payment slips and visible improvements were noticed in worksite facilities.
5. **Empowering marginalised:** It is important that marginalised social groups, which are normally excluded, have a say on local development issues and activities and have their views on the actual performance of local elected bodies. Through social audits these groups can have an impact on policy implementation and thus increasing outcomes.
6. **Policy evaluation:** Social audit plays an important role not in policy implementation but also policy evaluation. Thus, social audit also assess the physical and financial gaps available for local development thus improving policies and outcomes.
7. **Strengthens the local government:** Social Audit gives voice and influencing power to the Gram Sabha, the lynchpin of rural governance structure. It boosts professionalism in

public bodies by forcing Panchayats to keep proper records and accounts of the spending made against the grants received from the government and other sources.

Issues in social audits:

1. **Rules not followed:** In many states Social Audit Units don't seek record from Gram Panchayats regarding execution of works and expenditure (CAG report). Social audit reports are either not prepared or not made available to gram sabha in local languages.
2. **Not institutionalised:** Government has not mandated institutionalisation of social audit, thus making auditors vulnerable to implementing agencies, who face resistance and intimidation and find it difficult to even access primary records for verification.
3. **Apathy of implementing agency:** The implementing agency requests for postponement of social audit, fails to provide documents on time, does not send independent observers for the Gram Sabha, and fails to take action on the findings of the social audit.
4. **No incentive to participate:** Lack of interest in people about the village activities due to their livelihood reasons.

Way forward:

1. **Support of implementing agencies:** Rules must be framed so that implementation agencies are mandated to play a supportive role in the social audit process and take prompt action on the findings.
2. **Using Management Information System (MIS):** Usage of MIS to track details of schemes at all levels to streamline the life-cycle of programme planning, implementation and feedback.
3. **Civil society participation:** People including students from different universities should be encouraged to participate as Village Resource Persons. Example, Jharkhand has instituted a formal mechanism by inviting prominent civil society representatives to be part of the SA panel.
4. **Role of media:** Media should also take responsibility to reach to the rural areas and spread the awareness through their designed programmes focusing on the issues of the rural concerns especially Gram Sabhas and their powers of social audit.

The Social Audit process is intended as a means for social engagement, transparency and communication of information, leading to greater accountability of decision-makers and officials. The Meghalaya state brought a Community Participation and Public Services Social Audit Act in 2017, which should be followed by all states as a model. The Social Audit holds tremendous potential in bridging gaps between policy objectives and its outcomes.

Q.8) Recent Citizenship Amendment Act, has a significant impact on India's secular image with deeper foreign policy implications. Do you agree?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Impact on India's secular image and foreign policy. What India should do?

Conclusion. Way forward.

The Indian parliament has passed the Citizenship Amendment Act amid protests all across India. As per this Act, Indian citizenship will be accorded to religious minorities of Afghanistan, Bangladesh, and Pakistan, who have fled their countries and landed in India

without valid documents. The Citizenship Amendment Act (CAA) has evoked extreme reactions from the international community.

Impact on India's secular image and foreign policy:

1. **Relation with Neighbour:** The move to provide citizenship to only certain religious sect have weakened India's image as a secular nation. The immediate difficulties are likely to be in India's relations with Bangladesh and Afghanistan, both of which are named in the recently passed Citizenship Amendment Act (CAA). Bangladesh's Ministers for Home and Foreign affairs cancelled visits to India last week as protests of the legislation began in the Northeast.
2. **Stance on Kashmir:** It has lowered the voices of support for Kashmir to India. CAA tainted India as a country moving towards Hindutva against principle of secularism. Saudi Arabia softened its stance towards Pakistan and called meeting of foreign ministers of the Organisation of Islamic Cooperation (OIC) in April to discuss Kashmir and the Citizenship Amendment Act.
3. **US relations:** The law has not gone down well with the USA as well. The US Commission on International Religious Freedom (USCIRF) has threatened the Indian government officials with sanctions if Muslims are not included among 'persecuted' minorities.
4. **Muslim countries ties:** Middle East countries are important for Indian energy needs. The Act has drawn criticism from various Muslim countries as an anti-Muslim measure. The Organisation of Islamic Cooperation (OIC), meanwhile, declared that it was increasingly concerned by the CAA due to its apparent discrimination of Indian Muslims.
5. **Impact on various opportunities:** The afore-mentioned instances of global acknowledgement of India's domestic policy decisions would adversely affect key foreign policy issues and indeed foreign investments opportunities through programmes such as the 'Make in India' initiative. Recently, Japan PM Shinzo Abe's visit to India, too, was delayed citing increasingly violent protests in Assam.

What should be done?

1. **Reach out:** India should reach out to all the nations and allay any fears regarding citizenship amendment act. Government should take its friends into confidence and should remove doubts regarding CAA.
2. **Diplomatic efforts:** Diplomatic efforts are needed at various international platforms to make sure that no country should perceive anything wrong about Indian intentions.
3. **Clarity about CAA:** Government should clarify all the provisions regarding CAA and NRC so as to prevent misinformation and fake propaganda to be used against the country.
4. **Assurance:** Government should assure its neighbours about the effective implementation and no discrimination against Muslims regarding CAA provisions.

India had been the beacon of liberal values in the subcontinent. But the continued lockdown in Kashmir and the CAA have cast a shadow on this image. It might not affect India's global position, but diplomats across the world will have to find a way to battle the unease that many countries are feeling. India will have to do a lot of firefighting.

Q.9) Implementation of information and Communication Technology (ICT) based Projects/Programmes usually suffers in terms of certain vital factors. Identify these factors, and suggest measures for their effective implementation.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Vital factors that affect ICT based Programmes implementation. Government measures and measures needed.

Conclusion. Way forward.

The information and Communication Technology (ICT) is a part of good governance and it enhances its accessibility by bridging the gaps in governance. It not only enhances governance efficiency but enable citizens to enjoy various services with ease. ICT projects ensure speedy governance. But various factors hinder the effective implementation of ICT projects like digital illiteracy.

Vital factors that affect ICT based Programmes implementation:

1. **Infrastructure:** The lack of necessary infrastructure such as broadband connectivity, continuous electricity supply, mobile coverage to support the ICT based projects has made governance elusive rather than making them inclusive. Often faced with issues such as poor connectivity it has resulted in people struggling in accessing the modes of governance.
2. **Digital illiteracy:** Illiteracy rate in India is more than 25-30% and digital literacy is almost non-existent among more than 90% of India's population. The lack of digital literacy has resulted in an increase in the number of intermediaries who lure the people for financial gains in the name of assisting them. As a result, ICT based projects rather than reforming governance has added another intermediary for the common man.
3. **Language Barrier:** The ICT based platforms are often driven by English. Due to the efforts of central government Hindi has started to make some inroads in ICT. But other regional languages are still out of the ambit of ICT platforms. Even where they are present, they are full of technical jargons which are non-comprehensive. This has made governance more alien.
4. **Cost of Data:** Government banking of JAM (Jan Dhan, Aadhaar, Mobile) is promoting governance through mobiles. But the cost of data in relative terms is high in India. This financial burden has made people shying away from using the ICT platforms.
5. **Lack of technical proficiency:** The government officials implementing such projects needs to be skilled enough to handle the technical challenges that may arise. Proficiency in the technology is a must. For example, government authorities overseeing E-passport seva must know how to solve problems faced by users.
6. **Non-inclusive nature of technology used:** The ICT technologies are difficult for certain sections of society to understand. This need simplification of the process and make it easy to handle. For example, problems faced by senior citizens, differently-abled, illiterate persons due to complex design of ICT based solutions.
7. **Poor internet connectivity:** Rural India suffers from poor internet penetration due to lack of electricity and poor network quality. This has led to difficulties in Aadhaar Enabled Payment Services (AEPS) and last mile delivery of services.
8. **Geographical and weather-related problems:** Population residing in difficult terrains like North Eastern hilly region, islands of Andaman and Nicobar and Lakshadweep are difficult to reach. Extreme weather events like cyclones, tsunamis, etc. can hamper key communication and mobile internet services.

Government efforts to address these factors:

1. **Digital literacy:** Programmes like PMGDISHA aimed at educating people with low digital literacy must be taken up.
2. **Connectivity:** Projects like BharatNet aimed at connecting all gram panchayats with broadband must be taken up with faster pace.
3. **Digitisation of services:** The government has been spearheading radical digitisation to induce economic inclusiveness and social transformation, through initiatives like, 'Digital India', 'Make in India' and Skill India.

Measures for Effective Implementation

1. **Creating suitable infrastructure:** Suitable infrastructure must be created for ICT projects. Increasing the number of Common Services Centres and addressing the connectivity issues should be the first priority.
2. **Increasing investment in human capital formation:** The government must explore providing free internet packages to enable people to access ICT platforms. The government must develop model like basic Facebook wherein people would be able to access the government portals without internet charges. The government could offset the costs through Universal Service Obligation Funds.
3. **Changes in design and structure:** Government websites should be made user friendly so that they can be used by differently abled and senior citizens.
4. **Digital literacy:** Mandating digital literacy in school curriculum and co-curricular activities is important. By educating the children to access these platforms, they can serve as agents of change to adopt ICT platforms. One such example is IT Club 'e-Kidz' formed by students of the Government Upper Primary School at Koothattukulam in Kerala.
5. **Involving Private sector organizations:** Corporates can be asked to spend their CSR funds in digital training and providing technological solutions for societal needs.
6. **Integrating Local Languages:** The government must integrate local languages into ICT platforms to ensure the ease of use by population across the country.
7. **Plugging digital divide:** The ICT programmes must not become ends in themselves rather they must be the tools of good governance. Due consideration must be given to address the issues of availability, affordability and accessibility while developing the ICT governance platforms.

Adoption of Information and Communication Technologies has proved to be a boon with its inherent advantages such as increased efficiency, transparency, and flexibility in operations. But their implementation also suffers due to certain shortcomings at the preparation level. In order to reap the benefits ushered by ICTs, India must address the above factors and be prepared to embrace the revolution.

Q.10) What is quasi-federalism? Is India a quasi-federal state?

Ans.

Demand of the question

Introduction. What is quasi-federalism?

Body. How India is a quasi-judicial state?

Conclusion. Way forward.

Quasi-federalism means an intermediate form of state between a unitary state and a federation. It combines the features of a federal government and the features of a unitary government. India is regarded as a semi-federal state or a quasi-federal state as described

by Prof. K.C. Wheare. The Supreme Court of India also describes it as a federal structure with a strong bias towards the Centre.

Quasi federal nature of Indian Constitution: Article 1 of the Constitution of India states that 'India that is Bharat shall be a union of states. Indian model of federalism is called the quasi-federal system as it contains major features of both a federation and union.

Federal Features of the Indian Constitution	Unitary Features of the Indian Constitution
1. Supremacy of the Constitution: Constitution is the supreme law of land in India. A federal state derives its existence from the Constitution.	1. Single Constitution: In India, there is only one Constitution. It is applicable to both the Union as a whole and the States. In a true federation, there are separate constitutions for the union and the States.
2. Bicameral Legislature: The main feature of federalism is a bicameral legislature. The Constitution of India also provides for a bicameral legislature i.e. Parliament with two houses of the Lok Sabha and the Rajya Sabha.	2. Rajya Sabha does not represent the States equality: In a true federation, the upper house of the legislature has equal representation from the constituting units or the States. But in Rajya Sabha, the States do not have equal representation. The populous States have more representatives in the Rajya Sabha than the less populous States.
3. Dual Government Polity: The Constitution of India has divided powers between the Central government and the state governments through the 7th schedule. It contains three legislative lists which enumerate subjects of administration, viz. Union, State and Concurrent Legislative Lists. Both the governments have their separate powers and responsibilities.	3. Division of power is not equal: In a federation, power is divided equally between the two governments. But in India, the Central government has been given more powers and made stronger than the State governments.
4. Written Constitution: The Indian Constitution is a written document containing 395 Articles and 12 schedules, and therefore, fulfils this basic requirement of a federal government. The Indian Constitution is the most elaborate Constitution of the world.	4. Existence of States depends on the Centre: In India, the existence of a State or a federal unit depends upon the authority of the Centre. The boundary of a State can be changed by created out of the existing States.
5. Rigid Constitution: The Indian Constitution is largely a rigid Constitution. All the provisions of the Constitution concerning Union-State relations can be amended only by the joint actions of the State Legislatures and the Union Parliament.	5. Constitution is not strictly rigid: The Constitution of India can be amended by the Indian Parliament easily. On many subjects, the Parliament does not need the approval of the State legislatures to amend the Constitution. In a true federation, both the Union and the State legislatures take part in the amendment of the Constitution with respect to all matters.
6. Independent Judiciary: In India, the Constitution has provided for a Supreme	6. Unified judiciary: India has a unified or integrated judicial system. The High Courts

Court. The Supreme Court of India can declare a law as unconstitutional, if it contravenes any provisions of the Constitution.	which work in the States are under the Supreme Court of India.
7. Revenue Sharing: In the case of a federal country there is a system of revenue sharing between the Center and the State. In India, there is the principle of dual GST system adopted by the legislation for the constitutional requirement of fiscal federalism.	7. Proclamation of emergency: The Constitution of India has given emergency powers to the President. When an emergency is declared, the Union or Central governments become all powerful and the State governments come under the total control of it. The State governments lose their autonomy.

Thus, on a careful analysis of the federal and unitary features of the constitution, it is evident that with every federal feature, there is an ultimate centralising force which is existing. Therefore, it would not be wrong to conclude that the Constitution of India is federal in structure and unitary in spirit i.e. it is quasi- federal in nature.

Q.11) Despite differences, India and China need to come together for a multilateral, rules-based world order. Comment.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss the need of cooperation between India and China for a rules-based world order.

Conclusion. Way forward.

The world is undergoing a political, economic and social transformation. It is marked by the rise and dominance of Asian economy, politics and culture. The growing importance and emphasis of unity in Asia, demands progressive relationships among countries especially India and China. Both countries represent 40% of the world and are the centre of growth in Asia. Thus, the relationship between two countries is paramount to the realisation of the Asian century and a rule based global order.

Need of cooperation between India and China for a rules-based world order:

1. **Ensuring multilateral trading system:** It is important to defend the rules-based multilateral trading system. The World Trade Organisation (WTO), is under assault from the world's largest economy, the US through unilateral measures. The US has stalled appointments of members in the appellate body of WTO's dispute. India and China, need to work together to work against unilateralism.
2. **Success of global organisations:** China and India can strengthen coordination in global institutions to protect their national interests. Global Organisations like Shanghai Cooperation Organisation, United nation, etc. are centre for geo-economics and geo-politics. These platforms should be used by both nations to cooperate with each other and work together.
3. **Pressure groups:** The existing international mechanism has failed to address the current challenges like trade disputes, refugee crisis. It is mainly because the dominant power of the current world system has lost the capacity to maintain the stability of the world order.

India and China should collaborate in terms of looking into each other's sensitivities. It would be more beneficial when they cooperate to emerge as a pressure group in the world.

4. **Regional integration:** China and India can play pivotal roles in regional and global affairs in the 21st century. It is important that two nations should jointly defend economic rules-based order and multilateralism. This would lead to Asian integration which is a common responsibility of China and India. It is important to deal with issues of common concern such as border disputes in a healthy and strategic way.

5. **Economic significance:** Asia is experiencing robust economic performance over the three decades, spearheaded by India and China. Robust growth can't be realised without economic development of the two countries and moving out millions of people in the region out of poverty. Both nations must enhance bilateral relations in a positive way leading to a path of development.

Way forward:

1. **Experts group:** There must be establishment of bilateral groups with experts from both countries who would work out a plan for further cooperation. The aim should be to go beyond zero-sum thinking and employ a co-operative attitude to resolve their differences and address common regional challenges.

2. **Boundary dispute resolution:** India-China border and other territorial disputes, along with the issue of Tibet, restrict the establishment of political trust. Two nations must work together for promotion of greater coordination to resolve boundary disputes among two nations.

3. **Multi-Sector Co-operation:** The development of economic co-operation is the main pillar of India-China relations. Despite the development that has occurred so far, there are still many constraints in bilateral relations. There is a huge opportunity to expand the size of both markets and deepen the economic interdependence. Correction of bilateral trade is important to ensure mutual economic development.

4. **Strategic Partners:** China and India should become strategic partners in the true sense, rather than viewing each other as hostile competitors. To achieve fully the goal of co-operation based on common interests, China and India should first adjust their view of each other. Both nations should view each other as real strategic partners.

5. **Shedding cold war mentality:** The key to achieving this partnership is to abolish both the cold war mentality. India and China should not see South Asia or East Asia as being solely under their respective spheres of influence. China should understand that India is an important player in Asia.

Although the constraints exist, there is still a positive future, as the two countries share many common interests. For example, their economic structures are complementary. China is a manufacturing power and India is a major worldwide player in the service industry. Both countries can share their experiences and support each other in approaching these. Without harmony among two nations, both nations and the world cannot progress much.

Q.12) Discuss the role and significance of Chief of Defence Staff (CDS). How it would help in India's security?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Role of Chief of Defence staff. Importance of CDS in India's security

Conclusion. Way forward.

The Chief of Defence Staff (CDS) is a high military office that will oversee and coordinate the working of the three defence Services in India. Most countries with advanced militaries like in the UK have such a post with varying degrees of power and authority. The CDS is important for the integration of tri-service personnel in India.

Role of Chief of Defence Staff:

1. **Principal Military Adviser:** CDS will act as the Principal Military Adviser to the Defence Minister on tri-services matters. He will also be the military adviser to the Nuclear Command Authority (chaired by the Prime Minister), which handles India's nuclear arsenal.
2. **Department of Military Affairs' Head:** The Department of Military Affairs will also be headed by the CDS. The mandate of the Department of Military Affairs will include the following areas:

- Promoting jointness in procurement, training and staffing for the Services.
- Facilitation of restructuring of Military Commands for optimal utilisation of resources.
- Promoting use of indigenous equipment by the Services.

3. **Permanent Chairman of the Chiefs of Staff Committee:** The CDS will be the permanent Chairman of the Chiefs of Staff Committee (COSC). As a permanent chair, CDS will:

- Administer all tri-service organisations and commands.
- Function as the Military Adviser to the Nuclear Command Authority.
- Implement the five-year Defence Capital Acquisition Plan (DCAP) and the two-year roll on Annual Acquisition Plans.
- Coordinate operation, logistics, transport, training, support services communications, etc. of the three Services

Importance of CDS in India's security:

1. **Coordination among services:** The Chief of Defence Staff (CDS) is a high military office that will oversee and coordinate the working of the three defence Services in India. This would lead to enhanced security in the region.
2. **Effective leadership:** CDS will provide effective leadership at the top level to the three wings of the armed forces.
3. **Resource optimisation:** The CDS will help in the tackling of threats in an integrated manner and would help in optimal use of available resources. Policy-making on operations, procurement and joint logistics will be improved.
4. **Coherence:** It will provide a single and coherent perspective, instead of disaggregated individual single service perspective.
5. **Holistic management;** It would help in holistic management of national security for optimised results and single point military advice on matters of national security including nuclear weapons.

India is the only country with a Ministry of Defence without military professionals, with bureaucrats lacking a military background and knowledge. As a result, we lack a cohesive national security strategy. There is little synergy within the military and also the military-industrial complex remains in a bad state. A post of CDS will remove such issues.

Q.13) What are various new age threats to Indian security? Discuss how India should prepare itself for these threats.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various new age threats to Indian security. Mention how India should prepare itself for these threats?

Conclusion. Way forward.

India constitutes the world's largest democracy. With rise in modern technologies and penetration, India confronts a wide spectrum of challenges to its security. Today national security challenges include not only traditional military and nuclear threats, but a multitude of other threats, including terrorism, cyber security, demographic challenges etc. These challenges for the security demand proactive response and preparedness in the coming years.

Various new age threats to Indian security:

1. **Cyber-threats:** The initiatives like Digital India initiatives have brought about a paradigm shift in terms of connectivity. While greater connectivity promises wider services, it also paves the way for the emergence of new vulnerabilities. Leading companies in energy, finance and other sectors are targeted by new-age cyber criminals. As per CERT-IN, one cybercrime was reported every 10 minutes in India during 2017 which is quite alarming.
2. **Climate change as a destabilising threat:** One of the most critical issues concerning India's security is climate change and its impact. Dwindling freshwater resources has led to many inter-state water tussles, one of which was witnessed in the Cauvery row. Such endeavours may not only affect the environment but also lead to a threat to internal security.
3. **New form of Terrorism:** Terrorism is taking new shape with increased incidents of lone wolf attacks. The recent London terror attack, Manchester terror attack are scary. They are neither limited by territorial boundaries, nor do they recognise the concept of sovereignty. The use of suicide bombers, sophisticated technology and tactics such as leaderless movements, sleeper cells networks have made it increasingly difficult for the governments to get rid of terrorist groups.
4. **Demographic changes and their consequences:** India is sitting at a huge demographic dividend in terms of its 65% population is in the age group of 15-35 years of age. While it can be a huge economic advantage, if not provided with suitable opportunities can turn into a worse nightmare. Although the Indian economy is growing substantially, India's rate of employment has actually declined. This may lead to youth turning to crime and drugs, which is dangerous to society.
5. **New technologies:** Although technology has immense usefulness for humanity, it has a harmful impact too. For example, new technologies like drones, transparent cameras, robotics etc. have the potential of snooping into India's security set up. Pakistani drone was recently fired down by Indian army in Rajasthan as an example of this. This poses new challenges to Indian security.

How should India prepare itself for these threats?

1. **Strengthening security enforcement agencies:** Security enforcement agencies must be strengthened with enough powers and modern technology, to tackle the new age threats. The security personnel must also be trained in cyber warfare to tackle any threat to cyber security of the nation.
2. **Climate action:** Environment protection and nurturing is an urgent need of the hour, as a destabilised environment can lead to a tipping point. State must be prepared for natural disasters that may threaten the survival of the state and its population.
3. **Public-private partnership:** The study titled 'New Age Crime' says, India needs at least \$4 billion in public-private partnership mode by 2019 to address cybercrime-related challenges at individual and organisational levels. This is needed for upgrading technology, training cyber professionals, counselling of victims and creating cyber cells. Thus, the government must make efforts to work with the private sector.
4. **Smart policing:** Police must use real-time technology and data analysis to pursue smarter policing. It must have the capability to receive crime tips from the public in real time through smartphone apps and create detailed crime and complaint mapping. That data must be used with appropriate strategies designed to reduce crime and disorder.
5. **Regulations:** Proper guidelines and rules must be framed for the use of technologies. Rules and regulations of usage of drones is a right step in this direction. Government must involve all the stakeholders while framing rules and regulations in order to prevent any harm to individual's privacy and freedom.

To meet the diverse likely security challenges and to successfully confront all challenges, India requires a clear-cut strategy. It is important to synergise our diplomatic, economic, political, social and military strengths. Government has made various efforts like creating a post of National Cyber Security Coordinator, Cyber Swachhta Kendra, Khelo India initiative for youth etc. This will help India to tackle new age threats in a comprehensive manner.

Q.14) What are the reasons for the high child mortality rate in India? Suggest some measures to control child mortality in India.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various reasons for the high child mortality rate in India. Discuss some measures to control child mortality in India.

Conclusion. Way forward.

Despite significant progress in recent years, India continues to have considerable issues with child mortality. India's under-five mortality rate is the highest in the world. Around 1.3 million newborns die every year in the country during or immediately after delivery. According to the national Health Ministry, India's current newborn mortality rate stands at 29 per 1,000 live births. High child mortality has been a long-term issue in India due to various reasons like poor maternal health and poverty in families.

Reasons for the high child mortality rate in India:

1. **Poverty:** A major factor that leads to a high rate of infant mortality is poverty. 21.9% of Indians are below the poverty line (BPL). Poor people are unable to get good healthcare services. They tend to get babies delivered at home through local nurses known as dais and

quack doctors. This endangers a child's life and often leads to infections due to unhygienic conditions in which the baby is delivered.

2. **Malnutrition:** Low birth weight is the leading cause of neonatal death, which drives up the under-five mortality rate. Low birth weight can be caused by many factors. Foremost among these are poor nutritional intake during pregnancy and a lack of healthcare, both before and during the birth.

3. **Access to healthcare:** Increasing access to affordable healthcare is critical to prevent child mortality. In India, there are great disparities in the levels of access to healthcare. The allopathic doctor-patient ratio at 1:1445, which is lower than the prescribed ratio of 1:1000 by WHO. This is notable between urban and rural regions of the country. Lack of access to healthcare both during and after the pregnancy have severe consequences to the health of the child and lead to deaths.

4. **Air pollution:** India's children are at severe risk of health issues due to air pollution. Around 93% of children are regularly exposed to air pollution levels considered dangerous to their health according to the World Health Organization (WHO). High levels of pollution are exposing India's children to risks that may not contribute to mortality in early life, but cause lifelong conditions that significantly reduce their life expectancy.

5. **Illiteracy:** Education still remains low on priority in rural areas. According to Comprehensive National Nutrition Survey data, 53% of the mothers surveyed had no education at all. Only 20% of mothers of preschool children, 12% of mothers of school going children and 7% of mothers of adolescents had completed 12 years of schooling. Thus, new mothers and pregnant women lack the basic fundamentals of pregnancy as well as post baby care. With no knowledge about immunisation of children, it exposes children to greater risk of diseases leading to mortality.

6. **Sanitation:** Another major reason is that many women do not have sufficient access to clean water, nutritious food and regular medical assistance. This endangers the life of the child and mother and exposes them to risk of infections.

7. **Gender discrimination:** The health of the girl child is neglected as they are seen as burden. Due to this many girls die due to malnutrition and/or infectious diseases. Meta-preference for sons leads to neglect of girls and their immunisation exposing them at higher risk.

Measures to control child mortality in India:

1. **Awareness:** Education campaigns to aware mothers of importance of institutional delivery, exclusive breast feeding, immunisation, home care for diarrhoea are needed. All these should create awareness among family members to provide support to women during pregnancies and deliveries.

2. **Gender sensitisation:** The issue of neglect of the girl child is much broader and needs interventions beyond health. Focus should be on addressing the social norms and cultural practices. There is an urgent need to ensure equitable access to care for the newborn girl.

3. **Nourishment:** Low birth weight can be prevented if the mother is well-nourished. Mothers should be taught about the importance of breastfeeding. National food security scheme should include more nutritious food to pregnant ladies at subsidised prices.

4. **Quality healthcare:** Addressing gaps in quality of health care is the need of the hour in India. Hospitals should ensure that the critical products to save the newborns are available. Capacity building of healthcare providers to train doctors, nurses and ANMs auxiliary nurse midwives for early diagnosis and care of the mother during pregnancy and delivery is important.

5. **Sanitation:** Swachh Bharat campaign is a noble effort for improving sanitation in India. Efforts must be made to make and keep hospitals, surrounding areas Swachh. It is important that rural people must be motivated to use toilets built under Swachh Bharat.

Further, quacks and local nurses' daïs must be trained and educated about the importance of sanitation.

6. **Community involvement:** Communities at local level must be involved with an aim to target immunisation of newborns and mother. Female education and involvement is a must and they must be taught about the importance of immunisation programmes.

7. **Improving climate conditions:** Rural people must be educated about the harm of firing woods openly for food preparation. Simultaneously, they must be encouraged to use LPG. Ujjwala Yojana is a good initiative but its penetration must be increased. Further, refilling of LPG cylinder must be subsidized.

SDG goal 3 calls for an end to preventable deaths of newborns and children under 5 years of age. The investment on ensuring holistic nutrition under the POSHAN campaign and national commitment to make India open defecation-free by 2019 are steps that will help in accelerating progress further. The uptake of the Janani Suraksha Yojana and NRHM needs to be ensured across the states it could address some of the variations in IMR across India.

Q.15) What do you understand by 'The String of Pearls'? How does it impact India? Briefly outline the steps taken by India to counter this.

Ans.

Demand of the question

Introduction. What is string of pearls?

Body. Its impact on India. Steps taken by India to counter string of pearls.

Conclusion. Way forward.

String of Pearls refers to the Chinese intention to establish a network in India Ocean Region (IOR) surrounding India. Each Pearl represents some form of permanent Chinese military installation in a series of locations along a String. Recent development of ports around India, in Gwadar, Hambantota, Sittwe on the Bay of Bengal Coast in Myanmar etc. are seen as part of a string of pearls. Although these are commercial ports, the fear is that these could be easily converted to Naval facilities in case of a conflict in India.



Impact on India:

1. **Strategic impact:** Strings of pearls will lead to China surrounding India. China, which doesn't have any openings in Indian Ocean, will be able to dominate it. Strategic clout of India which it enjoys today in Indian Ocean will be reduced. Countries which today consider India as a partner in response to China may end up in the lap of China.

2. **Economic impact:** Indian resources will be diverted towards defence and security. Thus, the economy will not reach its potential hampering economic growth. This may further lead to instability in India and the whole east and south east region.

3. **Maritime security:** China's presence will pose a threat to India's security through water. China is developing more firepower with more submarines, destroyers, vessels and ships. This endangers Indian maritime security.

Steps taken by India to counter string of pearls:

1. **Act East Policy:** India's Act East Policy, which was launched as an effort to integrate India's economy with South East Asian nations. It has been used to make important military and strategic agreements with Vietnam, South Korea, Japan, Philippines, Indonesia, Thailand and Singapore helping India to counter China.
2. **Military relationships:** India has developed strategic naval relationship with Myanmar to upgrade and train its navy which gives India an increased footprint in the area. India has also made strategic agreements for military cooperation in the region with Japan, Australia and the USA. The four countries carry out joint military exercises in the IOR region and are known as the 'Quad'.
3. **Chabahar port:** India is developing Chabahar port in Iran, opening a new land sea route to Central Asian countries by-passing Pakistan. Chhabahar gives India a strategic position since it overlooks the Gulf of Oman, a very strategic oil supply route.
4. **Strategic pact with France:** India and France recently signed a strategic pact opening up their naval bases to each other's warships across the Indian Ocean. It grants the Indian navy access to strategically important French ports including one in Djibouti, home to China's single overseas military base.
5. **Surrounding China in the north:** India has invested a lot diplomatically in countries like Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan and Mongolia, all surrounding China.
6. **Naval bases and airfields:** India finalised an agreement for a new base in the Seychelles and negotiated military access to naval facilities at Oman's port and airfields. A pact allowing deployments from each other's naval facilities was signed with Singapore in 2017. With expanded bases on the Andaman and Nicobar Islands at the end of the Malacca Strait, India is raising the stakes in the fight over the waters of Southeast Asia.

It should be noted that many of the solutions are not immediate in nature and may require at least 2-3 decades to fructify. What is needed is the strong decision-making ability at the highest levels to change the status quo. The timely execution of the planned strategic initiatives would play a key role in making India's presence in Indian Ocean a strong Leader.

Q.16) What is meant by middle powers in international relations? How aligning with other middle powers would help India rise in the new global order?

Ans.

Demand of the question

Introduction. What are middle powers?

Body. Importance of aligning with other middle powers for India.

Conclusion. Way forward.

In international relations, a middle power is a sovereign state that is neither a superpower nor a great power, but still has large or moderate influence and international recognition. Countries like Australia, Japan, India, Brazil, South Korea are important middle powers that are important for India in changing world order. These countries can play an important economic, strategic and political role in India's rise as a major Asian and global power.

Importance of aligning with other middle powers for India:

1. **Political significance:** At a time when the the United States' global influence is declining and the world is moving towards an era of unpredictability, a new Middle Power coalition is the need of an hour. Deeper ties with middle powers like Australia, Canada, France, Germany, Israel, Japan, and South Korea are important in changing global order. India also has a large diaspora in these countries that sends home around \$35 billion in remittances annually.
2. **Global rise:** Due to the rapid growth of China and the improving growth trajectories of numerous middle powers, collaborating with these countries can help India progress from being a South Asian power to an Asian and eventually global power. The Indian economy's projected growth, along with the improved relationship with the United States, have enhanced India's status with many of these powers.
3. **Energy requirements:** Middle power countries are aimed at strengthening partnerships in a changing global scenario. Apart from strategic significance in a region the oil-rich countries like Saudi Arabia are critical for India's massive energy requirements. Thus, strong ties with these countries are important.
4. **Countering China:** To the east, South Korea, Japan, and Australia, all are middle powers that are deeply connected to China economically, but are treaty allies of the U.S. All are potentially useful economic and strategic partners for India. A partnership with these powers will create more balance in a region increasingly dominated by China. They can be critical to the U.S.-India Joint Strategic Vision for the Asia-Pacific and Indian Ocean Region and to India's own strategic influence in Asia.
5. **Economic significance:** The potential economic benefits of India's partnerships with the middle powers are significant. India requires \$1 trillion over the next decade to upgrade its infrastructure, for which it needs foreign direct investment. While Japan is already invested in the Delhi-Mumbai Industrial Corridor project. An infrastructure build-out will also need investment and technology from such countries as South Korea and Canada.
6. **Nuclear energy:** In the coming years, Japan will remain crucial to India for nuclear energy. India has concluded with Australia and Canada that will provide the uranium. Additionally, Japan, Australia, and Canada are members of the the Nuclear Suppliers Group. With deeper ties to these countries, India's support base for membership to these regimes can widen.
7. **Defence:** The middle powers will also be critical partners for India's indigenous defence production and to reduce the country's defence import bill. Although major powers Russia and the U.S. have been the biggest sources of defence exports and co-production, deals such with Israel on the Spike missile defence system will help unlock India's defence manufacturing capabilities.

India needs to step up its partnerships with a host of countries on a number of issues. A strong tie with these countries is important if India has to rise and become a major power. These countries can help India's economic growth and play an important role in emerging multipolar world.

Q.17) Discuss the importance of NGOs in India's development process. Do you think present legal and regulatory mechanisms are adequate for efficient working of NGOs?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Role of NGOs in development. Various regulations related to NGOs in India. Issues related to NGOs.

Conclusion. Way forward.

NGOs are voluntary organizations, that work toward a social cause and social justice. They have assumed a significant space in civil society. NGOs with the support given by the government has been accelerating its development activities by taking up specific issues like poverty alleviation, casteism and discrimination, women rights, child labour, rural development, environmental issues etc. In the last two decades the role of NGOs have become significant in the social sector development-education, health etc.

Role of NGOs in Development:

1. **Social development:** NGOs have played an immense role in bringing social change and development. NGOs ensure development which essentially involves the equal participation of the people. They play an important role in educating and motivating people to fight for their rights.
2. **Education:** The NGOs actively work for promoting education, particularly among weaker sections of the population. The education of girls, and other deprived people, particularly the SCs and STs, has been their target objective.
3. **Women empowerment:** Women are the other vulnerable section of society. More and more women are working for their rights and involving themselves actively in the social sphere. Important in this process has been the role of NGOs. Sewa, Sathin, Eklavya, Disha etc. are some of the thousands of NGOs known for their role in development by creating awareness among people and interventions regarding women.
4. **Environmental awareness:** Human life is facing a threat due to environmental pollution and the depletion of natural resources. Here, the role of NGOs work is noticeable and praiseworthy. Thousands of voluntary organisations work to awaken people and governments against environmental degradation and depletion of resources e.g. Vanashakti NGO.
5. **Rehabilitation:** The projects like the construction of dams, road highways and railways have often led to displacement of some sections of people, particularly in rural areas without being properly compensated. The NGOs have a major role to play towards the cause of people's resettlement and are also performing commendable jobs in this direction.
6. **Protecting dignity:** NGOs are also rendering great service in restoring dignity of the deprived and discriminated sections. For example, protecting dignity of women by protecting women suffering from gender discrimination, racial and religious discriminations.
7. **Human rights protection:** The contribution of NGOs to human rights and public awareness is significant in India. The recognition of the rights of homosexuals and transgender people, for instance, would have been unimaginable without the sustained effort of civil society organisations.

Legislations and constitutional provisions regarding the NGOs:

Foreign Contributions (Regulation) Act (FCRA), 2010	The act ensures that the recipients of foreign contributions adhere to the stated purpose for which such contribution has been obtained.
Foreign Exchange Management Act, 1999	It aims to facilitate external trade and payments and promote the orderly development and maintenance of foreign exchange market in India.
Constitutional Provisions for NGOs in India	<ul style="list-style-type: none"> • Article 19(1)(c) on the right to form associations • Article 43 which highlights the State's having an endeavor to promote cooperatives in rural areas • Concurrent List in Entry 28 mentions Charities and charitable institutions, charitable and religious endowments and religious institutions.

Issue and challenges that remained in spite of these legislations that impact efficiencies of NGOs:

1. **Difficulties to get funds:** The majority of NGOs have experienced difficulties in getting enough, and continuous funding in order to do their work. Getting donors is a hard task, and sometimes dealing with some specific donor's funding conditions can be an enormous challenge for NGOs.
2. **Over-regulations:** Government regulations are misused to curb voice and work of NGOs that impact vote bank of politicians. Politicians threaten NGOs of removing funds or removing their certification. Over-regulation of NGOs hinder their work and efficiency.
3. **Cultural hurdles:** NGOs are often seen as encroaching on centuries-old tradition and culture of the people, and lead to mass protest at times. Ban of Jallikattu after a Public interest litigation filed by PETA is one such example.
4. **Lack of proper networking:** For some NGOs, it is difficult to develop networks. Having a poor network leads to lack of communication. Poor networks lead to loss of opportunity to work with community and their participation and impact NGOs effectiveness.
5. **Lack of governance:** Many NGOs do not have a Board for governance. One of the main reasons for that is the difficulty to attract board members without paying them or providing them some benefits. Often lack of board leads to poor direction and inefficiencies in NGO working.

Way forward:

1. **Monitoring:** There should be better coordination between Ministries of Home Affairs and Finance in terms of monitoring and regulating illicit and unaccounted funds. NGOs are vehicles of development especially in rural areas.
2. **Participation:** Citizens today are keen to play an active role in processes that shape their lives. It is important that their participation in democracy go beyond the voting and should include promotion of social justice, gender equity, inclusion etc. while working with NGOs.
3. **Improving governance:** Having a Board for governing NGO is one of the best ways to achieve good levels of governance. Capacity building and training can help to provide crucial new skills. NGOs can more readily train staff and cultivate the necessary skills within the organisation to address challenges going forward.
4. **Funding:** Maintaining a good relationship with partners will be helpful in growing as an organisation. NGOs with assets can use any surplus to help generate income. Renting out buildings, offering training, providing consultancy, creating and selling products and trading on their name.

5. **Cultural awareness:** NGO should try to know local cultures and should work in harmony with the communities. They must make people aware of any discriminatory community practices and work with them, rather than going against the people.

Non-governmental organisations face multiple challenges. One of the most important steps to overcome these obstacles is identifying what are various challenges that an organisation is facing, and the areas where there is a room to improve. After identifying these key areas organisations can design a plan to improve and overcome the obstacles they are facing.

Q.18) What is the importance of good early childhood education in child development? Discuss various provisions regarding primary education in draft National Education Policy.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss the importance of good early childhood education in child development.

Conclusion. Way forward.

Early childhood education is education for children at early age especially between the ages of three and six. It is commonly referred to as preschool, nursery school or simply early education. During this period, children learn the social, emotional, physical and cognitive abilities which are important for child development in future. Unfortunately, in India early childhood education is not much focused. The draft National Education Policy (NEP) seeks to increase the focus on early childhood care, strengthen teacher training, and restructure the education regulatory framework.

Importance of good early childhood education in child development:

1. **Socialisation:** Humans are social beings and the main socialisation takes root in early childhood. In a safe environment away from family, children meet other people of their age, sowing the seeds of socialisation and friendship in young minds. This helps to develop self-confidence in your children by eliminating their shy nature.
2. **Cooperation:** During this phase, children learn to share and cooperate. These are all part of a social life. This is especially beneficial for single children. In the safe environment provided, the child learns to cooperate with guidance from professionals.
3. **Holistic Development:** It is important to have a strong foundation in every aspect of the personality such as emotional, social, mental and physical. Teachers who handle young children are well trained to identify the weaker aspects of a child and to encourage them to improve through practical sessions. Interaction amongst peers is extremely important in this context.
4. **Enthusiasm for Lifelong Learning:** Children develop a hunger for learning if they are taught through fun and exciting activities in early childhood. This eagerness and enthusiasm for learning remains with them their entire lives.
5. **Value of Education:** The new environment provided in preschool gives children an entirely different perspective on the requirement of education. Grasping knowledge and applying them to their lives demonstrates the value of education.
6. **Teamwork:** Many preschool activities are focused on teamwork and help children improve their attitude towards working as a team. A person's teamwork capability is based on their respect for others opinions, listening skills and mentality towards equality. All these qualities are needed to be taught at a young age.

7. **Confidence and Self Esteem:** A sense of wellbeing is important for a person to explore their talents. The positive interactions with peers and teachers encourage a positive view of themselves. This is an important impact of early childhood education.
8. **Cognitive Development:** Professionally crafted activities in preschool enhance the development of the brain. Various activities involving analysing and logical reasoning help them to develop their skills.

Deficiencies in early childhood learning Programmes according to NEP:

1. **Accessibility:** Early childhood education is costly and available only in urban schools mostly. Due to this many people are unable to access early childhood education nearby their area. Furthermore, high cost is an impediment as poor are unable to spend money on early childhood education.
2. **Poor quality education:** In addition to problems of access, the Committee observed several quality related deficiencies in the existing early childhood learning programmes. These include:
 - Curriculum that doesn't meet the developmental needs of children.
 - Lack of qualified and trained teachers, and
 - Substandard pedagogy.
3. **Less focus on early childhood education:** Currently, most early childhood education is delivered through anganwadis and private-preschools. However, there has been less focus on the educational aspects of early childhood.

Various provisions regarding primary education in National Education Policy:

1. **Early childhood Curriculum:** The draft Policy recommends developing a two-part curriculum for early childhood care and education. This consist of:
 - Guidelines for up to three-year-old children (for parents and teachers).
 - Educational framework for three to eight-year-old children.
 This would be implemented by improving and expanding the anganwadi system and co-locating anganwadis with primary schools.
3. **The Right to Education Act, 2009 (RTE Act):** Currently, the RTE Act provides for free and compulsory education to all children from the age of 6 to 14 years. The draft Policy recommends extending the ambit of the RTE Act to include early childhood education and secondary school education. This would extend the coverage of the Act to all children between the ages of 3 to 18 years.
4. **No detention Policy:** In addition, the draft Policy recommends that the recent amendments to the RTE Act on continuous and comprehensive evaluation and the no detention policy must be reviewed. It states that there should be no detention of children till class eight. Instead, schools must ensure that children are achieving age-appropriate learning levels.
5. **Curriculum framework:** The current structure of school education must be restructured on the basis of the development needs of students. This would consist of a 5-3-3-4 design comprising:
 - 5 years of foundational stage (3 years of pre-primary school and classes one and two).
 - 3 years of preparatory stage (classes three to five).
 - 3 years of middle stage (classes six to eight).
 - 4 years of secondary stage (classes nine to 12).
6. **School infrastructure:** The draft Policy recommends that multiple public schools should be brought together to form a school complex. Each school complex will be a semi-autonomous unit providing integrated education across all stages from early childhood to secondary education.

Recent studies reveal the importance of early childhood education as it can influence the mental, emotional and physical development of a child. To increase the quality of the education of children, it is important to ensure early childhood education. The recommendations in draft NEP should be implemented early.

Q.19) In the coming decade, India's cities need to focus on governance and sustainable development. In light of this, discuss various reasons for the poor performance of urban local bodies in India. What should be done to improve urban local governance?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various reasons for the poor performance of urban local bodies in India. Steps needed to improve urban local governance.

Conclusion. Way forward.

India's economic survey 2018, estimates that the country's urban population will reach 600 million by 2031, which is a cause for concern for urban planners. Thus, cities in India will need to create new houses, health care services, water, and transportation infrastructure to accommodate the flow of migrants. Our cities are not prepared for it and would face governance challenges in near future. City infrastructure such as water supply, sewerage, solid waste management are under pressure and require appropriate government efforts.

Various reasons for the poor performance of urban local bodies in India:

1. **Poor governance:** The largest reason for the poor condition of India's cities is the failure of municipal governance. In some States, elections to urban local bodies have not been held for years, defeating the goal of decentralised governance. Tamil Nadu is an example. There is a complete lack of planning and governance at the urban local body level.
2. **Lack of management capacity:** Indian municipalities do not have the management capacity to either plan economic activity or execute it. Poor urban planning and rapid unregulated growth in cities has caused severe damage to India's cities. For instance, Chennai experienced severe flooding for the first time in 2015, because of the mindless urban expansion in the watershed areas of the city.
3. **Financial condition:** The finances of municipalities are in a bad shape. City municipalities do not collect enough taxes to pay the salaries of their own employees. The Economic Survey of 2018 pointed out municipalities do not realise the full potential of property tax. The Survey showed that Bengaluru and Jaipur are currently collecting only 5-20% of their respective potentials for property tax.
4. **Top-down approach:** Urban planning is done at the state government level and municipalities have little or no role in it. There is no direct responsibility for the consequences of planning as long as the municipality completes the plan. Poor planning, poor accountability, and poor governance have led to disasters.
5. **Lack of coordination:** Poor coordination among centre, state, and various departments at local level lead to poor implementation of urban policies. Inability to coordinate leads to administrative inefficiency and thus poor urban governance. There is a range of institutions with overlapping functional jurisdiction, leading to confusion and poor coordination.

Steps needed to improve urban local governance:

1. **Greater autonomy:** The urban local bodies should be given greater autonomy. India needs to follow a devolved model that empowers urban local bodies. In practice municipalities have very little autonomy. State governments continue to take decisions on matters such as property tax, octroi, which have an impact on the revenue of urban local bodies. Municipalities should be more autonomous in their functioning, so that they can deliver quality service.
2. **Encouraging public-private partnership:** Successful PPP programs should be formulated at both state and city levels to fund city development. Role of the state should be to create an enabling environment with an aim to expand and deepen private sector investments in infrastructure, whereas city administration should develop and implement PPP projects.
3. **Planning:** Government needs to coordinate at various levels with regard to implementation of various programmes. The urban local bodies should prioritise the development programmes. Any mega project envisaged needs to be developed taking into account the views of all the stakeholders.
4. **Governance reforms:** For strengthening ULBs, a minimum level of staffing should be provided in metropolitan areas. Elections to ULBs should not be, generally, delayed beyond six months. The Government may consider the adoption of a common categorisation of urban bodies across the country so as to assist a systematic planning process and devolution of funds. All areas having population more than 10 lakh should be defined metropolitan areas.
5. **Holistic approach:** It is important to integrate various urban development and related programs at local, state and national levels to develop sustainable city or metropolitan regions. Urban institutions should be strengthened and roles of different organisations should be fixed.

The Ministry of Housing and Urban Affairs has floated several schemes for urban transformation such as the Smart Cities Mission, HRIDAY for heritage cities, Housing for all and AMRUT. However, these schemes have not changed much on the ground. Municipalities have failed in their objectives and the quality of life in urban slums is substandard. To overcome this, a series of reforms are needed by the Indian government to strengthen local-level governance. To improve urban governance and delivery of services there should be appropriate government as well administrative actions.

Q.20) Recent NCRB report has shown a rise in crimes against women over the years. Discuss various reasons for this. Suggest some measures to improve the situation.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various reasons for rising crime against women. Suggest measures for the same.

Conclusion. Way forward.

Crime against women is increasing every year. According to NCRB report, it has reached a peak in 2018. Close to 3.78 lakh cases of crimes against women were recorded in 2018, the highest since gender-wise classifications were initiated in 1992 by the NCRB. In recent years, more than 560 cases of rape reported in Delhi. Violence against Indian women is increasing and has widespread and deep roots in social psyche.

Reasons for rise in crime against women in India:

1. **No fear of law:** Various laws like Sexual harassment at workplace, Vishakha guidelines are in place. Unfortunately, these laws have failed to protect women and punish the culprits. Even law has a lot of loopholes. For example, under Sexual harassment at workplace act, the law states that there has to be an annual report that needs to be filed by companies, but there is no clarity with the format or filing procedure.
2. **Lack of accountability and conviction:** Lack of accountability of the law and order institutions and lack of conviction of culprit lead to increase in crimes against women. A lack of centralised mechanism to collect data on women harassment, makes it difficult to analyse patterns on harassment that women face leading to poor law implementation.
3. **Patriarchy:** Despite the increased education levels and various government efforts like Beto Bachao Beti Pado, women status has not improved much. People are not shedding their patriarchal mindset. Honour killing, domestic violence are on rise due to increasing women's voices that is challenging patriarchal mindset.
4. **Police failure:** Indifferent attitude of Police leads people to take law in their own hands. Police delays and inability to catch the criminals lead to more crime against women. The state police attitude is not good in implementing laws against sexual crime. Many cases of misbehave with women by police have been reported.
5. **A lack of public safety:** Women generally aren't protected outside their homes. Many streets are poorly lit, and there's lack of women's toilets. Women who drink, smoke or go to pubs are widely seen in Indian society as morally loose, and village clan councils have blamed a rise in women talking on cellphones and going to the bazaar for an increase in the incidence of rape.
6. **More reporting:** A recent report reveals that there is a 12% increase in sexual offences. With women shedding their shyness and more women being educated, reporting of crimes has increased. More women are raising their voice as was seen in #MeToo movement. This has led to increased reported cases as reflected in NCRB report.
7. **A sluggish judicial system:** India's court system is painfully slow, because of a shortage of judges. The country has about 15 judges for every 1 million people. This leads to delay in justice. The Indian justice system has failed to investigate, prosecute, and punish the perpetrators and failed to provide effective redressal for victims.

What should be done?

1. **Civil society participation:** The role of community and state has increased to stop such crimes. Active participation of civil society against such crimes and helping state and law enforcement agencies in nabbing the criminal is critical.
2. **State action:** State should be more proactive in police reforms. Strict action should be taken against any police officials who do not record such incidents in criminal records.
3. **Police reforms:** The government should carry a recruitment drive for women and should focus on gender focused training in police and judiciary. There is a need to create women police stations and more women should be taken as judges.
4. **Judicial reforms:** Women harassment cases must be resolved in a time frame. The court dealing with rape cases should be sensitive towards the conditions of rape victims and award punishments to rapists with great seriousness towards women conditions in the Indian society.
5. **Compensation:** The need of the hour is the creation of state sponsored victim compensatory fund particularly for heinous offences including rape. This award should be totally free from the result of the prosecution that is conviction or acquittal and should come into action the moment FIR is registered or cognisance is taken of a complaint.
6. **Media:** The media must be sensitive to the plight of the rape victim and must not highlight the name or any inference leading to the identification of the victim, as it will be

counterproductive. The media must invariably highlight those cases where the offender has been convicted, as it will infuse the feeling of deterrence among the people.

7. **Crisis centre:** Rape Crisis Centres are set up in countries like Australia, Canada, America, United Kingdom, etc. These centres provide their help through their telephonic help lines also. These centres provide the rape victims with medical help, counselling, and financial help by way of providing job opportunities etc. Such centres should be set up in India to provide for medical aid and counselling to the rape victims.

Thus, women's crime needs to be tackled at all levels with involvement of community and whole society. Everyday women are dealing with harassment from mild to extreme forms on our streets, workplaces, public transportation, and even in homes. This needs to be stopped by active vigil in society. Women's issues need to be tackled with strong political will and government efforts.

Q.21) What are parliamentary standing committees? Discuss their need and significance in Parliamentary democracy.

Ans.

Demand of the question

Introduction. What are parliamentary standing committees?

Body. Discuss why parliamentary standing committees are necessary? What is their significance?

Conclusion. Way forward.

Parliamentary standing committees are permanent and regular committees which are constituted from time to time in pursuance of the provisions of an act of parliament or rules of procedure and conduct of business in Lok Sabha. The work of these Committees is of continuous nature. Among the Standing Committees, the three Financial Committees- Committees on Estimates, Public Accounts and Public Undertakings constitute standing committees as they keep an vigil over Government expenditure and performance.

Need of parliamentary standing committees:

1. **Lawmaking:** Due to the large volume of legislature, discussion of all the bills in parliament in detail is not possible. Committees do a detailed discussion and analysis on a proposed law, thus enabling that every law is for the benefit of citizens.
2. **Policy challenges:** Disruptive changes in technology and the expansion of economy bring new policy challenges that require the assistance of experts in dealing with such situations.
3. **Consensus:** Committees provide a forum for building consensus across political parties. The proceedings of the House during sessions are televised, and MPs are likely to stick to their party positions on most matters. Committees have closed door meetings, which allows them to freely question and discuss issues and arrive at a consensus.
4. **Scrutiny:** To ensure that a Bill is scrutinised properly before it is passed, our law-making procedure has a provision for Bills to be referred to a standing committee for detailed examination.

Importance of Parliamentary Standing Committees in democracy:

1. **Executive accountability:** Parliamentary standing committees ensure executive accountability through scrutiny of public spending and various laws. For example, the public accounts committee is concerned with the manner and results of spending public

funds. It scrutinises the accounts and the report of the Comptroller and Auditor-General of India, thereby ensuring accountability of any misspending.

2. **Better informed discussions:** Committee allows members for a more meaningful exchange of views as against discussions in open Houses where party positions take precedence. This allows them to make better decisions on policies.

3. **Expertise:** Committees allow use of input and suggestions of various expertise on subject matter of law thereby helping to formulate better policies and laws. It is through these committees that such expertise is involved in lawmaking.

4. **Help in Economic growth:** The Estimates Committee does a detailed examination of the budget estimates. It suggests alternative policies to bring about efficiency and economy in administration.

5. **Scrutiny of public funds:** The Public accounts committees scrutinise the government accounts and the report of the Comptroller and Auditor-General of India. Thus reduce the chance of misspending and also validate government's spending statistics.

6. **Ensure better laws and rules:** The Committee on Subordinate Legislation scrutinise and report to the house about regulations, rules, sub-rules, bye-laws, etc. conferred by the Constitution being properly exercised within the limits of various provisions.

6. **Ensure answerability:** The Committee on Government Assurances committee scrutinise the various assurances, promises, undertakings, etc. given by ministers from time to time report on the extent to which such assurances have been implemented. This ensures the answerability of the government to public enabling democracy in true spirit.

7. **Ensure participation of MPs:** The Committee on Absence of Members considers all applications from members for leave of absence from the sittings of the House and examines every case where a member has been absent. This ensures participation of each member in the constructive lawmaking process and various debates and discussions.

Although parliamentary and cabinet committees are not a part of the Constitution, they ensure healthy democracy and governance through scrutiny and better policies. They enable the cabinet and Parliament to make difficult decisions.

Q.22) Discuss the significance of Supreme Court judgement in Shreya Singhal case. Examine whether Draft Intermediary Rules by the Ministry of Information and Technology is against the principles of this judgement.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss the significance of Shreya Singhal case judgement. Issues in Draft Intermediary Rules violating the principles of Shreya Singhal judgement.

Conclusion. Way forward.

Recently, in a landmark ruling, India's Supreme Court held that citizens' right to freedom of speech using the internet are constitutionally protected. The verdict is in line with, Shreya Singhal case judgement in which the Supreme court had nullified Section 66A, terming it vague and unconstitutional. This judgement is significant as it safeguards fundamental right of freedom of speech.

Significance of Supreme Court judgement in Shreya Singhal case:

1. **Liberty- a cardinal constitutional value:** In the judgment, the court held that the liberty of thought and expression is a cardinal value of paramount significance under the Constitution.
2. **Free speech:** According to the Supreme Court, discussion or advocacy of a particular cause, no matter how unpopular, is at the heart of the right to free speech. It cannot be curbed on the ground of causing public disorder unless such discussion or advocacy reach the level of incitement.
3. **Reasonable restrictions:** The court held that only reasonable restrictions can be imposed as contained under Article 19(2). The mere causing of annoyance, inconvenience, danger, etc. or being grossly offensive or having a menacing character are not offences under the Indian Penal Code at all.

Issues in Draft Intermediary Rules violating the principles of Shreya Singhal judgement:

1. **Prohibition by intermediaries:** Shreya Singhal clarified that competent public authorities, not private platforms, should decide whether online speech is violating certain law. The Intermediary rules in opposite give authority to intermediaries such as Facebook, Google, WhatsApp, and others to decide what is violative and what to remove.
2. **Freedom of speech:** The Shreya Singhal case upheld that freedom of speech is ultimate constitutional right and must not be curbed except under reasonable restrictions. The intermediary rules require each intermediary to publish terms of use to prohibit the user from hosting certain content. This put restrictions decided by private intermediaries and may not be reasonable as described by the constitution. Research, including in India, has shown that these platforms often simply honour invalid requests from accusers, improperly silencing legal speech, or cutting off customers' access to legitimate businesses.
3. **No mechanism to correct mistakes:** The Court in Shreya Singhal said that, binding decisions about what content violates the law should come from courts or appropriate government agencies following fair processes. The proposed Rules depart from this principle:
 - Under rules intermediaries, has to act on government demands in just 24 hours, with no mechanism to correct mistakes or clarify confusing orders. Many public interest groups like Human Rights Watch have pointed out that this would lead to over-compliance and unnecessary removal of lawful expression.
 - The Rules also require platforms to build automated tools to proactively police and remove internet users' speech which may be arbitrary. Many researchers have warned, even the best filters can make serious mistakes, leading to wrongful removals. Software filters are thus no substitute for human judgement and proper review by courts or government authorities. In particular, filters can't understand the context in which material appears.

Way forward:

1. **Public review:** The intermediary rules should be open for careful public review. Government must incorporate all important suggestions and remove controversial rules.
2. **Clarification:** Instead of intermediaries the government must clarify what is violative and against the public order.
3. **Reasonable restrictions:** It must be notified under the rules that any content or speech must be removed if it leads to any incitement as mentioned under Shreya Singhal case.
4. **Time to prove innocence:** Enough time must be given to an individual to clarify his/her content and speech. Instead of 24 hours, 72 hours should be given to act on government's demands under the rules.

Thus, the draft rules need to be amended. These draft rules must be in line with various judgments given by the Supreme Court (SC) to deal with malicious online content. There are some concerns but there is also scope to make regulations better and improved.

Q.23) What is mob-lynching? What are various reasons for a rise in mob-lynching incidents in India. Suggest some measures to prevent mob-lynching.

Ans.

Demand of the question

Introduction. What is mob-lynching?

Body. Discuss various reasons for rise in mob-lynching incidents in India. Suggest some measures to prevent mob-lynching.

Conclusion. Way forward.

Mob lynching is an act of premeditated extrajudicial killing by a group of people, often targeted against a particular individual or group. Mob lynching is based on some false information, unconfirmed rumours etc. Act of lynching leads to mockery of law and order. Recently, mob-lynching incidents have increased in India due to various reasons. The lynching of Pehlu Khan in Rajasthan is one of such incidents.

Reasons for rise in mob-lynching incidents in India:

1. **Failure of state:** The failure of state in protecting Minorities from mob, lack of proper mechanism in place. People are losing their faith in law and order machinery therefore they are taking laws in their hand.
2. **Rise in intolerance:** In recent times intolerance has increased especially against marginalised. For example, intolerance has increased against Muslims for cow slaughter and mob lynching case has increased on any news of beef eating lead to mob lynching of the Muslims. With rise in anger fuelled by fake news and propagandas, mob lynching cases has increased.
3. **Misguided youth:** With rise in unemployment, youth are being misguided ideologically by politicians or religious groups. Due to misguidance of youth, they act against certain sects to take revenge or are motivated by thrill and excitement.
4. **Defence:** Mob violence may be done for defence against any perceived and presumed threat from other social groups. It is also motivated by a desire to protect one's territory. E.g. mob crime against a nation's citizens.
5. **Biased view:** A bias against any group due to historical or social reasons motivate mob to commit a hate crime. For example, Muslim being tagged as terrorist lead to an act of lynching against them by mob.
6. **Lack of impunity:** One of the major reasons for the rise in mob lynching is impunity. Police find it difficult to register cases against big crowds, some people get advantage of it. There is no particular law to deal with lynching and it finds no mention in the Indian Penal Code. Hence often the perpetrators get away with it.
7. **Propagandas:** In India people are very emotive on sensitive issues. It is very easy to flare them up. Some people are spreading wrong information on social media especially on Facebook and WhatsApp. Some people used this incident to settle their personal enmity.

Measures to prevent mob-lynching:

1. **Legislation:** A national law is required in response to the spate of lynching incidents happening in the country. The proposed law should define the terms lynching, mob and

victim. It should make lynching a non-bailable offence, criminalise failure of duty by police officers, designate judges for trial, define compensation and rehabilitation for victims and witnesses within a definite time frame.

2. **Fast-track courts:** The lynching cases should be tried by fast-track courts with day-to-day hearings. It is important to punish the culprit with stringent punishment and conclusion of the cases within 6 months.

3. **Sensitisation:** Indian community should be sensitised towards the rights of other citizens and danger of mob crimes for social cohesion. Awareness campaigns are needed to sensitise people about the plight of others.

4. **Community Policing:** By fostering partnerships with the community state can enable communities and law enforcement to work together to prevent and respond to hate crimes. Community involvement can prevent serious mob crimes. Helpline should be established for reporting of mob lynching crimes in society.

5. **Youth involvement and counselling:** The majority of act of lynching are committed by persons who are 29 years old and younger. Youth are also often more vulnerable to violent attacks, bullying, and other forms of harassment. To combat this teachers and school administrators should educate their students and staff on the nature of such incidents and crimes and how to prevent them.

6. **Training for Officers and Deputies:** Police should train new recruits and existing officers and deputies on mob lynching and other related issues. It shall be the duty of every police officer to cause a mob to disperse, which, in his opinion, has a tendency to cause violence in the disguise of vigilantism or otherwise. The state governments shall designate a senior police officer in each district for taking measures to prevent incidents of mob violence and lynching.

7. **State efforts:** The state governments shall immediately identify districts, sub-divisions and villages where instances of lynching and mob violence have been reported in the recent past. Central and the state governments should broadcast on radio and television and other media platforms including the official websites that lynching and mob violence shall invite serious consequence.

Rajasthan and West Bengal have passed state specific laws which criminalises mob lynching. It's high time that democracy has to be saved from mobocracy by those in power. The Central and state government must leave aside the political blame game. Government need to come up with some concrete steps to protect the citizens from the recurrent violence which cannot be allowed to become the new normal.

Q.24) The Indo-US relation has reached new heights in recent times. In light of this, discuss the significance and various issues in Indo-US relationship.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss the significance and various issues in Indo-US relationship.

Conclusion. Way forward.

India and the US share an extensive cultural, strategic, military, and economic relationship. After the decades of trust deficit between India and US, relations have achieved new heights and deepness. Although it is evident that there is growth of bilateral relations as was seen, there are various issues between the two democracies.

Significance of Indo-US relationship:

1. **Global rise:** Due to the rapid growth of China, collaborating with the US can help India progress from being a South Asian power to an Asian and eventually global power. The Indian economy's projected growth, along with the improved relationship with the United States, have enhanced India's status with many of these powers.
2. **Countering China:** A partnership with the US will create more balance in a region increasingly dominated by China. The deeper ties with India is an important part of the US's pivot to Asia Policy. With the rise of India, China's hegemony is challenged which is good for both India and China.
3. **Multipolarity:** With change in global order, it is important for both US and India to deepen their ties as there is no enemy or friends in these times. Whereas the US can help India to rise as an important power in a multipolar world, it can help the US strategically in Indian Ocean by keeping India as a good friend.
4. **Economic significance:** The potential economic benefits of India's partnerships with the US are significant. India requires \$1 trillion over the next decade to upgrade its infrastructure, for which it needs foreign direct investment. For this US can play an important role. On other hand good ties with India can help US in economic growth which is hampered due to recent US-China tussle.
5. **Defence:** US is critical for India's indigenous defence production and to reduce the country's defence import bill. With transfer of significant defence technology and equipment US can help India to be self-sufficient to tackle future dangers. This will help the US strategically and economically.

Various issues between India-US relations:

1. **Trade issues:** There have been various issues regarding trade between two nations. The US has continuously accused India of high tariffs and India has accused the US of restriction to US markets and high tariffs on Indian products. Recently India and US confronted each other regarding tariffs and protectionist policies.
2. **Intellectual Property Rights:** US has continuously criticised India for its IPR policies. It has accused India of acting against Intellectual properties of major companies especially pharmaceutical over generic drugs.
3. **Continuous support to Pakistan:** Although the US has reduced support to Pakistan, it has still provided monetary support to Pakistan. Major support by the US is due to Afghanistan. In February 2016, the Obama administration notified the US Congress that it intended to provide Pakistan eight nuclear-capable F-16 fighters.
4. **Relations with Russia:** US is the all-time rival of Russia. While India is always a friend of Russia. Russia has always supported India on an international platform. It helped India to develop its defence capabilities. In 2018, India inked the historic agreement worth with Russia to procure four S-400 surface-to-air missile defence system, the most powerful missile defence system in the world ignoring America's CATSA act. The U.S. threatened India with sanctions over India's decision to buy the S-400 missile defence system from Russia.
5. **Relations with Iran:** US recent tussle with Iran has taken very bad shape. India has strategic interest in Iran to buy oil. India has continuously bought oil from Iran despite US sanctions on Iran. The real action with Iran has not been well received by the US.

Recognising India as a key to its strategic interests, the United States has sought to strengthen its relationship with India. The two countries are the world's largest democracies, and both are committed to political freedom protected by representative

government. The US and India have a common interest in the free flow of commerce and resources, including through the vital sea lanes of the Indian Ocean. In recent years, India and US relations have deepened.

Q.25) What are various malpractices in the medical and healthcare system in India? Discuss its consequences.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various malpractices in the medical and healthcare system. Mention consequences of such malpractices.

Conclusion. Way forward.

Health is considered as the biggest wealth of a human being. Healthcare is a fundamental right under Article 21 of the Indian Constitution. It includes within its ambit the right to health and medical care.

Various malpractices in the medical and healthcare system:

1. **Illegal organ trade:** Illegal organ trade is the biggest crime going on in the medical industry. There is the sad practice of luring poor and uneducated people to agree to donate organs, kidneys in particular, for which there is no dearth of high paying customers. The arrest of top doctors, of Hiranandani Hospital in Mumbai, in connection with a kidney sale and transplant case is an example of ongoing unethical (and illegal) business practice at India's big private hospitals.
2. **Corruption:** Numerous doctors are involved in corrupt practices. For a hefty commission, doctors prescribe more tests than necessary, to be done at preferred in-house or outside labs. Sometimes tests are not even conducted on the samples taken, instead, fake results are given. On a similar theme, doctors prescribe expensive medicines or vaccines when cheaper, quality substitutes are easily available.
3. **Unnecessary charges:** Private hospitals, with profit-making as their main motive, use a system of incentives and disincentives to push doctors to over-bill using whatever means. Nexus between doctors and pharmaceutical firms are rampant, and that leads to prescription of costly drugs.
4. **Quackery:** Quacks are although healthcare providers in rural inaccessible areas, but are dangerous to patients as they lack proper training and education. They put a patient's life in danger. Often quacks pay money to keep their business thriving.

Consequences of various malpractices:

1. **Endangers others life:** Malpractices like illegal organ trade put the life of donor in danger. It leads to an increase of health risks. Further as these donations occur behind the curtain any death goes unnoticed and the culprit moves freely.
2. **Rise in cost of treatment:** Corruption, wrong diagnosis, unnecessary tests, costly medicine make healthcare unaffordable. India hosts millions of poor people who do not have enough to pay for food. Further they suffer from malnutrition. Corrupt medical practices make treatment unaffordable for them.
3. **Mistrust:** When common people learnt about such malpractices, they lose their trust in doctors and system. They lose hope of getting treated. Further, this mistrust may lead to attack on innocent doctors if they do not attend patients on risk.

4. **Medical education:** There is no accountability and transparency in the state medical organisation and institutions. There are no accountability and transparency measures and often this leads to malpractices in medical administration. This is reflected in unnecessary fee rise in medical courses making it unaffordable especially for common people.

Way Forward:

1. **Changes in the Medical Council of India:** The Medical Council of India (MCI) has had a limited success in checking malpractices and corruption in the medical field. The National Medical Commission Bill seeks to replace MCI. A system of standardised treatment protocol (or SOP) may help check some abuses with required changes in MCI.
2. **Incentives:** Increasing the supply of seats in government medical colleges and capping capitation fees will reduce investment costs for medical students and in turn reduce their incentive to give in to the uncontrolled pursuit of profit in private hospitals, which are often run not by doctors but by MBAs. Lowered debt will reduce the incentives for doctors to cheat.
3. **Access to information and transparency:** Mandatory video recordings and sharing the recording with patients or their representatives, will make doctors accountable. At present, private hospitals do publish the credentials of top doctors, including their education and past experience. That practice needs to be expanded to include each doctor's record in treating patients.
4. **Disincentives:** Aggrieved patients should be encouraged to take their grievances to consumer courts, which are cheaper, faster, and don't require lawyers for representation.
5. **Restructuring medical education:** Various committees like Ranjit Roy committee, 2014 has recommended a restructuring of medical education in India. The Supreme Court set up an oversight committee under Justice Lodha who stressed, to bring in transparency and accountability within the MCI and oversee its statutory functioning.

The above measures can check most of the unethical practices but not all of them. For serious infractions, stringent penalties including fines, permanent disbarment, and imprisonment will still be needed.

Q.26) Progress made under the BharatNet initiative is not impressive. Examine. Suggest some measures to reduce digital divide in India.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss progress made so far under the BharatNet initiative. Mention various reasons for not achieving targets under the scheme. Discuss various measures to reduce digital divide in India.

Conclusion. Way forward.

India has been appreciated globally for providing IT services. Indian growth saga in past decades was based on services led growth, especially in the IT sector. Despite this, India faces a huge digital divide. In 2014, it had only about 18 people per 100 using the Internet (World Bank Data). To remove this divide, the government had launched the BharatNet project to provide affordable high-speed broadband connectivity to 2.5 lakh gram

panchayats across India. The objective is to facilitate the delivery of e-governance, e-health, e-education, e-banking, Internet and other services to the rural India

Progress so far under the BharatNet initiative:

1. **Unable to achieve target of last mile connectivity:** Under BharatNet phase 1, only about 7.45% of Gram Panchayats have been provided with last mile connectivity against the target of providing connectivity to 1.5 lakh gram panchayats (GPs). As against a target of laying down 3.11 lakh km of optical fibre cable, only about 92,283 km of cable has been laid down.
2. **Lack of functional internet connection:** The Digital Empowerment Foundation's research team found that, only 50 (18.6%) of the surveyed 269-gram panchayats had NOFN internet connection up to the Panchayat Bhawan. And only 11.5% of them had functional internet connection. The cables have been laid and the devices have been installed. But internet connectivity was not available.
3. **Poor internet speed:** The BharatNet mission is to provide 100 mbps broadband connectivity to all Gram Panchayats and for increasing broadband penetration in rural areas so as to foster socio-economic development. It was found that Gram Panchayats who have functional internet are working at very slow speed impeding the very aim of the scheme of providing fast connection.

Reason for not achieving targets and desired objectives:

1. **Poor project implementation:** The lack of approved detailed project report has been attributed as the reason for the delay for most of these projects.
2. **Lack of funds:** Dearth of funds have stifled progress of the BharatNet initiative. In the 2018 budget, the government had added another Rs10,000 crore for the second phase of BharatNet. The allocated amount under budget has not been effectively used.
3. **Absence of implementing agencies:** There is no agency made responsible for project implementation. This has led to delays in work progress and no responsibility on any institution to make the initiative successful.

Steps needed to bridge the digital divide:

1. **Proper execution:** To bridge the digital divide, there is a need to accelerate execution of the Bharat net initiative. Timely goals should be achieved with funds allocated in a comprehensive manner. An authority should be created for implementation of BharatNet.
2. **Public private partnership:** Meaningful collaborations with the private sector, technological innovations and following a consistent focused approach towards the larger objective are necessary. There is a need to enhance and develop robust rural digital infrastructure and ecosystem.
3. **Digital literacy:** Focus must also be on enhancing the digital literacy through various platforms especially media. Digital literacy initiatives like Pradhan Mantri Grameen Digital Saksharta Abhiyan (PMGDISHA) are important in this direction.
4. **Increase affordability:** One of the major barriers in internet penetration is high internet costs. A large group of people cannot access the internet because of the high costs involved. Government can subsidise the tariffs to make the internet affordable.
5. **Address gender gap in internet access:** There is a gender gap regarding access to the Internet. The effort must be made to close this gender gap.

Digital literacy is important for good governance and transparency. India has tried to bridge the digital divide gap by enacting some programmes like Digital India, Pradhan Mantri

Grameen Digital Saksharta Abhiyan (PMGDISHA) etc. To make these initiatives successful, a multi-pronged approach is needed.

Q.27) What are self-help groups? Discuss various socio-cultural hurdles faced by Self Help Groups (SHGs) in promoting increased participation in development programmes.

Ans.

Demand of the question

Introduction. What are self-help groups?

Body. Discuss various socio-cultural hurdles faced by Self Help Groups (SHGs) in promoting participation in development programmes.

Conclusion. Way forward.

Self-Help Groups (SHGs) are small voluntary association of poor people, who come together for the purpose of solving their common problems through self-help and mutual help. The SHGs usually comprise of very poor people who do not have access to formal financial institutions.

Various socio-cultural hurdles faced by Self Help Groups (SHGs) in promoting participation in development programmes:

1. **Illiteracy:** About 30% of rural people are illiterate according to government data. They don't know the importance and working of SHGs. Lack of practical knowledge and information adversely affects the efficacy of SHG. Even though the authorities take measures for creating awareness about the schemes beneficial to them, still the majority of the group are unaware of the schemes of assistance offered to them.
2. **Lack of Stability:** In the case of SHGs dominated by women, it is found that there is no stability of the units as, many married women are not in a position to associate with the group due to the shift of their place of residence.
3. **Social barriers:** Women SHGs in India face various social barriers. For example, women in villages are still seen as caretaker of children and housewife. They are not allowed to work or participate. This hinders women's participation in SHG. Various women, even if they participate, often do not attend the meetings due to house activities.
4. **Caste and Religion:** In rural areas caste and religious systems dominate and are very deep. Group formations based on caste and religious lines hinders the working of SHGs. People belonging to different castes are not ready to participate and cooperate with each other.
5. **Patriarchy:** Prevalence of patriarchal mindset in the rural areas, see women as weak in all respects. Female child discrimination restricts the women to take active part in various decision-making processes.
6. **Lack of funding:** Generally rural people lack funds or are not ready to spend out of pocket. It is found that in most of the SHGs, the financial assistance provided to them by the agencies concerned is not adequate to meet their actual requirements. The financial authorities are not giving adequate subsidy to meet even the labour cost requirements.

Way forward:

1. **Awareness:** Awareness is needed among rural people about various benefits of schemes and objectives of SHG. Frequent awareness camps can be organised by the Rural

Development department authorities to create awareness about the different schemes of assistance available to the participants in the SHGs.

2. **Funding:** Financial institutions must provide adequate financial assistance to the SHGs on the basis of their performance. Efforts must be made to provide loans to SHGs at less interest rates.
3. **Removing taboos:** Efforts must be made by removing various taboos and awarding people about Increasing role of women. Gender sensitisation efforts must be made.
4. **Ensuring women participation:** Non-Government Organisations (NGOs) can play a significant role in empowering women entrepreneurs by providing basic education, motivation training, and financial help.

SHG and the socio-economic programmes reinforce each other and promote all-round development of the children, the women, the households and the communities. It is a process which ultimately leads to self-fulfilment of each member of the society. It is in this direction that SHGs are moving towards fulfilling their objectives with a meaningful strategic direction.

Q.28) In a democratic polity the fundamental rights and duties of citizens are correlated. Comment in the Indian context.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss correlation between fundamental rights and duties.

Conclusion. Way forward.

It is commonly said that the rights and duties of the citizens are correlative. It means that rights have real meaning, if individuals perform duties. A duty is something that someone is expected or required to do. Indian Constitution originally had no provision for Fundamental Duties. Parliament realised the need for inserting the fundamental duties and by the 42nd Constitutional Amendment, a new part (Part IVA) was inserted mentioning the fundamental duties of Indian citizens.

Correlation between fundamental rights and duties:

1. **Respect for others rights:** A right comes with an obligation to show respect for the rights of others. The obligations that accompany rights are in the form of duties. If we have the right to enjoy public facilities like transport or health services, it becomes our duty to allow others to avail the same. If we have the right to freedom, it becomes our duty not to misuse this and harm others.
2. **Reminder:** Duties serve as a reminder to the citizens that while enjoying their rights, they should also be conscious of duties they owe to their country, their society and to their fellow citizens. For example, it is the duty of the state to preserve fundamental rights of individuals, and it is the duty of citizens to preserve national values and ethos.
3. **Balance privileges and obligations:** Fundamental duty corresponds to fundamental rights. In other words, they complement each other. A duty recognises and enforces a perfect balance between obligation towards a society and privileges of an individual.
4. **Social benefit:** Fundamental duties serves as a warning against the anti-national and antisocial activities like burning the national flag, destroying public property and so on. As an individual has every right to live with dignity, it is the duty of every citizen to not destroy national property which provides services to the whole society.

5. **Close relationship:** Rights and duties have a close relationship and both are inseparable. Both are existing side by side. If a legal system gives the right to life to its citizen, it also imposes an obligation on him to not to expose his life in trouble, as well as to respect the life and convenience of others. Thus, a strong legal system consists of fundamental rights and duties like its two non-separable parts.
6. **Establish a democratic balance:** The moral value contained in fundamental duties aim to establish a democratic balance by making the people conscious of their duties equally as they are conscious of their rights.

The fundamental duties are regarded as directory. There is no doubt that these duties are a constant reminder to us of the national goals as well as the basic norms of political order. They inspire us to inculcate in ourselves a sense of social responsibility. They are much of an educational and psychological value for the citizens.

Q.29) Discuss the significance of Article 131 of the Indian constitution. Can States challenge the validity of central laws? Examine.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Significance of Article 131. Can States challenge the validity of central laws?

Conclusion. Way forward.

Under Article 131 Supreme Court decides the disputes between different units of the Indian federation- the Centre and states or between two or more states. Recently, the Kerala government moved the apex court under Article 131 of the Constitution, challenge the constitutional validity of the Citizenship (Amendment) Act 2019 (CAA) and certain allied laws before the Supreme Court under Article 131 of the Constitution.

Significance of Article 131:

1. **Federalism:** Article 131 helps in the resolving federal disputes between state and centre or between two states. It implies that the federal structure has been given importance by the constitution makers. It is a way to maintain federal nature of Indian polity.
2. **Legal rights of the state:** The Constitution under Article 131, provides that whenever a State feels that its legal rights are under threat or have been violated, it can take the dispute to the Supreme Court. It thus prevents an infringement of legal right of the State government.
3. **Way to remove states dissatisfaction:** Article 131 allows states to move to apex court to remove their dissatisfaction against any action of centre which they might think is against the states and develop dissatisfaction in them. It provides a way to remove such dissatisfaction.
4. **Check on Centralisation tendency:** Centre can't enact any law which impinge or interfere with legal rights of state. Any tendency of such an act is dealt by Article 131.
5. **Cooperative federalism:** By resolving various disputes among various federal units of the Indian polity i.e. centre and state and between two states, Article 131 allows them to cooperate and work on important matters.

Can States challenge the validity of central laws?

1. In 2011, in the State *of Madhya Pradesh v. Union of India and Another*, the court said that the Central laws can be challenged in the State High Courts and Supreme

Court under Article 32 and held that the constitutional validity of a central law cannot be normally challenged under Article 131.

2. In the State **of Jharkhand vs. State of Bihar and Ors. (2014)**, the Supreme Court upheld Article 131 as an appropriate tool to test the constitutionality of a central law. Court ruled that the condition for invoking the court's jurisdiction under Article 131 was that the dispute should involve a question on the existence or extent of a legal right and not a political one.
3. The apex court in **State of Karnataka Vs. Union of India** held that the sole condition which was required to be satisfied for invoking the original jurisdiction of the apex court was the dispute between the parties must involve a question on which the existence or the extent of legal right depends.

Thus, presently, the States can move Supreme Court under Article 131 if any legal right derived from any statute or the Constitution of India is infringed. Further states cannot question the legality of central law on political or ideological basis.

Q.30) Do government's schemes for up-lifting vulnerable and backward communities by protecting required social resources for them, lead to their exclusion in establishing businesses in urban economies? Examine.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. How government schemes for vulnerable lead to their exclusion in establishing businesses in urban economies?

Conclusion. Way forward.

Vulnerable and backward communities like SC/ST face various level of discrimination in the society. To mitigate these and to provide an equal opportunity to all, the government executes various schemes. Government has mandated protections for various communities in the form of various schemes like MGNREGA, reservation for jobs and seats in educational institutions etc. However, even after various schemes, these communities suffer from poor representation in urban economies in the form of jobs in private sector and in pursuing entrepreneurship.

How government schemes for vulnerable lead to their exclusion in establishing businesses in urban economies?

1. **Government jobs preference:** Educational incentives like reservation and lower threshold of marks make academic professions and government jobs more attractive. Reservation in promotion in government jobs makes them more attractive for reserved communities.
2. **Impact on abilities:** Protecting social resources for backward communities has kept them away from competition leading to less improvement in skills, literacy and other abilities required to come into business. For example, MGNREGA provides 100 days of work for the needy, but it doesn't focus on their skill development.
3. **Social prejudices:** Social prejudices hinder their entrepreneurial activities. The schemes have limited success in removing social prejudices against them and thus they face hurdles while setting up businesses. Schemes like reservation in government jobs are seen as discriminatory by well off sections of the society and thus they do not cooperate with vulnerable sections or effort made by them in business.

4. **Reduced entrepreneurial spirit:** Guaranteed privileges through scheme also kills the hunger and opportunistic spirit among vulnerable leading to complacency. They find no incentive or motivation to work and establish businesses. For example, these vulnerable sections like Dalit instead of going to set up businesses and start-ups seek to get a job under reservation and find no motivation to take up business activities.
5. **No focus on structural discrimination:** There are some structural discrimination faced by these vulnerable groups. These schemes focus only providing privileges and not removing structural discrimination. In India, members of gender, caste, class, and ethnic identity experience structural discrimination that has adversely impacted on their ability to do business. Women also face dual discrimination being members of specific caste, class or cultural group apart from experiencing gendered susceptibilities.

Thus, various government schemes have prevented vulnerable to reap benefits of economic opportunities outside of cities. More efforts are needed to push them for entrepreneurial activities. A push and motivation is all needed through raising awareness and collaboration with various non-governmental organisations and local community.

Q.31) Critically examine the effectiveness of electoral bonds to make Indian elections more transparent. What other reforms are needed to make Indian election process more fair?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss positive aspects and various issues related to electoral bonds. Suggest some reforms to make Indian election process more fair.

Conclusion. Way forward.

Electoral bonds are instruments launched by the Indian government that allow donations to political parties using banks as an intermediary. These are meant to ensure transparency in political funding and thus fair elections in India. The conventional practice of funding elections via unaccounted cash is expected to be minimised with the electoral bonds.

Benefits of electoral bonds:

1. **Transparent political funding:** ADR (Association for Democratic Reforms) study shows that 69% of political funding in India comes from unknown sources. Electoral bonds give an alternative and the transparent route for parties to collect funds and meet election expenditures as it only allows bonds through certain banks and that too to KYC validated individuals.
2. **Reduce misuse:** A limited window and a very short maturity period (life of bonds is only 15 days) make its misuse difficult. The scheme is important to build a transparent electoral system by making bonds purchase only with validated KYC and an audit trail.
3. **Protect anonymity:** It also provides anonymity to donors. It is essential so as to prevent post-poll intimidation or harassment by political opponents. Electoral bonds reduce such chances of harassment.
4. **Political accountability:** The political parties are required to submit the details about contributions received through electoral bonds to the Election Commission. Hence the bonds help in cleaning up the system of electoral finance in India.
5. **Reduce black money:** Under the old system a massive amount of political donations were made in cash by individuals or corporates using illicit means of funding and

unaccounted black money was pumped in for financing elections. Electoral bonds will ensure cleaner money coming from donors.

Various issues related to electoral bonds:

1. **Crony capitalism:** According to RTI documents, electoral bonds with denomination of Rs 1 crore accounted for more than 91% of the Rs 5,896 crore raised between March 1, 2018 and July 24, 2019. The higher value of the bonds being purchased indicates that the electoral bonds are being purchased by corporates rather than individuals that reflects corporate influence.
2. **Political influence:** Electoral bonds scheme only ensures that contributions come from legitimate, tax-compliant sources. Since we can't know who gave which party how much, it is impossible to assert that no political influence was bought with these anonymous bond contributions. In 2017-18, according to data collected, some 95% of the ₹222 crore of electoral bonds issued landed up with the major political party as anonymous contributions.
3. **Delayed audit reports:** Audit reports submitted by political parties are the only source for information on beneficiaries of electoral bonds. According to data, not more than half of the political parties have submitted their annual audit report for 2018-19. The delay & non-compliance by political parties defeat the purpose of any such reporting.
4. **Foreign funding:** The Election Commission has observed that with the removal of the cap on foreign funding, electoral bonds invite foreign corporate powers to impact Indian politics.
5. **Non-disclosure to Election Commission:** While RPA mandates that the funds received by political parties in sums greater than Rs 20,000 be disclosed to the tax authorities, the Finance Act 2017 explicitly provides an exemption to this clause to electoral bonds. This affects the very purpose of cleaning up electoral finance.
6. **Round-tripping/Tax evasion:** These bonds may also facilitate round tripping i.e. rerouting illegal money that originates in India, back into the country through a tax haven. Electoral bonds provide secrecy and will encourage such tax evasion.
7. **Shell companies:** The ECI has said that there are chances that shell companies might get created. As per new provisions a company does not necessarily be profitable for the past 3 years to make political donations.

Other measures to make Indian election process more fair:

1. **State funding:** Major electoral reform needed is state funding of elections. State funding has proved its effectiveness in a number of countries like Germany, Japan, Canada, Sweden etc. The government can set up a national election fund where corporate houses and individual donors can contribute with 100% tax-free fund. The EC can oversee it.
2. **Political party auditing:** Venkatachaliah Committee Report (2002) recommended strict regulatory frameworks for auditing and disclosure of party income and expenditure along with state funding. In the absence of such frameworks, state funding in India cannot be effective.
3. **Strengthening Election commission:** The ruling parties should play key responsibilities in strengthening the role of Election Commission by enabling suitable laws and creating healthy political environment. The EC should increase its own capacity in terms of empowering staff and developing infrastructural and logistical strength.
4. **Legislative measures:** Dinesh Goswami committee recommended a series of legislative measures that should be set up to eradicate booth-capturing rigging and intimidating. The committee also called for an amendment of the anti-defection law to restrict disqualification. These recommendations should be implemented.

Bringing about effective electoral finance reform in India requires political will. Measures like electoral bonds will have limited effectiveness, unless they are not accompanied by other necessary reforms. The Santhanam Committee on Prevention of Corruption had raised the issue of black money in politics in 1964. A number of committees and commissions have recommended addressing the electoral finance issue. Their recommendations need to be implemented.

Q.32) What do you understand by the term ‘participatory democracy’? How important is the participation of people in a democratic setup?

Ans.

Demand of the question

Introduction. What is participatory democracy?

Body. Discuss the importance of people’s participation in a democracy.

Conclusion. Way forward.

Participatory democracy is a form of democracy in which citizens are involved in the decisions about public policy that affect their lives. It gives citizens a central role in the making of particular decisions through various means like public discussion, negotiations and voting. Participatory democracy strives to create opportunities for all members of a population to make meaningful contributions to policy-making.

Importance of people’s participation in a democracy:

1. **Good governance:** People’s participation is essential for good governance and is the backbone of the democratic process. When people express their views and opinions, it becomes possible for a government to effectively execute various welfare measures listening to people’s grievances. It is significant in various policy and decision-making processes undertaken by the government.
2. **Feedback mechanism:** People’s participation helps the government in understanding the viewpoints of citizens and gather feedback. This helps them to make policies implementation better and plugging various loopholes regarding various welfare measures.
3. **Better policy implementation:** Without people’s participation any effort made for their welfare does not give desired results. People’s participation is important, especially where policy seeks to make a behaviour change. For example, Swachh Bharat abhiyan, beti bachao beti padao etc. are made successful due to the drive to involve people at a local level.
4. **Accountability:** People’s participation makes the government accountable to them. It creates a 2 way mechanism in which the government understands the issues of citizens better and people learn about government efforts in a better way. Thereby removing misunderstandings and making the government accountable and answerable to people. For example, RTI has increased accountability in government due to increased participation of citizens.

Ways to enhance people’s participation:

1. **Media:** Media is always connected with people. Strengthening media’s freedom and safety can help better involvement of people. PM ‘Mann Ki baat’ initiative has enabled Indian citizens to directly connect with them. Social media is another new platform that is transforming governance and government services. For example, Twitter is being used excessively nowadays by railways, municipalities to solve various issues.

2. **Connectivity:** The Internet is an enabler in a way, it connects citizens directly to the government. For example, mygov.in platform of government helps it to connect with people and get various inputs regarding important national issues and policies.
3. **Incentives:** Monetary incentives attract people of every sphere. Government can provide incentives to people to get involved and work with the government for good governance. For example, government efforts to create various competitions like logo design contests etc. help people to participate actively in government activities.

India is the largest democracy in the world and Indian citizens are enthusiastic to be a part of governance. In a democratic system, citizen participation is one of the key components of the decision-making process. People's participation can make a country's development inclusive and targeted. Thus, efforts must be made to increase People's participation in a democracy.

Q.33) Discuss various provisions of disqualifications under Representation of people's Act. Do you think these provisions have helped in decriminalising Indian politics?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various provisions of disqualifications under RPA. Discuss the effectiveness of these provisions in decriminalising Indian politics.

Conclusion. Way forward.

The Representation of the People Act, 1951 serves the backbone of the electoral process in India. Apart from providing the framework for the electoral process, Representation of the People Act, provides framework for qualification and disqualification for the parliamentary and state legislative elections.

Various provisions of disqualifications under Representation of people's Act:

1. **Conviction in an offence:** A member can be disqualified under RPA for various offences. If a person is found to be guilty in any offence resulting in imprisonment for not less than 2 years, he is liable to be disqualified from his position.
2. **Illegal activities:** Violation of laws such as Foreign Exchange (Regulation) Act, the Terrorism and Disruptive Activities Act, Prevention of Insults to National Honour Act, Prevention of Corruption Act, Prevention of Terrorism Act, hoarding or profiteering and the Dowry Prohibition Act can also be the cause for disqualification.
3. **Holding an office of profit:** A person fighting for elections if holding any office of profit under the government or its subsidiaries and do not resign is disqualified under RPA. In other words, holding an office of profit while being a member of the Parliament could lead to disqualification as an MP or MLA.
4. **Corrupt practices:** A person convicted in practices such as bribery is not allowed to contest elections. Any effort to rig elections leads to disqualification under RPA.
5. **Anti-social activities:** If a person is convicted for an offence involving the SC/ST act or involved in rape, cruelty towards wife, preaching or promoting untouchability etc. he will be disqualified.
6. **Failure to file election expenses:** As per Section 10A of the Act, the failure to disclose election expenses could also lead to disqualification. It was under this provision that a former Madhya Pradesh minister was disqualified for a period of 3 years. An individual

is expected to file his election expenses with the Election Commission of India within a certain period of time after election.

Limited impact of RPA in decriminalising Indian politics: Although RPA is important in preventing criminals from entering the electoral system and representative institutions, it has limited impact in decriminalising Indian politics.

1. **Low Rates of Conviction:** According to a law commission report, there is an extremely wide gap between legislators with trials pending and those whose trials have actually resulted in convictions. For example, in the Lily Thomas case judgement only 3 legislators were disqualified as a result of convictions. In contrast with the number of pending cases against legislators, the number of convicted MPs and MLAs continues to be an extremely low figure, indicating a need for a change in the law.
2. **Delays in trials:** The delays in the judicial system in India has reduced the very purpose of the act. In such cases, with delay, there is an increased chance that the accused might compromise the trial process, distort evidence, and delay proceedings further. Delays are also caused by prolonged absence from court proceedings by influential persons.
3. **Lack of adequate deterrence:** Given the low levels of convictions of MPs and MLAs, and the lack of consequences for pending criminal charges, political parties are not deterred from continuing to hand out party tickets to persons with criminal backgrounds. Nearly half of the newly-elected Lok Sabha members have criminal charges against them, a 26% increase as compared to 2014, according to the Association of Democratic Reforms.

Way forward:

1. **Expediting trials:** In the case of sitting MPs/ MLAs who have relevant charges framed against them the trial should be concluded speedily. The Supreme Court should in all the cases where a sitting MP/ MLA has charges framed against him, should conduct the trial on a day-to-day basis with an outer limit of completing the trial in one year.
2. **Amending the law:** Disqualification upon conviction has proved to be incapable of curbing the growing criminalisation of politics, owing to long delays in trials and rare convictions. The law needs to evolve to pose an effective deterrence, and to prevent subversion of the process of justice.
3. **Special Fast track courts:** Fast track courts may be established to deal with matters of disqualifications under RPA. This would prevent influential politicians to influence the outcome of the judgement due to paucity of time.
4. **Implementation of SC guideline:** The Supreme Court held that chargesheeted Members of Parliament and MLAs, on conviction for offences, will be immediately disqualified from holding membership of the House without being given three months' time for appeal, as was the case before. This is important for timely disqualification.

The law in its present form is incapable of curbing the growing cancer of criminalisation of politics. Long delays in trials coupled with rare convictions ensure that politicians face little or no consequences when engaging in criminal activity. The law needs to evolve to meet this threat to our democracy, and to effectively curb the steady flow of criminals into the political process.

Q.34) Bringing public health under concurrent list and declaring health as a fundamental right can improve India's healthcare system. Discuss.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss the need of bringing public health under concurrent list and importance of declaring health as a fundamental right.

Conclusion. Way forward.

The Lancet in its latest study ranked India at 145th among 195 countries in terms of quality and accessibility of healthcare, behind its neighbours China, Bangladesh, Sri Lanka and Bhutan. Recently, a high-level group has recommended the 15th finance commission to bring health under concurrent list and declaring health as a fundamental right.

Need of bringing public health under concurrent list:

1. **Low healthcare spending:** India's government spends only 1% of GDP (Gross Domestic Product) on health (Ministry of Health and Family Welfare), of which 80% is raised and spent by the states themselves. Achieving a public health expenditure of 2.5 % can be done by bringing health under concurrent list.
2. **Indigenous practices:** States do minimum to preserve indigenous healthcare systems and practices. Bringing health under concurrent list would allow Centre to spend in a better way to preserve indigenous systems of medicine, like Ayurveda.
3. **Cooperative federalism:** Health Under concurrent list will further the spirit of cooperative federalism. State-level Policy implementation regarding the health sector has underperformed and is plagued by poor quality and corruption. With health as a part of the concurrent list, the government can ensure a better healthcare system by working with states in a better way.
4. **Better policy implementation:** With health under concurrent list, the central and state governments would find a way to collaboratively design better policies and better implementation of union government initiatives. For example, a health scheme launched by the centre is implemented by states and funded by them makes its implementation poor.

Importance of declaring health as a fundamental right:

1. **Social justice:** A fundamental right is justiciable. Once health is made a fundamental right the citizens can approach the courts for its violation. It can prevent poor from being denied basic health services on basis of various factors like race, religion, caste etc.
2. **Unaffordable health system:** The large number of people still living below the poverty line in India. Thus, the affordability of quality healthcare is a problem and needs to be addressed.
3. **Discrimination:** Cultural differences such as social, cultural, and linguistic barriers may prevent patients from accessing care. E.g. minorities may face discrimination in accessing quality health services.
4. **Increasing risks:** Environmental challenges, which include unsafe streets, asthma exacerbated by air pollution, leading to unnecessary hospitalisation and minimal or no spaces for physical activity or exercise all add to risk to health of millions of poor.

With an objective to achieve Universal Health Coverage by 2030, the Government of India has initiated significant reforms to improve citizens' access to good quality, affordable

healthcare. There remains, however, a need to strengthen the broad ecosystem in which health services are delivered. For this, public health under concurrent list and declaring health as a fundamental right can help India's health system. This will result in eventually achieving larger health objectives.

Q.35) There is a view that the Official Secrets Act is an obstacle to the implementation of the Right to Information Act. Do you agree with the view? Discuss.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss how Official Secrets Act is an obstacle to the implementation of the Right to Information Act.

Conclusion. Way forward.

The Official Secrets Act was enacted in 1923 and was retained after Independence. The law makes spying, sharing secret information, withholding sensitive information, a punishable offence. The law meant for ensuring secrecy and confidentiality in governance, mostly on national security and espionage issues, has often been cited by authorities for refusing to divulge information. Governments have faced criticism for misusing the law against journalists and whistleblowers.

How Official Secrets Act is an obstacle to Right to Information Act?

1. **Culture of secrecy:** The frequent use and misuse made confidentiality a norm, hindering the very essence of providing information under RTI. OSA along with other rules and instructions impinge on the freedom of information as they historically developed a culture of secrecy and non-disclosure, which is against the spirit of the Right to Information Act.
2. **Ambiguity:** The wording of the law is ambiguous and has made it a legal provision converting various issues of governance into a confidential matter. Any kind of information is covered by Section 5 of OSA and is classified as 'secret'. The word 'secret' has not been defined in the Act. Therefore, public servants enjoy the discretion to classify anything as 'secret' allowing them to deny information under RTI.
3. **No change in ambiguous clauses:** The Official Secrets Act was enacted during the colonial era to govern all matters of secrecy and confidentiality in governance. With time law has not changed or amended to improve its provisions. Even under RTI, OSA is a cause of exemption and no improvement is done even to define what defines the 'secret' under the act.
4. **A tool of corruption:** It is said that OSA has become a tool of corruption. Either its recent case of irregularities in the Rafale aircraft deal or irregularities in Bofors defence deal, OSA lead to opaqueness that undermine the very essence of RTI.
5. **Misuse:** The OSA makes it a punishable offence to share information that may help an enemy state. The law is misused for booking journalists when they publicise information that causes embarrassment to the government. Journalist Tarakant Dwivedi was booked for criminal trespass under the Official Secrets Act in 2011. An RTI query later revealed that the armoury he visited was not a prohibited area.

Way forward:

1. **Defining security:** Section 5 of OSA should be amended to make the penal provisions of OSA applicable only to violations affecting national security. The 'security' clause under the section should be defined clearly with details.
2. **National security act:** Second ARC Report had suggested that the Act should be substituted by a chapter in the National Security Act. The NSA should incorporate the necessary provisions of defined secrecy, as it had become a contentious issue after the implementation of the Right to Information Act. The Law Commission also suggested consolidation of all legislation dealing with national security into a single law and pass the National Security Act.
3. **Freedom of speech and expression:** According to the Supreme Court, the right to freedom of speech & expression and information should be prioritised over the archaic Official Secrets Act. The Court ruled for the protections to the whistleblowers to make sure that those who expose corruption should not feel insecure.

After the enactment of the RTI, OSA needs to be reconsidered as it hinders the very essence of RTI. It is necessary to go back into the history of the law to understand why it was enacted and whether it is still relevant today. Both the acts have different objectives to achieve, and should complement each other and not be a hindrance in good governance.

Q.36) What do you understand by manual scavenging? Why does it still persist in India? Do you agree that state governments have failed to stop manual scavenging altogether?

Ans.

Demand of the question

Introduction. What is manual scavenging?

Body. Discuss reasons for manual scavenging in India. Explain why state governments have failed to stop manual scavenging?

Conclusion. Way forward.

Manual scavenging refers to the practice of removing human and animal waste from dry latrines and carrying it to dispose off. It has been officially prohibited by the anti-manual scavenging Act in 1993 being dehumanising practice. Unfortunately, manual scavenging still persists. According to Socio Economic Caste Census 2011, 1.8 lakh households are engaged in manual scavenging for a livelihood. The 2011 Census of India found 7.9 lakh cases of manual scavenging across India. It not only violates fundamental rights to live with dignity, but poses a great threat to the life of the individual.

Reasons for manual scavenging:

1. **Caste based division of labour:** Manual scavengers are usually from caste groups customarily relegated to the bottom of the caste hierarchy and confined to livelihood tasks viewed as deplorable or deemed too menial by higher caste groups.
2. **Law implementation:** First anti-manual scavenging Act was passed in 1993. No conviction was ever made under the Act. In 2013, Manual Scavengers and Their Rehabilitation Act was passed which reiterated the provisions of 1993 Act. The offences were made cognizable and non-bailable. These provisions are not implemented effectively. Only when fatal cases come to light, laws are referred to and mostly settled with negotiated compensation with no action on the culprit.

3. **Unemployment:** Unemployment rate is high in India. India's unemployment rate is 7.7% according to data released by Centre for Monitoring Indian Economy (CMIE). Availability of cheap labour promotes manual labour as a job in India. Due to lack of jobs manual scavengers go for such menial work to earn for their existence.
4. **Lack of waterborne toilets:** The major latrine used in urban areas is the dry toilets which are a major cause of manual scavenging. In India, for example, there are approximately 26 million insanitary toilets. Moreover, in rural areas, there are no strategies put forward to convert dry toilets.

A state failure:

1. **Persisting in various states:** Recent examples from communities engaged in manual scavenging in the states of Gujarat, Madhya Pradesh, Maharashtra, Rajasthan, and Uttar Pradesh highlight the failures of government to end manual scavenging and eliminate the entrenched attitudes and discriminatory practices that still bind members of affected communities to this degrading and unnecessary occupation.
2. **Failure of laws:** India's Constitution bans the practice of untouchability, and the Protection of Civil Rights Act, 1955, prohibits compelling anyone to practice manual scavenging. The Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993 declared the employment of manual scavengers and construction of dry toilets to be punishable with fines and imprisonment. Still its persistence shows failure of law and state.
3. **Deaths:** The Safai Karmachari Andolan, reported 1,269 deaths due to manual scavenging during 2014-16. Reports of death of workers engaged in cleaning and repairing manholes, in the times of 'Swachh Bharat' reflects inability of state to end the practice. Recently, three people died each in Bangalore and Cuddalore, while working in underground manholes. Inhaling toxic gases was the major cause.

Way forward:

1. **Involving all stakeholders:** In order to tackle the problem, it would be necessary to involve all the major stakeholders involved. The inclusion of the community around the areas that are most affected into the program is very important. Seeking information from officials and the community will help in coming up with an informed decision as the best way to prevent such crime.
2. **Creating Awareness:** It is important to educate the community on the devastating effects caused by dry toilets. Government officials should inform on the legal implications that are related to engaging in scavenging and having dry toilets. The sanitation workers should be informed about their rights and the laws that protect them from abuse by their employers.
3. **Rehabilitation and Reintegration:** Creation of more employment is one of the most important rehabilitation processes. The jobs created would aim to offer equal opportunities to the locals. The jobs created also act as a means to assimilate manual scavengers into the community. Other areas that are associated with social inclusion should also be established for instance the loaning schemes.
4. **Enforcement of law:** The government should enforce the law strictly that prohibits scavenging. Governmental institutions are reluctant to act and go to great lengths in denying the existence of manual scavengers. People subjecting others into such inhuman activities should be arrested.
5. **Taking responsibility:** Every person should realise their role in preventing manual scavenging. For instance, garbage should be thrown in proper bags and not thrown in sewers or septic tanks as they cause the blockage. People with blocked toilets can seek

services from the right sanitation institution and desist from using manual scavengers for cheap labor.

6. **Education:** Children whose families are involved in scavenging experience a lot of social discrimination that affect their education. The child ends up dropping out and joining their parents in the same line of work. Implementation of schemes that would help these children finish their studies would be an effective strategy in ending manual scavenging.

Manual scavenging is regarded as inhuman and a violation of the law. It constitutes problems that encompass health and occupation, human rights and social justice, gender and caste, and human dignity. This practice is prevalent and needs collaborative efforts of government, civil society and every individual to end it.

Q.37) 'Right to self-identification is a part of the right to life under Article 21 of the Constitution'. In light of this critically examine various provisions of Transgender (Protection of Rights) Act, 2019.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss both negative and positive provisions of Transgender (Protection of Rights) Act, 2019.

Conclusion. Way forward.

The Transgender Persons (Protection of Rights) Act, 2019 is an act that seeks to provide for protection of rights of transgender persons, their welfare, and other related matters. As per the Census of 2011, the total population of Transgender in India is 4.9 lakh. They face the highest social neglect and abuse in the society. Often their rights are violated and are seen as criminals and abnormality In the society.

Key provisions of the Transgender Persons (Protection of Rights) Act, 2019:

1. **Definition of a transgender person:** The act defines a transgender person as one whose gender does not match the gender assigned at birth.
2. **Certificate of identity:** A transgender person may make an application to the District Magistrate for a certificate of identity, indicating the gender as transgender.
3. **Prohibition against discrimination:** The act prohibits discrimination against a transgender person, including denial of service or unfair treatment in relation to education, employment, healthcare, access to or enjoyment of goods, facilities, opportunities available to the public etc.
4. **Health care:** The act also seeks to provide rights of health facilities to transgender persons including separate HIV surveillance centres.
5. **Punishment:** It states that the offences against transgender persons will attract imprisonment between six months and two years, in addition to a fine.
6. **Welfare measures by the government:** The act states that the relevant government will take measures to ensure the full inclusion and participation of transgender persons in society.
7. **National Council for Transgender persons (NCT):** The act has provision for National Council for Transgender Persons to advice, monitor and evaluate measures for the protection of their rights.

Various issues in the act:

1. **Self-identification:** The act fails to legally recognise a self-defined gender identity. Right to self-identification is a part of the right to life under Article 21 of the Constitution as recognised by the Supreme Court in *National Legal Services Authority v. Union of India*.
2. **Less comprehensive:** The act recognises only certain categories of crimes committed against transgender persons. Additionally, the act does not specifically recognise, and provide appropriate penalties for violence that transgender persons face in educational and health care institutions, police stations, jails, shelters etc.
3. **Violative of right to privacy:** A District Screening Committee would issue a certificate of identity to recognise transgender persons. This is a violation of Fundamental Rights to Privacy as recognised by Supreme Court in *Justice K. S. Puttaswamy v. Union of India*.
4. **Sexual assault:** The act makes sexual abuse against a transgender person a punishable offence. However, it fails to clearly define what constitutes sexual abuse.
5. **Lack of clarity:** The act, while mentioning government aid in education and healthcare, does not specify the manner they will aid the transgender community. There is no clarity regarding this aspect.
6. **Social rights:** The act also has no mention of things like marriage rights, adoption rights, property rights, social security or pension. This deprives the transgender community of some of the most fundamental rights.
7. **Under-representation:** Act doesn't include different identities like, transmales, intersex etc. Thus, transgender act does not completely represent the whole trans-gender community.
8. **No reservation:** There is no provision of reservation in education and employment for the transgender community under the act.

The transgenders act, 2019 although seek to provide justice to the community has some lacunae. It ensures various fundamental rights to transgender community under Article 14, 15, 19, 21 and article 23 of the constitution but do not recognise the right of self-identification. In 2014, the Supreme Court of India in *National Legal Services Authority v. Union of India*, upheld the right of a transgender person to self-perceived gender identity, guaranteed by the Constitution of India. The act undermines this provision and must be reviewed.

Q.38) 'Increased use of facial recognition technology is dangerous in the absence of privacy and data security laws'. Comment.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss various issues associated with facial recognition technology.

Conclusion. Way forward.

Facial recognition software has become increasingly popular in the past several years. It is used everywhere from unlocking phones, airports, shopping centres and even by law enforcement. While there are a few potential benefits to using the technology to prevent and solve crimes, there are many concerns about privacy, safety regarding the use of the technology in the absence of legislation privacy and data security laws.

Issues associated with facial recognition technology:

1. **Infringement of Privacy:** The privacy of users' data is at stake with the technology. In absence of regulations it would expose data to cyber criminals. Companies are not regulated; thus, they may sell facial data which can be misused for political purposes.
2. **State surveillance:** The most significant risk with the use of the technology is state surveillance. China's reported use of facial recognition technologies for surveillance in Xinjiang is such an example. This raises concerns as it might be misused for political purposes.
3. **Inaccuracy:** Facial recognition technology is inaccurate. Evidence shows that the technology is not flawless. For example, the technology has been proven in multiple studies to be inaccurate at identifying people of colour, especially black women.
4. **Predatory marketing:** Software which analyses facial expressions could potentially be put to use by some companies to prey on vulnerable customers. This could be done by segmenting extreme emotions such as distress and tailoring their products and services to these individuals.
5. **Stalking:** Tools like reverse image searches can provide stalkers with more data about their victims. This is unsafe especially for women, who can be tracked and stalked and maybe assaulted by misusing information obtained.
6. **Identity fraud:** Criminals who have collected enough personal information on an individual could commit identity fraud. This could have a significant effect on your personal life, including on finances. For example, fake id can be created by exploiting information obtained from persons' associated facial information. Crime like photo morphing can threaten the identity of an individual.
7. **Dark activities:** There is possibility of misusing facial information for illicit activities and markets like drug selling, weapons etc. By using stolen ids, Aadhar information, it also increases risk for being used in various terrorist activities across the border.

Need for Data Protection law in India:

1. **Data management:** For efficient management of data in the age of digitisation, a data protection law is needed. One of the major challenges to big data is information privacy which necessitates robust data protection.
2. **Check frauds:** To check unauthorised leaks, hacking, cybercrimes, and frauds. Economic cost of data loss/theft is high. Recent rise of crimes like WhatsApp Pegasus scam demands a data protection law in place.
3. **No comprehensive framework:** Until now, the only legal framework for the information technology in India is the Information Technology Act, 2000. However, it doesn't provide guidelines or norms for data collection, storage, and processing.
4. **Right to privacy:** The need for legislation also got attention particularly after the landmark judgement of Supreme Court (SC) in Justice K.S Puttaswamy vs Union of India case, that maintained the right to privacy as an inherent part of the fundamental right under Article 21 of the constitution.
5. **Protecting personal data:** With a billion population, India has the second highest internet user base in the world. India has 450 million internet users and expected to increase up to 730 million by 2020. Therefore, a strong data protection law is needed to protect their personal data.
6. **Consent:** Without consent of the owner no data should be used for any purpose. It is important that data protection law must include the consent of an individual before its use for various purposes.

With right to privacy being a fundamental right and recent rise in risks to privacy of the individuals, use of such technology can be unsafe and dangerous. The state must work to

prevent misuse of data and encourage data security through legislation. A framework regulating the use and that too with individuals' consent is necessary. It is important to examine and put into place a robust regime for data protection. The creation of such a regime requires a careful and sensitive balance between individual interests and legitimate concerns of the state.

Q.39) Examine the role of the Supreme Court as the final interpreter and guardian of the Indian Constitution.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss the role of Supreme Court as the final interpreter and guardian of the Indian Constitution?

Conclusion. Way forward.

The Supreme Court has been assigned a very significant role in the Indian political system and is the final interpreter of the constitution. Under the constitution of India, the Supreme Court is provided with the scope of judicial review. The judicial review allows the Supreme Court to safeguard fundamental rights and struck down legislations which are violative of Constitutional provisions. Under Article 13, 32, 131-136, 143, 226 and 246 Supreme Court can review any law.

Supreme Court- as the final interpreter of the Indian Constitution:

1. **Constitutional values:** Supreme Court under judicial review can examine the constitutionality of legislation and executive orders of both the Central and state governments. On examination, if they are found to be violative of the Constitutional values, they can be declared as unconstitutional and invalid by the Supreme Court. In *A.K.Gopalan v/s State of Madras* the court upheld that it is the constitution that is supreme and a statute law to be valid, must in all cases be in conformity with the constitutional requirements.
2. **Protection of fundamental rights:** Article 13 declares that all laws that are inconsistent with or in derogation of the Fundamental Rights shall be null and void. Article 32 guarantees the right to move the Supreme Court for the enforcement of the Fundamental Rights and empowers the Supreme Court to issue directions or orders or writs for that purpose. For example, in *Navtej Singh Johar* case, Supreme Court has upheld that section 377 of IPC is unconstitutional.
3. **Check on executive action:** Every state action is to be tested on the ground of rule of law. Indian Constitution is federal in nature and it is the constitutional duty of the Supreme Court to interpret the constitution. Under its original jurisdiction, the Supreme Court keeps the government within their limits by judicial interpretations.
4. **Check on tyrannical tendencies:** Supreme Court protects citizens against legislative excesses and executive arbitrariness. It protects our country from tyranny of executive and legislature through judicial review. In absence of judicial review and judicial activism, various legislation or executive actions might undermine the very spirit of democracy.
5. **Reviewing own decisions:** Article 137 of the constitution of India empower the Supreme Court to review its own order or judgment. This power of correction makes the judiciary correct its own mistakes. As per the change in circumstances and conditions and coming into existence of new facts and laws the Supreme Court and High Court

overrule and set aside their own judgments and orders. Supreme Court has done this many times, for example in Kesavananda Bharati case. This case upheld the changes in 24th amendment in Article 368 and Article 13 of Indian Constitution by overruling Golaknath Judgment of 1967.

Judiciary has been playing a remarkable role by the way of judicial review for maintaining the supremacy of the constitution. The judiciary is the main aspect which safeguard the democracy and ensures peace, justice and good order. The constitution has provided judiciary with independence and enough powers to keep executive in check making Supreme Court as the final judge of the constitution.

Q.40) Discuss in brief about the role of National Commission of Women. Do you think it is a toothless organisation?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss the major role of the National Commission for Women. Mention majority limitations of the National Commission for Women making it toothless.

Conclusion. Way forward.

The National Commission for Women was set up in 1992 under the National commission Act. It was established to review the constitutional and legal safeguards for women. It recommends remedial legislative measures, facilitates redressal of grievances and advises the government on all policy matters affecting the women. It enjoys all the powers of a civil court. But there are many limitations that prevent it from working towards women with ease.

Major role of National Commission for Women:

1. **Investigation and Examination:** NCW investigate and examine all the matters related to the safeguards provided for the women under the Constitution and other laws.
2. **Presentation of Reports:** Its table reports to the central government, every year and at such other times as the commission may deem fit, reports upon the working of those safeguards
3. **Recommendation to government:** Make in such reports and recommendations, for the effective accomplishment of those safeguards for enhancing the conditions of the women by the Union or any State.
4. **Legislative reviews:** Review, every now and then, the current provisions of the Constitution and other laws distressing the women and prescribe alterations and suggest curative legislative measures meet any break, inadequacies and incapacity in such legislation.
5. **Cases of violation:** Take up cases of infringement of the provisions of the Constitution and of other laws relating to the women with the relevant authorities.
6. **Suo motu notice:** It looks into complaints, and takes Suo Motto notice of matters relating to – deprivation of women's rights, Non-implementation of the laws and Non-compliance of the policy decisions guaranteeing the welfare for women society.
7. **Special Studies and Investigation:** It conducts special studies or investigation on the concerning issues or circumstance emerging out of segregation and outrages against ladies and recognises the limitations in order to suggest techniques for their expulsion

8. **Research:** It also undertakes promotional and educational research so as to propose ways of ensuring due representation of the women in all fields.

Major limitations of National Commission for Women making it toothless:

1. **Not concrete powers:** The NCW is only recommendatory and has no power to enforce its decisions. Often it takes action only if the issues are brought to light. Unreported cases of oppression and suppression of women are not attended to.
2. **Legal powers:** Commission lacks constitutional status, and thus has no legal powers to summon police officers or witnesses. Also, it has no power to take legal actions against the Internal Complaint Committees that prevent grievance redressal of women facing harassment.
3. **Less funding:** NCW's functions are dependent on the grants offered by the central government. Financial assistance provided to the Commission is very less to cater to its needs.
4. **Political interference:** It does not have the power to choose its own members. The power selecting members is vested with the Union government leading to political interference at various levels.

Steps need to be taken:

1. **Staff selection:** Commission must be granted the power of selecting its own members. The members should be chosen without any prejudice and should have fair knowledge of law and understands the society and human behaviour.
2. **Awareness generation:** More awareness has to be created especially among the rural women about the existence of the Commission. The Commission can employ a person at the district level to bring into light the atrocities occurring at the district level.
3. **Legal powers:** Functioning of the NCW has to be strengthened and given more legal powers as part of any effort to strengthen the laws for safety of women at the workplace. The chairperson of NCW should be given the status of the Union Cabinet Minister and the members that of minister of state.
4. **Funding:** Centre must devolve more funds to NCW. NCW should have an independent budget and must not be dependent on the Women and Child Development Ministry for funds.

Though the NCW have done some good work for the women in India, the above-mentioned shortcomings must be addressed. NCW was instrumental in various campaigns, for example, against triple talaq. But at numerous times the Commission has not been able to come up to the expectations of women in India. Empowering NCW with enough powers can help in making it more efficient.

Q.41) Critically examine whether the MGNREGA scheme has been able to address the issue of rural distress.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss progress made under MGNREGA. Mention various issues related to it.

Conclusion. Way forward.

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) guarantees 100 days of work a year to every rural household with an aim to enhance the livelihood

security of people. It is the only employment guarantee program run by the government. Considered as one of the biggest social welfare programmes in the world the programme has lifted lakhs of people out of poverty, though many lacunas still exist in it.

MGNREGA scheme success in addressing rural distress: MGNREGA scheme has been able to address the issue of rural distress to some extent:

1. **Employment:** MGNREGA is the biggest single public works programme in the world. According to the World Bank, it provides employment to around one in every six Indian families. Last year, about 235 crore person-days of work were generated under the scheme. The Act for the first time brings the role of the state as provider of livelihood which has led to economic emancipation of rural people from distress.
2. **Financial inclusion:** The programme has led to empowerment of the rural poor and led to financial inclusion due to rise in rural wages and prevention of urban migration. Payment through bank accounts has led to financial inclusion of many.
3. **Women empowerment:** Out of the total jobs created so far, the percentage of hours put in by women has increased steadily, much above the statutory minimum of 33% to 57%. There are three provisions in the MGNREGA that were specifically included into the act to ensure access to the benefits to rural women:
 - Priority for women in the ratio of 1/3rd of total workers employed.
 - Equal wages for men and women.
 - Crèches for the children of women workers.

This has helped in economic empowerment of women and thus led to overall welfare of women.
4. **Empowerment of marginal section:** According to the Rural Development Ministry, out of all the workers benefited under the scheme, the percentage of Scheduled Caste workers has consistently been about 20% and of Scheduled Tribe workers has been about 17%. Due to this their condition has improved leading to their upliftment.
5. **Rural transformation:** MGNREGA is said to have changed the face of whole rural labour and rural India. In places where it was effectively implemented, it empowered people, and in places where it was not implemented effectively, it gave powers to labourers to demand higher wages. It has given dignity to them and has acted as a market mechanism.

Issues with MGNREGA:

1. **Delay in wages:** The Union Ministry of Rural Development withholds wage payments for workers of states that do not meet administrative requirements within the stipulated time period. For instance, delay in submission of the previous financial year's audited fund statements, utilisation certificates, bank reconciliation certificates etc. lead to delay in wage payments. This delay in processing and payments of wages is not compensated properly.
2. **Low wage rate:** Currently, MGNREGA wage rates of many states are less than the corresponding state minimum wages. Various judgements have upheld that the MGNREGA wage rate cannot be less than the minimum agricultural wage rate of the state. The low wage rates have resulted in lack of interest among workers in working for MGNREGA schemes, making way for contractors and middle men to take control locally.
3. **Funding:** MGNREGA's success at the ground level is subject to proper and uninterrupted fund flow to the states. Almost every year, more than 80% of funds get exhausted within the first 6 months. This year's budget allocation for the scheme was only ₹60,000 crore, lower than the amount spent in the previous year. Thus, fund allocation is insufficient to ensure proper implementation on the ground.

4. **Capital formation:** Successive governments have spent an estimated Rs. 3.1 trillion on MGNREGA schemes over the past decade. The impact of such spending would have been far higher if the money had been used for rural infrastructure that would have raised productivity as well as helped the structural transformation of the rural economy.
5. **Inflation:** MGNREGA pushed up rural wages without having much of an impact on rural productivity. It led to inflation as nominal wages rose faster than productivity. This has hit the poor the hardest.

Way forward:

1. **Adequate funds:** The government needs to allocate funds to ensure adequate opportunities for these households. Allocation for a year should include pending liabilities of previous years. The Centre also needs to ensure uninterrupted operations by primarily ensuring the allocation of adequate funds for the programme.
2. **Timely payment:** The government should ensure timely payment with reduced delays. Also, the MGNREGA payment procedures should be simplified to ensure transparency and accountability.
3. **Increasing wage rates:** Wages must be increased to ensure benefit of the poor. More income means more economic empowerment of rural poor. This will enable social welfare in the form of increased spending on health and education.

It is important to substantially increase the budget for programmes such as MGNREGA. This would lead to higher disposable income for the poor and have positive multiplier effects in the economy. Timely payment of wages and an increase in wage would help many rural people to come out of distress.

Q.42) Discuss the issue of rise in suicidal deaths among Indian youth. Suggest some measures to prevent such tendencies among Indian youth.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss why suicidal deaths among Indian youth is increasing? Give some measures to prevent suicidal tendencies among Indian youth.

Conclusion. Way forward.

Approximately half of India's 1.2 billion people are under the age of 29, making it one of the youngest countries in the world. Unfortunately, India has the highest suicide rate in the world among the youth standing at 35.5 per 100,000 people in 2012. Suicides in India have become increasingly prevalent and are increasing especially in the younger age groups. India accounts for over a third of the world's annual female suicides and nearly a fourth of male suicides, a significant increase in its global share from 1990.

Reasons for rise in suicide among Indian youth:

1. **Family problems:** With urbanisation and the breakdown of the traditional large family support system, suicide tendencies increase. The clash of values within families is an important factor for young people in their lives. As young Indians become more progressive, their traditionalist households become less supportive of their choices pertaining to financial independence, marriage age etc.

2. **Unemployment:** Unemployment rate in India is very high. According to the National Sample Survey Office, India's unemployment rate is 6.1%, the highest in 45 years. Such a high rate of unemployment lead to pressure among youth and depression, which is one of reason of suicide. In Sikkim About 27% of the state's suicides were related to unemployment and found to be most common among those between 21 and 30 years of age.
3. **Failure in exams:** A common cause for suicide is inability to tolerate the pressure from parents to do well in the examinations. Students aged 16-18 are often subjected to undue pressure at home to succeed. In 2013 alone, 2,471 suicides were attributed to failure in examination. Academic pressure, social pressures, and the breakdown of support systems is major cause of suicide among youth.
4. **Lack of professional help:** Professional help is difficult to find. According to a report by India Spend, India has 87% shortage in mental-health professionals. The situation is exacerbated by low public spending on mental health. India spends even less than Bangladesh on mental-health services.
5. **Substance abuse:** Substance abuse too is a significant factor in young suicides. According to the National Mental Health Survey (2015-16) more than 22% of India's population over 18 years suffers from a substance disorder, including alcoholism, use of tobacco and drug abuse.
6. **Social neglect:** Low focus and the taboo associated around mental health is also one of the reasons. The youth does not present such situations often and the parents try to hide it to avoid the social stigma of mental illness

Measures needed:

1. **Teacher training:** Student suicides can be averted, by training and sensitisation sessions for teachers. Teachers can easily gauge suicidal tendencies among students. They must be trained on how to communicate with children and make children talk about their problems with them.
2. **School reforms:** Schools and colleges need to foster a culture of understanding and trust, where students feel free and safe to talk about issues like bullying and anxiety. Institutes can look for solutions like allowing volatile students to take a gap year or starting courses for parents to help them understand the importance of being more receptive to their children's needs.
3. **Promoting coping skills:** The National Mental Health Policy identifies a range of vulnerable groups for protection. It is vital that organisations and governments should support mental health education and promote coping skills in youth. Mental health education and resources for dealing with symptoms of mental health should be taught and promoted from an early age.
4. **Spending on mental health:** India does not spend enough on mental health. Currently, it spends 0.06% of its health budget on mental health. Government must spend more on mental healthcare. It is important to increase medical seats pertaining to mental health professionals.
5. **Employment generation:** In the current scenario in India, employment opportunities are shrinking. Policies including for self-employment require to be framed, quality of education needs to be strengthened, and the feeling that education has not made them employable needs to be addressed.

India needs change, especially in its approach towards mental health and suicide. Stigma of seeing mental health with an ignorant attitude related to it needs to be removed. The lives of students are not dependent on a change in government, but on affirmative action of everyone in the society.

Q.43) Explain the pardoning powers of the President. How is it different from the Governor's pardoning power?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss pardoning powers of the President. Explain how the president's pardoning powers are different from the Governor's pardoning power?

Conclusion. Way forward.

Pardoning is an act of kindness that reduces the punishment conferred under the law for the offence and restores the rights and privileges lost on account of the offence. Indian Constitution under Article 72 empowers the President to grant pardons and Article 161 grants powers to the governor to pardon the sentence except in a few cases. It can be granted to individuals who have been convicted of any offence against a law or sentenced by a court martial (military court) and for sentence of death. The object of pardoning power is to correct possible judicial errors, for no human system of judicial administration can be free from imperfections.

Pardoning power of President: The pardoning power of the President includes the following:

1. **Pardon:** It removes both the sentence and the conviction and completely absolves the convict from all sentences, punishments and disqualifications.
2. **Commutation:** It denotes the substitution of one form of punishment for a lighter form. For example, a death sentence may be commuted to rigorous imprisonment, which in turn may be commuted to a simple imprisonment.
3. **Remission:** It implies reducing the period of sentence without changing its character. For example, a sentence of rigorous imprisonment for two years may be remitted to rigorous imprisonment for one year.
4. **Respite:** It denotes awarding a lesser sentence in place of one originally awarded due to some special fact, such as the physical disability of a convict or the pregnancy of a woman offender.
5. **Reprieve:** It implies a stay of the execution of a sentence (especially that of death) for a temporary period. Its purpose is to enable the convict to have time to seek pardon or commutation from the President.

Difference between pardoning powers of president and governor: The scope of the pardoning power of the President under Article 72 is wider than the pardoning power of the Governor under Article 161. The power differs in the following two ways:

1. **Court martial:** The power of the President to grant pardon extends in cases where the punishment or sentence is by a Court Martial but Article 161 does not provide any such power to the Governor.
2. **Death sentence:** The President can grant pardon in all cases where the sentence given is sentence of death but pardoning power of Governor does not extend to death sentence cases. Even if a state law prescribes the death sentence, the power to grant pardon lies with the President and not the governor.

Supreme Court guidelines on pardoning power: Supreme Court cases have laid down various norms regarding pardoning power of president as below.

1. **Mandatory Central government advice:** In *Maru Ram v Union of India*, the Constitutional Bench of Supreme Court held that the power under Article 72 is to be

exercised on the advice of the Central Government and not by the President on his own, and that the advice of the Government binds the head of the Republic.

2. **No reason required:** The Supreme Court in *Ranga Billa case* observed that the term pardon itself signifies that it is entirely a discretionary remedy and grant or rejection of it need not to be reasoned.
3. **Not a matter of right:** Supreme Court in *Kehar Singh v Union of India* held that the grant of pardon by the President is an act of grace and, therefore, cannot be claimed as a matter of right. The power exercised by the President being exclusively of administrative nature, is not justiciable.
4. **Limited Judicial review:** Pardoning powers under Articles 72 and 161 is subject to judicial review. In *Epuru Sudhakar vs Govt. Of A.P.*, the Supreme Court held that it is a well-set principle that a limited judicial review of exercise of clemency powers is available to the Supreme Court and High Courts. Granting of clemency by the President or Governor can be challenged on the following grounds:
 - The order has been passed without application of mind.
 - The order is malafide.
 - The order has been passed on wholly irrelevant considerations.
 - Relevant material has been kept out of consideration.
 - The order is arbitrary.

The pardoning power is founded on consideration of public good and is to be exercised on the ground of public welfare. Pardon may substantially help in saving an innocent person from being punished due to miscarriage of justice or in cases of doubtful conviction. The hope of being pardoned itself serves as an incentive for the convict to behave himself in the prison institution and thus, helps considerably in solving the issue of prison discipline.

Q.44) Critically examine various provisions of the Medical Termination of Pregnancy (Amendment) Bill, 2020. Do you think it will enable women's right to health?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss salient features of Medical Termination of Pregnancy (Amendment) Bill, 2020. How will it enable women's right to health?

Conclusion. Way forward.

The Medical Termination of Pregnancy (Amendment) Bill, 2020 seeks to amend the Medical Termination of Pregnancy Act, 1971. The bill aim to reduce not only unsafe abortions but also ensure that vulnerable women get every right to decide about her pregnancy.

Salient features of proposed amendments:

1. **Increased gestation limit:** The bill has enhanced the upper gestation limit from 20 to 24 weeks for special categories of women. It would include vulnerable women including survivors of rape, victims of incest and other vulnerable women (like differently-abled women, minors) etc.
2. **Opinion of professional:** Bill has proposed requirement of the opinion of one doctor for termination of pregnancy, up to 20 weeks of gestation and introducing the requirement of opinion of two doctors for termination of pregnancy for 20-24 weeks of gestation.

3. **Medical board:** Upper gestation limit will not apply in cases of substantial foetal abnormalities diagnosed by Medical Board. The composition, functions and other details of the Medical Board to be prescribed subsequently in Rules under the Act.
4. **Identity protection:** Name and other particulars of a woman whose pregnancy has been terminated shall not be revealed except to a person authorised in any law for the time being in force.

A step towards women's right to health:

1. **Women dignity:** The right to choose whether to conceive and carry pregnancy to its full term or to terminate is at the core of women's privacy and dignity. It is important for personal autonomy, bodily integrity, self-determination and right to health as recognised by Article 21 of the Constitution. The proposed increase in gestational age will ensure this and would provide justice for women who need to terminate pregnancy.
2. **Sexual abuse:** In case of rape, the woman is weak or underage. Such girls don't even know they are pregnant and fall prey of unsafe abortion practices. It is important to allow abortion of pregnancies due to sexual violence faced by women as they have every right to choose what they want.
3. **Access to safe abortion:** According to a study published in the Lancet Global Health, 15.6 million abortions occurred in India in 2015 of which 78% of these were outside health facilities. Medical Termination of Pregnancy (Amendment) Bill, 2020 aims to expand access of women to safe and legal abortion services on therapeutic, humanitarian or social grounds.
4. **Reproductive rights:** The bill will strengthen reproductive rights of women. They would have a decision of their own if they want to take their pregnancy to full term or not. Mortality of pregnant women is about 8% due to unsafe abortions. The bill will help women getting access to safe abortion.
5. **Need of change:** The existing MTP Act, 1971, has not kept pace with the changing times, needs and advancements in medical science. More women are now approaching the Courts to seek approval for abortion over 20 weeks, a provision that has been made available in a number of countries around the world.
6. **Justice:** Majority of pleas are due to foetal anomalies that are detected late and cases of sexual assault and rape, particularly of minors, where doctors are not willing to provide abortions, irrespective of gestational stage. This has led to delaying access to safe abortion care, subjecting women and girls to repeated examination by medical boards. A decision to terminate a pregnancy, as provided by existing laws, is the right of the women.

India is changing rapidly and people's needs and their lives are no longer similar to what was in the 70s when this Act was passed. MTP Act should therefore, be amended to allow AYUSH doctors and nurses to provide it. This is imperative if we need to ensure that every one who needs it, can legally access safe abortions.

Q.45) Discuss various issues in Indo-Australian relationship. How bilateral relations among two nations can be strengthened?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss various issues in Indo-Australian relationship. How bilateral relations among two nations can be strengthened?

Conclusion. Way forward.

The India-Australia bilateral relationship has undergone evolution in recent years. The people-to-people ties, increasing Indian students going to Australia for higher education, growing tourism and sporting links, especially Cricket, have played a significant role in strengthening bilateral relations between the two countries. Despite this, the strategic ties between Australia and India keep falling short of expectations.

Various issues in Indo-Australian relationship:

1. **Economic relations:** The trade between the two countries has been at a modest \$31 billion, largely composed of resources like coal and other minerals. Negotiations on a free trade agreement, which began in 2011, have not moved forward significantly. The problems faced by the Adani Group to begin work on a coal mining project in Queensland did not go down too well with investors from India.
2. **Visa issues:** India's desire for visa reforms in Australia, which would permit more Indian workers to seek employment in Australia, remains unmet. India wants greater free movement and relaxed visa norms for its IT professionals, on which Australia is reluctant. Australia and India are yet to nurture a common bilateral ground to figure out the basis of their cooperation.
3. **Nuclear power issue:** Building consensus on non-nuclear proliferation and disarmament has been a major hurdle given India's status as a nuclear power. Trade and maritime security on the other hand seem the most viable points of collaboration. Although a defence agreement was signed in 2014, the defence relationship has yet to develop fully.
4. **Bilateral defence cooperation:** Although security has received a lot of significance in the relationship, in practice Australia-India defence cooperation remains relatively undeveloped. There are a considerable number of defence and security dialogues between the two countries, but none has been translated into more substantive cooperation.
5. **Attacks on Indians:** Increasing Racist attacks on Indians in Australia has been a major issue. The relationship was further strained over the attacks on Indian students studying in Melbourne, and the resulting media coverage caused serious damage to Australia's standing in India.
6. **Chinese influence:** The formation of the Japan-America-India (JAI) partnership at the G20 summit in Buenos Aires in 2018 is cause for Australian concern. India's unwillingness to invite Australia to participate in the Malabar naval exercise, despite Australian lobbying, has sparked speculation over the fate of the Quadrilateral Consultative Dialogue (the 'Quad') involving India, Australia, Japan and the United States.

Way forward:

1. **Energy:** Australia is a natural partner for India in the energy sector. By the end of this decade, Australia is expected to overtake Qatar to be the largest exporter of Liquefied

Natural Gas according to Energy Quest. Australia's long-term and secure LNG supply can help diversify India's current highly concentrated import supplies from the Middle East.

2. **Science & Technology:** India and Australia have a strong track record of collaborating in research and innovation. The \$84 million Australia-India Strategic Research Fund (AISRF) is Australia's largest. The Australian Government's \$1.1 billion National Innovation and Science Agenda presents new opportunities to engage with India. The agenda resonates well with India's 'Start-up India' and 'Make in India' campaign.
3. **Space:** The Indian Space Research Organisation has a proud record of space exploration, including recently with its successful Mars Orbiter Mission and launching 104 satellites in one go. India can provide commercial Space applications to Australia for several of its Space initiatives.
4. **Economic ties:** Our economies are highly complementary. But trade is still very narrow. If we are to build depth to our economic relationship, we need to broaden its base. That is why negotiating a CECA will put in place the framework to support the freer flow of particularly services and investment between our countries. For India, CECA would give improved access to the world's twelfth largest economy.
5. **Exports in merchandise:** The weakest link in India's exports to Australia is in merchandise. Australia is a brand-conscious market while India has not created a single consumer brand of international acceptance. Indian companies will need to invest a little more in market research on Australian consumer expectations and lifestyles before their products can successfully penetrate the Australian market.
6. **Security:** Regular strategic dialogue should focus on common interests, including relating to China, Pakistan, Afghanistan, terrorism and maritime security. A bilateral security declaration is needed between Australia and India. India should reciprocate Australia's overtures to engage as a priority maritime partner. The two armies should help each other too, for example in Special Forces training.

Although there are strategic divergences in the Australia-India relationship, there are more common interests. The time has come for an honest appraisal of these divergences and introspection regarding how to build a stronger bilateral strategic relationship. Last year the Australian government released an India Economic Strategy that comprehensively laid out the weaknesses of the economic relationship and identified pathways to push it forward. Similar initiatives aimed at evaluating and advancing the geopolitical relationship are needed.

Q.46) Discuss various reasons for decreasing quality of scientific research in Indian universities. Suggest some measures to boost scientific research in India.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss various reasons for decreasing quality of scientific research in Indian universities. Mention various measures to boost scientific research in India.

Conclusion. Way forward.

Research and development (R&D) is at the core of economic growth. It leads to innovation and innovation in turn leads to economic growth. An analysis of research publications around the world has shown that in terms of scientific research output, the country's universities have fallen way behind than other countries. The higher education sector in

India has been largely a failure in R&D, according to most analysts, except for a few institutions, such as the Indian Institutes of Technology, All India Institutes of Medical Sciences and the Indian Institute of Science.

Reasons for decreasing quality of scientific research in Indian universities:

1. **Funding:** Inadequate funding especially in private institutes has led to minimal R&D activity in India. Government spending in R&D has continued to remain static for about a decade, at 0.9% of the GDP, as compared to China, whose spending during the 2000-2017 period grew at an average of 17%. The situation is so dire in India that even the country's premier technology colleges, the Indian Institutes of Technology, are reaching out to their alumni for funds.
2. **Poor private sector R&D:** According to an Economic survey, 2018, there are only 26 Indian companies in the list of the top 2,500 global R&D spenders, out of which, 19 are concentrated between just three sectors. Poor research enthusiasm in the private sector due to focus on profits and earning and less spending has led to poor quality of scientific research in India.
3. **Institutional Framework:** University system in India has emphasised more on teaching over research. This in addition to rigid admission rules, for example bar on change of discipline, age restrictions and lack of inter and trans-disciplinary culture in universities has led to poor scientific research in Indian universities.
4. **The Quality of Students:** Majority of students are motivated to pursue Ph.D. to get entry into the teaching profession and subsequent career advancement. They often enter into academia for various extraneous reasons and pursue it for want of a better option. A large number of students taking admission to Ph.D. programs with accumulated deficit of disciplinary knowledge and research methodology and often even lack communication skills and linguistic competence.
5. **Weak linkages:** India has a weak linkage between universities, institutes of higher learning, and industry. That linkage is a lot more robust in countries like the US, UK, Germany, and Israel. Most Indian universities have not been able to modify their curriculum with changing times.
6. **Weak IPR:** The most important issue is the weak IPR regime. Any investment in R&D pre-supposes a strong intellectual property rights (IPR) regime to protect the IPs. In most areas, R&D IPs are either too weak structurally or are very hard to enforce.

Measures to boost scientific research in India:

1. **Investment in Science and Technology:** The way forward for India is through investment in science for a sustainable research culture. If we want to grow scientific research in the country, we need to focus and create opportunities in science and technology.
2. **Basic Scientific Research:** Focus must be on interdisciplinary research and increased use of technology. Efforts must be made to encourage and foster curiosity of the life sciences among primary school students. Steps should be taken to improve math and cognitive skills at the school level. National labs to universities should be linked so that R&D can initiate from very basis.
3. **Improve STEM Education in Schools:** The current methods being used to teach science, technology, engineering, and mathematics (STEM) education in India's schools have become both inefficient and ineffective. By promoting problem-solving and critical thinking through STEM education, students will be better prepared for future careers. In turn, this new approach will build an entrepreneurial ecosystem in India that promotes job creators not job seekers.

4. **Funding:** The immediate priority in this regard should be to increase the government funding in higher education and R&D. Private sector should be encouraged to focus more on R&D and spending CSR funds on R&D.
5. **Change in approach:** India needs to redouble its efforts to improve science and R&D in the country. Taking a more mission-driven approach in areas such as dark matter, genomics, energy, agriculture and mathematics is needed. Matching efforts are required directed at improving "ease of doing business" to the "ease of doing science" index.

Potential for R&D in India is huge but there are ground level challenges. To catapult India into the top five scientific nations, the country needs enabling policies with increased spending. India's ambition should be to become the front-runner in the field of scientific research.

ForumIAS

General Studies 3

Q.1) What is Demographic dividend? Argue whether Indian demographic dividend is turning into a demographic disaster or not?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss opportunity of demographic dividend for India. Various issues that can turn it into a disaster.

Conclusion. Way forward.

According to United Nations Population Fund (UNFPA), demographic dividend means, the economic growth potential that can result from shifts in a population's age structure. It occurs mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (<14 but >65 years). India has one of the youngest populations in an aging world. By 2020, the median age in India will be just 28. This bulge in the working-age population is going to last till 2055, or 37 years from its beginning.

Issues if not focused would turn Demographic Dividend into disaster:

1. **Poor human capital:** Poor human capital formation is reflected in low employability among India's graduates and postgraduates. According to ASSOCHAM, only 7 % of MBA graduates have employable skills in India, and only around 20-30 % of engineers find a job suited to their skills. India may not be able to take advantage of the opportunities, due to a low human capital base and lack of skills.
2. **Low human development:** India ranks 130 out of 189 countries in UNDP's Human Development Index, which is alarming. Life expectancy at birth in India (68 years) is much lower than other developing countries. The mean years of schooling and expected years of schooling are still low at 6.3 years and 11.7 years respectively.
3. **Informal economy:** Informal nature of economy in India is another hurdle in reaping the benefits of demographic transition in India. Nearly 216 million people are engaged in agriculture sector are in the informal economy where not only they earn lower wages, but with little social security and few days of employment in a year.
4. **Jobless growth:** There is a mounting concern that future growth could turn out to be jobless due to deindustrialization, de-globalization, the fourth industrial revolution and technological progress. As per the NSSO Periodic Labour Force Survey 2017-18, India's labour force participation rate for the age-group 15-59 years is around 53%, that is, around half of the working age population is jobless.
5. **Asymmetric demography:** The growth in the working-age ratio is likely to be concentrated in some of India's poorest states and the demographic dividend will be fully realised only if India is able to create gainful employment opportunities for this working-age population.
6. **Declining female labour force participation:** According to data from the International Labour Organization and World Bank, India's female labour force participation rates have fallen from 34.8 % in 1990 to 27 % in 2013. Without women participation India can't dream of reaping demographic dividend.

Way forward:

1. **Building human capital:** India has to invest more in human capital formation at all levels, from primary education to higher education, cutting-edge research and development

as well as on vocational training to increase the skill sets of its growing working-age population.

2. **Skill development:** Skill development to increase employability of young population. India's labour force needs to be empowered with the right skills for the modern economy. Government has established the National Skill Development Corporation (NSDC) with the overall target of skilling/ up skilling 500 million people in India by 2022.

3. **Education:** Enhancing educational levels by properly investing in primary, secondary and higher education. India needs to increase its spending on health and education. As recommended by the National Health Policy 2017 and the National Policy on Education 1986, India needs to increase its spending on health and education to at least 2.5 % in 6 % of GDP respectively from its current levels.

4. **Health:** Improvement in healthcare infrastructure would ensure higher number of productive days for young labour force, thus increasing the productivity of the economy.

5. **Job Creation:** The nation needs to create ten million jobs per year to absorb the addition of young people into the workforce. The number of formal jobs have to be created, especially in labour intensive, export-oriented sectors such as textiles, leather and footwear, gems and jewellery etc. These sectors also have a higher share of the female workforce.

6. **International learnings:** By learning from global approaches from countries such as Japan and Korea and designing solutions considering the domestic complexities, we would be able to reap the benefits of demographic dividend.

India is on the right side of the demographic transition that provides golden opportunity for its rapid socio-economic development, if policymakers align the developmental policies with this demographic shift. This demographic transition also brings complex challenges with it. If the increased workforce is not sufficiently skilled, educated and provided gainful employment, we would be facing demographic disaster instead.

Q.2) Discuss the problems faced by the power sector in India. Suggest some measures to tackle these problems.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various problems faced by the power sector in India. Suggest some measures.

Conclusion. Way forward.

Power or electricity is very essential constituent of infrastructure affecting economic growth and welfare of the country. India's power sector is one of the key sectors which forms the foundation of the growth of the country. Installed power capacity of the country is around 331GW. Despite the fact that India has surplus energy, it is facing huge problems which serves as an obstacle for supplying electricity to all needy people.

Challenges faced by the Power Sector:

1. **Fuel Security Concerns:** Thermal capacity addition is plagued by the growing fuel availability concerns faced by the Industry. A significant natural gas-based capacity of more than 20,000 MW is idle due to non-availability of natural gas. Coal supply is restricted, leading to increased dependence on imported coal with the cascading result of high-power generation costs.

2. **Transmission & Distribution Losses:** High distribution-line losses are among the most vexing problems in the Indian power sector. India's aggregate technical and commercial

losses average about 32% of electricity which is very high as compared to those of the developed countries (6-11%).

3. Financial Health of State Discoms: Years of populist tariff schemes, mounting losses and operational inefficiencies have adversely affected the financial health of State Discoms which are currently plagued with humongous out-standing debts. As of June 2017, NPAs in the electricity sector amounted to Rs 37,941 crore.

4. Aging Power Plants and Transmission network: Since most of the power plants and transmission lines have been installed immediately after independence, they have become old and inefficient. This is the main reason for low growth and transmission rate in electricity generation and transmission during the recent years. About half of the power plants need to be upgraded or shut down as quickly as possible.

5. Under-procurement of Power by States: Increasing power generation costs due to limited fuel availability, poor financial health of State Discoms, have contributed in suppressed demand projections by State Discoms.

6. Interstate Disputes: India is a federal democracy, and because rivers cross state boundaries, constructing efficient and equitable mechanisms for allocating river flows has long been an important legal and constitutional issues. Due to this there is not availability of water all the time to operate hydro plants. Inter- state disputes also restrict the excess power exchange between the states. For example, Mahanadi water dispute.

7. Policy Paralysis: The micro level policies governing the fuel cost pass-through, mega power policy, competitive bidding guidelines are not in consonance with the macro framework like The Electricity Act 2003 and the National Electricity Policy.

8. Coordination Issues: Multiple ministries and agencies are currently involved in managing energy-related issues, presenting challenges of coordination and optimal resource utilisation, hence undermining efforts to increase energy security, as reported by the Kelkar Committee in 2013.

Solutions to tackle the Foregoing Challenges:

1. Fuel Reforms: Various aspects like ramping up coal production by both public and private sector in a time-bound manner, increased participation of private sector in coal production and easing of regulatory framework, clearances and approvals for allocation and development of coal blocks & gas infrastructure need to be addressed while formulating such reforms.

2. Balanced Regulatory Interventions: Regulators need to be sensitised to the challenges faced by the sector and policy framework needs to be crafted and enforced to ensure a win-win situation for all the stakeholders. They must pro-actively intervene to resolve the immediate issues ailing the power sector.

3. Increased Financing Facilities for Energy Sector: A robust and sustainable credit enhancement mechanism for funding in Energy Sector needs to be put in place through increased participation by global funding agencies like The World Bank, ADB etc. in the entire value chain.

4. Public private partnership: There is a strong need to push for wider-scale implementation of public private partnership models. The private sector has been playing a key role in generating power, a more supportive environment will help in bridging the energy deficit of the country.

5. Taxation: Power-generating companies should not be saddled with the burden of cross-subsidising the renewable sector. This can be borne by the society (through taxation) and not by the entities that are already in trouble.

6. Cooperative federalism: To resolve water disputes, government must help states to come to a common ground. Emphasis should be on cooperative federalism with shared benefit to all the states.

7. **Merger of ministries:** There should be only one energy ministry to make coordination and implementation of policies better. It will remove policy paralysis too.
8. **Reduction of transmission losses:** This should be achieved by better infrastructure and technological efforts. Old plants should be shut and should be replaced with new.

In the recent past, several initiatives have been taken to address the challenges in the power sector. These include structural changes in the regulatory framework, and the UDAY scheme to address financial issues being faced by companies distributing electricity. But power sector still face loses and old issues. Government must effectively replace and modernise old and inefficient plants and lines to achieve the electricity production and demand target.

Q.3) What is National Infrastructure Pipeline? Discuss its need and significance in light of India's aim to become a \$5 trillion economy.

Ans.

Demand of the question

Introduction. What is National Infrastructure Pipeline?

Body. Discuss its need and significance.

Conclusion. Way forward.

The National Infrastructure Pipeline consists of the projects and programmes with a total allocation of INR 102 lakh crore for infrastructure development in the next five years. It is in accordance with the government's vision to make India a \$5 trillion economy by 2024-25. NIP includes economic and social infrastructure projects in sectors such as Energy (24%), Roads (19%), Urban (16%), and Railways (13%) amount to around 70% of the projected capital expenditure in infrastructure in India.

Need of National Infrastructure Pipeline (NIP):

1. **\$5 trillion goal:** To achieve the GDP of \$5 trillion by 2024-25, India needs to spend about \$1.4 trillion (Rs. 100 lakh crore) over these years on infrastructure. This challenge is to be tackled by National Infrastructure Pipeline so that lack of infrastructure does not become a binding constraint on the growth of the Indian economy.
2. **Inclusive growth:** Availability of quality infrastructure is a prerequisite to achieve broad-based and inclusive growth on a sustainable basis.
3. **Poor infrastructure:** India's growth potential has not been achieved mainly due to poor infrastructure in various sectors. National Infrastructure Pipeline would help in Improving the infrastructure and realising the growth potential.
4. **Investment:** India can't achieve high growth without investment. NIP will build investor confidence as identified projects are likely to be better prepared, exposures less likely to suffer stress given active project monitoring, thereby less likelihood of NPAs.

Significance of National Infrastructure Pipeline (NIP):

1. **Economic growth:** It is estimated that India would need to spend \$4.5 trillion on infrastructure by 2030 to sustain its growth rate. The endeavour of the National Infrastructure Pipeline (NIP), is to make this happen in an efficient manner.
2. **Employment:** Well-planned NIP will enable more infrastructure projects, grow businesses, create jobs, improve ease of living, and provide equitable access to infrastructure for all, making growth more inclusive.

3. **Fiscal space:** Well-developed infrastructure enhances level of economic activity, creates additional fiscal space by improving revenue base of the government, and ensures quality of expenditure focused on productive areas.

4. **Better Projects:** National Infrastructure Pipeline will ensure that infrastructure projects are adequately prepared and launched. It will provide better view of project supply, provides time to be better prepared for project bidding, reduces aggressive bids/ failure in project delivery, ensures enhanced access to sources of finance as a result of increased investor confidence.

5. **Agricultural benefits:** It will strengthen agricultural and rural infrastructure. Irrigation and rural infrastructure projects would account for 7.7 lakh crore each.

6. **Connectivity:** It will further increase the connectivity in India, especially in rural areas. Road projects will account for Rs. 19.63 lakh crore while another Rs. 13.68 lakh crore would be for railway projects.

7. **Credit:** There is a lack of private investment due to ongoing NPA crisis and lack of credit creation in the economy. So the government needs to invest from its own resources to give a push to the economy

Challenges:

1. Banks are recovering from NPA problem. If they are pushed to fund for NIP, they may further face NPA crisis.
2. Scale of pipeline is massive and its implementation will not be easy. Coordination among various levels of government is a must.
3. Land acquisition is a big challenge for completion of infrastructure projects. Rehabilitation of millions of people will also be not easy.

The National Infrastructure Pipeline is an ambitious plan that would include greenfield and brownfield projects costing above Rs 100 crore each. It will also enable robust marketing of the pipeline of projects requiring private investment through the India Investment Grid (IIG), National Investment & Infrastructure Fund (NIIF), etc. Thus, it may help in realising India's \$5 trillion economy dream.

Q.4) What is digital signature? What are various types of digital signature? Discuss its working mechanism and various benefits.

Ans.

Demand of the question

Introduction. What is digital signature?

Body. Discuss various types of digital signature. Mention how digital signature works and its benefit.

Conclusion. Way forward.

A digital signature is a type of electronic signature which ensures that an electronic document is authentic. It gives the information about the creator of the document and ensures that the document has not been altered or tampered after its creation by that person. Digital signatures are used for validating the integrity and authenticity of any digital document, message or software etc.

Types of Digital Signatures: There are three types of digital signatures Class-1, Class-2 and Class-3, each of them have different security levels:

1. **Class-1 certificate:** These are issued for both business personnel and private use. The class-1 certificate confirms that the information provided is authentic and it is not in conflict with the information of recognised consumer databases. These are used in places where the risks and consequences of data compromise are not of major significance
2. **Class-2 certificate:** These are issued to both business personnel and for private use. The certificate confirms that the information provided is authentic and it is not in conflict with recognised pre-verified databases. These are used in environments where the risk of data compromise are moderate. It can include transactions having substantial monetary value, or access to important private information etc.
3. **Class-3 certificate:** These are issued to individuals and organisations primarily intended for e-commerce applications, and for other important purposes. It provides the highest level of security where the person needs to be present himself/herself in front of the registration authority for proving his or her identity.

How it works?

1. **Creation:** Digital signatures rely on a secret, either a secret passphrase, or, more commonly, a secret file. Digital signatures, like handwritten signatures, are unique to each signer.
2. **Encryption:** When a signer electronically signs a document, the signature is created using the signer's private key, which is always securely kept by the signer. The mathematical algorithm encrypt that data. The resulting encrypted data is the digital signature.
3. **Time stamp:** The signature is also marked with the time that the document was signed. If the document changes after signing, the digital signature is invalidated.
4. **Keys generation:** To protect the integrity of the signature, the keys are created, conducted, and saved in a secure manner, and often requires the services of a reliable Certificate Authority (CA).

Advantages of digital signatures:

1. **Saves Time:** Digital signatures ensure that businesses save on cost and time with documents and contracts signed off with a click of a button. There are huge savings in cost and time, especially when the person required to sign is in a geographically different area.
2. **Cost Savings:** Many companies also see significant cost savings, with little or no expense in ink, paper, printing, scanning, shipping/delivery or travel expenses. There are also savings in other indirect costs such as filing, rekeying data, archiving, or tracking.
3. **Workflow Efficiency:** With lesser delays, digital signatures ensure better efficiency in workflow. Managing and tracking documents is made easier, with lesser effort and time involved. Many features of the digital signatures help speed up the work process. For instance, email notifications help remind the person to sign, while status tracking, help to know at which stage the document is at.
4. **Better Customer Experience:** Digital signatures provide the convenience of signing important documents wherever a customer or the person to sign is located. Salesperson do not have to wait for the customer to come to the bank or office. Documents can be signed off at the doorstep. This is ideal, especially in remote areas and smaller townships providing improved and personalised services.
5. **Security:** When it comes to signatures, authenticity and security is a priority. Digital signatures reduce the risk of duplication or alteration of the document itself. Digital signatures ensure that signatures are verified, authentic and legitimate. Signers are provided with PINs, passwords and codes that can authenticate and verify their identity and approve their signatures.

6. **Legal Validity:** Digital signatures provides authenticity and ensures that the signature is verified. This can stand in any court of law like any other signed paper document. Time stamping and ability to track and easily archive documents improve and simplify audit and compliance.

7. **Environmental Benefits:** As corporates and business become more conscious of their role in sustainability, digital signature is a step ahead in their efforts in reducing waste and being environmentally friendly.

8. **Governance:** Digital signature has significant application in governance due to its security and authenticity features:

- Income tax: filings, Notices and certificates.
- Municipalities: Birth and Death certificate.
- Public sector companies: Shares, bonds, debentures, appointment orders.
- Procurement: Auctions, tendering etc.

Digital Certificate has immensely helped government servants to focus on their core functions by freeing them up in routine operations like revenue collection, issuing of certificate etc. which therefore helps in enhancing overall productivity of administrative machinery.

Q.5) What are the advantages of offshore wind energy projects to onshore projects? What are the challenges for offshore projects in India?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Advantages of offshore wind energy projects when compared to onshore project. Various challenges and government initiatives.

Conclusion. Way forward.

Offshore wind power or offshore wind energy is the use of wind farms constructed in water bodies, usually in the ocean on the continental shelf, to harvest wind energy to generate electricity. Offshore wind power includes inshore water areas such as lakes and sheltered coastal areas. India has an estimated 127 GW of offshore wind energy potential, mostly off the coasts of Tamil Nadu, Gujarat and Maharashtra.

Advantages of offshore wind energy projects when compared to onshore projects:

1. **Area availability:** Large area is available for setting up large projects. It is the major reason for moving towards offshore projects since there is a lack of suitable wind turbine sites on land.
2. **Wind speed:** Wind speeds are considerably higher at sea than onshore locations. Small increases in wind speed yield large increases in energy production- a turbine in a 25 Km/h wind can generate twice as much energy as a turbine in a 20Km/h wind on onshore infrastructure. Also, Wind is less turbulent at sea than over land which results in lower mechanical fatigue load and hence longer lifetime for the turbines.
3. **Wind Consistency:** Wind speed is more consistent at sea than on land where low winds occur most of the time. At sea, periods of complete calm are extremely rare and short-lived.
4. **Less transmission losses:** Offshore wind farms are usually located near to the cities and load centres and thus transmission losses are minimised.
5. **Lesser disputes:** There are lesser disputes for land and large space is available which could be capitalised to build windmills.

6. **Larger windmills:** Windmills can be built that are larger and taller than their onshore counterparts, allowing for more energy collection. They tend to be far out at sea, meaning they are much less intrusive, allowing for larger farms to be created per square km.
7. **Environmental benefits:** Wind farms have a relatively less negative impact on the environment. As any renewable energy source, offshore wind farms do not require the consumption of water to operate properly, and also do not emit any environmental pollutants or greenhouse gasses during its operation.

Few challenges that needs to be addressed:

1. **High capital cost:** The foundation and installation cost for offshore projects is much higher compared to that of onshore. Furthermore, the cost in India might be on the higher side because of various factors like absence of installation and support vessels, lack of sub-structure manufacturers, lack of trained manpower etc.
2. **Lack of data:** The data required for the calculation of offshore wind potential and identification of suitable sites are not available. Resource map data is crucial because there are particular zones like the shipping lanes, dredging regions, oil exploration areas, exclusive fishing zones, areas with underlying submarine communication cables, and dumping grounds for ammunition, explosives and other hazardous material that have to be considered before finalising the exact potential areas.
3. **Regulatory framework:** Currently there is no dedicated regulatory framework available for offshore wind energy on the lines of Jawaharlal Nehru National Solar Mission (JNNSM) for the promotion of solar energy.
4. **High energy tariff:** Offshore windmills are more expensive than onshore ones, power generated from the former could cost around Rs 12 per unit, compared to around Rs 2.43 for onshore wind power, the cheapest source of renewable energy in India today.
5. **Manufacturing of Equipment:** Offshore wind farms typically have larger turbines and longer windmill blades. But most firms in India don't yet make such high-capacity machines, so components will have to be imported. This might affect investor interest.

What are the initiatives taken by the Government?

1. **National Offshore Wind Energy Policy:** In 2015, the country released its first National Offshore Wind Energy Policy, detailing the government's roadmap on offshore wind energy. It involves wind energy mapping of the country to identify high-potential locations to be offered to firms for development through a bidding process.
2. **Offshore wind energy project in Gujarat:** The National Institute of Wind Energy (NIWE) under Ministry of New and Renewable Energy (MNRE) has issued Expression of Interest (EoI) for first offshore wind energy project of India. The global EoI is for prospective offshore wind energy developers for developing 1000 MW (1 GW) offshore wind energy project in Gulf of Khambhat, off the coast of Gujarat.
3. **Government funds:** In offshore wind energy sector, the Government of India has already allocated Rs. 10,000 crores as the initial seed money from clean energy fund, which is basically collected from coal cess.

Government has recognized the importance of offshore wind energy harnessing and therefore, has rolled out a plan to generate 5 GW of power capacity through this mean by 2022. If all the challenges are duly addressed, India could reduce the supply-demand mismatch and be a step closer in providing 24x7 power to all by 2022. In India offshore wind power still remains untapped and given the power deficit in the country this huge potential needs to be tapped.

Q.6) What are the major causes of forest fires in India? Discuss its impact on the forest ecosystem. Suggest some measures to tackle it.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Reasons of forest fires and its Impact. Measures for tackling forest fires.

Conclusion. Way forward.

Forest fire is the uncontrolled fire that destroys large parts of the forest. They are a threat to the fauna and flora and destroy the biodiversity and the ecology of a region. Forest fire causes imbalances in nature and endangers biodiversity by destroying habitats and precious life. Incidents of forest fires have increased in recent years. The main reason for this is climate change fuelled by anthropogenic activity. About 21.40% of forest cover in India is prone to fires according to a 2019 report by the Forest Survey of India that demand urgent action.

Causes of Forest Fires:

Anthropogenic causes (90% of all wildfires)	Natural Causes
Smoking: Smoking is the leading cause of fires and deaths globally. Habit of smoking while driving, walking or biking and then throwing away the cigarette butts without completely extinguishing it lead to forest fires. Smokers at times become negligent at extinguishing the cigarette butts after smoking.	Lightning: A good number of wildfires are triggered by lightning. A lightning strike can produce a spark. Sometimes the lightning can strike power cables, trees, or rocks and any other thing and this can trigger a fire.
Campfires: During camping or outdoor activities people normally leave lit fires or combusting materials unattended to which ignite wildfires. It is a must for all lit fires and combusting materials to be totally extinguished after use to avoid wildfire disasters.	Volcanic eruption: Hot magma in the earth's crust is usually expelled out as lava during a volcanic eruption. The hot lava then flows into nearby fields or lands to start wildfires.
Burning Debris: Wastes and trash are on several occasions burned to ashes as a way of reducing the accumulation of rubbish. What is left after burning the waste matter or trash is debris that burns slowly. This slowly burning debris can potentially set anything ablaze and start a wildfire because of the heat.	Heat patterns: Increased temperatures due to global warming are making the forests more vulnerable. Rising atmospheric temperatures and dryness (low humidity) make favorable circumstances for a fire to start.
Fireworks: Fireworks are used by humans for various reasons such as festivals. However, their explosive nature can start wildfires.	

Impact of forest fires on ecosystems:

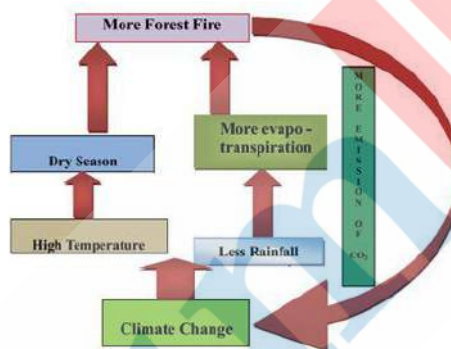
1. **Loss of Ecosystems and Biodiversity:** Forest fires destroy the habitats and the intricate relationships of diverse flora and fauna leading to loss of ecosystems and biodiversity.

- Wildfires damage the habitable and adaptable land for specific animal and plant species.
- Besides, wildfires can even lead to extinction for certain animals.
- Wildfires can be so severe that they decimate the habits and critical relationships of plants and animals causing loss of ecosystem.

2. **Forest Degradation:** Forest fires especially that commonly happen in dry tropical forests are a major cause of forest degradation. Almost every year, forest fires are witnessed across different forest regions which persistently reduce the quality of certain forest features like soil fertility, biodiversity, and ecosystems.

3. **Air Pollution:** Living plant matter purifies the atmospheric air we depend on for respiration. They achieve this by taking in carbon dioxide, greenhouse gases, and air impurities and by producing oxygen. In addition, the huge clouds of smoke instigated by wildfires lead to massive air pollution.

4. **Global Warming:** When plant life is exterminated by fires, the quality of air we breathe in declines and greenhouse gasses increase in the atmosphere leading to climate change and global warming. Trees and vegetation when are burned, it means more greenhouse gases increases in the atmosphere, resulting in global warming.



5. **Soil Degradation:** Forest soils are loaded with nutrients released from decaying forest debris. Forest fires kill beneficial soil microorganisms that are responsible for breaking down the soil and promoting soil microbial activities. The burning of trees and vegetation cover also leaves the soil bare making it readily vulnerable to soil erosion.

6. **Destruction of Watersheds:** Trees and vegetation cover acts as watershed protectors since approximately all the water comes from forest-derived water tables. Whenever they burn, the natural protection systems for water tables, streams, and rivers may be affected.

Measures to prevent forest fires:

1. **Policy:** A national policy is required to consolidate existing guidelines and to issue comprehensive guidelines which should be aligned with the climate change policies. The policy should also define the respective roles and responsibilities of the MoEFCC, state forest departments, and disaster agencies, and establish a mechanism for the provision of regular funding to the states.
2. **Human Capital:** Ground-based detection will continue to be essential along with the introduction of new remote sensing technologies. So, training should be provided to field officers, seasonal fire watchers, and community volunteers involved in firefighting.
3. **Coordination with other agencies:** Stronger collaboration between the State Forest Departments (SFDs), the disaster management authorities and research entities would enable states to innovate new science-based management approaches for preventing fires and rehabilitating fire-affected areas.

4. **Technology:** Systems for early warning and fire danger need to be developed. Fire alert systems can also be improved by integrating ground-based detection with the satellite-based alert systems.

5. **Community Engagement:** Sensitisation of communities should be done to ensure that fire is used responsibly in a way that promotes forest health, while seeking to avoid damaging and out-of-control fires. Provision of training should extend beyond state-managed forests to community institutions in regions such as the Northeast, where communities are responsible for managing most of the forest estate.

Forest fires incidents have increased due to global warming. Destruction of forests is a crisis and need immediate action. Fast initial attack measures are required with a vigorous follow up action. Special emphasis should be given to research, training, and development.

Q.7) What are the various reasons for the failure of Tuberculosis control in India? Suggest some measures to prevent Tuberculosis in India.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Reasons for failure of TB control in India. Measures to prevent Tuberculosis.

Conclusion. Way forward.

Tuberculosis (TB) is an infectious airborne bacterial disease caused by Mycobacterium tuberculosis, which most commonly affects the lungs but can also damage other parts of the body. According to WHO's 2018 Global TB Report, India accounted for 27% of the total new TB infections in 2017, the highest in the world. The prevention and control of TB is a challenge and needs the efforts of all the stakeholders.

Reasons for failure of TB control in India:

1. **Poverty:** A majority of TB patients in India get affected due to undernourishment. Poverty impacts their accessibility to food and ability to get treated. It is still a big problem in India associated with problems of undernourishment and poor and unhygienic living conditions.
2. **Underreporting:** One of the major factors of TB prevalence in India is under-reporting of TB cases. This leaves the risk of spread of TB to other healthy individuals. Inaccurate estimates of the tuberculosis burden in India between 2000-2015, has led the World Health Organisation (WHO) to seriously underestimate the TB epidemic. The Global TB Report 2016, stated that India had reported only 56% of TB burden in 2014 and 59% in 2015.
3. **Wrong Diagnosis:** The doctors in India are less and untrained quacks most of the time mis-diagnose the disease. Further, important diagnostics infrastructure that identify individuals at highest risk of progression to disease are not adequate.
4. **Treatment:** Inequitable access to quality diagnosis and treatment remains a major issue in combating tuberculosis. Further, the private sector which contributes a major part of TB care is fragmented, made up of diverse types of healthcare providers, and largely unregulated.
5. **Drug resistance to TB:** Standard TB treatment is not followed uniformly across the private sector, resulting in the rise of drug resistance. Patients on getting treated for symptoms do not follow the complete treatment dosage and regimen. Due to lack of consistent follow-up of treatment regimens, situation often turn into Multi-drug resistance TB and Extreme-drug resistance TB.

6. **Outdated Drugs:** The drugs used to treat TB, especially multi drug-resistant TB are decades old. It is only recently that Bedaquiline and Delamanid (drugs to treat MDR-TB) has been made available. Further, access to such drugs remain low.
7. **Social Stigma:** Patients often hesitate to seek treatment or deny their condition altogether for fear of social discrimination and stigmatisation. Many other issues like human resource shortage, payment delays, procurement delays and drug stock-outs add to TB prevalence.

Solutions to the issue:

1. **Accountability:** Government should build accountability among health professionals and ensure sufficient and sustainable financing to provide access to prevention and treatment.
2. **An after-care system:** All hospitals should create an after-care system in which every TB case should be followed up regularly at periodic intervals. ASHAs should be trained for the same.
3. **Social upliftment:** It is important to address the social conditions and factors which contribute to and increase vulnerability to tuberculosis. Efforts should be made to address the issues of undernourishment, diabetes, alcohol and tobacco use.
4. **Sensitisation:** We need to sensitise healthcare providers to the issues faced by those with TB and ensure that they act in a non-discriminatory manner.
5. **Awareness:** Mass awareness campaigns against social taboos regarding TB should be done through media educating people about the disease, precautions and its cure. The Government of India has launched a new multimedia campaign '#India vs TB' featuring Amitabh Bachchan for the same.
6. **Research and development:** It is important to invest more in R&D to come up with new drug regimens for responding to the spread of drug-resistant strains. In the last few years, India has made considerable progress in advancing TB research, but private sector involvement in R&D is very low.

Tuberculosis remains the biggest killer disease in India. It is the active involvement of TB survivors and champions that can give an impetus to a collective effort to improve public understanding of TB, reducing stigma and prevent discrimination to end TB in India. Without a holistic approach India cannot achieve SDG 3.3 which envision to 'end of epidemic of tuberculosis by 2030'.

Q.8) With millions suffering from hunger and tonnes of food grains rotting in massive accumulation of grain stocks Indian needs to reform their grain management system. Comment.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss the need to reform grain management system. Government efforts.

Conclusion. Way forward.

India, with a population of over 1.2 billion, has seen tremendous growth in the past two decades. Its GDP has increased 4.5 times and per capita consumption has increased threefold. Similarly, food grain production has nearly doubled. However, despite the phenomenal growth and while India produces sufficient food to feed its population, the

nation is unable to provide access to food to a large number of people, especially women and children.

Need of reforms in grain management system:

1. **Outdated grain management system:** While trade policies became liberal, domestic food grains management continues to remain the same, dominated by public intervention. The dominance of the public sector discourages the development of the private marketing sector which can promote diversification. Over time, the costs of the policies and the institutions implementing the policies have risen and the benefits have declined.
2. **Low Demand:** Demand for food grains has not been keeping pace, due both to a decline in the share of expenditure on food due to poverty. Further, dietary preferences towards non-grain food items, due to rising income levels has led to less food grain consumption.
3. **Malnourishment:** The Food and Agriculture Organisation (FAO) in a report, said 194.6 million people in India are under-nourished. The Global Hunger Index 2019 ranks India at 103 out of 119 countries. On the other hand, it is estimated that nearly 40% of fruits and vegetables and 20% of the food grains that are produced, are lost due to inefficient supply chain management. Food grains do not reach the consumer market.
4. **Food wastage:** According to a Government study, India is growing more food but also wasting up to 67 million tonnes of it every year. The value of the food lost Rs 92,000 crore, is nearly two-thirds of what it costs the Government to feed 600 million poor Indians. The result is that lower supplies add to inflation and reduce the farmers' returns.
5. **Inefficient food management:** The massive accumulation of grain stocks is the result of a deeply inefficient strategy for food management wherein the procurement for wheat and rice remains open-ended, but the disbursal of these stocks remains largely restricted to the public distribution system (PDS). The open market operations (OMO) are much less compared to what is needed to liquidate the excessive stocks. We don't have a clear strategy.

Government efforts:

1. **Targeted PDS:** The foodgrain management policy in India is detailed in the Targeted Public Distribution System. Through targeted PDS government has tried to provide food grain to the needy. Allocation of food grains for TPDS is made by the GOI for Below Poverty Line (BPL), Antyodaya Anna Yojana (AAY) and Above the Poverty Line (APL).
2. **Procurement:** Before the start of every marketing season, Department of Food and Public Distribution convenes a meeting of State Food Secretaries to make advance arrangements for procurement of foodgrains/coarse grains.
3. **Open market operations:** The foodgrains are also disposed off by FCI and State Governments, through sale under Open Market Sales Scheme.

Reforms needed:

1. **Implement Shanta Kumar panel recommendations:** The Shanta Kumar panel provided for a blueprint for reforming the grain management system. According to it:
 - While the poor under the Antyodaya category should keep getting the maximum food subsidy, the issue price for the others should be fixed at, say, 50% of the procurement price (as was done under former PM Atal Bihari Vajpayee for the BPL category).
 - Limit subsidised grain distribution under NFSA to 40% of the population rather than the current 67%.
 - Limit procurement of rice, particularly in the north-western states of Punjab and Haryana, where the groundwater table is depleting fast, and invite the private sector in grain management.

2. **Private sector involvement:** Long-term vision should be of a liberalised market environment in which the private sector should participate extensively in performing the primary roles of marketing, distributing, exporting and importing food grains.
3. **Protection of poor:** The food grains market policies must be complemented with programs to protect the poor from price and income shocks. Government must follow a clearly articulated and transparent price stabilisation policy.
4. **Reducing PDS:** Employment programs that provide a wage income to the beneficiaries thus stand out to be a better form of real income transfer than consumption subsidies. Reducing the size of the PDS and expansion of MGNREGA should go on simultaneously. Eventually, safety net for the poor should be through income transfer schemes such as MGNREGA, income coupons, etc. that enables the poor to meet their food requirements from market purchases at the prevailing market prices.

The money locked in these excessive stocks (beyond the buffer norm) is more than Rs 1 lakh crore. Even if the government decides to liquidate half of it, it can garner Rs 50,000 crore to finance at least half of its infrastructure projects. We need bold moves to reform our grain management system. It will help the government to reduce its fiscal deficit. And it will also help in containing inflation too.

Q.9) What is the importance of Gaganyaan mission to India? Discuss various challenges related to the mission.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Significance of Gaganyaan for India. Various challenges.

Conclusion. Way forward.

The Gaganyaan programme is an indigenous mission that would take Indian astronauts to space. It is an Indian crewed orbital spacecraft that is intended to send 3 astronauts to space by 2022, as part of the Indian Human Spaceflight Programme. The programme will make India the 4th nation in the world to launch a Human Spaceflight Mission.

Significance of Gaganyaan for India:

1. **Boost to industries:** The Indian industry will find large opportunities through participation in the Space missions. Gaganyaan mission is expected to source nearly 60% of its equipment from the Indian private sector.
2. **Employment:** The space organisation would need an additional manpower of 900. Gaganyaan mission would create 15,000 new employment opportunities. It is expected to generate employment and train human resources in advanced technologies. The programme is expected to give impetus to economic activities within the country in terms of human resource development and enhanced industrial capabilities.
3. **Technological development:** Human Space flights are frontier field in science and technology. Human spaceflight programme will provide a unique platform in space for conducting experiments and test bed for future technologies.
4. **Boost to academic organisations:** Gaganyaan Programme is a national effort and will involve the participation of academia and National Agencies. It will establish a broader framework for collaboration between ISRO, academia, industry, national agencies and other scientific organizations.

5. **Boost to research:** It will boost good research and technology development. With a large number of researchers with proper equipment involved, it will thrust significant research in areas such as materials processing, astro-biology, resource mining, planetary chemistry, planetary orbital calculus and many other areas.

5. **Motivation:** Human space flight will provide that inspiration to the youth and also the national public. It will inspire a large number of young students to take up science and technology careers for national development.

6. **Prestige:** India will be the 4th country to launch human space mission. The Gaganyaan will not only bring about prestige to the nation but also establish India's role as a key player in the space industry.

Challenges of the mission:

1. **Launch:** The GSLV Mk III has been modified to enable human space flights, to be human rated and fail-safe. For a human space flight, the launcher must have a reliability of 98% or above, or only two failures in 100 launches, which is a big challenge.

2. **Escape System:** It is important to develop a crew escape system to prepare for any emergency from the launch phase onwards and ensure the reliability of such a system. Environmental Control & Life Support System (ELCSS), space suit and crew support systems are still in the developmental phase.

3. **Astronaut Training:** India does not have facilities for rigorous and focused training, such as centrifuges to experience g-forces and aircraft to simulate zero gravity conditions.

4. **Threat from Space Debris:** There is increasing threat of Space debris in the low earth orbits which can result in depressurisation of the cabin of the crew module in case of a collision with small debris.

5. **Cost:** Human space flight missions are not one-time investments required for demonstrating national capability but has to be continued human space flight pursuit with national gain. Therefore, the financial implications are of a concern.

Way forward:

1. **Private sector:** Private sector must be encouraged to support ISRO efforts and develop critical technologies for it.

2. **Human Capital:** Youth should be encouraged through campaigns and media to take an interest in space activities.

3. **Government support:** Government must keep encouraging and supporting ISRO's efforts. Also, government must work toward pitching in private sector in space activities.

In terms of space technology, a manned space programme is the obvious next step for India. Gaganyaan's success will put India into the elite club of space superpowers. It will help India to put a step forward in developing its own space station. It is important to overcome the technological challenges to ensure a safe, successful manned space mission. International collaboration is important for acquiring needed technology.

Q.10) A focus on developing human capital and employment generation can help India to become a \$5 trillion economy. Comment.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Need of investment in human capital. Importance of generating employment and human capital.

Conclusion. Way forward.

India has one of the youngest populations in the world (65% of our population is under 35 years of age). With India aiming to become a \$5 trillion economy by 2025, it is important to focus on this demographic dividend. Human Capital means the skills, education, capacity and attributes of labour which influence their productive capacity and earning potential. It is pointed out that there is a huge shortfall of human capital in the country. Although there is increasing workforce in the country, this is a big challenge for India because there is a huge shortfall of educated, skilled and trained workforce.

Need to invest in human capital:

1. **Economic growth:** The growth of capital stock depends extensively on the human capital formation. In the absence of adequate investment in human capital, utilisation of physical capital will be at low pace, leading to retardation of development.
2. **Skill gap:** Human capital lack critical skills which are very much needed for the industrial sector. India has a surplus labour force but have poor skills for employment. Thus, human capital formation should solve these problems by creating necessary skills and also by providing gainful employment.
3. **Ripple effect:** Organisations across the world have recognized the importance of skilled manpower and the value it can provide despite being a little costlier. Skilled human capital provides high value for money and initiate a ripple effect in the growth of a country's economy.

Importance of human capital quality and employment to reach \$5 trillion mark:

1. **Employment:** During the last decade, the growth rate of the labour force (2.23%) was significantly higher than the growth rate of employment (1.4%), which itself was several-fold less than the growth rate of the economy. Without employment productive labour go waste and hinders the economic growth of a national and prevent it to achieve its full growth potential.
2. **Innovations and Technological Improvement:** A focus on human capital will lead to more innovations in the areas of production and related activities. Innovation is a must to achieve more growth. It also creates the ability to absorb new technologies.
3. **Higher Productivity of Physical Capital:** Human capital increases labour productivity. Trained workers will use the physical capital (like machines etc.) more efficiently.
4. **Raises Production:** Human capital formation raises production levels and leads to economic growth by adding to GDP. Knowledgeable and skilled workers can make better use of resources at their disposal.
5. **High Rate of Participation and Equality:** By improving productive measures of the labour force, human capital formation increases excellent employment. This leads to a high rate of participation in the labour force. It reduces the gap between poor and rich. Further, women participation is a must if India has to achieve \$5 trillion economic goal, that demand focus on women's employment.

6. Improves the Quality of life: Quality of life is indicated by income and health. Income and health depend upon the level of education, skill formation, etc. Human capital formation increases these skills and improves the quality of life of the masses. Better quality of population means more economic growth.

Way forward:

1. **Skill development:** It is important to upgrade skills to international standards through significant industry involvement and develop necessary frameworks for standards, curriculum and quality assurance. The skill development scheme needs to be well coordinated and properly dovetailed to have an effective and efficient mechanism to fulfill the requirement.
2. **Vocational training:** Vocational training should be imparted by ministries and department of government. This would help them in gaining required technical skills for the industry.
3. **Private sector involvement:** Effort must be made to enhance, support and coordinate private sector initiatives for skill development through appropriate Public-Private Partnership (PPP) models. Thus, striving for significant operational and financial involvement from the private sector.
4. **Social upliftment:** Focus on underprivileged sections of society and backward regions of the country thereby enabling to move out of poverty is needed. Similarly, focus significantly on the unorganised or informal sector workforce.

The government of India is taking initiative to fill the existing skill gap through skill development mission in order to leverage its position to fulfill domestic and global requirements and at the same time fulfilling its domestic requirement of the skilled labor force. Skilling would enhance human capital quality needed to reap the demographic dividend which might turn into demographic disaster.

Q.11) What do you understand about the Integrated Farming System? How far is the Integrated Farming System helpful in sustaining agricultural production?

Ans.

Demand of the question

Introduction. What is Integrated Farming System?

Body. Role of Integrated Farming System helpful in sustaining agricultural production. Various challenges.

Conclusion. Way forward.

The Integrated Farming System (IFS) is a combined approach aimed at efficient sustainable resource management for increased productivity in the cropping system. The IFS approach has multiple objectives of sustainability, food security, farmer's security and poverty reduction by involving livestock, vermicomposting, organic farming etc.

Integrated Farming System ensures sustainable agricultural production through:

1. **Economic activity:** IFS provide an opportunity to increase economic yield per unit area by virtue of intensification of crop and allied enterprises especially for small and marginal farmers. Due to interaction of enterprises, IFS provide flow of money round the year amongst the farming community.
2. **Reduced use of fertilisers:** It has the capability to make the sector profitable by reducing the use of chemical fertilisers and recycling nutrients.

3. **Environmentally sustainable:** In IFS, subsystem of one byproduct works as an input for the other subsystem, making it environmentally sustainable. Moreover, IFS components are known to control the weed and regarded as an important element of integrated pest management and thus minimise the use of weed killers as well as pesticides and thereby protect the environment.

4. **Recycling:** Effective recycling of products, by-products and waste material in IFS is the cornerstone behind the sustainability of farming system under resource poor condition in rural areas.

5. **Resource management:** IFS promote the efficient management of resources. This enhances the productivity of the farming. The IFS promote for rejuvenation of systems productivity and to achieve agroecological equilibrium.

Challenges: While integrated farming system can help improve the income and nutritional security of farmers, however it is not free of challenges such as:

1. **Affordability:** For financial reasons small and marginal farmers cannot afford large cattle so we have to encourage small ruminants such as goats and sheep.

2. **Acceptance:** There is hesitation among the farmers in non-coastal areas to adopt fisheries, poultry, duck rearing because of lack of role models and religious perceptions.

3. **Not under MSP:** Mushroom farming and beekeeping are not covered under the Minimum Support Price (MSP) system. Better integration with the food processing industries and hotel Industries is therefore necessary.

Way forward:

1. **Integrating subsistence agriculture:** Indian farmers in many regions such as in north-eastern part, practice subsistence agriculture. They also have a rich traditional base in water harvesting, soil management etc. which could be efficiently utilised under IFS.

2. **Encouraging livestock enterprises:** Combining crop with livestock enterprises would increase the labour requirement significantly and would help in reducing the problems of underemployment and unemployment to a great extent. IFS provide enough scope to employ family labour round the year.

3. **Building farmer capacities:** All stakeholders should make continuous efforts to build farmer capacities for adoption of productive, remunerative, eco-friendly and self-sustaining integrated farming systems.

IFS provide multiple benefits that are sustainable and can pave the way for climate-smart agriculture. India needs to adopt a “well designed” Integrated Farming System (IFS) to realise the vision of doubling farmers’ income by 2022 and having sustainable agricultural practices.

Q.12) What is strategic disinvestment? Discuss its need and significance for Indian economy.

Ans.

Demand of the question

Introduction. What is strategic disinvestment?

Body. Need and importance of investment in India.

Conclusion. Way forward.

Strategic disinvestment is the selling of more than 50% of government shares in a public enterprise. As a part of strategic disinvestment, a part of the control of the company and or

management is passed from the government to the private shareholder. The strategic disinvestment leads to engagement of the private sector and thus, making the PSUs more efficient and profitable.

Need of Disinvestment in India:

1. **Fiscal health:** The government faces a massive shortfall in revenue and capital receipts. The non-debt capital receipts were at 17.2% of the fiscal's target of about Rs. 1.2 lakh crore. Given this, the share sale is aimed at helping the government narrow its widening fiscal deficit. Disinvestment would provide revenue to the government and thus would improve fiscal health.
2. **Economic slowdown:** India is undergoing an economic slowdown with tax collection below par. As of now the net tax revenue had only reached 36.8% of the budget estimate of Rs. 16.5 lakh crore. Disinvestment would boost the economy through more revenue to the government, which could be invested in the economy further and more efficient PSUs.
3. **Inefficient PSU:** Many PSUs are facing loss and are on verge of closure. While government presence may be necessary in strategic sectors such as defence or oil exploration, there is no need in areas like building ships or running container freight operations. Government presence in such non-strategic sectors distorts competitive dynamics for private players. It also results in consumers and taxpayers bearing the brunt of inefficient PSU operations.
4. **Competition:** Strategic disinvestment is needed due to the prevalence of an increasingly competitive environment. Government control makes it difficult for many PSUs to operate profitably. This leads to a rapid erosion of the value of the public assets making it critical to disinvest early to realise a high value.

Importance of strategic disinvestment:

1. **Reduce fiscal burden:** It will reduce the government's debt and fiscal deficit. Disinvestment would help in saving resources by spending less on PSUs which can be used by the government for welfare purposes.
2. **Increased social spending:** It will increase the government's focus on society welfare. Thus, it will ensure resources in the hands of the public. Disinvestment funds can be utilised for long-term goals such as:
 - Financing large-scale infrastructure development.
 - Investing in the economy to encourage spending.
 - Investing in social programs like health and education.
3. **Better quality products and services:** It would bring more competition into various sectors, thus improving the quality of services. Consumers will get better products. It will further increase market profitability and hence companies' profits pushing them to deliver more.
3. **Employment:** Companies will expand that will lead to more jobs. With engagement of private sector and competition, more people would be needed to enhance the production and scale. It is important to improve public finances and overall economic efficiency.
4. **Efficiency of PSU:** Economic potential of entities will be better discovered in the hands of the strategic investors due to various factors like infusion of capital, technology upgradation and efficient management practices. Further, there will be distribution loss and failure risks of PSUs to the private sector.
5. **Modernisation:** It will ensure modernisation of PSUs with changing times. Strategic buyers would bring in new management, technology and more investment for the growth of these companies and may use innovative methods for their development.

Way forward:

1. **Transparency:** The strategic sale process needs to be transparent with a minimum reserve price that does justice to the valuable assets being auctioned off. A third-party valuation of every PSU's assets and a minimum number of bidders, should be necessary pre-conditions before going ahead with each sale.
2. **Infrastructure creation:** Spending the sums raised from such strategic sales in long-term infrastructure assets can yield returns to the economy. Government can redirect these disinvestment proceeds into Infrastructure projects.
3. **Regulation:** The government should look into strengthening the regulatory framework that ensures efficient market conditions.

Divestment should not be seen as only a short-term fiscal measure. Instead, it should be part of a long-term plan to improve the production of goods and services in India. The regulations should also ensure that the basic necessities of the consumers are met.

Q.13) Livestock rearing has a big potential for providing non-farm employment and income in rural areas. Discuss suggesting suitable measures to promote this sector in India.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Role of livestock in economy. Important Initiatives by the Government to promote livestock sector. Suitable measures to promote Livestock sector in India.

Conclusion. Way forward.

Livestock sector plays an important role in Indian economy. India has vast livestock resources. India has 56.7% of the world's buffaloes, 12.5% cattle, 2.4% camel (10th in camel population in the world) and 3.1% poultry (2nd largest poultry market in the world). Livestock sector contributes 4.11% of GDP and 25.6% of total Agriculture GDP. Rapid growth of this sector can lead to more egalitarian and inclusive growth. This is because those engaged in it are mostly small landholders and the landless farmers.

Role of livestock in economy:

1. **Income:** Livestock is a source of subsidiary income for many families in India especially the resource poor who maintain few heads of animals. Cows and buffaloes provide regular income to the livestock farmers through sale of milk. Animals like sheep and goat serve as sources of income during emergencies to meet exigencies like marriages, treatment of sick persons, children education, repair of houses etc. The animals also serve as moving banks and assets which provide economic security to the owners.
2. **Employment:** A large number of people in India being less literate and unskilled depend upon agriculture for their livelihoods. It provides employment to about 8.8 % of the population in India. The landless and less land people depend upon livestock for utilizing their labour during lean agricultural season.
3. **Food:** The livestock products such as milk, meat and eggs are an important source of animal protein to the members of the livestock owners. The per capita availability of milk is around 375 g/day and eggs is 74/annum during 2017-18.
4. **Social security:** The animals offer social security to the owners in terms of their status in the society. The families, especially the landless which own animals are better placed

than those who do not. Gifting of animals during marriages is a very common phenomenon in different parts of the country.

5. **Gender equity:** Animal husbandry promotes gender equality. More than 3/4th of the labour demand in livestock production is met by women. The share of women employment in the livestock sector is around 90% in Punjab and Haryana where dairying is a prominent activity and animals are stall-fed.

6. **Protection against disasters:** Livestock are the best insurance against the drought, famine and other natural calamities. Majority of the livestock population is concentrated in the marginal and small size of holdings. Further, agricultural productions get valuable organic manure provided by the livestock.

Important Initiatives by the Government:

1. **Rashtriya Gokul Mission:** It aims to develop and conserve indigenous breeds of bovine population. This is important to enhance milk production and to make it more remunerative to the farmers.

2. **National Livestock Mission:** Its objective is to ensure quantitative and qualitative improvement in livestock production systems and capacity building of all stakeholders.

3. **National Artificial Insemination Programme:** To suggest novel methods of bringing about impregnation in female breeds. Also, to prevent the spread of certain diseases which are genital in nature, thereby enhancing the efficiency of the breed.

4. **National Cattle and Buffalo Breeding Project:** To genetically upgrade important indigenous breeds on priority basis with a focus on development and conservation.

5. **Animal Husbandry Startup Grand Challenge:** To appreciate innovations coming from the villages to expand the dairy sector in India.

Suitable measures to promote Livestock sector in India:

1. **Sufficient resources:** Providing sufficient fodder and drinking water is the need of hour to increase productivity of livestock rearing in India, in the rain-shadow region.

2. **Marketing:** Trade Policies like marketing have to be more effective for promotion of various livestock products like egg, fish, milk etc. and providing sufficient price to farmers by reducing influence of middlemen.

3. **Promoting indigenous breeds:** Our indigenous breed of cattle shall be promoted, because most foreign breed cattle are not suitable to our climate and even provide low quality. There are some exceptions like Jersey cows, but overall introduction of foreign breeds has not been very successful.

4. **Training:** Necessary training and subsidies shall be provided to farmers to adopt livestock rearing as an alternate source of income.

5. **Research and development:** Government shall also focus on Research & Development in livestock sector to increase per livestock productivity to provide more benefits to small & marginal farmers.

There is a need to encourage livestock husbandry to reap its full potential. If implied with utmost priority, these advice can boost the production. Thus would further attract the landless and small farmers to take advantage of this sector for sustaining their livelihood and make India competent in the global market.

Q.14) What is carbon tax? Do you think carbon tax can help in reducing air pollution in India? Suggest some measures to reduce air pollution in India.

Ans.

Demand of the question

Introduction. What is carbon tax?

Body. How can carbon tax help in reducing air pollution? Issues related to Carbon Tax. Measures to reduce air pollution.

Conclusion. Way forward.

A carbon tax is a form of pollution tax imposed on the burning of carbon-based fuels (coal, oil, gas). It is a tax levied on products that are a source of greenhouse gases, primarily fossil fuels. The tax is imposed with the goal of environmental protection to reduce the output of greenhouse gases and carbon dioxide. Research shows that carbon taxes are the most efficient and effective way to curb climate change, with the least adverse effects on the economy.

How can carbon tax help in reducing air pollution?

1. **Reduced consumption:** As the tax makes using dirty fuels more expensive, it encourages businesses and individuals to reduce consumption and increase energy efficiency. It checks the use of fossil fuel.
2. **Increase in use of alternative energy sources:** The alternative energy such as solar, hydro and wind energy are costlier than the fossil fuel energy. The carbon tax on fossil fuel makes the alternative energy competitive to the fossil fuel resulting in more use of alternative clean energy.
3. **Revenue:** Carbon tax offers social and economic benefits. It increases revenue while simultaneously promoting objectives of climate change policy. The revenue can be used for socio-economic purposes like health and education and also on efforts to reduce pollution. It can make the correct use of fund availability for programmes like afforestation.
4. **Better air quality:** Carbon tax helps in reducing consumption leading to less emissions. The carbon tax charges a fee based on the carbon emission. So, to reduce the fee, users use less fossil fuel. This will help to protect the environment and ensure good quality air in cities especially cities like Delhi and Kanpur.
5. **Meet emission targets:** A carbon tax is a step towards helping India meet their voluntary target, to reduce the amount of carbon dioxide released per unit of GDP by 25% from 2005 levels by 2020. It will also help India to reach the committed INDC of 33% by 2030.
6. **Clean energy investment:** The clean energy tax will help to finance a National Clean Energy Fund (NCEF). All the money raised by the tax can help subsidise environmental programs and clean energy. It will also help India to promote the flagship programmes like International solar Alliance, Start-up India and Make in India by reducing use of non-renewable fossil fuels.

Issues related to Carbon Tax:

1. **Regressive in nature:** Carbon tax is inherently regressive as it puts a burden on the poor. The poor in India contribute the least to climate change and face the maximum brunt of carbon tax through rise in prices of various commodities and services.
2. **Increased production costs:** Imposing carbon tax has a direct effect of increasing the production cost which can seriously hamper our competitiveness in international markets as well as domestic production. Indian exports and small-scale industries are affected by increase in input costs. Production may shift to countries with no or lower carbon taxes.

3. **Issue of appropriate carbon tax:** There is no particular methodology to exactly calculate carbon emission. Thus a higher carbon tax and how much to be levied is subjective and debatable.

4. **Irrational:** India's emissions are still very low with only 1.8 tonnes of carbon dioxide emissions per capita (much lower than the world average of 4.2 tonnes). Per capita electricity consumption is half of the world's average, thus imposing a high carbon tax is not rational.

Measures to reduce air pollution:

1. **Strengthening Public transport:** It is important to strengthen public transport and encourage people to use public transport. The odd-even scheme in case of Delhi should be applied without any exemptions.

2. **Reducing emissions:** Emphasis should be laid on reducing emissions from thermal power plants and industry by instituting strong emissions standards. Carbon tax should be levied to reduce the consumption and hence emissions.

3. **Change in Fuel:** The use of less polluting fuel to reduce air pollution should be promoted. Use of low sulphur fuel instead of high sulphur fuel by electric utilities is an example of this method.

4. **Stubble burning:** Centre must work with states to frame a policy to tackle the issue of stubble burning and air pollution. The available paddy straw can be effectively used in the market for power generation. States can provide markets for buying stubble from other states.

5. **Effective implementation:** There is a dire need for political will for effective implementation of environmental regulations and ensure coordination among all stakeholders

The cost of administering the carbon tax may be quite expensive reducing its efficiency. But it is an effective way to reduce consumption. An optimum carbon tax is the way forward. Higher carbon tax would be regressive and discriminatory and a lower value would defeat its purpose.

Q.15) What is financial inclusion? What are the challenges to financial inclusion in India? Discuss various government measures for the same.

Ans.

Demand of the question

Introduction. What is financial inclusion?

Body. Challenges to financial inclusion in India. Various government measures for financial inclusion.

Conclusion. Way forward.

According to the world bank, financial inclusion means that individuals and businesses have access to affordable financial products and services that meet their needs. Accessibility, affordability and availability of financial services are 3 pillars of financial inclusion. It is a method of offering banking and financial solutions and services to every individual in the society without any form of discrimination.

Challenges to financial inclusion in India:

1. **Socio-economic factors:** Financial exclusion is related to the social conditions of low-income households, who are not able to access the available financial products and

services. Various constraints such as low income, low savings and generally low levels of awareness hinders financial inclusion.

2. **Geographical factors:** A review by the Rangarajan Committee shows that financial exclusion is highest among households in the Eastern, North -Eastern and Central areas of the country partly due to poor infrastructure. This coupled with remoteness and less population in some areas resulting in problems with access.

3. **Limited availability of appropriate technology:** The key driver of financial inclusion is the proliferation of stable and reliable Information and Communication Technology (ICT). The lack of infrastructure and cost-effective technology for facilitating transactions at the doorstep is a hindrance to financial inclusion.

4. **Perception of obligation:** The financial institutions are reluctant to serve small value and unprofitable customers with irregular income. Banks perceive inclusion as an obligation rather than a business opportunity. This discourages banks from providing financial services to low income individuals.

5. **Lack of documents:** Another factor preventing them from accessing formal financial institutions are the requirement of various document proof. The poor generally lack documents such as Aadhaar card, income certificate, birth certificate, address proof etc.

6. **Financial illiteracy:** The absence of basic education prevents people from following even simple information related to financial inclusion. Lack of financial literacy is the major hurdle. The rural population as a result, relies mostly on the informal sector for availing finance at high rates which lead to the vicious circle of poverty and debt repayment.

7. **Penetration:** At present, only about 5% of India's 6 lakh villages have bank branches. There are 296 under-banked districts in states with below-par banking services. Thus, bank reach is poor in rural areas leading to financial exclusion.

Various government measures for financial inclusion:

1. **Pradhan Mantri Jan Dhan Yojana (PMJDY):** It was launched to ensure financial inclusion of all the households in the country by providing universal access to banking facilities. Under this, a person not having a savings account can open an account without the requirement of any minimum balance.

2. **Swabhiman Campaign:** Swabhiman means "self-respect". This campaign aimed at giving more self-respect and confidence to people by making them aware of the financial sector of their country and banking services.

3. **Insurance & Pension schemes:** Government has launched many insurance and pension schemes. This includes Atal Pension Yojana, Pradhan Mantri Suraksha Bima Yojana and Jan Suraksha Yojana.

4. **Pradhan Mantri Mudra Yojna:** Pradhan Mantri Mudra Yojna provides formal access of financial facilities to Non-Corporate Small Business Sector. The basic objective of the scheme is to promote & ensure bank finance to the unfunded segment of the Indian economy.

5. **RBI initiatives:** RBI has launched many initiatives for promoting financial inclusion. This includes Priority Sector Lending (for providing a specified portion of the bank lending to few specific sectors), Opening of no-frills accounts (account with nil or very low minimum balance), Relaxation on know-your-customer (KYC) norms, Business correspondents (BCs) (as intermediaries for providing financial services) etc.

6. **Digital initiatives:** Initiatives like Digital India, payments banks and small finance banks have helped to improve the reach of formal financial services to economically disadvantaged sections. This will help to provide financial services to both the unbanked and the underbanked population, especially in rural/remote regions.

Financial inclusion is important for any economy. The availability of banking facilities and strong bank branch network are the major facilitators of developmental activities. A strong and sturdy financial system is a pillar of economic growth, development and progress of an economy. The problem of financial exclusion needs to be tackled if we want our country to grow in an equitable and sustainable manner.

Q.16) The spread of dengue in India has been related to unplanned urbanisation, changes in environmental factors, and a host of other factors. Elaborate.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Factors responsible for the spread of dengue in India. Some measures to reduce the spread of dengue.

Conclusion. Way forward.

Dengue is a major public health problem in India. It is a tropical disease caused by the dengue virus through mosquitoes bite. For the past ten years, the number of dengue cases has gradually increased in India. The spread of dengue is due to various factors especially due to unplanned urbanisation and climate change.

Factors responsible for spread of dengue in India:

1. **Unplanned urbanisation:** As more people move to cities, human-mosquito contact increases contributing to risk of infection. Urbanisation, poor town planning, and improper sanitation are the major risk factors for the multiplication of such mosquitoes. The open sewerage, improper handling of wastage, urban slums, open drains are providing breeding ground for dengue.
2. **Climate change:** Recent studies have shown that seasonal mean temperature in India has increased significantly over the past years. Slight increases in temperature increase the dengue risk by increasing the mosquito development rate and the virus, thereby increasing the rate of transmission.
3. **Poor control measures:** Inadequate vector (mosquito) control measures have created favourable conditions for dengue virus transmission and its mosquito vectors. Lack of proper planning to control the vector has led to the spread of dengue. Lack of funding, interrupted fumigation campaigns, and poor management of mosquito eradication programs contribute to the mosquito resistance.
4. **Favourable climate:** Dengue is a tropical disease that occurs in the countries around the Equator. Hot weather, monsoon and intermittent rainfall favour the sustenance of the vector transmitting the dengue virus.
5. **Lack of manpower:** The number of skilled workers available for preventing spread of dengue is low. Delhi and Mumbai have 1,260 and 895 employees per 100,000 population respectively vis-a-vis New York's 5,338 and London's per 100,000 population respectively. Many posts in government departments remain vacant. Due to this deficiency of manpower, active surveillance against dengue is not being done in India.
6. **Under-reporting:** Dengue cases are often under-reported due to political reasons and also to avoid spreading panic among the common people. This increases the risk of dengue spreading.
7. **Lack of coordination:** There is a lack of coordination between the local bodies and health departments in the delivery of public health measures. This leads to an unplanned approach to deal with the dengue epidemic.

Some measures to prevent spread of dengue:

1. **Disease surveillance:** Effective surveillance of dengue cases is essential to detect outbreaks to initiate timely and effective control measures. Singapore uses one successful model of mapping and analysing data on dengue, using Geographical Information System (GIS). This involves mapping the streets with dengue cases for vector densities.
2. **Strengthening healthcare system:** Dengue mortality can be reduced by implementing early case detection. Health services must be strengthened to cope with dengue outbreaks. Training health personnel at all levels of the health system is important.
3. **Effective Planning:** An effective plan should be prepared on how to tackle any outbreak. It is an important element of the overall strategy to prevent dengue spread. The plan should include all the stakeholders.
4. **Effective vector control measures:** Effective vector control measures are critical to prevent dengue outbreak. Preventive and vector control interventions like fumigation, awareness campaign, cleanliness drive etc. is needed with an aim to reduce dengue transmission. The integrated vector management approach to vector control as promoted by WHO should be adopted.
5. **Coordination:** Dengue prevention and control needs an effective inter-sectoral approach. It requires coordination between the (the Ministry of Health) and other relevant ministries and governmental agencies, the private sector, nongovernmental organizations and local communities.

Dengue is endemic to India. An integrated approach is needed to tackle the epidemic. Various causal factors must be controlled. Swachh Bharat mission is important to prevent dengue and must be used to raise awareness about dengue. Without collaborative efforts, fighting the dengue epidemic is not easy.

Q.17) Subsidies are not a sustainable solution to underlying problems, rather it is a burden on fiscal purse. Comment.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss arguments in support of subsidies and against.

Conclusion. Way forward.

A subsidy is a form of financial aid or support extended generally with the aim of promoting economic and social welfare. The subsidy is given to improve the lives of the poor and is important to promote social justice in the society. But subsidies also put a great burden on fiscal purse. It is not considered as sustainable as the root problem remains unresolved.

Subsidies- not a sustainable solution:

1. **Fiscal burden:** The economic survey, 2017 points out that despite spending as high as 3.77 lakh crore rupees annually on subsidies, there is no 'transformational impact' on standard of living of masses. India spends roughly 2% of the GDP in indirect subsidies, which put excessive burden on fiscal purse with lesser impact than desired.
2. **Optimal amount:** An important problem with subsidy is calculating the optimal amount after overcoming unseen costs. An unjust price makes subsidies more burdensome than they are beneficial.
3. **Corruption:** Providing subsidies doesn't ensure it reaches the hands of needy. Leakages, corruption are common malaise that reduce the effectiveness of subsidies. For example,

leakages in PDS do not lead to social welfare of many but put extra burden on fiscal purse. At the all-India level according to parliamentary standing committee it is observed that leakages were around 40% for food grains in India.

4. **False beneficiaries:** A World Bank study argued that the rich stood to gain more than the poor from public provision of services such as healthcare and education due to various factors. Despite free provisioning, availing of services entails private costs which the rich found easier to pay.

5. **Distortion:** Agricultural subsidies distort the cropping pattern which leads to environmental degradation and pollution. Overuse and inefficient use of scarce resources such as water and financial losses to the government because of power subsidies.

Need of subsidies:

1. **Ensuring welfare:** Its state responsibility to ensure welfare of all the people. Subsidies are a way to ensure the welfare of people. This allow inclusiveness and equity in the society by welfare of marginalised.:

2. **Social justice:** Few communities have been economically, socially and historically marginalised in society, for example Dalits. A helping hand is needed for such people. Subsidies provide social justice in a way that allows equal rights and opportunities to all.

3. **Farmers welfare:** Around 600 million people are dependent on agriculture. With nearly 98% of Indian farmers being on low income or are resource poor with mostly engaged in subsistence farming, farm subsidies provide relief to them.

4. **Affordability:** Subsidies make services affordable. For example, food subsidies allow everyone to afford a meal at very low prices. Similarly agricultural subsidies help in making agriculture an affordable business.

5. **Reduce prices:** Government subsidies help industry by allowing the producers to produce more goods and services. This increases the overall supply of that good or service, increases the quantity demanded for that good or service and lowers the overall price of the good or service.

Way forward:

1. **Rationalisation:** Subsidies are must for uplifting poor and helping them to get out of poverty. Thus, we can't remove subsidies. Rationalisation according to the demand of programmes based on marketability, affordability and input cost and according to different income groups could pave the way for optimal utilisation of subsidies.

2. **Universal basic income:** Universal basic income is an alternate to subsidies. It removes issues of corruption and leakages. Further, a universal basic income helps the government to make better budgetary provisions as many subsidised schemes fail to reflect exact ground situation. Universal basic income gives a choice to the poor to invest in education and health.

3. **Investment:** The impact of public investment on both the agriculture and rural poverty is far greater than that of fertiliser, electricity, irrigation and interest rate subsidy. There should be fewer freebies and higher investment in agriculture research, irrigation, better infrastructure.

4. **Technology:** Technological improvement like Aadhaar, direct benefit transfer can be used to eliminate inclusion and exclusion errors. The third-party verifications of beneficiary will help in eliminating the free riders.

5. **Targeted subsidies:** There should be better targeting of subsidies by linking them to specific crops, size of farms, area, regions etc. This is important to prevent false beneficiaries and to benefit only the needy.

Subsidies are must to ensure welfare of the poor. It can help in improving access to education and bridge socio-economic divides across communities in the country. However, these can be rationalised in order to reap optimum benefits. It is better to make subsidies more rational and targeted. Direct transfer of cash can help in plugging the leakages.

Q.18) What is stagflation? What steps should be taken to control stagflation in Indian economy?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various causes of looming stagflation situation in India. Steps needed to control stagflation in Indian economy.

Conclusion. Way forward.

Stagflation is a situation in which the inflation rate is high, the economic growth rate slows and unemployment remains steadily high. With recent 7.35% rise in consumer price inflation in December, India is entering a period of slow growth accompanied by high inflation, in other words stagflation. This is happening because with stalled economic growth, unemployment is increasing and existing incomes are not increasing fast enough with rising prices.

Causes of looming stagflation situation in India:

1. **Reduced consumption:** Ongoing stagflation is caused by a decrease in consumption. Consumption makes up about 60% of GDP and spending has reduced due to less income and less jobs. Consumer sentiment remains in the doldrums.
2. **Volatile Oil:** The recent volatility in oil prices led to a further decrease in spending. US-Iran tussle has led to rise in oil prices. This has led to an increase in transportation cost and thus led to an increase in general prices especially of food products.
3. **Decreased credit availability:** The RBI's interest-rate cuts and liquidity pumped into financial markets have done little to spur lending. This is because banks who are already facing the worst stressed-asset ratios, are neither lending much nor transmitting rate cuts to borrowers. This has led to reduced investment and spending leading to reduced industrial activity impacting economic growth.
4. **Unemployment:** Unemployment is all time high and has impacted the buying ability of individuals. The increased automated production and inability of the manufacturing sector to boost up the growth has impacted job growth of the country.
5. **Inflation:** With rising input costs and reduction in the aggregate supply, price of various products and services are increasing. Poor monsoon has led to a lower area under cultivation. This, in turn, has led to lower output and consequently lesser supply. As aggregate supply is reduced, there is a fall in output and employment and the price level rises.

Steps needed to control stagflation in Indian economy:

1. **Tax measures:** The best policy measure is to reduce income tax and corporate taxes as they tend to reduce labour costs and raise demand for labour. Similarly, GST should be reduced in order to prevent the price level from rising. To encourage state and local governments to reduce state and local sales, the central government should sanction additional grants-in-aid to them.

2. **Wage control:** A policy of wage control should be adopted with government intervention to limit wage rises. When wages rise, firms are forced to reduce production and employment. Consequently, there is a fall in real income and consumer expenditure. Limiting wage increases can break the cycle of wage inflation and help to improve the economic situation.

3. **Supply-side solutions:** One solution to stagflation is to increase aggregate supply through supply-side policies, for example, privatisation and deregulation to increase efficiency and reduce costs of production. Private sector must be incentivised to invest more and to increase supply through tax measures.

4. **Monetary policy:** The primary macroeconomic objective should be to reduce inflation. Reducing inflation may cause higher unemployment and lower economic growth in the short-term. But, this unemployment can be targeted once the price level is controlled.

5. **Labour reforms:** Frictions in the labour market should be reduced by reducing the time and cost involved in obtaining information about employment opportunities. Barriers which either limit entry into a profession or maintain wages at artificially high rates should be removed.

Stagflation needs to be controlled at earliest. With the government aiming to become a \$5 trillion economy it is important that slowdown and inflation must be arrested. Meanwhile, the government should engage all stakeholders to address the supply-side issues, a calming down of food prices will help the government to prevent stagflation in the economy.

Q.19) Why is artificial intelligence one of the key developments of the 21st century? Discuss government efforts regarding artificial intelligence in India and the scope of its application in the development process of the country.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss why AI is a key development of the 21st century. Government efforts regarding artificial intelligence in India. Scope of its application in the Indian development process.

Conclusion. Way forward.

Artificial intelligence (AI) refers to the simulation of human intelligence in machines. These are programmed to think like humans and mimic their actions. Artificial intelligence is a 21st century technology that is transforming every walk of life. It enables people to integrate information, analyse data, and use the AI insights to improve decision making. AI is already altering the world and is used in various fields of the economy and governance.

Why AI is the key development of the 21st century?

1. **Economic development:** One of the reasons for the growing role of AI is the tremendous opportunities for economic development. A project undertaken by PriceWaterhouseCoopers estimated that artificial intelligence technologies could increase global GDP by \$15.7 trillion (14%) by 2030.

2. **Financial sector transformation:** AI is being used effectively in the financial sector especially in the stock market.

- In stock exchanges, high-frequency trading by machines has replaced much of human decision making. People submit buy and sell orders, and computers match them in the blink of an eye without human intervention.

- Fraud detection represents another way AI is helpful in financial systems. In the banking sector, decisions about loans are now being made by software that can take into account a variety of data about a borrower. HDFC Bank has developed an AI-based chatbot called EVA (Electronic Virtual Assistant).
- 3. **Agriculture:** World will need to produce 50% more food by 2050 due to increasing population and climate change. AI can help farmers get more from the land while using resources more sustainably. Berlin-based agricultural tech start-up called PEAT has developed an application that identifies potential defects and nutrient deficiencies in the soil through images.
- 4. **Healthcare:** A lot of organisations and medical care centres are relying on AI to save lives. An organization called Cambio HealthCare developed a clinical decision support system for stroke prevention that can give the physician a warning when there's a patient at risk of having a heart stroke.
- 5. **Space Exploration:** Space expeditions and discoveries always require analysing vast amounts of data. Artificial intelligence and machine learning is the best way to handle and process data on this scale. Artificial intelligence is being used by NASA for next rover mission to Mars, the Mars 2020 Rover.
- 6. **Social Media:** In social media platforms like Facebook, AI is used for face verification wherein machine learning and deep learning concepts are used to detect facial features and tag friends. Machine learning algorithms are used to design an individual's feed based on his interests.
- 7. **Transportation:** Transportation represents an area where AI and machine learning are producing major innovations. Autonomous vehicles and drone delivery systems use AI. AI is being used to analyse information in real time and the use of high-performance computing and deep learning systems to adapt to new circumstances through detailed maps.

Government efforts regarding artificial intelligence in India:

1. **National Programme on Artificial Intelligence:** It was announced in Interim Budget 2019. The programme would be catalysed by the establishment of the National Centre on Artificial Intelligence as a hub along with 6 centres of excellence.
2. **NITI Aayog's paper on national strategy for AI:** Budget 2018 mandated the NITI Aayog to establish the national programme on AI to guide research and development in new and emerging technologies. NITI's discussion paper 'National strategy on Artificial Intelligence' identified 5 sectors for AI application to serve societal needs- Healthcare, Agriculture, Education, Smart cities and infrastructure and Smart mobility and transportation.
3. **Task Force on Artificial Intelligence:** A Task Force on Artificial Intelligence (AI) for India's Economic Transformation was constituted. The Task Force has recommended an Inter-Ministerial National Artificial Intelligence Mission to act as a nodal agency for coordinating AI related activities in India.
4. **National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS):** It is a programme led by the Union Ministry of Science & Technology & Earth Science to enhance capabilities of cyber-physical system. Budget 2019 allotted Rs. 5 crore for the mission.
5. **Various Committees:** In order to create a policy framework and to develop the ecosystem for Artificial Intelligence, Ministry of Electronics & Information Technology, has constituted 4 committees covering all the aspects of AI. These Committees are:
 - Committee on platforms and data for AI.
 - Committee on leveraging AI for identifying National Missions in key sectors.
 - Committee on mapping technological capabilities, key policy enablers, skilling, re-skilling and R&D.
 - Committee on cybersecurity, safety, legal and ethical issues.

Scope of its application in the Indian development process:

1. **Economic:** AI can boost India's economic development by increasing efficiency in various industrial sectors. NITI Aayog estimates that adopting AI means a 15% boost for the gross value added (GVA) for the economy by 2035. According to a Accenture report, AI has the potential to add \$957 billion to India's economy in 2035.
2. **Education and Skilling:** AI can play a major role in the Indian education sector by providing solutions for quality and access issues. It can help in better learning experience through personalised learning and predicting the need for student intervention to reduce dropouts or recommend vocational training.
3. **Smart Cities:** Incorporation of applied AI in developing cities could also help in meeting the demands of a rapidly growing population and providing them with enhanced quality of life. Traffic control for reducing congestion enhanced security by providing improved crowd management are some of the potential uses of AI systems.
4. **Agriculture:** Indian agriculture is dependent on the monsoon system. AI can help prediction of monsoon behaviour and impact of climate change on monsoon. It can contribute towards enhancing farmers' income, increase farm productivity and reduce wastage. It will help in better weather prediction and thus a climate adjusted agriculture can be adopted.
5. **Criminal justice:** By analysing big data of road safety data and NCRB (National Crime Record Bureau) data for crimes, new policies can be formulated. In the counterinsurgency and patrolling operations, loss of CRPF jawans which can be minimised by using the robotic army and lesser human personnel. Further it would help in reducing judicial delays and burden by effectively dissemination of similar cases bunched together.

Artificial intelligence has a lot of potential in the 21st century, especially for India. Nearly 200 Artificial Intelligence start-ups in India are today innovating and creating AI-based solutions for various industries. It can complement Digital India Mission by helping in the big data analysis which is not possible without using AI. 'Make in India' programme can be strengthened and help India in becoming a major manufacturing hub with AI-assisted technology.

Q.20) What is blockchain technology? Discuss its advantages and potential applications.

Ans.

Demand of the question

Introduction. What is blockchain technology?

Body. Discuss advantages and potential applications of blockchain technology.

Conclusion. Way forward.

Blockchain technology is a technology that leads to a chain of blocks, containing digital information stored in a public database. It is a distributed database existing on multiple computers at the same time, which constantly grows as new sets of recordings or blocks are added to it. Blockchain technology has a lot of advantages especially regarding security and processing. It has a lot of potential applications in various fields that make it one of the 21st century technological developments.

Advantages of blockchain technology:

1. **Integrity of the whole process:** Blockchain technology ensures integrity of the entire process. It means that any block or even a transaction that adds to the chain cannot be

edited which ultimately provides a very high range of security. They provide an unalterable document of the history of every transaction.

2. **Traceability:** With the blockchain ledger, each time an exchange of goods is recorded on a Blockchain, an audit trail is present to trace where the goods came from. This improves security and prevents fraud in exchange-related businesses. It can also help verify the authenticity of the traded assets. In industries such as medicine, it can be used to track the supply chain from manufacturer to distributor, or in the art industry to provide an irrefutable proof of ownership.

3. **Security:** Blockchain is considered to be a highly secure system due to its digital signature and encryption. This ensures that the owner of the account himself is operating the transactions. The block encryption in the chain makes it tougher for any hacker to disturb the traditional setup of the chain.

4. **Faster processing:** Before the invention of the blockchain, the traditional banking organisation took a lot of time in processing and initiating the transaction but after the blockchain technology speed of the transaction increased to a very high extent. Before this, the overall banking process takes around 3 days to settle but after the introduction of Blockchain, the time reduced to nearly minutes or even seconds.

5. **Fraud prevention:** A system that is based on data stored in a number of places is immune to hackers. Its not that easy to get access to it, and if so, any piece of information can be easily recovered

6. **Transparency:** Banks, as well as the clients, are immediately notified about the completion of transactions, which is both convenient and trustworthy. In financial systems and businesses, this adds a layer of accountability, holding each sector of the business responsible to act with integrity towards the company's growth, its community and customers.

Potential applications of blockchain technology:

1. **Governance:** Blockchain technology can help in ensuring good governance. It ensures transparency of the public records through the usage of a digital form platform and allows auditing of government documents. Moreover, it allows to maintain the authenticity of the document and clearly reduces the processing time.

2. **Banking:** Blockchain can help in avoiding risk of payment losses involved in banking transactions by adopting secure distributed ledger platform. It reduces transaction fees across cross-borders, corporate payments and remittances.

3. **Food & Supply Chain:** It creates a tamper proof record to check the real information about expiration date, product journey from the farm to the shop. The real information of the product can help in improving the reliability and efficiency of the supply chain system.

4. **Insurance:** Blockchain technology can change the ways the insurance documents, claim settlements and fraud handling's are carried out. It allows the creation of transparent, secure, decentralized and immutable insurance network.

5. **Healthcare:** It helps to prioritize patient health at all costs without compromising the quality of the health care service. By establishing a secure chain of network blockchain can help in handling the patient records, consent forms, billings and public health monitoring.

6. **Automotive:** Blockchain can solve the challenges in automotive manufacturing, car deliveries, billings. It can help in the creation of an after-sales support ecosystem to keep track of the maintenance record of vehicle owners.

7. **Tourism:** Blockchain can reduce the delay time of passenger document handling, creates a decentralized hotel booking ecosystem at the least transaction fee and also keeps passengers' private information safe.

Blockchain technology has proven itself robust and secure. It ensures integrity of the data and reduces incidents of fraud. The decentralised nature of the blockchain technology applications makes it a perfect fit for many industries to carry out secure business transactions. The proper use of blockchain technology allows us to avoid the use of middlemen or partner platforms in a peer-to-peer network, reduce reception time, fraudulent proof.

Q.21) How globalisation has led to the reduction of employment in the formal sector of the Indian economy? Is increased informalisation detrimental to the development of the country?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss how globalisation has led to the reduction of employment in the formal sector? Argue whether increased informalisation is good or bad for the development of the country?

Conclusion. Way forward.

With the 1991 economic reforms India opened its door for the world and embraced globalisation that allowed Indian economy to engage with others. It enabled the global integration of production and markets across nations. It is said that globalisation has led to the informationization of the economy and reduced formal employment. Although informalisation has provided livelihood to many, it has not raised the living standard as was expected.

How globalisation has led to the reduction of employment in the formal Indian sector?

1. **Decline in public employment!** The most stable source of formal employment has been the public sector. Because a major focus of liberalisation is a reduction in size of the public sector. The proportion of formally employed workers fall as governments cut their work force unless.
2. **Restrictive labour laws:** With restrictive labour laws and lack of labour reforms after liberalisation, industries went for contract hiring. It was done in order to circumvent rigid hiring and firing provisions. This led to reduction of formal jobs and more contractual jobs of short-term nature.
3. **Global Competition:** The impact of global competition encouraged formal firms to shift formal wage workers to informal employment arrangements without minimum wages, assured work or benefits.
4. **Service-sector led growth:** Globalisation led to growth of service sector in India. Service sector requires skilled labour that was not available as required. As a result many sectors lacked skilled manpower and formal jobs were not created.
5. **Women employment:** As the decent formal jobs declined and economic growth slowed many men remain unemployed. As a result, women increasingly seek paid employment in the informal economy as a means to ensure the living standards for households that are already living in poverty. Further, with responsibility to manage home, more women seek informal employment.
7. **Capital intensive industries:** The newer industries were capital intensive rather than labour intensive, thus absorbing lesser workforce. Due to this labour remained out of formal sector employment.

8. **Informalisation:** Due to rise in the service sector many jobs were outsourced which were fulfilled by the informal sector. Further, contractual jobs led to insecurity in the labour sector and formal sector. Thus, many people took up informal jobs.

9. **Mechanisation:** With globalisation and growth of internet and automation, many jobs were replaced by machines. Industries in order to increase their production went for automation and this was supported by technology transfer through liberal policies. Further, most of the inflowing FDI went into technology and capital-intensive sectors like information technology, engineering, automobile etc. which mostly are automatic requiring less human resource.

How is the informal sector important for development?

1. **Livelihood:** The Informal economy contributes significantly to production, employment and income generation in developing countries. It is a source of livelihood to a majority of poor and is an important means of survival for people in countries lacking proper social safety nets and unemployment insurance especially those lacking skills for formal sector jobs.

2. **Economic growth:** Informal sector also contributes significantly to the output of developing countries. The informal economy is very large in developing countries, as formal sectors are not well developed and unable to absorb their available working population.

3. **Working conditions:** Over recent decades, conditions for working people have undergone a major transformation. This has been due to the substantial rise in the proportion of people engaged in informal employment.

4. **Women empowerment:** Due to the growth of the informal sector, many women have been employed. Informal sector provides flexibility to work. Due to the responsibilities of managing a house, women seek and find informal jobs best as it provides them with flexibility to work. At the time of pregnancy, they can leave their job, if they want to focus on themselves. This flexibility allowed many women to get work.

How informalisation is detrimental to development?

1. **Hurdle to inclusive growth:** Informal jobs often have low productivity and of low general quality. Informal workers lack proper wages and their wages are also less. Lower wages lead to increasing inequality, which is detrimental to inclusive growth.

2. **Lack of protection:** Informal jobs are not under government supervision. Thus, they are not protected wrt the working hours, health and safety at the workplace. There is no guarantee that they would get wages on time and in full, as it is not embedded in any formal document that would ensure its validity.

3. **Lack of formal benefits:** Informal workers lack welfare benefits such as healthcare, insurance, and education facilities. This leads to increased out of pocket expenditures on those things and extra burden on the poor.

4. **Reduces government revenue:** Informalisation also reduces the tax base based on incomes of the employees. This reduces overall revenue and thus hinders public investment in infrastructure, economy and social welfare. This hinders the development of an economy.

5. **Reduced productivity:** Contract labour has no affinity or loyalty towards the company. Therefore, it hampers productivity and economic development. Productivity of the economy decreases as a whole since companies lose the incentive to skill the employees, and focus on contractual workforce.

From above it can be concluded that informal employment although provides badly needed jobs for the poor, but it harms workers' protection, earning predictability and social benefits. Arab spring is such an example, which began when a young street trader set fire to himself due to continued harassment and humiliation by the police. Thus, increased

informalisation is detrimental as it impacts the long-term goals. Steps must be taken to create more formal jobs.

Q.22) Discuss various efforts made by India and various states to improve ease of doing business in India. What else needs to be done?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss recent efforts to improve in Ease of doing business. What else can be done to improve the rank?

Conclusion. Way forward.

Recent rise in India's ranking by 14 places to 63 in the World Bank's Ease of Doing Business 2020 survey is a positive development for India. From being ranked 142 in 2014 to 63 in 2020, it has been a significant upward journey for the country in a rank list that is an important input in the plans of global investors. Many recent initiatives and efforts have been made by both the centre and state government in order to improve India's ease of doing business.

Recent efforts to improve in Ease of doing business:

1. **Starting a Business:** India made starting a business easier by fully integrating multiple application forms into a general incorporation form. India also replaced the value added tax with the GST (Goods and Services Tax) for which the registration process is faster.
2. **Dealing with Construction Permits:** India streamlined the process of obtaining a building permit and made it faster and less expensive to obtain a construction permit. It also improved building quality control by introducing decennial liability and insurance.
3. **Getting Credit:** India strengthened access to credit by amending its insolvency law. Secured creditors are now given absolute priority over other claims within insolvency proceedings.
4. **Paying Taxes:** India made paying taxes easier by replacing many indirect taxes with a single indirect tax, the GST, for the entire country. India also made paying taxes less costly by reducing the corporate income tax rate and the employees' provident funds scheme rate paid by the employer.
5. **Trading across Borders:** India reduced the time and cost to export and import through various initiatives, including the implementation of electronic sealing of containers, the upgrading of port infrastructure and allowing electronic submission of supporting documents with digital signatures.
6. **Resolving insolvency:** India made resolving insolvency easier by promoting reorganisation proceedings in practice. Resolving insolvency has shown a jump of 56 spots, endorsing the successful implementation of the Insolvency and Bankruptcy Code, 2016. India also made resolving insolvency more difficult by not allowing dissenting creditors to receive as much under reorganisation as they would receive in liquidation. This reform applies to both Delhi and Mumbai.
7. **Other reforms:** Separately, the government had also announced implementation of eBiz portal which will offer Government-to-business (G2B) services for investors and business activities, through a single window to cut time and cost and improve business environment. Under its National Trade Facilitation Action Plan 2017-2020, India implemented several initiatives that improved the efficiency of cross-border trade, reducing border and documentary compliance time for both exports and imports.

What else can be done to improve the rank?

1. **Creating demand:** There is need to focus on generating aggregate demand while focusing on improving ease of doing business. At the present scenario it is unwise to judge the state of economy on basis on the ease of doing business Index. India is facing an aggregate demand slowdown, thereby require fiscal stimulus.
2. **Focusing on Public Capital Formation:** The composition of the public spending matters for growth. Increase in the fiscal deficit took the form of rise in public consumption rather than public capital formation, which had temporary effects. The focus needs to shift to the capital formation for increasing aggregate demand and raising the potential supply of the economy.
3. **Attracting investment:** India needs to move faster on the reform front, to better attract global savings and investments. The available data suggest that the resources required for starting a business can be considerably higher in the lower income economies.
4. **Entrepreneurship:** We need to induce policy measures to boost entrepreneurship nationally. It would lead to better employment opportunities, higher tax revenue for governments, and also give rise to improved personal income as well.
5. **Taxes:** We need to, further simplify the indirect goods and services tax (GST) regime, and make taxes, both on income and consumption, easy and taxpayer-friendly. The average time for filing taxes can be significantly higher in lower-middle income economies like India.
6. **Construction reforms:** India has a high global rank in dealing with construction permits, 27th in the ranking. The way ahead is to have reforms in place to better coagulate funds for built spaces.

India is among the top 10 improvers in 2020 report. However, India still lags in areas such as enforcing contracts (163rd) and registering property (154th). While the improvements are impressive and the rise in overall rankings in the last few years is noteworthy, the fact is that India is still below its competitors for global capital. The country lags in many key metrics. The Centre must convince the States to reform their systems.

Q.23) Critically examine whether the 'Make in India' initiative has met its objectives or not. Suggest some measures needed to improve its outcomes.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss progress made under Make In India. Mention various shortcomings. Suggest some measures to improve outcomes.

Conclusion. Way forward.

Make in India is a national program initiated by the Indian government to promote investment, innovation, skills development and build a world class manufacturing ecosystem in the country. Since its inception, the government has announced several steps to improve the business environment by streamlining processes of doing business in the country. But results under the Make In India initiative are mixed.

Progress so far in Make in India initiative:

1. **Boost in investment:** Make in India initiative led to radiant growth in the IT and manufacturing sectors. This has encouraged various global/foreign investors to make investments in India and boost their business by building the products in the country.

In 2015, India emerged as the top destination for foreign direct investment, surpassing the U.S. and China.

2. **Boost to MSMEs:** The 'zero defect zero effect' phrase which came with Make in India campaign has shown positive impact on the Micro, Small and Medium Enterprises (MSMEs) of India. As a result, many companies are manufacturing goods with 'zero defects' and ensuring that the goods have 'zero effect' on the environment.
3. **Accountability:** The implementation of Goods and Services Tax (GST) and demonetisation have made the industry as a whole much more transparent and accountable. Now the processes have been simplified such as obtaining licenses and clearances that have brought in more transparency into the system. The digitisation initiative that is part of Make in India has helped make processes much more transparent and easier to implement.
4. **Ease of doing business:** Steps taken to improve ease of doing business include simplification and rationalisation of existing rules. As a result of the measures taken to improve the country's investment climate, India jumped to 63rd in World Bank's ease of doing business rankings as per World Bank report.
5. **Boost to research:** First indigenously developed and manufactured Rotavirus vaccine, 'Rotavac', launched. 30 bio-incubators and Biotech Parks supported.

Various shortcomings in meeting objective under Make in India:

1. **Not much impact on manufacturing:** One of the major objectives under Make in India was to increase the manufacturing sector's growth rate to 12-14% per annum. Monthly index of industrial production pertaining to manufacturing shows that only on two occasions during the period April 2012 to November 2019, double-digit growth rates was registered. Data show that for a majority of the months, it was 3% or below and even negative for some months.
2. **Employment generation:** Under Make In India, it was envisaged that 100 million additional manufacturing jobs would be created in the economy by 2022. Data shows that employment, especially industrial employment, has not grown to keep pace with the rate of industrial growth in the labour market.
3. **Decreasing investment:** Make In India aimed that the manufacturing sector's contribution to GDP is increased to 25% by 2022 (revised to 2025) from the current 16%. This was envisioned to be achieved through increased investment. Unfortunately, the last 5 years witnessed slow growth of investment in the economy. Gross fixed capital formation of the private sector (a measure of aggregate investment) declined to 28.6% of GDP in 2017-18 from 31.3% in 2013-14 (Economic Survey 2018-19). The private sector's share has declined from 24.2% to 21.5%.

Measures needed to improve the outcomes:

1. **Labour reforms:** Large-scale exclusions of workers from labour law, violence and arrests are the reasons for India's poor performance. India must introduce labour reforms at earliest like raising minimum wages, providing better social security for the labour.
2. **Simplifying Tax system:** The complex taxation system, a huge amount of paperwork and corruption is a main cause of worries among the investors. An overly complex GST, which has dampened investor sentiment and created compliance burdens on SMEs need to be simplified.
3. **Land reforms:** Stringent land acquisition laws and inflexible labour regulations make it difficult for India to attract investors in the manufacturing sector. India's benchmark land acquisition law can be amended to make it easier to buy land for defence and

development projects in the fast-growing economy, while also ensuring the rights of farmers.

4. **Skill training:** Despite various government efforts like Skill India initiative, Yuva kaushal Kendra etc., India still lags behind other nations in imparting skill training. Many youths have not joined the skill initiatives. Efforts must be made for encouraging youth to join the mission to make them available for industrial needs.
5. **Co-operative federalism:** Indian states play a very crucial role in the implementation and success of the Make in India initiative. But different states differ and are not on the same page. To make the concept of Make in India a success, a common consensus among the states is needed. There is a need to bring the less performing states at par with the better performing ones through collaborative efforts.

The Make in India programme aims to turn India into a manufacturing, design, and innovation hub in order to get big investments. This initiative is undoubtedly an inspiring initiative, which has reduced the risk factors of investing in India for many foreign companies. The availability of skilled labour, a business-friendly environment, good infrastructure and low manufacturing cost are some conditions required for the success of the Make in India campaign.

Q.24) The move to cash transfers will put agriculture on a sustainable growth path. Do you agree? Also, suggest some measures to make agriculture more sustainable and productive.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Need of making cash transfers in agriculture. How cash transfers will lead to agriculture on a sustainable growth path? Measures to make agriculture more sustainable and productive.

Conclusion. Way forward.

Agriculture is the most important sector of Indian economy. Indian agriculture sector accounts for 18% of India's GDP and provides employment to 50% of the country's workforce. The Indian government has, since independence, subsidised the agricultural sector. These subsidies are targeted to benefit Indian agriculture sector and farmers. But these subsidies have limited impact in terms of outreach and there still remains certain concerns regarding the nature of subsidies and their effectiveness to the developmental process.

Need of making cash transfers in agriculture:

1. **Fiscal burden:** The economic survey, 2017 points out that despite spending as high as 3.77 lakh crore rupees annually on subsidies, there is no 'transformational impact' on standard of living of masses. India spends roughly 2% of the GDP in indirect subsidies, which put excessive burden on fiscal purse with lesser impact than desired.
2. **Wastage:** India subsidises the cost of energy to pump water for agriculture, which encourages producers to pump more water than they need. This has made Indian producers among the world's least efficient water users. Given that food and water are in short supply, a more effective way to run the system would be direct cash transfers which would help in reducing water wastage.

3. **Subsidies do not reach the marginalized farmers:** The marginalised farmers, the main target audience for the government to come up with subsidies in the first place are not receiving it. It was observed that the better off farmers end up taking more than their fair share. Many landless labourers, agricultural workers and marginal farmers suffer from multidimensional poverty. Welfare schemes have also failed to bring them out of poverty.
4. **Prevent overuse:** Agricultural subsidies also lead farmers to overuse fertilisers or pesticides, which result in soil degradation, groundwater depletion and other negative environmental impacts. Instead of giving subsidies, the government must move to direct cash transfer as it would ensure less use of fertilisers.
5. **Corruption:** Providing subsidies doesn't ensure it reaches the hands of the needy. Leakages, corruption are common malaise that reduce the effectiveness of subsidies. At the all-India level according to parliamentary standing committee it is observed that leakages were around 40% for food grains in India.
6. **Distortion:** Agricultural subsidies distort the cropping pattern which leads to environmental degradation and pollution. Overuse and inefficient use of scarce resources such as water and financial losses to the government because of power subsidies.

How cash transfers will lead to agriculture on a sustainable growth path?

1. **Optimising inputs:** Direct income transfer will enable farmers to use the money to decide their production and help in optimising the use of inputs especially of fertilisers. Direct cash transfer will also ensure better crop choices with minimal input. For example, a farmer who is using more fertiliser would not spend excessive on fertilisers and would try to use alternatives like organic manure.
2. **Government savings:** With less spending on subsidies false beneficiaries will be removed. The move towards direct cash transfers will provide the government with a minimum saving of Rs 50,000 crore annually which is evident in direct benefit transfer scheme, as per government figures. These savings can then be invested in better water management, especially drip irrigation (more crop per drop), for better infrastructure for Agri-markets, which will help farmers get better prices for their produce.
3. **Help negate money lender issue:** With direct income transfer farmers can buy and use the necessary inputs in time without being in debt to the moneylenders and traders. This will also help reduce the total cost of cultivation and also stop exploitation of farmers by money lenders.
4. **Raising living standards of farmers:** Direct cash transfer to farmers would help raise their living standards, reduce poverty and mitigate farm distress.
5. **Commercial production:** Cash transfer would help smallholder farmers to move from subsistence production to more high value, commercial production by investing more in land and crops. Cash transfers would help farmers to increase productivity overcoming production constraints.
6. **Increased productivity:** Cash transfer would help farmers to make best decisions for themselves. Productivity will increase as farmers would use cash for increasing revenue through horticulture, less inputs etc. Further farmers would be able to buy high yield variety that would help them to raise production.

Measures to make agriculture more sustainable and productive:

1. **Adopting appropriate technology:** Farm practices must be sustainable and need to be technically as well as economically efficient. Intermediate technological solutions and affordable tools can encourage small-scale farmers to use them. New tools can help in increased productivity with minimal cost and labour.

2. **Adopting agroforestry practices:** By mixing trees or shrubs into their operations, farmers can provide shelter to protect plants, animals, and water resources, while also potentially offering additional income.
3. **Rotating crops and embracing diversity.** Planting a variety of crops can have many benefits, including healthier soil and improved pest control. Crop diversity practices like intercropping (growing a mix of crops in the same area) and complex multi-year crop rotations can increase productivity.
4. **Use of renewable energy sources:** Use of solar, hydro-power or wind-farms is ecology friendly. Farmers can use solar panels to store solar energy and use it for electrical fencing and running of pumps and heaters. Running river water can be a source of hydroelectric power and can be used to run various machines on farms. This will also save money.
5. **Crop Diversity:** Farmers can grow varieties of the same crop yielding small but substantial differences among the plants. This eases financial burdening.

NITI Aayog is exploring the various aspects of initiating a direct transfer of benefits to farmers on fertilisers and other inputs like seeds, electricity, and irrigation, on which a subsidy could be available. A proposal on Direct Investment Support (DIS) scheme, in line with the schemes that are already offered to landed farmers in states like Telangana and Odisha. Government has already been able to save around Rs.60,000 crore in schemes like Pahal through direct transfer of cash. The cash transfer with fundamental reforms in food and fertiliser subsidy, can help in tackling agriculture crisis.

Q.25) How can the 'Digital India' programme help farmers to improve farm productivity and income? What steps has the Government taken in this regard?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss how Digital India programmes can help to improve farm productivity and farmers' income. Mention steps taken by the government in this regard.

Conclusion. Way forward.

Digital India was launched in 2015 to create digital infrastructure for empowering rural communities and promoting digital literacy. Given that 70% (2011 census) of India's population is rural and agriculture is the main source of livelihood for 50% of the population, Digital India can play an important role in the agriculture sector.

How can the Digital India programme help to improve farm productivity and farmers' income?

1. **Better prices:** The greatest impact of Digital India is on realising better market pricing and reducing transaction costs. It has potential to connect each farmer to anywhere in the country. This would help farmers to cut the cost born to intermediaries and would help to realise better profits.
2. **Virtual ecosystem:** Digital India is important to create a virtual ecosystem to support the delivery of timely, localised information and services to farmers, making agriculture profitable and sustainable. It can help in providing data regarding soil variability, moisture and nutrient levels, rainfall variability, timing of planting and harvesting and market price volatility to farmers.

3. **Tailored recommendations:** Digital technology can be the key to increase agriculture productivity by delivering tailored recommendations to farmers based on crop sown, real time observed weather and projected market prices.
4. **Direct cash transfer:** Digital India will help the government to reach the needy and poor farmers for the Direct cash transfers system replacing agricultural subsidies. This would help in increased agricultural productivity as well as reduce farmer's debt burden. When combined with data infrastructure, subsidies can be validated and targeted to increase farm profitability that in turn give farmers confidence to invest in their farms to further increase productivity.
5. **Social media usage:** Digital India will also leverage social media platforms to build human capacity. One of the best examples of this is Digital Green. It uses participatory videos that have farmers explain best management practices to other farmers. This approach is more cost effective than traditional extension services as farmers trust other farmers. Also, they better relate to someone like them who are building a livelihood under similar circumstances.
6. **Savings:** Mobile money is the intervention that has unlocked tremendous opportunities for rural consumers in Africa. Similarly, initiatives like PM Jan Dhan Yojana, Bhim etc. can play an important role. Digital platforms allow farmers to bypass poor banking infrastructure and support savings and access credit digitally.

Steps taken by the government:

1. **e-NAM:** National Agriculture Market or eNAM is an online trading platform for agricultural commodities in India. The market facilitates farmers, traders and buyers with online trading in commodities. The market is helping in better price discovery and provide facilities for smooth marketing of their produce.
2. **BharatNet:** BharatNet, also known as Bharat Broadband Network Limited, is a set up by the under the Department of Telecommunications for the establishment, management, and operation of the National Optical Fibre Network. It aims to provide connectivity to all 250,000-gram panchayats in the country, to improve communication in India and reach the campaign goal of Digital India.
3. **National mission on agricultural extension and Technology:** The aim of the Mission is to strengthen agricultural extension to enable delivery of appropriate technology and improved agronomic practices to farmers. This is envisaged to be achieved by interactive methods of information dissemination, use of ICT, popularisation of modern technologies, capacity building etc.
4. **AgriMarket app:** The mobile application has been developed with an aim to keep farmers updated with the crop prices and discourage them to carry-out distress sale. Farmers can get information related to prices of crops in markets within 50km of their own device location using the AgriMarket Mobile App.
5. **Bharat Nirman:** Bharat Nirman is an effort for creating and augmenting basic rural infrastructure. This plan aims to supply telecommunication facilities to remote areas of rural areas. It aims to increase the rural telecommunication facilities by 40%. Under Bharat Nirman, has registered the increased tele-density in rural areas.
6. **e-governance efforts:** Government has put in operation 3 portals viz. farmer portal, kisan call centre and mKisan portal to help farmers take informed decisions for efficient farming under varying agro-climatic conditions. Under the eGovernance program, soil health card software has been standardised and web-based software developed to provide integrated nutrient management recommendations using soil test crop response method for eight states.

There is much promise in digital applications to improve farmer livelihoods. Indian agriculture needs to be made more market-oriented through reform in existing policies, even as the government provides enabling environments for digital innovation. Rural connectivity is important for providing low cost data and access to information. It would empower rural youth to realise their full potential and farmers to increase their profitability by accessing equitable markets.

Q.26) Give an account on different strategies for implementation of National Mission for Sustainable Agriculture.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss different strategies for implementation of National Mission for Sustainable Agriculture.

Conclusion. Way forward.

National Mission for Sustainable Agriculture (NMSA) is one of the eight Missions under National Action Plan on Climate Change (NAPCC). It aims at making agriculture more productive, sustainable and climate resilient. NMSA has been formulated for enhancing agricultural productivity especially in rain fed areas focusing on integrated farming, water use efficiency, soil health management and synergising resource conservation.

Different strategies for implementation of National Mission for Sustainable Agriculture:

1. **Integrated farming system:** Integrated Farming System is being promoted under NMSA in which activities like horticulture, livestock, fishery, agroforestry, value addition are to be taken up along with cropping system. It is important for enhancing livelihood opportunities, ensuring food security and minimising risks from crop failure through supplementary production systems.
2. **Adopting Technology:** NMSA seeks to achieve its objectives by popularising resource conservation technologies and introducing practices that will support mitigation efforts in times of extreme climatic events or disasters like prolonged dry spells, floods etc. This is important especially in changing climatic conditions due to global warming.
3. **Water resource management:** Under NMSA it is strategized to focus on effective management of available water resources and enhancing water use efficiency. It will be achieved through application of technologies coupled with demand and supply side management solutions.
4. **Agronomic practices:** NMSA envisage encouragement of improved agronomic practices for higher farm productivity like improved soil treatment, increased water holding capacity, judicious use of chemicals and enhanced soil carbon storage.
5. **Creating Database:** Through creation of database on soil resources by land use survey, soil profile study and soil analysis on GIS (Geographic Information System) platform NMSA seek to facilitate adoption of location and soil-specific crop management practices & optimise fertiliser use.
6. **Integrated Nutrient Management Practices:** For improving soil health, enhancing crop productivity and maintaining quality of land and water resources, NMSA will focus on promoting location and crop specific integrated nutrient management practices.

7. **Involving professionals:** NMSA will involve knowledge institutions and professionals in developing climate change adaptation and mitigation strategies for specific agro-climatic situations and promoting them through appropriate farming systems.
8. **Interventions:** NMSA seeks to disseminate and adopt rainfed technologies with greater reach in disadvantaged areas. It is envisaged to be done by coordination, convergence and leveraging investments from other schemes like MGNREGS, National Food Security Mission, National Mission for Agricultural Extension & Technology etc.

The Mission acknowledges that the risks to the Indian agriculture sector due to climatic variabilities and extreme events would be accentuated. If implemented in letter and spirit it can help the agricultural sector and can help farmers mitigate the developing risks due to climate change.

Q.27) Assess the need and significance of strengthening intra-BRICS trade for Indian economy. What should be done to boost Indian trade with other BRICS countries?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss the need and significance of strengthening intra-BRICS trade for Indian economy. Suggest measures to boost Indian trade with other BRICS countries.

Conclusion. Way forward.

Recently there has been a rise in trade disputes, protectionism and unilateral tendencies. Thus, the relevance and significance of cooperation among BRICS nations has increased. With emphasis on Increasing intra-BRICS trade, BRICS can emerge as five major economic powers of 21st century.

Need and significance for boosting intra-BRICS trade for India:

1. **Economic growth:** The BRICS countries account for over 40% of the world's population and nearly a quarter of global GDP. BRICS countries' can contribute to Indian growth with more trade and investment towards making it a \$5 trillion economy.
2. **To reap full potential:** India has not harnessed the potential offered by the regional cooperation among BRICS. The BRICS market size has grown to US\$ 16.5 trillion in 2015, supported by a large consumer base of over 3 trillion people. Regional cooperation among BRICS can help India to reap this potential and emerge as a superpower.
3. **Global economic threats:** Structural imbalances caused by the global financial crisis and new threats to the global economy posed by trade war and unilateral economic sanctions are threats to Indian economy. In such a situation it is important for India to increase its trade with BRICS partners to safeguard its interests.
4. **Energy resources:** BRICS have an abundance of resources like energy resources in Far East Asia and mineral resources in South Africa. Brazil and Russia are among the world's largest producers and exporters of natural resources. Thus, it is important to increase intra-BRICS trade especially for India to fulfill its energy demands and growth.
5. **Bilateral trade:** Recently, India has rejected the proposal to join Regional Comprehensive Economic Partnership (RCEP). Thus, India needs to balance the lost opportunity of increasing trade through focus on bilateral trade with other BRICS countries.

What should be done?

1. **Reducing trade deficit:** India's trade deficit with the rest of BRICS has increased from US\$ 8.7 billion in 2006, to US\$ 58.4 billion in 2015. To further enhance India's trade with the BRICS countries, and at the same time to address the rising trade deficit, an important strategy would be to focus on India's export to these countries. Such a strategy should also contribute to the overall efforts to enhance India's trade with BRICS.
2. **Reducing administrative hurdles:** It is important to simplify rules and regulations and increase the efficiency of administrative procedures. This will facilitate and accelerate mutual trade and investment.
3. **Transparency:** Efforts must be made to improve the transparency of trade and investment climate. It is important to establish rule-based trade and push for it. Policies and bilateral agreements must be carefully framed with clear rules.
4. **Information exchange:** Enhancing consultations and exchanging information on macroeconomic and trade policies is an important pillar to boost bilateral trade. Efforts must be made to make macroeconomic policies conducive and recipient to changing global order.
5. **Investment:** It is important to encourage trade and investment links between BRICS countries. An emphasis on promoting market access on goods and services amongst BRICS countries is needed along with support of industrial complementarities, sustainable development and inclusive growth.

BRICS countries have made significant progress in integrating with the global economy. However, the share of intra-BRICS trade to its global trade is still as low. Further, intra-BRICS trade is dominated by China on both export and import fronts. BRICS are incrementally increasing their global engagements. India should reap the benefit of this association.

Q.28) Discuss whether the introduction of Bt cotton has benefitted Indian farmers or not. Do you think genetically modified crops can help farmers' cause?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss various benefits and issues regarding use of Bt cotton for Indian farmers. Mention how genetically modified crops can help farmers' cause and various issues with the same.

Conclusion. Way forward.

Genetically Modified Bt cotton was introduced in Indian market in 2002. Bt cotton covers over 95% of the area under cotton, with the seeds produced entirely by the private sector. It has played an important role in increasing India's cotton production. However, Bt cotton is criticised for negatively impacting livelihoods of poor farmers and favouring private seed industry more.

How Bt cotton has benefitted Indian farmers?

1. **Increased yields:** A number of studies revealed that farmers have benefited from adopting Bt cotton technology through increased yields and reduced pesticide costs. Substantial yield increases are attributed to decreased pest damages. A study

conducted by the Council for Social Development on Bt cotton, states that Bt cotton has enhanced yield of cotton by 4.95%.

2. **More net profit:** In spite of higher costs of Bt cotton seed, reduced pesticide use and reduced costs associated with pesticide, led to less expenditures on seed. This has provided farmers with more profit through less overall spending.
3. **Increased quality of life:** Bt cotton has improved quality of life due to increased income and better health due to less pesticide exposure. The higher returns, in turn, have enabled farmers to spend more on health, education, nutritious food and social needs, which has improved their standard of living.
4. **Women employment:** Bt cotton has provided more work to women. More cotton seed fluff needs to be picked during the harvest and cotton picking which is traditionally a woman's job in India. Many farmer's wives also process some of the cotton to cotton thread.

Concerns regarding Bt cotton:

1. **No benefit to small farmers:** The large farmers benefit most from Bt cotton. A study by August University said that income for large farmers in India has increased by 300 %. Poor and small farmers find it difficult to obtain the correct information and education, to have access to adequate infrastructure and to affordable credit for Bt cotton.
2. **Lobbying:** Indian government had set maximum retail prices for Bt seeds. This price is said to be the outcome of a strong political lobbying process rather than the result of objective analyses of a reasonable price level. The impact of the price controls on aggregate technology adoption is relatively small on poor farmers.
3. **Costly seed:** Bt cotton is a hybrid and thus for every cultivation its seed has to be bought by farmers. Due to the lack of affordable credit, most farmers have to borrow from non-official and uncontrolled money lenders, sometimes resulting in exorbitant interest rates. This has led to reduced profits especially for poor who find it tough to repay.
4. **Unsuitable expansion:** The expansion of the cotton area to regions less suitable to cotton has an adverse effect on farmers. The cotton harvest is doomed to fail in these areas, regardless of whether the crop is Bt cotton or conventional cotton. India had no social security system in the event of disappointing harvests that resulted in financial hardship for farmers.

Genetically modified crops can help farmers' cause:

Arguments in favour	Arguments against
Increased crop yields: It is said that GM seeds will increase the yields of farmers that adopt the technology. This means more income to farmers.	Costly seeds: GM crops are grown in laboratories and are costly to produce. Thus GM seeds would be costly especially to poor farmers and would not help them much.
Less use of pesticides: As adoption of GM seeds increases, the use of chemical pesticides and herbicides (and the costs associated with their application) will decrease.	Monoculture practices: Use of genetically modified crops will hurt the environment and soil health, because of monoculture practices. This will reduce agricultural productivity of soil and yield will be reduced.
Soil health: Mechanical weeding is one of the causes of top-soil erosion. Weeds rob nutrients from crops. GM crops are able to tolerate exposure to herbicides. Thus, GM	Development of resistant weeds and insects: Use of GM seeds might create superweeds or superbugs that, over time, become resistant to GM seeds and crops

crops promote no-till or conservation tillage. With less or no tilling, there would be less soil erosion and more yield.	and to other herbicides and pesticides. A recent study documented a decreased susceptibility in pests to the use of Bt as a sprayed pesticide.
Climate adaptation: Some GM crops can help protect harvests in water-limited conditions and drought-stricken areas. This would benefit many farmers in climate change and will help to grow crops in drought-like conditions.	Harm to soil friendly organisms: Other possible harm of GM seeds and crops is harm to other beneficial organisms. A study performed at Cornell University indicated that a gene contained within Bt corn can be harmful to the larvae of a monarch butterfly.

GM crops although have many benefits as was seen in the success of Bt cotton. But it may not help small farmers, unless seed prices are made affordable. It is expected that more GM crops engineered for agriculture will be developed in the near future, but its adoption needs careful thought.

Q.29) The 'Act East' policy has not brought the expected gains for India. Do you agree?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss progress made under Act East policy. Mention various concerns regarding Act East policy.

Conclusion. Way forward.

India's Act East policy is an effort of India to cultivate extensive economic and strategic relations with the nations of Southeast Asia. It is the successor of Look East policy and aims to further strengthen India's relation with East Asia. India's focus under Act East remains on enhancing economic relations with ASEAN and greater infrastructural connectivity, regional development in northeastern India and foreign direct investment.

Progress made under Act East Policy:

1. **Engagement with ASEAN:** ASEAN-India engagement has become deeper and has scaled new heights. India is now the 4th largest trading partner of ASEAN. Southeast Asian countries favour India's increased involvement to counter China's expansionist policies in the region. India has allocated \$1 billion for promoting connectivity at the India-ASEAN Summit.
2. **Strong relations: with neighbours:** India has not only developed strong bilateral relations with countries such as Bangladesh, Mauritius, Myanmar, Sri Lanka, Singapore, Vietnam, etc. but also steering a number of sub-regional programmes and projects such as the BBIN, Myanmar-Thailand Trilateral Highway etc. and is actively contributing to the success of several regional initiatives.
3. **North-East investment:** The Act East Policy focuses mainly on the Northeast region. Recently, Japan has shown interest in investing in the North-East. The Government of Japan has decided to invest around Rs 13,000 Crore in several ongoing as well as new projects in different states of India's North- Eastern region.
4. **Security Engagement:** Defence cooperation has increased with East Asian countries. In 2014, India and Vietnam signed a Memorandum of Understanding (MOU) that

opened up a line of credit for Vietnam to purchase defense equipment from India. Since 2015, India has carried out joint maritime-law enforcement patrols and military exercises with ASEAN countries.

5. **Far East involvement:** Recently, India has reached out to Far East economies especially Russia. India has announced to extend a \$1 billion line of credit towards the development of the Russian Far East. This is important as it is an energy rich region and would help India's economic growth.

Various concerns:

1. **China's influence:** The rising influence of China in Southeast Asia and the Indian Ocean Region poses a direct geopolitical challenge to India. The Act East Policy has been less effective in tackling China's influence in the region.
2. **Trade deficit with ASEAN:** The share of ASEAN in India's total trade deficit increased from about 7% to 12% during the last decade. Among the 15 RCEP countries, India faces trade deficits with all except Laos, Cambodia, Myanmar and the Philippines. China, accounts for 60% of the total deficit.
3. **RCEP failure:** Act East Policy has not been able to garner support of various countries in removing issues regarding RCEP that concerned India. India became the only exception with withdrawal from the regional trade deal due to failure of extensive negotiations regarding Regional Comprehensive Economic Partnership (RCEP).
4. **Limited economic engagement:** In contrast to the great progress in the field of defence and security cooperation, important economic agreements signed between India and East Asian countries are rather scarce. So far, India has only signed a memorandum of cooperation on oceans and fisheries with South Korea.

Act East policy is important for Indian economy. It is important that India must come up with a more sincere cooperation policy. To truly integrate into the Asia-Pacific economy, India must cooperate with East Asia and Southeast Asian countries in various fields such as culture, economy and politics. India should take the initiative to seek changes to the current situation. Only cooperation can bring a win-win result.

Q.30) Give an account of coral reef In India. Why are coral reefs so important? Discuss various methods of coral restoration.

Ans.

Demand of the question

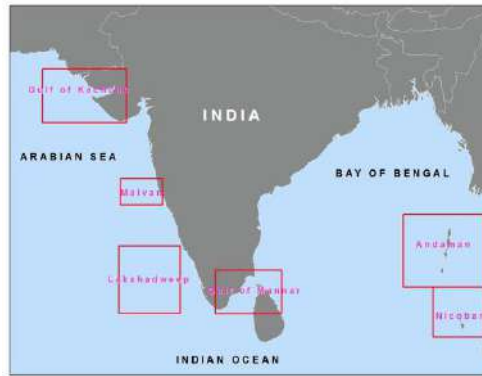
Introduction. Contextual Introduction.

Body. Discuss various coral reef In India. Significance of coral reefs. Explain various methods of coral restoration.

Conclusion. Way forward.

Coral reefs are one of the most biologically diverse marine ecosystems on the Earth. Coral reefs play an important role in marine ecosystems and support the habitats of flora and fauna in the sea. The vast diversity of animal and plant species that contributes to its system are increasingly at risk due to climate change. India with its coastline extending over 7,500 km and subtropical climatic conditions has very few coral reef areas.

Coral reefs in India: The mainland coast of India has two widely separated areas containing reefs:



1. **Gulf of kutch and Mannar:** The Gulf of Kutch in the north west, has some of the most northerly reefs in the world. Palk Bay and the Gulf of Mannar with numerous fringing reefs around small islands in the south east also have coral reefs.
2. **Coral Islands:** Important offshore island groups of India with extensive reef growth include the Andaman and Nicobar Islands in the Bay of Bengal and the Lakshadweep group of Islands in the Arabian sea. The Andaman and Nicobar Islands have fringing reefs (reefs that grow close to the shore and extend out into the sea like a submerged platform) and a 320 km long barrier reef on the west coast. The Lakshadweep Islands are made up of atolls (a roughly circular ring of reefs surrounding a lagoon).
3. **Other regions:** There are patches of reef in the intertidal areas of the central west coast of the country. Coral patches have been recorded in the intertidal regions of Ratnagiri, Malvan and Redi, south of Bombay and at the Gaveshana Bank of Mangalore. Hermatypic corals are found along the shore in the Kerala coast and in Tamilnadu.

Importance of coral reefs:

1. **Sustain biodiversity:** Ecologically, coral reefs are important because they are the counterpart to the tropical rain forest in terms of species diversity and biological productivity in the Ocean. Coral reef enables the formation of associated eco-systems which allow the formation of essential habitats, fisheries and livelihoods.
2. **Protect coastlines:** Coral reefs protect coastlines from the damaging effects of wave action and tropical storms.
3. **Nutrition and Habitat:** Coral reefs provide habitats and shelter for many marine organisms. They are the source of nitrogen and other essential nutrients for marine food chains and assist in carbon and nitrogen fixing
4. **Economic:** The fishing industry depends on coral reefs because many fish spawn there and juvenile fish spend time there before making their way to the open sea. The Great Barrier Reef generates more than 1.5 billion dollars every year for the Australian economy, from fishing and tourism.
5. **Climate change record:** In addition, coral reefs are climatologically important because they provide an accurate long-term record of the climate change and help in extending our knowledge of seasonal climate variability in many remote tropical oceans.

Methods of coral restoration:

1. **Biological restoration:** Biological restoration uses various methods involving coral growth and transplanting to assist the restoration of a coral reef. It includes:
 - **Asexual propagation:** It involves the transplanting of coral fragments or larger colonies from a donor reef site to a reef of choice, most commonly a degraded reef.

- **Coral Gardening:** Coral gardening is the process of collecting, growing and reattaching coral fragments at a degraded reef site.
- 2. **Structural restoration:** Structural restoration generally involves the construction of artificial reefs, sinking of wrecks, or relocation of rocks/dead coral heads. The goal is to increase the amount of reef structure and habitat available for the corals and other reef organisms to grow on.
- 3. **Physical restoration:** Physical restoration involves addressing the conditions in which the corals are growing to improve their health, growth rates, or reproductive ability. These methods have generally been developed more recently, and some are still in the experimental stages.

Coral reefs are an important part of the ecosystem. It has not only ecological significance but is an important indicator of environmental health. Recent rise in coral bleaching has raised various concerns and efforts have been made to restore the same.

Q.31) How does illegal trans-border migration pose a threat to India's security? Discuss the strategies to curb this, bringing out the factors which give impetus to such migration.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss how illegal trans-border migration is a threat to India's security. Mention various factors which give impetus to illegal immigration and strategies to curb this.

Conclusion. Way forward.

Illegal migration refers to the migration of people across national borders in a way that violates the immigration laws of the destination country. India has been witnessing immigration since independence. People who have faced religious and political persecution, economic and social discrimination, cultural repression and curbs on personal freedom have made India their home. Of all kinds of migration, illegal migration has become the most volatile and contentious issue in Indian polity today because of the socio-political conflicts it has brought in its wake.

Illegal trans-border migration- a threat to India's security:

1. **Clashes due to Insecurity:** Illegal migration has resulted in periodic clashes between the citizens of India and migrants, leading to their loss of life and property, and thereby violating their constitutional rights. This has led to a feeling of dissatisfaction and anger among locals against immigrants and state for not taking any action against migrants.
2. **Disturbance in Law and Order:** The rule of law and integrity of the country are undermined by the illegal migrants who are engaged in illegal and anti-national activities, such as entering the country fraudulently acquiring identity cards, exercising voting rights in India and resorting to trans-border smuggling and other crimes.
3. **Rise of Militancy:** The persistent attacks against the Muslims perceived as illegal migrants in Assam has given way to radicalisation within certain sections of the Muslim community. The formation of militant organisations, such as the Muslim United Liberation Tigers of Assam (MULTA) is a threat to national security.
4. **Human trafficking:** In the recent decades, trafficking of women and human smuggling have become quite rampant across the borders. The Centre for Women and Children Studies estimated that 27,000 Bangladeshis have been forced into prostitution in India.

Poverty and hunger forces either the parents to sell the girls to traffickers or the girls themselves leave home and fall prey to traffickers.

5. **Terrorism:** Marginalization of the indigenous peoples in their own states as a result of demographic pressure exerted by immigrants had given rise to many protest movements in the region. An off-shoot of such movements is the emergence of many insurgent groups in the states like Tripura and Assam that created internal security problems for the Government. The influx of foreign nationals also created deep security concerns mainly in view of infiltration by the Islamic terrorists to foment trouble within India. Existence of many Islamic terrorist groups and collusive networks in Assam adds alarming dimension to India's security problem.

Factors which give impetus to illegal immigration:

1. **Political Factors:** Political factors have been one of the major reasons in forcing the Bangladeshi and Pakistani Hindus out of the country and into India. Besides riots and war, discriminatory land laws were another reason for immigration. At the same time, availability of land, better economic opportunities, education and health facilities and a similar cultural landscape have attracted these migrants to settle in India.
2. **Religious Discrimination:** In Bangladesh, the already discriminatory land laws were further manipulated by vested interest groups and corrupt administrators to dispossess and alienate the Hindus from their own land and property. Religion has a particular effect in the case of the Rohingya Crisis.
3. **Growing Population:** Growing population creates greater demands on resources such as land, food, energy, water and forest products, and their consequent overuse results in deterioration of quality. This process, in turn, encourages inequality in resource distribution among the rich and poor as the rich corner them and deny the poor their share.
4. **Stagnant Economic Growth and Lack of Employment:** Industrialisation in India's neighbouring countries has not been able to keep pace with the growing labour force and as a result, the unemployment rate is declining. The working-age people who are unable to find jobs in the country look outside for employment opportunities.
5. **Porous Borders:** India shares a long and porous international border with Bangladesh, Nepal and Bhutan. The border traverses a range of natural and cultural landscapes, which pose a challenge to its effective management.

Strategies to curb illegal immigration:

1. **Tighter Border Controls:** The first step towards addressing the issue of illegal migration is not to allow persons to cross the international border without authorisation. For this purpose, border controls need to be made tighter to deter aliens from illegally crossing the borders.
2. **Strengthening Border Surveillance:** Despite experiencing continuous illegal migration, India's border had remained poorly guarded. While some efforts for strengthening border controls along the border were envisaged, no concrete steps were taken to secure the border against illegal migration. Augmenting the presence of the BSF along the border to effectively man the border is an important step towards better border surveillance.
3. **Border Fencing:** Border fencing as a potential tool to prevent illegal migration. The international border shall be made secure against future infiltration by erection of physical barriers like barbed wire fencing and other obstacles at appropriate places. Further roads should be constructed to facilitate patrolling by the security forces and all effective measures should be undertaken to prevent infiltrators crossing or attempting to cross the international border.

Illegal migration into India has continued unabated since independence. As lakhs of undocumented migrants fleeing either politico-religious persecution or economic deprivation crossed the border and settled in the border states of India, it created conflict between the host population and the immigrants. Thus, it is important to tackle the issue of illegal migration very carefully in order to safeguard India's interests.

Q.32) Discuss the need and significance of recent railways reforms. Examine whether private roles in railways should be increased.

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss the need and significance of the railway reforms. Mention various benefits of privatisation in railways and related concerns.

Conclusion. Way forward.

Indian Railways (IR) has the 4th longest rail network in the world. It is a network of 70,000 km and runs about 21,000 trains, carrying 23 million passengers and 3 million tonnes of freight per day. Government has set a vision of making railways a 100% safe, fast and reliable mode of transport for passengers and freight. The plan is to modernise the entire network. The recent step of creating an Indian Railway Management Service will help in this objective.

Need and significance of the railway reforms:

1. **Economic development:** Reforms are needed in IR to ensure that it meets the requirements of a soon-to-be \$5 trillion economy. To contribute comprehensively in Indian development IR needs administrative reforms, to improve services and efficiency and engineering reforms, to improve cost and environmental effectiveness.
2. **Departmentalism:** The Railway Board is IR's apex decision-making body. It is organised into various departments like mechanical, electrical, traffic and finance that are vertically separated from the top to bottom. These lines of separation made IR a complex over-departmentalised organisation with inefficient decision-making. Recent reforms of IR restructuring involving unification of existing Group A services into an Indian Railway Management Service (IRMS) and reorganisation of the Railway Board is a right step.
3. **Administrative reforms:** The management organization needs to be radically simplified. The Debroy committee's recommendation to separate the core functions (rail operations) of IR from the non-core (medical, schools, protection force, etc.) makes eminent sense. The Debroy committee also recommends a revised governance structure that is empowered to make decisions and create some distance from the government.
4. **Modernisation:** Indian Railways has not been able to keep pace with modernisation of infrastructure and services and has not been able to expand at the pace that India needs. Almost all arms of the railways require modernisation of equipment, processes and training, all of which are still continuing as they have been, through the decades. The result is that the railways continue to be a drain on the exchequer, while continuing to provide vital services inefficiently.
5. **Safety:** In India rail accidents are high. In 2018-19, railways recorded 16 deaths, 28 deaths in 2017-2018 and 195 deaths during 2016-2017. The Kakodkar committee had suggested investing Rs 1 lakh crore over a 5-year period and the creation of a statutory railway safety authority.

Advantages of increased private players in railways:

1. **Monetisation:** Railways owns large tracts of land along its tracks, in various parts of the country and this can be optimally monetised by inviting private players to invest, build and manage properties that may be developed on these lands.
2. **Enhanced infrastructure:** One of the strongest arguments in support of the privatisation is better infrastructure. It will give an end to some of the serious problems like poor sanitation, poor quality of food, safekeeping around stations, etc.
3. **Maintenance:** Private ownership is synonymous with better maintenance; thus, it will reduce the number of accidents, resulting in safe travel and higher monetary savings in the long run.
4. **Increased efficiency:** The main argument for privatisation is that private companies have a profit incentive to cut costs and be more efficient. A private firm is interested in making a profit, and so it is more likely to cut costs and be efficient. It is argued that a private firm has pressure from shareholders to perform efficiently. If the firm is inefficient then the firm could be subject to a takeover. A state-owned firm doesn't have this pressure and so it is easier for them to be inefficient.
5. **Less political interference:** With the presence of private investors in Indian Railways, there would be less political intervention. In the current scenario, the majority of public-sector enterprises in India are working under political pressure.

Related concerns:

1. **Hike in ticket fare:** With privatisation, there would be a hike in the ticket prices as private operators would seek to earn maximum profit. The poor sections of society will not be able to afford the ticket prices of trains.
2. **Social cost:** Indian Railways provide special concessions to women, old, disabled, defence etc. If railways get privatised then there might be a possibility that such concessions will not be given to the people.
3. **Accessibility:** Indian Railways connects even the remotest parts of India. It is making constant efforts to make it accessible to remote places. In case, railways will be run by private operators then there are chances that it will not be running in the remote areas as it will generate less profit from such areas.

Global experience in privatising railways services has been mixed. So it is essential to tread with caution. Bibek Debroy committee has suggested privatisation of some operations in Indian railways. In order to keep Indian Railways affordable for the lower strata of the society (post privatisation), the government must offer subsidies and tax incentives to companies that would provide low cost services, similar to low cost airlines, to these very pockets of population. This in the long run would make the railway network more efficient and affordable.

Q.33) Discuss India's achievements in the field of Space Science and Technology. How the application of this technology has helped India in its socio-economic development?

Ans.

Demand of the question

Introduction. Contextual introduction.

Body. Discuss various achievements of India in Space S&T. Discuss socio-economic development through application of space technology

Conclusion. Way forward.

India has become a significant global player in space science and technological (S&T). From a modest beginning in the 1960s, India's space programme has grown steadily, achieving significant milestones. These include fabrication of satellites, space-launch vehicles, and a range of associated capabilities.

Achievements in Space S&T:

1. **Telecommunication:** The first area of achievement was satellite communication, with INSAT and GSAT as the backbones. This cater to the national needs for telecommunication, broadcasting and broadband infrastructure. Gradually, bigger satellites have been built carrying a larger array of transponders. About 200 transponders on Indian satellites provide services linked to areas like telecommunication, television, broadband, radio, disaster management and search and rescue services.
2. **Satellite Based Navigation Applications:** With the satellite constellation established, NavIC system is now fully available for position, navigation and timing solution and for derived location-based services. NavIC signal can be extensively used in a variety of civil and commercial activities related to land transportation, aviation, maritime, scientific research etc.
3. **Remote Sensing and National Natural Resource Management System:** The Indian Remote Sensing Satellites (IRS) System, with currently 11 satellites in orbit, is one of the largest constellations of remote sensing satellites in operation in the world today. It provides inputs for management of natural resources and various developmental projects across the country using space-based imagery.
4. **Mars Orbiter Mission:** India's first interplanetary mission, the Mars Orbiter Spacecraft was successfully launched on PSLV-C25. It made India become one of the four nations in the world to send a space mission to Planet Mars. Mars Orbiter Mission is mainly intended to establish the Indian technological capability to reach Martian orbit and to explore Mars surface features, morphology, mineralogy and Martian atmosphere by indigenous scientific instruments.
5. **Lunar mission:** India's maiden moon exploration mission 'Chandrayaan-1' was launched in 2008 for mapping the lunar surface with high resolution remote sensing and study the chemical and mineralogical composition. This mission has led to the detection of the presence of water molecules on the lunar surface, which has set new directions of lunar explorations in the global community. Recently Chandrayaan 2 successfully put an orbiter in the moon's orbit.
6. **Cryogenic technology:** India has successfully achieved flight testing of indigenous cryogenic stage. Geosynchronous Satellite Launch Vehicle (GSLV) is capable of placing 2 Tonne class communication satellite into Geosynchronous Transfer Orbit (GTO) and India is one among six countries in the world to demonstrate such launch capability to GTO with the use of complex cryogenic technology.

7. **Space Capsule Recovery:** A leap-frog in Indian Launch Vehicle Technology was achieved in 2007 through the Space Capsule Recovery Experiment Mission which established India's technological capability to recover an orbiting satellite with precise re-entry trajectories.

Socio-economic development through application of space technology:

1. **Economic growth:** Satellite communications, navigation systems, earth observation missions, space science and technology research all create employment, boost economic growth and help make industries more competitive in an intense global market.
2. **Telemedicine:** The Telemedicine programme connects remote/rural hospitals through the Indian satellites to major specialty hospitals in cities and towns. The telemedicine technology utilises Information & Communication Technology (ICT) based system consisting of customised medical software integrated with computer hardware along with medical diagnostic instruments connected to VSATs. Presently, around 165 Telemedicine nodes are operational across the country.
3. **Tele-education:** Under Tele-education programme, the teaching sessions conducted from customised studio are telecast through satellite to schools and colleges. It has manifold benefits by imparting effective teacher training, providing access to experienced resource persons, and thus resulting in effective delivery of quality education to the nook and corners.
4. **Resource mapping:** Survey of various mineral and natural resources have been made possible through remote sensing. Management of these resources, their development conservation and formulation of various policies through remote sensing has helped economic growth.
5. **Rural development:** Bhuvan based application (GeoMNRGA), is being employed for monitoring of rural development activities under major schemes of the Ministry of Rural Development. Geo-MGNREGA has entered the second Phase wherein asset implementation is monitored using Bhuvan app for site selection, during asset creation and also after the creation of the asset.
6. **Agricultural services:** Various meteorological services including information about monsoon, climate flood, cyclonic activities etc. are provided through the technologies. Green revolution had been made possible through this technology. Coordinated programme on Horticulture Assessment & Management (CHAMAN) has been completed using geoinformatics for faster and efficient collection of ground information, as well as in building up a geodatabase through Bhuvan platform.
7. **Environmental conservation:** They have helped in environment conservation programmes estimation of agricultural production and water resources information. Monitoring & Assessment of Ecosystem Processes in North-West Himalayas is done to understand various processes related to mountain ecosystem, & climate change induced impacts.
8. **Water conservation:** Integrated Watershed Management Programme (IWMP) is a flagship programme of the Department of Land Resources. Using multi-temporal IRS high resolution (Cartosat-2 and Resourcesat) data, the monitoring of IWMP Projects is being carried out at National level. Bhuvan based GIS tool, called SRISHTI is used for monitoring and evaluation of the watersheds.

Today, ISRO's abilities have increased multifold. However, demand for space-based services in India is far greater than what ISRO can supply. Private sector investment is critical, for which a suitable policy environment needs to be created. There is growing realisation that national legislation is needed to ensure overall growth of the space sector. The government has an opportunity to give priority to the private sector and the start-ups.

General Studies 4

Q.1) What is 'emotional intelligence' and how can it be developed in people? How does it help an individual in making ethical decisions?

Ans.

Demand of the question

Introduction. What is emotional intelligence?

Body. Discuss how can it be developed in people? Discuss how does it help an individual in making ethical decisions?

Conclusion. Way forward.

Emotional intelligence (EI) is the capability of a person to assess, manage and control one's own emotions as well as emotions of others. It is critical to manage our behaviour and decision making. It has 5 components- self-awareness, self-regulation, motivation, empathy and social skills. These 5 components are important to develop emotional intelligence among people.

How emotional intelligence can be developed in people?

The skills that make up emotional intelligence can be learned at any time. The key skills for building emotional intelligence can be built by:

1. **Self-awareness:** Self-awareness ability allow an individual to know his/her strengths and weaknesses. This help in managing emotions through using his/her strengths and working upon weakness.
2. **Developing Empathy:** Having empathy is critical to understand and manage emotions of other people. Ability to recognize others' emotions help individual to act accordingly. It helps them to understand their colleagues' feelings and perspectives, which enables them to communicate and collaborate more effectively with their peers.
3. **Stress management:** It's important that one must learn how to manage stress first, so that he can feel more comfortable reconnecting to strong or unpleasant emotions and changing how you experience and respond to your feelings. A person can develop your emotional awareness by practicing mindfulness meditation.
4. **Effective Communication:** An effective communication can help people to develop better strategies and increase their efficiency by synchronising their efforts. By motivating others to communicate how they feel, can help them to know themselves better.
5. **Training to adapt:** People should be able to adapt to changing circumstances. This can be achieved by training to manage different situations. Ability to understand and manage their emotions and of those around them help emotionally intelligent leaders to navigate through difficult circumstances.
6. **Taking responsibility:** Take responsibility for one's actions is a part of emotional intelligence. One must develop courage to accept his/her deeds. This enables a person to better accept his/her faults and work upon them ultimately leading to emotional intelligence.
7. **Mindfulness:** Mindfulness is the practice of purposely focusing your attention on the present moment and without judgment. The cultivation of mindfulness can be achieved by yoga or meditation technique. Mindfulness helps shift ones' preoccupation with thought toward an appreciation of the moment, physical and emotional sensations, and brings a larger perspective on life.

How does it help an individual in making ethical decisions?

1. **Informed decision making:** Emotions help inform decisions by allowing the decision maker to anticipate the positive and negative emotional consequences of a particular decision on the decision maker and on others. The ability to read others' emotions, is critical in responding to others' feelings.
2. **Empathy:** More empathic individuals make more ethical decisions because they take into consideration the reactions and feelings of those impacted by the decision. The tendency to feel another's pain help the decision maker to make ethical decisions.
3. **Moral decisions:** Ability to regulate emotion helps a decision maker monitor his/her own emotional state, and serves to inform about whether a particular decision feels good or bad. This ability could be used to regulate emotions productively toward more situations.
4. **Conflict resolution:** Emotional Intelligence help individuals in resolving conflict effectively. It enables a person to visualise the effect of his decisions on him and others and help him to manage negative emotions like greed and anger.
5. **Objective Decision making:** Emotionally Intelligent person make objective decisions based on accumulated wisdom and understanding with time. A person who manages his or her emotions will take quick and strong decisions without emotions being involved after proper cost-benefit analysis.

Emotional intelligence is critical for effective decision making. It plays an important role in driving an organisation together towards a goal and help in conflict resolution. It enables a leader to be more empathetic, professional, understanding and goal oriented. Now-a-days, organizations take initiative to improve Emotional Intelligence among its employees through different group activities, exercises, seminars and tests. However, EI also improves with age (maturity) due to one's experiences in life.

Q.2) What is Corporate Governance? What are the weaknesses in corporate governance in India? Also, discuss the importance of ethically-based corporate governance.

Ans.

Demand of the question

Introduction. What is Corporate Governance?

Body. Weaknesses in corporate governance in India. Importance of ethically-based corporate governance.

Conclusion. Way forward.

Corporate Governance refers to the way a corporation is governed and managed. The Organization for Economic Co-operation and Development (OECD) defines corporate governance as 'procedures and processes according to which an organization is directed and controlled'. Negligence of business ethics in corporate governance is a responsible factor for the failure of corporate. There have been many instances of failure and scams in the corporate sector in India due to the absence of good corporate governance e.g. Satyam scam.

Weaknesses in corporate governance in India:

1. **Concentration of powers:** Ownership of corporations in India, is still held in a few hands. A single shareholder or family controls a large group of companies. This leads to several governance related challenges and has often led to poor decision making that harms company's profits.

2. **Board directors:** Independent directors were supposed to be the biggest corporate governance reform. However, they have hardly been able to make the desired impact due to the passive role played by them on board. The frequent removal of directors by promoters of the company is an issue. This has not been addressed effectively yet, despite the strengthening of the regulations regarding independent directors.

3. **No Proper Structure:** Corporate Governance has no proper structure or design and is largely ambiguous. There is still a lack of awareness about various issues like compliance with rules and regulations, roles and responsibilities of Board of Directors, shareholder's rights, etc. This leads to poor governance and impacts the working of companies.

4. **Insider Trading:** Corporate insiders like officers, directors and employees by the virtue of their position have access to confidential information. Many misappropriate that information to reap profits. SEBI lacks the thorough investigative mechanism and a vigilant approach due to which the culprits are able to escape. In most of the cases, SEBI failed to produce evidence and corroborate its stance before the court.

5. **Noncompliance with disclosure norms:** Noncompliance with disclosure norms is common in Indian businesses with hardly any punitive action. While the Companies Act provides clear instructions for maintaining and updating registers, in reality minority shareholders have often suffered from irregularities in share transfers.

6. **Family-owned business:** Many Indian businesses are old family establishments. With the growth of family and its business, there is an increase in inefficiencies and internal conflicts that threaten the continuity of the business. Family control also brings governance problems like a lack of checks and balances over executive decision making and a lack of transparent reporting.

Importance of ethically-based corporate governance:

1. **Profits:** Ethical Corporate Governance helps in growing the reputation of a company and thus, increase the profits. It leads to better relationships among stakeholders that enhances performance of organisations.

2. **Investment:** Robust governance practices are imperative for companies to create positive sentiment in the minds of investors and the public at large. An ethically-based corporate governance leads to more trust in the organisation and its work culture leading to more investors' interest.

3. **Employees' motivation:** Good corporate ethics improves the situations of the employee. It leads to higher retention and better morale. It also leads to a more effective recruitment process, loyalty, motivation, and productivity in the company.

4. **Customer relationships:** Customer relationships are also improved. Ethical governance increases customer loyalty, enhances brand image, and cater to customers service and satisfaction. With ethical business practices, complaints and issues of customers are solved transparently leading to trust in the corporation.

5. **Business performance:** Good corporate ethics also enhances overall business performance, particularly leading to improved competitive advantage through good governance, higher financial returns, and better reputation.

Way forward:

1. **Responsibilities of the Board:** The corporate governance framework should ensure the effective monitoring by the board and the board's accountability to the company and the shareholders.

2. **Objective performance evaluation:** Privileges and compensation of executive directors should be based on an objective performance evaluation process conducted by the board.

3. **Enhancing objectivity:** A code of conduct and code of corporate governance should be put in place in order to dictate desired behaviour.

3. **Relations with Shareholders:** The board should be responsible for ensuring that an appropriate dialogue takes place among the organisation and its shareholders. The corporate governance framework should ensure the equitable treatment of all shareholders, including minority and foreign shareholders.

4. **Effective internal audit function:** An effective audit mechanism should be in place to prevent insider trading. Both the board and the management should establish formal and transparent arrangements to appoint and maintain an appropriate relationship with the organisation's auditors.

5. **Transparency:** The corporate governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company.

Corporate governance is very essential for overall growth of the companies. Ethical culture can be regarded as the insurance for successful business. So for good corporate governance ethics is essential. It is every company's moral duty to implement the ethical codes in their business.

Q.3) Young people with ethical conduct are not willing to come forward to join active politics. Suggest steps to motivate them to come forward.

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Why are ethical people not willing to come forward to join active politics? Steps needed to motivate youth to join active politics.

Conclusion. Way forward.

India is a young democracy with 65% of the population below 35 years of age. Despite favouring demography, youth play a very minimal role in active politics. As per the 2014 data, India still elects the oldest cabinet, and only 12 Members of Parliament are below 30 years of age. The inclusion of youth with ethical conduct in formal politics is important. With involvement of youth with moral conduct, fresh ideas and new leadership help to overcome authoritarian practices. Politics should not be seen as the participation of experienced and old people only.

Why are ethical people not willing to come forward to join active politics?

1. **High entry barrier:** Entry into the role of full-time politicians is difficult. It demands money to win elections. Further, politicians use muscle power to prevent entry of good people to enter politics.

2. **Social stigma:** Politicians are viewed as corrupt and evil. Therefore, it is not the aspiration of people to become one. This is a rare exception that someone encourages his/her child to become a politician.

3. **Family discouragement:** India follows a family system. Most families in India discourage their relatives from joining politics due to the poor image of politicians and fear of harm to family by criminal politicians.

3. **Risk of failures:** The chances of failure of high and very few people become successful. Further, many have a deep psychological fear of going into jail, getting mocked and so on. These are part of a politician's life however it discourages people from entering politics.

4. **Perception:** General perception of a common man about a politician is someone who is deceptive and corrupt. So, people from well to do fields tend to avoid themselves being listed in categories of politicians.

6. **Dirty politics:** Nowadays parties play all kinds of tricks to prevent the entry of good people. Many fail to enter due to dirty politics and due to fear of harm to good image. Unethical practices have become the norm in politics in contrast to the practice of morality in politics.

Following steps can be taken to motivate youth to join active politics:

1. **Rewards:** There should be significantly better rewards and incentives in place for joining politics and for displaying ethical behaviour. A significant increase in wages of MPs and MLAs while getting rid of all of the perks can help in achieving so.
2. **Dismantling barriers:** We then need to work on the challenge of dismantling barriers to entry. For example, the enormous amount of money is now required to contest almost any MLA or MP election. For this state funding can be explored.
3. **Election reforms:** Electoral reforms have to be top priority. Electoral spending & campaign finance are at the heart of large-scale corruption in India. A lot of people do not join politics due to this. So, we need better accounting and tighter auditing of electoral funding.
4. **Youth parliament:** It must be conducted regularly to instil interest in political issues and desire to become political leader. Many people lack knowledge of such platforms. Thus, awareness campaigns regarding youth parliaments must be made especially at grass-root levels.
5. **University elections:** Elections in Indian universities are a glimpse of national politics. University elections need reforms like non-involvement of political parties and strict vigilance over use of money and muscle power. This will encourage good students to join politics.
6. **Emotional motivation:** Good people must be motivated by rousing the feeling of patriotism and projecting politics and a means to express the value of the love for nation.
7. **Role modelling:** Youth must be motivated by highlighting the stature and role of important leaders like Mahatma Gandhi, Netaji Subhash Chandra Bose and Lal Bahadur Shastri etc. in nation building. It is important to make youth aware of the struggle these leaders faced for the country.

The country needs some young leaders with enthusiasm, morality and diligence in Indian politics. At the time of independence, many youths like Jawaharlal Nehru participated actively in the active politics and freedom movement. But the scenario is completely different now. Nowadays, we only have a handful of young leaders. The majority of the youngsters only view politics as a dirty game, and do not want to enter into it.

Q.4) "The good of an individual is contained in the good of all." What do you understand by this statement? How can this principle be implemented in public life?

Ans.

Demand of the question

Introduction. Contextual Introduction.

Body. Discuss how good of an individual is contained in the good of all? How can this principle be implemented in public life?

Conclusion. Way forward.

"The good of an individual is contained in the good of all" means that the good of an individual lie in the good of all people of the society. In other words, the progress of the whole society is good for everyone. Sabka sath sabka vikas is a concept inherent which reflects that with the support of each individual, every individual grows in a society. Good of all is inherently for an individual as, a society can grow only when all members of society are part of this growth.

How good of an individual is contained in the good of all?

1. **Inclusive growth:** When a society grows inclusively, it leads to growth of all. Inclusive growth lead to a peaceful stable rise of a society and reduces inequalities. This in a way is good for an individual as it saves government spending for social upliftment which can be used to develop services like infrastructure, roads, railways which are good for anyone.
2. **Develop trust:** When all grow and good happens to everyone, a sense of trust is developed among citizens and state. Citizens trust their government and feelings of distrust, secession from state, hatred against society reduces which is good for everyone in the country.
3. **Reduce hopelessness:** With the good of every individual, sense of hopelessness is reduced. An individual hope to grow and work productively for his own growth and nation's growth. Thus, lead to overall growth of every individual.
4. **Social cohesion:** With good of all, inequalities in society reduces. Due to this every individual works together for larger social good.
5. **Reduced crimes:** As everyone progresses, people tend to move away from crime and invest their time in progressive work. With crime reduction everyone feels safe and thus work freely that help him and lead to societal progress.

How can this principle be implemented in public life?

1. **Sensitisation:** Each individual must be sensitised about other's plight and difficulties. Efforts must be made to make people aware of other's feelings. For example, by knowing about women's plight, a sense for women welfare can be developed in the society.
2. **Education:** Education leads to holistic development of an individual. With knowledge of various issues of marginalised and weaker sections, a feeling of empathy develops among individuals.
3. **Value development:** Values of empathy, compassion, selflessness etc. should be inculcated among every individual in the society. These values can be inculcated from the beginning of a child's upbringing through family, education etc. As in public life, every decision or action of a person affects someone else, he must be, therefore, sensitive towards other emotions and needs.
4. **Redressal of grievances:** Various grievances of people must be handled properly. This means that as civil servants we should be sensitive to the needs and grievances of all, even if they are small in number or even one person. This is because, in resolving the issues or concern of one we are also addressing concerns faced by many others.

5. People's participation: Engaging people and making them realise that how their actions have benefited the other people and making governance more participatory and service oriented can be some important ways to achieve it.

Thus, the good of an individual lie in the good of all. Efforts must be made that each individual must grow in a society. Betterment of all also brings benefits to individuals as being part of a peaceful and progressive society.

Q.5) What do you understand by the term 'moral conscience'? Discuss the role of moral conscience in ethical behaviour.

Ans.

Demand of the question

Introduction. What is moral conscience?

Body. Discuss the role of moral conscience in ethical behaviour.

Conclusion. Way forward.

Moral conscience is a part of the cognitive process in mind that tells whether an act is morally right or wrong. In other words, it is awareness of moral principles and whether act done is in accordance with these principles or not. It is an instrument for self-control, correction and regulation. The proper understanding of the moral conscience is basic to our understanding of morality and to an ethical conduct.

Role of moral conscience in ethical behaviour:

1. **Right choices:** Human actions entail free decisions concerning ends and means. These actions have an ethical dimension because they concern making right choices based on the analysis of the nature of acts and the intentions and circumstances that are involved. Moral conscience help guide people to follow the right means to a right end.
2. **Inner guide:** Moral conscience is our inner guide and it helps you figure out how to make good choices. As we grow up, we learn right from wrong. Our moral conscience is the thought and feeling we have that tells us whether something is a right or wrong thing to do or say. Thus it is a consistent guide to ethical decision making.
3. **Source of information:** The moral conscience is considered the proximate norm of conduct because it is the immediate source of information guiding human actions. It directs human actions so that a person can transcend his animal instincts and human inclinations. Moral conscience allows man to exercise reason and thus allow an objective decision and act based on right values.
4. **Decision making:** Without moral conscience a person would doubt even the smallest decisions. Since the judgment of moral conscience is a judgment about how an action conforms or does not conform to natural law, then, it is obligatory to act according to one's conscience. Although there are persons who have a doubtful conscience which renders them unable to decide upon actions easily. A well-formed moral conscience is effective because it makes practical judgments with relative ease or after seeking necessary advice.
5. **Resolving ethical dilemmas:** A human being always comes across ethical dilemmas in the decision making process. Moral Conscience acts as the guide for taking correct decisions when we have to choose between competing sets of principles in a given, usually undesirable or perplexing, situation. Example: Helping accident victims on your way to an interview.

6. **Rational decision:** Through our individual moral conscience, one becomes aware of his deeply held moral principles, and motivates accordingly to act upon those principles removing conflicts. As we assess our character, our behaviour and ultimately our self against those principles, conscience leads to proper analysis of good and bad of the situation and proper evaluation of various options.
7. **Ethical Awareness:** This is our ability to recognise ethical values and principles. The moral conscience enables the human mind to understand the world in moral terms. This enhances our ability to make practical decisions in light of ethical values and principles.
8. **Conscientious Objection:** The conscientious objection is very important in public services. To stay impartial, it is important that public servants must object to any favours and corrupt activities. Moral conscience helps in conscientious objection by making an individual aware of the impact of his decisions on larger public.

Limitation of moral conscience in ethical behaviour:

1. **Individuality:** Moral conscience is highly personal and varies with individuals. For example, a person might think killing muslim as moral in order to take revenge. In his conscience it is moral to kill muslim and help Hindu cause.
2. **Social norms:** Moral conscience is guided by the social norms in general. It can impact the ethical thinking of an individual leading to unethical behaviour. For example, in Islamic countries many are misguided in name of jihad and act of terrorism is held moral and as an act of sacrifice for the cause of religion.
3. **Courage:** Despite being morally conscience about what is right, an individual might lack courage to act ethically. For example, a civil servant might know that his colleague is taking bribes, he may not act consciously due to fear of political links that his colleague has.
4. **Other factors:** Many other factors like honesty, values, education etc. define an individual's morals. Thus, one might not know what he is doing is immoral. For example, a person might beat his wife as in his conscience mind it is not immoral, due to patriarchal mindset.

Thus the moral conscience plays an important role in making moral decisions and actions. The reason behind conscience as the ultimate, highest determiner of moral action and its authority is the idea that when conscience and all other principles are properly understood, they promote and motivate us to act that are in accordance with our nature.