



Mains Marathon
Compilation

August, 2023

Mains Marathon Compilation for the Month of August, 2023

1. Evaluate the effectiveness of the remedial measures directed by the Supreme Court to prevent mob violence and lynching. What are the challenges in their implementation?
2. Evaluate India's performance in digital transactions compared to other developing countries. What steps can be taken to improve India's performance?
3. Evaluate the changes proposed in the IIM (Amendment) Bill of 2023. How might these changes impact the functioning of IIMs?
4. Evaluate the role of international multilateral climate funds in supporting climate mitigation and adaptation activities in the Global South. What challenges are associated with the disbursement of these funds?
5. Discuss the potential of deep tech startups in transforming science and technology discoveries in public sector labs to market.
6. Evaluate the challenges and opportunities of sustainable and equitable economic growth in the context of global governance.
7. Discuss the role of nuclear weapons in India's strategic decision-making. How has being a nuclear power influenced India's international standing?
8. Evaluate the potential impact of changing the age of consent on adolescents and the legal system in India.
9. Discuss the concept of nuclear deterrence and its implications on global peace and security. How has the nuclear taboo evolved over the years?
10. Critically evaluate the government's decision to require licenses for importing laptops and tablets. How might this impact the Indian economy and the tech industry?
11. Discuss the significance of data protection for children in the context of the Digital Personal Data Protection Bill, 2022. How does the bill aim to protect the interests and rights of children?
12. Discuss the impact of excess sugar production on India's agricultural sector and sugarcane farmers. What are the implications of the over-cultivation of sugarcane?
13. Analyze the impact of import restrictions on India's IT revolution. How might these restrictions affect the country's technological advancement and economic growth?
14. Analyze the changes proposed in the Mines and Minerals Bill 2023. How might these changes affect India's mining industry and its ability to secure critical minerals?
15. Discuss the need for rebuilding the urban primary healthcare system to ensure resilience against unpredictable climatic events.
16. What is the United States Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022 (CHIPS Act)? Discuss the lessons that India can learn from the CHIPS Act for executing its semiconductor strategy
17. Why are cluster bombs considered controversial? Explain the provisions of the Convention on Cluster Munitions (CCM) and its significance in international law.
18. Compare and contrast the characteristics of small nuclear modular reactors (SMRs) and conventional nuclear power plants.

Mains Marathon Compilation for the Month of August, 2023

19. Discuss the link between undernutrition and tuberculosis, as highlighted in the Lancet study. Critically analyze the implementation of the Nikshay Poshan Yojana, aimed at improving the nutrition of TB patients. [150 words]
20. Analyze the arguments for and against the use of smartphones in schools. Discuss the impact on learning, mental well-being, and social interaction. Evaluate UNESCO's recommendation for a universal ban and India's approach to this issue. [250 words]
21. Explain the objectives and achievements of Project Elephant. How has it contributed to the conservation of elephants and their habitats?
22. Highlight the challenges of drug-resistant tuberculosis (DR-TB) in India. Also, Discuss the new regimens recommended by WHO for DR-TB patients.
23. Analyze the historical relationship between India and Taiwan (RoC). Also, Evaluate the strategic interests that India and Taiwan share, including military intelligence and Taiwan's position as a world leader in semiconductors.
24. Evaluate the NMC's new rules regarding doctors' use of social media. How might these rules protect patients' rights, and what challenges might arise in enforcing them?
25. Explain the differences between consumption-based poverty estimates and multidimensional poverty estimates. Suggest possible improvements in the collection of data and the need to supplement consumption surveys.
26. Analyze the impact of tourism on the fragile Himalayan ecology. How has the infrastructure development for tourism contributed to environmental degradation in the region?
27. Examine the principles of equality and equitability in criminal law reform. How do the proposed Bills address the disparities in access to justice between different social classes?
28. Explain the concept of the Multidimensional Poverty Index (MPI) and how it is used to estimate poverty in India. How does India's MPI differ from the Global MPI?
29. Discuss the Supreme Court's initiative in issuing a handbook on combating gender stereotypes. Evaluate the implications of stereotyping language for women's safety, well-being, and the larger pursuit of justice.
30. Critically analyze the provisions of the Registration of Births and Deaths (Amendment) Bill, 2023. Discuss the potential benefits and drawbacks of the amendments.
31. Analyze the impact of pilot fatigue on aviation safety in India. What measures have been taken by the regulatory authorities, and what further steps are needed to ensure the well-being of pilots and passengers?
32. Compare and contrast genome-edited (GE) crops with genetically modified (GM) crops. Discuss the implications of Genome-Edited (GE) crops for agricultural innovation in India.
33. Analyze the factors contributing to the growing epidemic of drug addiction in Kashmir. What preventive measures can be taken to address the issue?
34. Analyze the success of the PLI scheme in boosting mobile phone exports. What are the challenges and limitations of the scheme in achieving self-sufficiency in manufacturing?

Mains Marathon Compilation for the Month of August, 2023

35. Discuss the significance of the Election Commission's independence in the context of India's democratic setup. How does the proposed bill impact this independence?
36. Discuss the potential benefits and challenges for India in engaging with the Northern Sea Route (NSR).
37. How has the transition from a planned economy to a market-mediated economic system impacted India's fiscal federalism?
38. How can clean tech solutions be integrated into existing government programs to enhance their impact on rural livelihoods? What challenges do clean tech manufacturers face in bringing their products to rural customers, and how can these be addressed?
39. Elaborate on the significance of educational aid for religious minorities in India. What are the implications of reduced funding on the educational prospects of minority communities?
40. Analyze the significance of BRICS in representing the interests of the Global South. How does the expansion of BRICS membership reflect the group's value and its potential to influence global economic and political dynamics?
41. Discuss the implications of the suspension on Indian wrestlers participating in UWW (United World Wrestling) sanctioned events.
42. Examine the reasons behind the government's decision to impose export curbs and trade controls on rice and wheat, despite record production levels. What are the potential advantages of implementing a uniform MEP (Minimum Export Price) for all rice varieties?
43. Elucidate the significance of the Bharat New Car Assessment Programme (BNCAP) norms introduced by the Union Minister for Road Transport & Highways.
44. Discuss the historical and clinical evidence that suggests the role of social determinants, such as poverty and living conditions, in the incidence and mortality of TB. How has the focus shifted from these determinants to biomedical interventions over the years?
45. Critically analyze the Indus Waters Treaty (IWT) in the context of the principle of equitable allocation. How does it impact the bilateral relations between India and Pakistan?
46. Analyze the challenges faced by resource-constrained countries in providing quality treatment to HIV-positive individuals. How can international partnerships and agreements help in addressing these challenges?
47. Analyze the multi-dimensional implications of holding simultaneous elections in India.
48. Critically evaluate the progress made under the National Mission for Clean Ganga (NMCG) since its inception. What are the primary challenges faced in ensuring no untreated sewage flows into the river?

Mains Marathon Compilation for the Month of August, 2023

1. Evaluate the effectiveness of the remedial measures directed by the Supreme Court to prevent mob violence and lynching. What are the challenges in their implementation?

Introduction: Give a brief context of SC guidelines.

Body: What are the measures directed by SC to curb lynching and mob violence?

Conclusion: Way forward.

Supreme Court expressed concerns regarding the inaction of various state governments over cases of mob violence and lynching of Muslims by cow vigilantes over the past five years, despite a Supreme Court judgment *in Tehseen Poonawala versus Union of India in 2018* against vigilantism. The case highlights issues of police apathy, constitutional violations, and a breach of "duty of care" towards the victims.

Remedial measures directed by the Supreme Court to prevent mob violence and lynching:

- **Responsibility of the State:** SC in Tehseen Poonawaala case highlighted that authorities of the States have the "principal obligation" to protect the lives of its citizens. The judgment noted that vigilantism ushers in anarchy, chaos, and disorder, and, eventually, there is an emergence of a violent society that cannot be tolerated in diverse countries like India.
- **Nodal Police Officer:** SC directed state governments to appoint a designated nodal officer, not below the rank of Superintendent of Police for taking measures to prevent prejudice-motivated crimes like mob violence and lynching. He has the primary responsibility to monitor the investigation of such crimes.
- **Cooperative federalism:** SC has noted that the cooperation of both centres and states is important in dealing with vigilantism. Both levels of government must also take steps to curb and stop inflammatory messages that may lead the mob to the violence of any kind.
- **Compensation to victims:** SC has directed state governments to prepare a lynching or mob violence scheme to compensate the victims within one month.
- **Fast track courts:** SC noted that states should set up Fast track courts in each district with courts expediting the process completely in 6 months.

Challenges in their implementation:

- **Accountability:** There is a lack of accountability of state officials for the dereliction of their duty. This has led to a lack of deterrence among the violators and impunity.
- **Social Media:** The rapid proliferation of social media has fueled mob mentality exacerbating the situation for state officials.
- **Delays in the Judicial system:** Dealy in the legal process and huge pendency in district and trial courts has deterred victims from seeking justice which hampers the legal process.
- **Lack of trust:** The mistrust between the communities stems from social tension, religious and caste divides, and lack of dialogue among different communities leading to violence.

Conclusion:

Addressing the challenge of vigilantism requires multi multi-faceted approach involving all stakeholders like the judiciary, police, religious leaders, media responsibility, and public awareness campaigns to promote social harmony.

2. Evaluate India's performance in digital transactions compared to other developing countries. What steps can be taken to improve India's performance?

Introduction: Give brief overview of digital transactions in India.

Body: Evaluate India's performance in digital transactions compared to other developing countries and steps taken to improve it.

Conclusion: Way forward.

Digital payments are transactions that happen online or through other digital platforms without a physical exchange of money. This indicates that both the payer and the payee exchange money via electronic means. Studies have well documented that demonetization in November 2016 and the COVID-19 lockdown in 2020 were major push factors for the widespread adoption of digital payments. By 2026–2027, according to a recent report by PwC India titled "The Indian Payments Handbook – 2022–27," UPI will reach a ground-breaking milestone of 1 billion daily transactions. During 2022-23, UPI accounted for 75 percent of the total transaction volume, signifying a massive shift towards digital payments.

India's performance in digital transactions compared to other developing countries:

- **Data from MyGov India:** India with 89.5 million digital transactions in the year 2022 has topped the list of five countries in digital payments, according to data from MyGovIndia. As per the data, in 2022, India accounted for 46% of the global real-time payments, adding that the digital payment transactions in India are more than the other four leading countries (Brazil, China, Thailand, South Korea) combined.
- **UPI:** The success of UPI domestically has enabled countries like Bhutan and Nepal to launch UPI, from April 2023. Similarly, Singapore started cross-border payments between its national payments system PayNow and UPI.
- **Competition & Innovation:** In India, there is fierce competition among a variety of companies, including banks, payment service providers, and fintech startups. The ongoing innovation brought about by this rivalry has led to the creation of user-friendly and secure payment solutions. Support from private players like Paytm, PhonePe, and Google Pay has popularised the concept of UPI.
- **Rural-Urban divide:** India still has to go a long way in bridging the rural-urban gap in digital payments compared to nations like Bangladesh & Kenya. Only 30% of Indians in rural areas made or received any digital payment as compared to 45% in Bangladesh and 74% in Kenya.
- **Gender Gap:** There is a sharp gender gap in digital transactions in India. The corresponding figure among women was only 28%, which is quite low as compared to Vietnam (44%), Brazil (73%), China (85%) and Kenya (74%), Bangladesh (34%).

Steps were taken to improve digital transactions:

- **Har Payment Digital's mission:** RBI launched a program that aims to adopt 75 villages and convert them into digital payment-enabled villages in observance of 75 years of independence.
- **Digital India program:** The flagship program aims to transform India into a digitally empowered society and a digital economy. Under this program, the Government targets to promote digital payments and support the development of low-cost and easy-to-use digital payment solutions for all sections of society.
- **E-RUPI:** This digital payment solution is a cashless and contactless instrument & is expected to play a huge role in making Direct Benefit Transfer (DBT) more effective in digital transactions in the country.
- **Digital Payment ecosystem:** The ecosystem is characterized by schemes like JAM Trinity - Jan Dhan, Aadhaar and Mobile, Pradhan Mantri Jan-Dhan Yojana (PMJDY), Bharat Interface for Money-Unified Payments Interface (BHIM-UPI); Immediate

Mains Marathon Compilation for the Month of August, 2023

Payment Service (IMPS); pre-paid payment instruments (PPIs), National Electronic Toll Collection (NETC) system National Electronic Funds Transfer (NEFT) and Real-Time Gross Settlement (RTGS) all of which have created a robust ecosystem for a digital finance economy.

Conclusion:

Digital transactions have played a key role in the technological revolution in governance in India. As a result, government services have been made easily accessible & last mile delivery of government benefits has promoted financial inclusion as one of the important national objectives of the country.

3. Evaluate the changes proposed in the IIM (Amendment) Bill of 2023. How might these changes impact the functioning of IIMs?

Introduction: Brief context of the Bill.

Body: Main features of the Bill & how these can impact the functioning of IIMs:

Conclusion: Way forward.

Recently, the Government introduced the Indian Institutes of Management (Amendment) Bill, 2023 in the Lok Sabha to amend the statute governing IIM operations raising concerns about the planned modifications' potential to reduce the IIMs' autonomy. The purpose of the act is to undo the changes brought by the Indian Institutes of Management Act, 2017 which had hugely expanded the autonomy already enjoyed by the IIMs.

Main features of the Bill & how these can impact the functioning of IIMs:

- **Appointment of the Director:** The proposed Bill amends the 2017 Act & gives the government an expanded role in the appointment of the IIM Director. Under the previous Act, the Director was appointed by a Board of Governors, and the government had a limited say in the process. The Bill proposes that the President of India shall be the Visitor of every Institute” & prescribes three primary roles for the Visitor: to make appointments, to audit the working of institutions, and to conduct an inquiry.
- **Accountability:** The proposed Bill by giving more powers to the Visitor as the Chairperson of the Board of Governors will be nominated by the Visitor. This will seek to restore the principle of democratic accountability in IIMs.
- **Inquiries against IIMs:** The proposed Bill confers the power of inquiry upon the Visitor. It deprives the Board of its power to conduct an inquiry against an Institute if it has not been functioning as per directions given under the Act.
- **Dissolution of the Board:** The proposed law would also permit the creation of an interim board by the Union government if the current board of governors was to be suspended or dissolved. It also makes it essential for the board to obtain "prior approval of the Visitor" before removing any director from office for any norm violation.
- **Coordination Forums:** According to the proposed legislation, the "Visitor" may also choose the chairperson of each IIM's coordinating forum. These groups are in charge of encouraging the cooperation and coordination that the institutes' work requires, as well as monitoring the accomplishment of the goals outlined in the policy.
- **Incorporation of Institutes:** According to the Act, any employee of an existing institution that becomes an IIM under this Act would continue to receive the same tenure, pay, and pension benefits. The Director of such institutions is exempt from this provision under the Bill. Recently, the National Institute of Industrial Engineering (NITIE), Mumbai has been classified as IIM, Mumbai.

Conclusion

Mains Marathon Compilation for the Month of August, 2023

The proposed bill seeks to establish meaningful checks and balances on the institutes & restore the accountability of IIMs to the government. However, there is a need for discussion among stakeholders, including IIMs, policymakers, and education experts, to find the most suitable balance between accountability and autonomy for these premier B-schools.

4. Evaluate the role of international multilateral climate funds in supporting climate mitigation and adaptation activities in the Global South. What challenges are associated with the disbursement of these funds?

Introduction: Briefly describe climate financing.

Body: Role of international multilateral climate funds in supporting climate mitigation and adaptation activities & challenges associated with it.

Conclusion: Way forward.

The Global South's efforts at climate mitigation and adaptation are greatly aided by international multilateral climate financing. To address the effects of climate change and implement programs that reduce greenhouse gas emissions and improve resilience to climate-related risks, these funds aim to provide developing nations with financial resources. The Green Climate Fund (GCF), the Global Environment Facility (GEF), and the Adaptation Fund are some of the most significant multinational climate funds.

Role of international multilateral climate funds in supporting climate mitigation and adaptation activities:

- **Global cooperation:** Climate funds are a promise by rich nations to assist developing nations in addressing climate change, underscoring the importance of international cooperation in this endeavour.
- **Sustainable development:** Investments in sustainable agriculture, clean energy, and robust infrastructure are encouraged by climate funds, which support sustainable development.
- **Capacity development:** Multilateral climate funds assist developing nations in strengthening their institutions, capabilities, and knowledge to effectively address the issues posed by climate change.
- **Technology Transfer:** The funds assist in transferring climate-friendly technologies and practices from developed countries to developing countries, enabling the adoption of cleaner and more sustainable technologies.

Challenges associated with the disbursement of these funds:

- **Limited Institutional Structure:** Many developing nations lack the resources and knowledge necessary to obtain and efficiently use climate funds. For instance, small island developing states (SIDS) may have trouble obtaining funding because of their constrained institutional resources.
- **Uneven geographic distribution of finance:** The largest share (38% to 53%) of funding from multilateral Climate Funds has been directed to the countries of the Asia Pacific region while Least Developed Countries collectively represented only 10% of the total finance received.
- **High debt costs for climate/green projects:** Developing countries have insisted that developed country climate finance should be from public sources and should be provided as grants or as concessional loans. The overwhelming provisioning of climate finance through loans risks exacerbates the debt crisis of many low-income countries.
- **Data gap:** The global landscape of climate finance is heavily biased in favour of renewable energy due to the lack of accurate project-level statistics for private investments outside of renewable energy.

Mains Marathon Compilation for the Month of August, 2023

- **More focus on mitigation:** Adaptation has traditionally received far less attention than mitigation in the global climate finance discourse. An important reason for this is that adaptation solutions often do not give an immediately palpable return on investment (ROI).

Conclusion:

India's efforts to tap into global finance must address crucial concerns like accounting for climate change-induced, developing measures towards enhancing the resilience of communities, and habitations to climate change's impact.

5. Discuss the potential of deep tech startups in transforming science and technology discoveries in public sector labs to market.

Introduction: What are deep tech startups?

Body: How can deep tech startups help in transforming science and technology discoveries in public sector labs to market?

Conclusion: Way Forward

Deep tech start-ups in India are characterized by their focus on cutting-edge technologies, such as advanced materials, quantum computing, space and remote sensing, artificial intelligence, robotics, biotech and pharma, electric vehicles, drones, defence, telecommunications, semiconductors, and many more. The importance of these start-ups lies in the fact that these startups go beyond the traditional digital marketplace and impact many more sectors of the economy, which will bring deeper industrialization in newer areas and more jobs.

How can deep tech startups help in transforming science and technology discoveries in public sector labs to market?

Innovation: The successful examples of various startups have shown how innovation & entrepreneurship have helped in transforming scientific discoveries from public labs to market. E.g., include IIT Madras's Research Park, which has incubated over 200 deep tech companies, especially in space and aviation; the C-CAMP, which has in its portfolio seven deep biotech startups, and the National Chemical Laboratory's Venture Centre support to file and commercialise high-quality patents.

Leverage ties between academia and industry: Various discussions with technology leaders in academia and industry have shown that faculty members find it easier to push their discoveries through startups founded by themselves or their alumni, instead of licensing or patent re-assignments. This helps the startup ecosystem thrive through unique relationships.

Access to capital: Due to their tremendous potential for development and disruptive nature, deep tech firms frequently draw venture funding and other types of private investment. The need is for the government to put more emphasis on such startups through the use of SIDBI funds.

Use of indigenously developed technologies: The need for the industry is to enable mass procurement of indigenously developed technologies across sectors like defense, urbanization, and health. This can help in successful collaboration between government and industry as seen in successful models like Tatas buying Saankhya and Tejas Networks, Reliance acquiring Faradion, and Hero Motors buying equity in Ather Motors.

Commercialization of Research: Public sector labs often conduct groundbreaking research, but translating these findings into practical applications and products for the market can be a lengthy and complex process. Deep tech startups can provide the entrepreneurial drive, agility, and specialized expertise needed to accelerate the commercialization of these technologies, turning research into real-world solutions.

Conclusion

The success of Startup India depends on collaboration between industry, academia, and government. The Startup movement has successfully captured the imagination of suburban and rural entrepreneurs with half of one lakh startups coming from Tier 2 and Tier 3 cities. The future start-up movement should direct the energies of India's entrepreneurs towards building Indian industrial and public capabilities, to support Indian economic growth, job creation, national security, and other national capabilities.

6. Evaluate the challenges and opportunities of sustainable and equitable economic growth in the context of global governance.

Introduction: Briefly explain the context.

Body: What are the challenges and opportunities of sustainable and equitable economic growth in the context of global governance?

Conclusion: Way forward

In the context of global governance, equitable and sustainable economic growth is a complicated, multifaceted issue that requires global cooperation to make economic growth more equitable and sustainable. Here's an evaluation of the key challenges and opportunities:

Challenges:

- **Poverty:** Growth in the economy does not always result in a fairer distribution of wealth. Global governance must address the rising wealth disparity and make sure that economic growth benefits all societal groups, particularly the disadvantaged and marginalized ones.
- **Environment degradation:** Environmental degradation, including climate change, biodiversity loss, and resource depletion, can result from unsustainable economic practices. Implementing and enforcing environmentally friendly regulations and promoting sustainable production and consumption patterns require effective global governance.
- **Digital Divide:** Both opportunities and difficulties for economic progress are presented by the digital revolution. To ensure that all nations and communities can take advantage of the promise of the digital economy, it is crucial to bridge the digital gap.
- **Corruption:** Economic progress is hampered by corruption and poor governance, which also raises obstacles to the fair distribution of resources. The promotion of openness, responsibility, and good governance across boundaries should be the main goal of global governance initiatives.

Opportunities:

- **Sustainable Development Goals (SDGs):** A blueprint for sustainable and equitable development is provided by the SDGs of the United Nations. Global governance can coordinate resources and policies with these objectives to promote economic growth while preserving social and environmental aspects.
- **Green Economy:** There are numerous prospects for long-term growth and employment creation while moving to a green economy. Investments in green infrastructure, circular economy strategies, and renewable energy can boost the economy while addressing environmental issues.
- **Capacity building:** Global governance can support knowledge-sharing initiatives and capacity-building programs to help developing countries build their capabilities and effectively participate in the global economy.
- **Tech transfer:** Emerging technologies like artificial intelligence, digital platforms, and renewable energy present possibilities for higher productivity and sustainable

Mains Marathon Compilation for the Month of August, 2023

economic growth. Global governance can encourage the adoption of these technologies for the benefit of all nations.

Conclusion:

India as chair of G20 this year offers new insights for global governance. India's vision of *Vasudhaiva Kutumbakam* (One Earth, One Family, One Future) & local governance can be a role model in dealing with the above challenges & can ensure full political, social, and economic freedom) for all citizens. India's approach to LiFE (lifestyles for sustainable development) requires "coherent actions amongst stakeholders at all levels rooted in collective actions across society". LiFE also requires the world's leaders to "recognize and amplify the role of local communities, local and regional governments and traditional knowledge in supporting sustainable lifestyles".

7. Discuss the role of nuclear weapons in India's strategic decision-making. How has being a nuclear power influenced India's international standing?

Introduction: Give brief context of the question.

Body: Role of nuclear weapons in India's strategic decision-making & how has being a nuclear power influenced India's international standing?

Conclusion: Way forward.

India's nuclear capabilities have a considerable impact on its international stature and are a major factor in its strategic decision-making. The quest for strategic autonomy and security concerns led to India's nuclear journey, and the country's nuclear status has had several effects on its foreign policy and place in the world:

- **Deterrence:** The nuclear arsenal of India acts as a deterrent against conceivable foes, mainly Pakistan and China. Nuclear weapons guarantee the highest level of deterrent stability and eliminate the prospect that India would face a nuclear, or even a significant conventional, existential threat.
- **Security challenges:** Given the claims that India's nuclear-armed enemies make on its territory, India acquired and maintains nuclear weapons as protection against nuclear blackmail or coercion. The security issues are brought on by China's aspirations to cross the line of actual control (LAC), Pakistan's persistent use of cross-border terrorism, and the potential for a two-front war with the neighbors.
- **Non-Proliferation Efforts:** India's position on international non-proliferation initiatives has also been influenced by its nuclear status. India supports disarmament and open access to nuclear technology for peaceful purposes as a nuclear-armed state outside of the Nuclear Non-Proliferation Treaty (NPT).
- **Security Partnerships:** India's status as a nuclear power has led to a deepening of security and strategic partnerships with like-minded nations like the USA, Japan, and France. These partnerships encompass defense cooperation, strategic dialogues, and joint military exercises.

How has India's status as nuclear power influenced India's international standing?

- **Cooperation in the peaceful use of nuclear energy:** India's access to civil nuclear technologies and international cooperation agreements have been impacted by its nuclear capabilities. In the field of nuclear energy for peaceful purposes, some nations have shared and collaborated on technologies. For eg, India has signed nuclear cooperation agreements for peaceful means with the US, France, Russia, Canada, United Kingdom, Japan, etc.
- **Membership of multilateral groups:** India's nuclear status has influenced its bid for membership in the **Nuclear Supplier's Group (NSG), Australia Group (AG), Missile Technology Control Regime (MTCR), and Wassenaar Arrangement**. India is a member of all these groups except NSG.

Mains Marathon Compilation for the Month of August, 2023

- **Regional Power:** India's nuclear status has influenced the regional dynamics of Asia by ensuring that a balance of power is maintained in the region which has contributed to a certain level of deterrence and stability in Asia.
- **Diplomatic Standing:** India now has a stronger voice in international diplomatic efforts relating to nuclear disarmament, non-proliferation, and arms control as a result of its nuclear status. Discussions on these issues take India's perspectives into account.

Conclusion:

India's status as a major responsible nuclear power has come with enabling the country to resist external pressures and assert its national interests on the global stage. It allows India to make strategic decisions without the fear of coercion from nuclear-armed adversaries.

8. Evaluate the potential impact of changing the age of consent on adolescents and the legal system in India.

Introduction: Give a brief description of the POCSO Act.

Body: What can be the potential impact of changing the age of consent on adolescents?

Conclusion: Way forward.

Recently, there has been increasing clamour among the judiciary and civil society to reduce the age of consent in the Prevention of Children from Sexual Offences (POCSO) Act, enacted in 2012 to check crimes against children. Under the POCSO Act, any sexual activity with a girl under 18 years of age constitutes rape with or without the girl's consent. Consensual sexual activity among adolescents being criminalized under the law is cited as a major reason for the suggested changes.

What can be the potential impact of changing the age of consent on adolescents and the legal system in India?

- **Protection from Criminalization:** Lowering the age of consent might prevent consensual relationships between adolescents from being criminalized, reducing the chances of young people facing legal consequences for engaging in relationships with peers close to their age.
- **Child marriage:** The age at which a person can lawfully be married and the age of consent are frequently related. Laws and customs governing child marriage may need to be modified if the age of consent is reduced.
- **Prevent abuse of Law:** Courts in many cases have found that the POCSO act has been used by girls' parents to blackmail the family of the accused, resulting in injustice to boys. The reduction in age will address this issue and provide relief to the other side.
- **Definition of "consent":** Minor girls in India are involved in commercial sex as young as 10 to 13 years old and they depend on the sex trade for their livelihood. Upon lowering the age of consent it will be difficult to try these cases in court and prove that money exchanged was not "consent".
- **Social and Cultural Considerations:** Lowering the age of consent might require considering the cultural norms, societal attitudes, and local practices prevalent in India. It will require considerable time and efforts of courts to consider factors like the age gap between the accused and the victim, power dynamics, and caste equations — on a case-by-case basis to assess/establish consent.
- **Privacy:** Various studies have established that 18 to 25 percent of cases registered under the POCSO Act, were either found to be in consensual relationships or these were "romantic cases". This also raises concern as sometimes it violates the privacy of couples. So there is a need to review the act.

Conclusion:

The POCSO Act is not in sync with the social reality of adolescent interactions, as evidenced by the high incidence of acquittals. The High Courts have also recognized how criminal law might be disruptive in certain situations. The couples' marriage may have had an impact on several High Courts and led to the dismissal of romantic cases brought under the POCSO Act, but sexual behaviour is common during youth, and not all relationships result in marriage. The possibility for development, liberty, privacy, and developing autonomy of older teenagers who engage in such consenting sexual actions are all undermined by the blanket criminalization of such behaviour. Additionally, it affects the administration of justice since these lawsuits place a heavy strain on our courts and take resources away from examining and prosecuting true child abuse cases. Hence it is the right time to take a review of the Act.

9. Discuss the concept of nuclear deterrence and its implications on global peace and security. How has the nuclear taboo evolved over the years?

Introduction: Define Nuclear deterrence and nuclear Taboo.

Body: What are its implications on peace and security and how has nuclear taboo evolved over the years?

Conclusion: Way forward.

Nuclear deterrence is a concept in international relations and military strategy that is based on the notion that having a credible nuclear arsenal can deter enemies from launching a nuclear assault out of fear of severe reprisal. The core tenet of nuclear deterrence is that the prospect of mutual destruction serves as a potent inducement for nations to refrain from nuclear conflict. Nuclear taboo refers to the growing norm and understanding among nations that the use of nuclear weapons is morally and ethically unacceptable.

What are its implications for global peace & security?

- **Prevents Large-scale wars:** The fact that nuclear deterrence has helped to avert big power wars on a massive scale since World War II is one of the main arguments in favour of it. Nations contemplating aggressive steps against nuclear-armed enemies have been strongly constrained by the fear of catastrophic reprisal.
- **Balance of Power:** A certain degree of stability & peaceful existence in international affairs has resulted from the power balance brought about by nuclear deterrence. Mutual awareness of the dangers of nuclear war during the Cold War contributed to keeping relations between the US and the USSR relatively peaceful.
- **Arms race:** The pursuit of nuclear deterrence has led to an arms race in which nations strive to enhance their nuclear capabilities. While some contend that this competition helps to maintain stability, others worry about the possibility of proliferation, where more countries strive to obtain nuclear weapons, raising the risk of accidental use or unauthorized acquisition.

How has the nuclear taboo evolved over the years?

- **Post WWII:** Post WWII, Following the extreme devastation caused by the atomic bombs on Hiroshima and Nagasaki, there was discussion on the ethical implications of nuclear weapons. This continued during the Cold War era also which started to shape public opinion and political discourse against the arms race.
- **Nuclear disarmament:** Efforts were made to limit the spread of nuclear weapons and reduce nuclear testing. E.g., Partial Test Ban Treaty (PTBT) 1963, Nuclear Non-Proliferation Treaty (NPT) 1968, the Comprehensive Nuclear-Test-Ban Treaty (CTBT) 1996, & finally Treaty on the Prohibition of Nuclear Weapons 2017.
- **Post-Cold War:** With the conclusion of the Cold War came major reductions in nuclear arsenals because accords like the Strategic Arms Reduction Treaty (START) and the

Mains Marathon Compilation for the Month of August, 2023

decommissioning of nuclear weapons by former Soviet states & notion of a "nuclear-free world" gained popularity.

- **Humanitarian initiatives:** The effects of nuclear weapons on society, especially the effects on the environment, human health, and socioeconomic conditions, have drawn attention. The International Campaign to Ban Landmines and the International Campaign to Abolish Nuclear Weapons (ICAN) were prominent in advocating for the humanitarian approach to nuclear disarmament.

Conclusion:

While the efforts on disarmament, and non-proliferation seem to be partially successful the challenges such as geopolitical rivalries and technological advancements continue to shape the narrative around nuclear weapons and their place in global security.

10. Critically evaluate the government's decision to require licenses for importing laptops and tablets. How might this impact the Indian economy and the tech industry?

Introduction: Brief context of the government decision.

Body: Impact of this decision and how will it impact the tech industry.

Conclusion: Way forward.

Recently, the Union Government **issued an order requiring licenses to import personal computers, laptops, palmtops, automatic data processing machines, microcomputers/processors, and large/mainframe computers with immediate effect.** The industry has raised concern regarding the move as it could lead to the old days of license raj and bureaucratic discretion.

What is the impact of this decision and how will it impact the tech industry?

- **Curb imports from China:** The government has defended the move as it will curb the majority share of imports of these items from China. In 2022-23, imports of personal computers, laptops, etc. stood at \$5.3 billion, with China accounting for an overwhelming share of these.
- **Supply chain effect:** The decision might lead to unnecessary disruption in the immediate term, create supply shortages, and drive up prices of electronic equipment.
- **Boost to domestic manufacturing:** It is believed that this action will directly benefit the Centre's recently production-linked incentive (PLI) program for IT hardware. The move is aimed at pushing companies to manufacture locally in India, & strengthen the domestic IT infrastructure.
- **Security:** Recently there have been concerns regarding the electronic hardware imported from China as they were found to have security loopholes that may potentially endanger sensitive personal and enterprise data. Addressing the concern of cybersecurity is also one of the intended objectives of the government.
- **Domestic market:** The restriction will likely impact the domestic market of retailers and companies engaged in the business of electronic items. It will impact the income of retailers as the high demand for these items will impact the sales and discounts of the retailers and companies.
- **IT industry:** The industry has raised concern regarding the notification and asked for clarification as India's service sector critically depends on the import of these items.

Conclusion:

While the government has defended the move to boost domestic production, it should not lead to old socialist days of license and permit raj, and bureaucratic red-tapism which were regressive policies impacting India's growth negatively.

11. Discuss the significance of data protection for children in the context of the Digital Personal Data Protection Bill, 2022. How does the bill aim to protect the interests and rights of children?

Introduction: Brief outlay of Digital Personal Data Protection Bill 2022.

Body: Significance of data protection for children in the context of the Digital Personal Data Protection Bill

Conclusion: Way forward.

The Digital Personal Data Protection Bill 2022 provides legal data protection for personal data obtained from various sources. It highlights that personal data may be processed only for a lawful purpose upon the consent of an individual. The Bill grants certain rights to individuals including the right to obtain information, seek correction and erasure, and grievance redressal.

Significance of data protection for children in the context of the Digital Personal Data Protection Bill:

- **Online safety and privacy:** Children constitute around 15 percent of active internet users in India with activities ranging from e-learning, gaming, and content creation using popular social media platforms. This makes the issue of online safety and privacy vital for them.
- **Access to Internet:** The clause of parental consent for every individual below 18 will make it difficult for young adults and adolescents to freely access the internet. This may limit their access to popular social sites like Facebook, Instagram, YouTube, Twitter, and Snapchat.
- **Easy access to data:** Digital Personal Data Protection Bill 2023, allows users to have complete access to their data. The bill further prohibits behavioral monitoring of children and targeted advertising directed at children. This provision ensures a safer digital space for children.
- **Target misleading promotions:** The DPDP Bill restricts targeted digital advertisements that could adversely affect children's health and well-being in a variety of ways. For example, food marketing may encourage the consumption of unhealthy foods and drinks, which contributes to childhood obesity.

How does the bill aim to protect the interests and rights of children?

- **Parental consent:** The bill mandates parental consent for children below 18 years accessing social media sites. The government could lower the age for certain digital services which may not carry significant privacy risks. These could include services like web search, online encyclopedias, and others that children may access for educational purposes.
- **Age verification:** The intent of the bill in safeguarding children's rights is a step in the right direction, ambiguity exists regarding age verification. Knowledge-based tests like puzzles, maths quizzes, and Question and Answers could be used to assess the age of a child.
- **Exemptions:** The DPDP Bill allows the government to exempt entities from the requirement of parental consent and tracking and targeting ads for specific purposes. E.g., services like ed-tech.

Conclusion:

Mains Marathon Compilation for the Month of August, 2023

The Digital Personal Data Protection Bill, 2022 should aim for open, safe, trusted, and accountable internet for India's netizens with a special focus on protecting the rights and interests of children.

12. Discuss the impact of excess sugar production on India's agricultural sector and sugarcane farmers. What are the implications of the over-cultivation of sugarcane?

Introduction: Give brief context of recent over production of sugarcane.

Body: What is the impact of excess sugar production on India's agricultural sector and sugarcane farmers?

Conclusion: Way forward.

Recently according to statistics, India surpassed Brazil in sugar production in 2021-2022. Concerns have been raised over the extensive use of resources in sugar production which are depleting rapidly, leading to a potential crisis in the future. This surge in production is on account of policies and measures taken by the central government in the form of fair and remunerative price (FRP) schemes & various State governments also offering heavy subsidies to incentivise sugarcane cultivation that make farmers favour sugarcane cultivation.

What is the impact of excess sugar production on India's agricultural sector and sugarcane farmers?

- **Loss of Groundwater:** Since sugarcane is a water-intensive crop, over-cultivation can impact groundwater negatively. It leads to water scarcity in regions where water availability is already limited. E.g., Maharashtra.
- **Price fluctuations:** The revenue of both sugar manufacturers and farmers may be impacted by excessive sugar production's ability to cause price changes in the commodity. The market's ability to make money is harmed when there is an excess of sugar available, as prices tend to fall.
- **Soil degradation:** Continuous sugarcane monoculture reduces soil fertility and causes soil degradation in sugarcane fields. Without suitable crop rotation or soil management techniques, continuous sugarcane production has the potential to deplete soil nutrients, degrade soil fertility, and raise the danger of soil erosion.
- **Food Security:** Excessive focus on sugarcane cultivation leads to diversion of resources from other crops like food crops, and cereals like millet. This can negatively impact crop diversity and food security.

What efforts have been made to address this issue?

- **Ethanol Production:** The Indian government explored using the excess sugar to produce ethanol, by fermenting sugarcane molasses or sugar. Alcoholic beverages contain the substance ethanol, which can also be utilized in the chemical and cosmetics sectors.
- **Ethanol-Blended Petrol (EBP):** Under the ethanol blending program, the Indian government diverts excess sugar in the production of ethanol. It is aimed to achieve dual objectives: to reduce harmful emissions, such as carbon monoxide and various hydrocarbons, from vehicles & to reduce crude oil imports.
- **Financial Support:** Centre and state governments can provide financial support in the form of subsidies and grants for a variety of crops that can help farmers diversify as well as distribute cultivation evenly, prevent monocultures, and ensure an equitable income.

Mains Marathon Compilation for the Month of August, 2023

- **Sustainable Irrigation Practices:** Practices like drip irrigation can address the issue of groundwater depletion. This method reduces water consumption by up to 70% relative to the current flood irrigation method. Groundwater reservoir stress can be reduced by making a concerted effort to embrace cleaner techniques including rainwater collection, wastewater treatment, and canal irrigation networks.

Conclusion:

With these initiatives, farmers will be in a better position to diversify their crop selections, lessen their reliance on sugarcane, and improve the sustainability of their farming operations as a whole. When putting these tactics into practice, it's crucial to take local factors, market dynamics, and farmer preferences into account.

13. Analyze the impact of import restrictions on India's IT revolution. How might these restrictions affect the country's technological advancement and economic growth?

Introduction: Give the context of the recent order.

Body: How it will impact the IT industry?

Conclusion: Way forward

Union Government ***order requiring licenses to import personal computers, laptops, palmtops, automatic data processing machines, microcomputers/processors, and large/mainframe computers with immediate effect*** has raised concern among the IT industry as it could lead to the old days of license raj and bureaucratic discretion & marks a regression in the country's outlook on trade liberalization.

How might these restrictions affect the country's technological advancement and economic growth?

- **Less import from China:** The government has defended the move as it will curb the majority share of imports of these items from China. In 2022-23, imports of personal computers, laptops, etc. stood at \$5.3 billion, with China accounting for an overwhelming share of these.
- **Disruption in supplies:** The government decision might lead to supply chain disruption in the domestic market, creating supply shortages and raising the prices of these items in the retail market. Licensing development could lead to price increases for certain products ahead of the Diwali festive season in India in early November.
- **National Security:** Electronic devices imported from China have recently raised concerns due to security flaws that might potentially put sensitive personal and business data at risk. One of the government's stated goals is to address the issue of cybersecurity.
- **Atmanirbhar Bharat:** The stated aim of the government behind the move is to boost domestic manufacturing. This measure is anticipated to have a direct positive impact on the Centre's recently launched production-linked incentive (PLI) program for IT hardware. The action aims to encourage businesses to produce locally in India and to support the nation's IT infrastructure.
- **Effect on big tech companies:** The move may considerably hit revenues of companies like Apple, Dell and Samsung, HP which consider India a very lucrative market for their manufactured goods.
- **Domestic market:** The restriction will likely impact the domestic market of retailers and companies engaged in the business of electronic items. It will impact the income of retailers as the high demand for these items will impact the sales and discounts of the retailers and companies.

Mains Marathon Compilation for the Month of August, 2023

- **IT industry:** The industry has raised concern regarding the notification and asked for clarification as India's service sector critically depends on the import of these items.
- **IT Hardware:** The PLI Scheme 2.0 for IT Hardware is expected to result in the broadening and deepening of the manufacturing ecosystem by encouraging the localization of components and sub-assemblies and allowing for a longer duration to develop the supply chain within the country. The scheme is expected to lead to a total production of about ₹ 3.35 lakh crore, bring an additional investment of ₹ 2,430 crores in electronics manufacturing, and will lead to the generation of 75,000 additional direct jobs. This will result in lowering IT Hardware prices.

Conclusion:

While the intention of the government is novel in approach, it is prudent to consult all stakeholders involved regarding the policy so as not to derail the progress of India's IT revolution.

14. Analyze the changes proposed in the Mines and Minerals Bill 2023. How might these changes affect India's mining industry and its ability to secure critical minerals?

Introduction: Give context of the Bill mentioned.

Body: Mention some of the changes proposed in the bill which affect mining industry

Conclusion: Way forward

Recently, Parliament passed the Mines and Minerals (Development and Regulation) Amendment Bill, 2023 which aims to enhance the role of private sector investment in the exploration of critical and deep-seated minerals in the country.

Some of the changes proposed in the bill which affect mining industry:

- **Greater role of the private sector:** The bill seeks to allow the private sector to mine six out of 12 atomic minerals, including lithium, beryllium, niobium, titanium, tantalum, and zirconium. exploration and mining of these six minerals, previously classified as atomic minerals, were restricted to government-owned entities.
- **Less dependency on China:** Due to the scarcity of these rare & critical minerals or the concentration of their extraction or processing in a few places, there is an increased reliance on imports, which exposes supply chains to the risk and can even cause supply disruptions. For instance, 70% of the world's cobalt is mined in the Democratic Republic of the Congo, which is majority-owned by China. China is the nation with the biggest known reserves of rare earth elements, followed by Vietnam, Brazil, and Russia.
- **Economic development and national security:** These minerals are crucial to a country's manufacturing, infrastructure, and advancement. For eg, lithium is used for manufacturing batteries for electric vehicles and energy storage devices. These minerals are also necessary for the production of semiconductors used in smart devices, aerospace and defence technology, and telecommunications.
- **Capacity building of private players:** By utilizing the private sector's potential for exploration, a new bill aims to bring India's exploration methods up to level with those of wealthy nations. The use of techniques like aerial surveys, geological mapping, and geochemical analyses is a highly specialized, time-intensive, and monetarily risky operation that requires the assistance of the private sector.
- **Incentives for private players:** The bill allows pitting, trenching, drilling, and sub-surface excavation as part of reconnaissance, which included mapping and surveys that were earlier prohibited.

Mains Marathon Compilation for the Month of August, 2023

- **Power of State Government:** The State government will award the exploration license (EL), which has a five-year initial term and a two-year extension option. The bill also grants the central government the exclusive right to put up for auction mining leases and composite licenses for a few key minerals.

Conclusion:

Notably, it is believed that India has only explored 10% of its geological potential, less than 2% of which is mined, while the nation spends less than 1% of the worldwide budget on mineral exploration. The enhanced role of private sector participation will mark significant changes in mineral discoveries and mineral exploration projects.

15. Discuss the need for rebuilding the urban primary healthcare system to ensure resilience against unpredictable climatic events.

Introduction: Give a brief context of urban primary health care.

Body: Why is it essential to rebuild the urban primary healthcare system to ensure resilience against unpredictable climatic events?

Conclusion: Way forward

Urban primary healthcare refers to the healthcare services provided to individuals and communities in urban areas as part of their primary care needs. Urban primary health care is a broad term that refers to a variety of medical, preventive, and promotional services that are offered to urban people to meet their fundamental healthcare requirements. A considerable majority of India's population lives in urban regions, making urban primary healthcare a crucial component of overall healthcare systems.

Why is it essential to rebuild the urban primary healthcare system to ensure resilience against unpredictable climatic events?

- **Health risks:** Events brought on by climate change may increase health hazards. Waterborne illnesses can emerge from flooding, vector-borne illnesses like dengue and malaria can spread after flooding, and heatwaves can bring on heat-related illnesses and aggravate pre-existing medical issues.
- **Increased vulnerability of Urban Poor:** Urban households, especially those in less developed regions of a city like slums and urban settlement colonies, are probably the most vulnerable. Most residents of these slums and resettlement colonies are indigent, working in the unorganized urban economy without access to social security benefits.
- **Responsibility to Local bodies:** The primary responsibility of maintaining the preventive and public health functions of urban primary health care is the responsibility of local bodies. So it is critical to develop the capacity building of urban governance institutions to cater to the healthcare needs of urban citizens.

How to rebuild the health system?

- **Inter-State Cooperation:** The prevention of the spread of these illnesses necessitates systematic cooperation between States as well as within each State because of inter-state and intra-state migration.
- **Enhance Public investment:** There is a need for greater public investment with an immediate focus on urban areas especially in less developed parts of a city such as slums and urban settlement colonies.
- **Intersectoral Collaboration:** Addressing the health impacts of climate change requires collaboration across sectors, including urban planning, disaster management, environmental health, and public health. A rebuilt healthcare system

Created with love ❤ by ForumIAS- the knowledge network for civil services.

Visit academy.forumias.com for our mentor based courses.

Mains Marathon Compilation for the Month of August, 2023

should be designed to work seamlessly with the private sector to create a comprehensive response framework. This can be achieved through greater coordination and cooperation across various actors in terms of knowledge and data sharing, preventive and curative functions, treatment practices, and, above all, the regulation of rates and standards.

- **Front-line workers:** There is an urgent need to address the shortage of trained workers in the health sector by creating multi-purpose cadres through the integration of front-line workers across various disease management programs.

Conclusion:

By building a climate-resilient healthcare system, India can better safeguard the health and well-being of its urban population in the face of an increasingly unpredictable climate.

16. What is the United States Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022 (CHIPS Act)? Discuss the lessons that India can learn from the CHIPS Act for executing its semiconductor strategy

Introduction: Give brief context of CHIPS Act.

Body: What are its key features and lessons that India can learn from this Act for its semiconductor mission?

Conclusion: Way forward.

The ***Creating Helpful Incentives to Produce Semiconductors and Science Act (CHIPS Act)*** seeks to offer \$280 billion in aid and subsidies, with a special emphasis on the country's semiconductor industry, which is being threatened by China. The bill would give US chip manufacturers "\$52 billion in subsidies and additional tax credits" in addition to another \$200 billion for scientific research, particularly in artificial intelligence and other cutting-edge technology.

Key features of the Act:

- **Reduce dependence on China:** A global shortage of semiconductors or chips led to the recognition that the US needed its substantial manufacturing & reduced its dependence on China. 75% of world semiconductor demand is met by countries of East ASIA, particularly Taiwan, Korea & China.
- **National security:** It will strengthen US national security by making tech companies less dependent on foreign sources of semiconductors which are known to be used in critical sectors of the economy.

What can India learn from CHIPS Act for executing its semiconductor strategy?

- **US-India Initiative on Critical and Emerging Technologies (iCET):** Both countries agreed to enhance bilateral collaboration on resilient supply chains, support the development of a semiconductor design, manufacturing, and fabrication ecosystem in India, and promote the development of a skilled workforce for the industry.
- **Inter-Ministerial coordination:** The CHIPS Act highlights cooperation and coordination between several arms of the government. Central government must ensure cooperation between the Ministry of Commerce, defence and external affairs, and major scientific institutions for accelerating semiconductor manufacturing and research.
- **Focus on Technocrats:** India Semiconductor Mission (ISM) has been set up by MeitY, which is largely dominated by career bureaucrats while the CHIPS Act requires the

Mains Marathon Compilation for the Month of August, 2023

overwhelming presence of technocrats or subject experts cooperating alongside government efforts.

- **Link between Academia and Industry:** In line with the National Semiconductor Technology Centre (NSTC) of USA, Meity has created the Chips2 Startup (C2S) programme which aims to collaborate with industry and educational institutions.
- **Transparency and Accountability:** Along the lines of the CHIPS Program Office (CPO), there should be a body to lay down the guidelines for assessing the financial viability of a project, and display regular monthly reports on the semiconductor program which will enhance transparency and accountability.

Conclusion:

India needs to make concerted efforts to identify and invest in research on future technologies. For eg, India needs to prioritise and focus on high volume chip manufacturing and packaging research to ensure the success of its India Semiconductor Mission (ISM).

17. Why are cluster bombs considered controversial? Explain the provisions of the Convention on Cluster Munitions (CCM) and its significance in international law.

Introduction: What are cluster bombs?

Body: What are the provisions of the Convention on Cluster Munitions (CCM) and their significance in international law?

Conclusion: Way Forward

A bomb that explodes in the air and scatters smaller "bomblets" across a large area is known as a cluster munition. The bomblets are made to destroy troops, tanks, and other equipment by simultaneously striking several different targets. The dud rate is the proportion of bomblets that do not explode right away and remain dormant for several years. These dormant bomblets function as unstable landmines and pose a serious hazard to the civilian population, particularly women and children, for a considerable amount of time which makes these bombs highly controversial. These were used by the US in ***Vietnam, Afghanistan, Iraq & Russia against Ukraine***. Efforts of civil society organizations & Human rights watch led to the **Convention on Cluster Munitions (CCM)** an international treaty that prohibits all use, transfer, production, and stockpiling of cluster munitions, a type of explosive weapon which scatters submunitions ("bomblets") over an area.

What are the provisions of the Convention on Cluster Munitions (CCM) and their significance in international law?

- **Prohibits the use of cluster bombs:** Article 1 of the CCM bans the use, production, stockpiling, and transfer of cluster bombs.
- **Production and Transfer Prohibition:** States Parties are not allowed to manufacture, obtain, stockpile, or transfer cluster munitions to other states or non-state entities.
- **Destruction and Clearance:** States must ensure that Cluster munition remains must be removed and destroyed in any locations that fall under the jurisdiction and control of the parties. They have a deadline to meet for completing these responsibilities, which is specified in the convention.
- **Assistance to Victims and Affected Communities:** States Parties are required to offer cluster munitions victims assistance, including medical attention, rehabilitation, and emotional support. They are also urged to help the impacted areas rebuild economically and socially.

Conclusion:

Mains Marathon Compilation for the Month of August, 2023

Presently, only 112 countries have acceded to the CCM including many North Atlantic Treaty Organization (NATO) members such as Canada, Germany, France, and the United Kingdom while important countries such as the U.S., Russia, China, Israel, and India have not signed the CCM. As envisioned in the CCM, cluster bombs should be completely outlawed for use, ownership, transfer, and supply. To make this a reality, all UN member states must ratify the CCM and eliminate cluster munitions from the planet.

18. Compare and contrast the characteristics of small nuclear modular reactors (SMRs) and conventional nuclear power plants.

Introduction: Give a brief context of the question.

Body: Highlight differences between small nuclear modular reactors (SMRs) and conventional nuclear power plants.

Conclusion: Way forward.

The move to decarbonize power generation has once again brought the issue of **small nuclear modular reactors (SMRs)** as an alternative to coal-fired power generation plants “to ensure access to affordable, reliable, sustainable and modern energy for all”.

Difference between small nuclear modular reactors (SMRs) and conventional nuclear power plants.

- **Size:** SMRs are smaller in size and have lower power output compared to conventional nuclear power plants. They typically have an electrical output of fewer than 300 megawatts (MW). Conventional nuclear power plants on the other hand are large with an output of 700+ MW.
- **Cost & Construction:** The construction of conventional plants can be more complex and time-consuming, often requiring a longer lead time for planning and execution. By reusing existing infrastructure, SMRs can be constructed in decommissioned thermal power plant sites, saving the host nation from having to buy extra land and/or relocate residents outside of the current site border.
- **Safety:** Because SMR designs are more straightforward than those of traditional NPPs and incorporate several passive safety safeguards, there is less chance of an uncontrolled release of radioactive materials into the environment. Additionally, compared to a traditional NPP, an SMR plant will store less spent nuclear fuel.
- **Fuel Used:** Some SMR designs employ various fuel types, including advanced fuels and even non-uranium fuels, which might result in improved fuel utilization and less waste. Enriched uranium is primarily used as fuel in conventional nuclear power plants.
- **Regulation:** Due to their distinct design and smaller scale, SMRs may have a different regulatory process than conventional facilities. Some nations are investigating simplified licensing procedures for SMRs. The standard plant regulatory process is well-established, but it can be strict and time-consuming.

Conclusion:

Union Government must take full responsibility to ensure the safety, security, and safeguards, controls of nuclear fuel and radioactive waste. Additionally, a law must be passed by the government to establish a regulatory body that is independent, powerful, and qualified to monitor every phase of the nuclear power production cycle. Lastly, the Atomic Energy Act will need to be amended to allow the private sector to set up SMRs.

Mains Marathon Compilation for the Month of August, 2023

19. Discuss the link between undernutrition and tuberculosis, as highlighted in the Lancet study. Critically analyze the implementation of the Nikshay Poshan Yojana, aimed at improving the nutrition of TB patients. [150 words]

Introduction: Give context to the Lancet report.

Body: Discuss highlights of the report and implementation of Nikshay Yojana.

Conclusion: Way forward.

Recently, a study conducted by Lancet in Jharkhand shows that a good diet not only reduces the incidence of the disease amongst vulnerable people living with infected people, but it also reduces mortality in TB patients. The study found that early weight gain in people with TB lowers the risk of mortality by 60 percent.

How has implementation of the Nikshay Poshan Yojana, aimed at improving the nutrition of TB patients?

- **Direct benefit transfer:** The NPY was launched in 2018 by the Ministry of Health and Family Welfare. It aims to support every TB Patient by providing a Direct Benefit Transfer (DBT) of Rs 500 per month for nutritional needs. The government needs to increase the DBT amount as Rs 500 is too low to have a nutritious and healthy diet.
- **People's participation:** Community participation is an essential feature of Nikshay Yojana. Community participation plays a key role in mass awareness, behaviour change, demand creation, clearing myths, and convincing the reluctant to embrace services. Low patient awareness has also been reported to affect the program's reach to the citizens.
- **Nikshay Mitras:** The program allows Nikshay Mitras to adopt and take care of TB patients. Nikshay Mitras are volunteers who may represent private citizens, businesses, NGOs, cooperative societies, or even political organizations. They promise to assist TB sufferers by providing dietary support, nutritional supplements, extra research, and employment assistance. Medical journals have reported about the lack of training for healthcare providers and complex reporting formats as the main hurdles in the implementation of the scheme.

Conclusion:

Policymakers must take insights from Lancet's study and frame guidelines to make sure that people have a healthy diet of proteins, carbohydrates, and micro-nutrients which will help the government achieve its ambitious goal of TB elimination by 2025.

20. Analyze the arguments for and against the use of smartphones in schools. Discuss the impact on learning, mental well-being, and social interaction. Evaluate UNESCO's recommendation for a universal ban and India's approach to this issue. [250 words]

Introduction: Give context to the UNESCO report.

Body: Analyse arguments for and against use of smartphones and give UNESCO suggestions for the same.

Conclusion: Way Forward.

A recent UNESCO report has flagged concern regarding the increasing use of smartphones in schools. UNESCO has recommended a universal ban on the usage of smartphones in schools to tackle classroom disruption, improve learning, and help protect children from cyberbullying.

Mains Marathon Compilation for the Month of August, 2023

Arguments for the Use of Smartphones in Schools:

- **Post-COVID Digital Age:** Post-pandemic there has been increased usage of smartphones owing to the widespread boom in the edutech industry. The government has also highlighted the use of smartphones in its NEP or New Education Policy.
- **Implementation of blanket ban:** Studies have shown that a blanket ban on phones is difficult for school administration to enforce as children find discreet ways to bring phones.
- **Information & digital age:** Smartphones provide students with instant access to a vast amount of information and educational resources which can enhance their learning experience. The use of the latest technology like AI and speech recognition can widen the scope of education and make it possible to engage children from various backgrounds.
- **Interactive:** Learning may be made more interactive and engaging by using smartphones in sessions. Interactive tests, multimedia presentations, and educational apps can hold students' interest and accommodate various learning styles.

Arguments against the Use of Smartphones in Schools

- **Distraction:** The fact that smartphones may be quite distracting is one of the biggest worries. During class, students might use them for non-educational activities like texting, social media, or gaming, which would distract them from learning.
- **Academic Performance:** Smartphone distractions might affect academic achievement as they are engaged in non-academic activities or frequently check their phones during class, risk missing vital information, and find it difficult to stay up with their studies.
- **Social Interaction:** Smartphone use in class could make it harder for students to interact socially in person. There may be less opportunity for peer collaboration, communication, and social skill development if students are engrossed in their devices.
- **Health concerns:** Excessive smartphone use has been associated with attention deficit disorders, anxiety, and depression. This may affect the mental health of the student and his academic performance.

UNESCO recommendation for a universal ban and India's approach to this issue:

- UNESCO recommended that policymakers should take in mind the concern of students and frame data protection laws keeping their health & security in mind.
- UNESCO has suggested that mobile phones be banned during school hours.
- UNESCO has suggested that bringing smartphones into schools increases the digital divide among students belonging to various socio-economic backgrounds because students with access to the latest expensive devices could experience an advantage, while those with limited resources might feel left out or stigmatized.

Conclusion:

There should be a need to engage all stakeholders connected with school education such as students, parents, teachers, and heads of schools to decide on the future of smartphones in the schools.

21. Explain the objectives and achievements of Project Elephant. How has it contributed to the conservation of elephants and their habitats?

Introduction: Describe Project Elephant.

Body: Explain the objectives and achievements of Project Elephant & measures taken to conserve elephants.

Conclusion: Way Forward.

Project Elephant is a government-led initiative in India aimed at the conservation, protection of elephants their habitats, corridors & ensuring the welfare of captive elephants. It was launched in 1992 by the Ministry of Environment, Forests and Climate Change, Government of India, in response to the growing concerns about the declining elephant population and the increasing conflict between elephants and human activities.

Objectives and achievements of Project Elephant are:

- **Elephant population:** Due to increased conservation efforts India is home to around 60% of the global elephant population spreading across southern, north-eastern, east-central & northern regions of the country.
- **Protection of elephants:** The primary goal of Project Elephant is to ensure the long-term survival of the Indian elephant population and its habitats. This involves implementing measures to counter various threats such as habitat loss, poaching, human-elephant conflicts, and other anthropogenic pressures.
- **Capacity Building:** Training forest workers, residents, and other stakeholders on elephant conservation and management practice is a key component of Project Elephant's capacity-building strategy.
- **Mitigating Human-Elephant Conflict:** Project Elephant aims to address this conflict by implementing measures like the construction of barriers, early warning systems, and community-based interventions to reduce negative interactions between elephants and humans.

How has this helped in the conservation of elephants and their habitats?

- The government has worked extensively to minimize the adverse impact of railway lines on elephant corridors. It is most important to minimize habitat fragmentation.
- Various mitigation strategies like underpasses in Tamil Nadu and Kerela, elevated corridors in Assam, speed restrictions, level crossings & ramps to facilitate elephant movement have been used to protect elephant corridors.
- Technological interventions like the Intrusion Detection System using fibre optic technology have been used in West Bengal & Uttarakhand to detect animals using seismic sensors and thermal infrared cameras.
- **Management Effectiveness Evaluation (MEE)** of elephant reserves is being undertaken by governments and international bodies to understand the strengths and weaknesses of the protected areas. E.g., in Tamil Nadu, Odisha, Uttarakhand & Assam.
- Project Elephant has helped in improving natural habitats by increasing water resources, planting fodder trees, bamboo registration, etc. Natural habitats are being notified as Elephant reserves have improved focus and synergy in the conservation of big species.
- The genetic database recorded in the Gaj Soochna App has prevented the illegal transfer of elephants interstate as well as person to person.

Conclusion:

Mains Marathon Compilation for the Month of August, 2023

The success of the project can be gauged from the fact that so far India has established 33 Elephant reserves in 14 states and has recognised the elephant as a National Heritage Animal which is protected under Schedule I of Wildlife Protection Act, 1972.

22. Highlight the challenges of drug-resistant tuberculosis (DR-TB) in India. Also, Discuss the new regimens recommended by WHO for DR-TB patients.

Introduction: What are TB, MDR-TB & DR-TB?

Body: Challenges of DR-TB & new methods adopted by India and WHO.

Conclusion: Way forward.

Tuberculosis is a disease caused by the bacteria, *Mycobacterium tuberculosis*. India constitutes a major burden country with 20% of all TB cases in the world. Multidrug resistant TB (MDR TB) is caused by bacteria that do not respond to at least Isoniazid and Rifampicin, the most powerful, first line anti-TB drugs. Drug-resistant TB occurs when drugs are not properly taken, like incomplete treatment, wrong dosage, wrong length of treatment, wrong combination, unavailability of drugs or poor quality drugs.

Challenges of drug-resistant tuberculosis in India:

- **High patient burden:** India has 25% of world's DR-TB cases with a large number of cases being diagnosed and treated each year.
- **Inaccurate diagnosis:** Timely and accurate diagnosis is critical for effective management but challenges like underreporting & lack of the latest diagnostic methods have led to a large no of cases which is being highlighted in WHO report.
- **High cost of treatment:** Due to the use of expensive second-line medications, the treatment of drug-resistant TB is not only more difficult but also more expensive. Patients may be deterred from obtaining the right care or from sticking to their regimen by this costly burden.
- **Rapid Urbanization:** India's crowded mega-cities provide a perfect breeding ground for the airborne infection to spread as people travel from rural to urban areas & interact in densely populated environments. UP has the highest number of such patients, followed by Maharashtra.

new regimens recommended by WHO for DR-TB patients.

- WHO suggested use of molecular diagnostics as the initial diagnostic test which are highly accurate, detect resistance to drugs, are cost-effective, and reduce treatment-related delay.
- Use of oral medications has reduced the duration of DR-TB treatment from 24 months to 6 months which is a big improvement in medical science.
- WHO suggests use of oral **BPaLM/BPaL regimen for DR-TB patients**, (Pretomanid (Pa) bedaquiline (B), linezolid (L), and sometimes moxifloxacin (M) to form BPaL and BPaLM) has reduced pill intake & is found to be effective at curing 89-91 per cent of multidrug-resistant TB (MDR-TB).

Conclusion:

As per India TB Report 2023 most patients in India are still on treatment regimens involving injectables which are to be phased out at the earliest as per WHO recommendation. The government and medical industry should also ensure that drugs like bedaquiline, pretomanid should be available, accessible, and affordable to Indian citizens with every individual having right to access the best quality healthcare.

23. Analyze the historical relationship between India and Taiwan (RoC). Also, Evaluate the strategic interests that India and Taiwan share, including military intelligence and Taiwan's position as a world leader in semiconductors.

Introduction: Give a brief context of the relationship.

Body: Briefly describe the historical relationship between India and Taiwan including military and economic cooperation.

Conclusion: Way forward.

The formal name for Taiwan is the Republic of China (ROC), and historically, relations between India and Taiwan have been complicated and multidimensional, defined by a careful balancing act between political considerations, economic interests, and diplomatic pragmatism.

Historical relationship between India and Taiwan:

- **Relation during WWII:** The relations can be traced back to the deployment of the 100,000-strong Chinese Expeditionary Force (CEF) for the defence of Burma after which a centre for military training was opened in Ramgarh (India) which was visited by Chiang Kai-shek. The visit marked solidarity with India in its fight against Japanese aggression & extended support for India's freedom struggle. India initially recognized the ROC as the legitimate government of China
- **Post 1949 Revolution:** Post India's independence and Chinese revolution there was a shift in India's policy & India was one of the first Asian countries to recognise the People's Republic of China (PRC under Communist Party) and its **One China** principle.
- **Normalization of relations:** Post 1991 both nations established representative offices in Taipei and New Delhi. The two establishments have played a significant role in improving people-to-people contacts and in the expansion of cultural, economic, and political relations.

Strategic interest between India & Taiwan:

- **Geo-strategic cooperation:** While overt military intelligence cooperation is not possible due to diplomatic constraints, both countries are concerned about regional stability in South Asia as well as Taiwan Strait.
- **Convergence of policies:** There is room for convergence between Taiwan's New Southbound Policy, which seeks to strengthen cooperation and exchange between Taiwan and 18 countries in Southeast Asia, South Asia, and Australasia, and the Indian government's Act East policy, which promotes closer economic, strategic, and diplomatic engagement with nations in the Indo-Pacific.
- **Emerging and critical technologies:** Both nations are actively seeking to expand the relations in areas of emerging and critical technologies including manufacturing of semiconductors and electronics equipment. Taiwanese companies are looking to relocate their manufacturing bases to India to bring down their exposure to the Chinese market, allowing Indians to upgrade their skills to meet the needs of the semiconductor industry. Eg, Taiwan-based Foxconn, which is Apple's largest supplier, has an iPhone manufacturing facility in Tamil Nadu. India's strength in software capabilities & Taiwan's in hardware and manufacturing in the ICT sector could be a big boost to India's flagship schemes like Make in India.

Conclusion:

India should engage with like-minded countries like ASEAN in establishing relations with Taiwan while maintaining its One China principle. Taiwan should be accepted as a **part of the wider Indo-Pacific region** towards ensuring a **rules-based order** in the Indo-Pacific.

24. Evaluate the NMC's new rules regarding doctors' use of social media. How might these rules protect patients' rights, and what challenges might arise in enforcing them?

Introduction: Explain the role of National Medical Commission.

Body: Highlight the new guidelines framed by NMC & challenges in their enforcement.

Conclusion: Way forward.

The National Medical Commission (NMC) is a regulatory agency established in India with the goals of regulating the medical profession there as well as supervising and reforming the nation's medical education system. To resolve issues relating to medical education, training, and practice, was established to take the position of the Medical Council of India (MCI).

What are the new rules by NMC regarding doctors' use of social media?

- **Respect patient rights:** NMC guidelines refrain doctors from using social media to disclose their patients' conditions, treatment & outcomes. This rule protects the patient's right to privacy. Further, social media can be used only to educate patients and not for soliciting.
- **Right to refuse:** Doctors may refuse treatment to abusive, unruly, or violent patients and relatives. The step is aimed at checking instances of violence against doctors.
- **End to unethical medical practices:** The regulations bar doctors from endorsing any drug brands, medicine, and equipment. This would restrict doctors and their families from receiving gifts, travel facilities, hospitality, cash, or access to recreation from pharma companies or their representatives under any pretext.
- **End to "commission" culture:** The guidelines also forbid doctors from accepting commissions from diagnostic centres, medical or surgical equipment, etc. for referral and from endorsing particular products. This would end corrupt practices and bribery culture in the medical field.
- **Generic medicine:** To reduce out-of-pocket expenditure NMC has mandated that doctors prescribe generic drugs failing which their license may be suspended for some time.
- **Misuse of Technology:** The guideline also forbids doctors from "purchasing" likes, followers, or any fees to boost their profile on search algorithms and says that doctors should not participate in telemedicine platforms that provide ratings, reviews, and promotions of certain doctors by any means. This ensures that the integrity of the medical profession is not compromised.

Challenges in enforcing these guidelines:

- The medical fraternity has urged the government to clarify if the guidelines drafted are binding or merely recommendatory. This will help clear ambiguity regarding the new guidelines.
- Medical practitioners have also raised concerns regarding the mandatory use of generic medicines. They have highlighted the inadequate stock of generic medicines owing to their lower profit margin & also the difference in the quality of generic medicines for the same disease.
- An inadequate supply of generics would make patients depend on the word of pharmacists who will prescribe medicine that is procured by them irrespective of the health implications on the patient.

Conclusion:

The new NMC guidelines will usher an era of ethical & responsible medical industry catering to citizens welfare. Much more will depend on how effectively these guidelines are implemented and its penal provisions.

25. Explain the differences between consumption-based poverty estimates and multidimensional poverty estimates. Suggest possible improvements in the collection of data and the need to supplement consumption surveys.

Introduction: Define Poverty and methods to estimate poverty.

Body: Explain the differences between consumption-based poverty estimates and multidimensional poverty estimates

Conclusion: Way Forward.

Poverty can be defined as a condition in which an individual or household lacks the financial resources to afford a basic minimum standard of living. A common method used to estimate poverty in India is based on the income or consumption levels and if the income or consumption falls below a given minimum level, then the household is said to be Below the Poverty Line (BPL). Multidimensional poverty index (MPI) on the other hand captures poverty using 10 indicators: nutrition, child mortality, years of schooling, school attendance, ownership of assets, and access to proper house, electricity, drinking water, sanitation, and clean cooking fuel. The MPI is a more comprehensive measure of poverty because it includes components that capture the standard of living more effectively.

Difference between both methods:

- **Factors and dimensions:** Consumption-based estimates are based primarily on the economic aspects showcasing the household consumption or income pattern to meet their basic needs of food, clothing, and shelter. MPI on the other hand broadens the definition by including various dimensions like health & education giving a more comprehensive view.
- **Measurability:** Consumption-based estimates are relatively easy to measure as they are based on expenditure or income of the household which can be derived from the consumption pattern or economic figures while MPI indicators need to be evaluated carefully. MPI indicators generally give a comprehensive view of the entire population rather than the household.
- **Policymaking:** Consumption-based estimates are useful for understanding the basic economic well-being of individuals and households & framing policies related to income redistribution, social safety nets, and poverty alleviation programs. MPI on the other hand considers non-monetary aspects of deprivation helping policymakers to design programs for the complete well-being & human development of all.

What are the ways to improve the collection of data?

- **Frequent surveys:** Poverty estimates should be done frequently to capture the changes in poverty and well-being more accurately.
- **Supplement with other surveys:** Poverty estimates in India should consider data from surveys like the Centre for Monitoring Indian Economy (CMIE) and Periodic Labour Force Survey (PLFS) to overcome any shortcomings in data estimates.
- **Minimizing the gap between different surveys:** NSO should study the widening gap between the data of National Accounts Statistics (NAS) and National Sample Survey data & make efforts to improve the collection of data through both routes.

Conclusion:

Recent reports of NITI Aayog and UNDP on multidimensional poverty highlight that India has made momentous progress in reducing multidimensional poverty. These statistics should be supported by the consumption-based estimates which are due to be released later this year.

26. Analyze the impact of tourism on the fragile Himalayan ecology. How has the infrastructure development for tourism contributed to environmental degradation in the region?

Introduction: Briefly describe the context of the question.

Body: What is the impact of tourism on Himalayan ecology and how has infrastructure worsened it?

Conclusion: Way Forward.

Recent environmental disaster in the Himalayan ecosystem in the states of Uttarakhand and Himachal Pradesh has once again sparked the issue of irresponsible tourism in fragile Himalayas which has caused great loss to life and property of the region.

What is the impact of tourism on Himalayan ecology?

- **Overcrowding:** In recent years it has been seen that hill stations are fully overcrowded throughout the year, unlike the past decade where it was mainly in the summer season. This huge influx of tourists has led to soil erosion, vegetation damage, and disturbance of wildlife habitats.
- **Depletion of resources:** Local ecosystems and infrastructure are stressed by the increased demand for water, electricity, and other resources, which frequently results in overuse and depletion.
- **Waste Generation:** Tourism produces a lot of waste, including plastic, packaging, and other contaminants that can contaminate local waterways and harm flora and fauna.
- **Pollution:** The influx of vehicles and increased construction can lead to air and noise pollution, affecting both the environment and residents.
- **Deforestation & Loss of Habitat:** The development of tourism-related infrastructure, such as roads and lodging, can result in deforestation and habitat fragmentation, upsetting ecosystems and endangering species.

How has infrastructure development exacerbated this environmental degradation?

- **Widening of Roads:** Projects like the Char Dham highway project and many other small road-wide project has disturbed the ecology of the region. Road construction for improved access to tourist destinations frequently entails clearing forests, deteriorating slopes, and raising the possibility of landslides. Additionally, the migration of wildlife may be impeded by these roadways.
- **Unplanned rise in the Hospitality sector:** Building hotels, resorts, and other types of lodging has resulted in unchecked urban growth, destroying habitat and upsetting normal drainage patterns.
- **Management of Water Resources:** As a result of the increased demand for water brought on by tourists, local resources are frequently over-extracted, creating a water shortage that affects both local populations and the environment.
- **Solid Waste Management:** Inadequate waste management facilities can lead to improper disposal of waste, polluting soil and water, and impacting the overall aesthetic appeal of the region.
- **Energy Consumption:** The requirement to accommodate visitors and offer services increases energy consumption, which frequently results in a rise in greenhouse gas emissions and environmental stress.

Conclusion:

Careful planning, sustainable practices, and cooperation between governments, local communities, and the tourism sector are necessary to strike a balance between the economic advantages of tourism and the preservation of the vulnerable Himalayan ecology.

27. Examine the principles of equality and equitability in criminal law reform. How do the proposed Bills address the disparities in access to justice between different social classes?

Introduction: Give context to the latest bills introduced in Parliament.

Body: How do the proposed Bills address the disparities in access to justice between different social classes?

Conclusion: Way forward.

Recently Parliament introduced three new Bills which aim to transform India's criminal laws — the Bharatiya Nyaya Sanhita to replace the Indian Penal Code; the Bharatiya Nagarik Suraksha Sanhita to replace the Code of Criminal Procedure and the Bharatiya Sakshya Bill to replace the Indian Evidence Act. The Bills have the potential to transform India's criminal justice system with far-reaching effects on the issues of sustainability, efficacy, adherence to the rule of law, and justice delivery. The principles **of equality and equitability in criminal law** can be traced to the principle of 'Rule of Law' propounded by the British jurist A.V. Dicey & mentioned in Article 14 of the Indian Constitution.

Equality in criminal law reform refers to treating all individuals equally under the law, regardless of their race, gender, socioeconomic status, religion, or any other characteristic. The principle of equality emphasizes that the law should be applied uniformly, and individuals should be treated similarly in similar situations.

Equitability in criminal law reform goes beyond simple equality and considers the particular circumstances and personal elements that may influence a person's engagement in criminal activity. This principle acknowledges that treating everyone equally does not always lead to justice since certain people could experience difficulties or vulnerabilities that have an impact on their decisions and behaviors.

How do the proposed Bills address the disparities in access to justice between different social classes?

- Balance between security & fundamental rights: The proposed bill aims to address the balance between state security and the fundamental rights of the citizens. Eg, Sedition or Sec 124A has been completely repealed and the new Sec 150 defines offences against the state.
- Gender Inclusivity: The proposed Bharatiya Nyaya Sanhita, 2023, has a clause on using **"deceitful means" to promise to marry a woman** which did not exist in IPC. This will ensure that women are not exploited in workplaces.
- Mob Lynching: The new bill has incorporated a specific provision for mob lynching and stipulated punishment ranging from seven years in jail to the death penalty for those convicted of the crime. This will ensure that the rule of law is upheld & curb mob violence.
- Serious punishment for sexual offenses: The new bills prescribe a minimum of 20 years in prison for a person convicted of gang rape, with the maximum punishment being life imprisonment. The new bills propose the "death penalty for rape of a minor"

Conclusion:

There needs to be wider discussion in Parliament regarding the scope of the bills and greater engagement to involve subject matter experts like jurists, lawyers, and police officers to accommodate individual rights and their participation in society. The proposed criminal law must foster the rule of law and help in the administration of justice.

28. Explain the concept of the Multidimensional Poverty Index (MPI) and how it is used to estimate poverty in India. How does India's MPI differ from the Global MPI?

Introduction: Describe MPI.

Body: Differentiate between India's MPI & the Global MPI. How MPI is used to calculate poverty?

Conclusion: Way forward

The Multidimensional Poverty Index (MPI) is a comprehensive indicator of poverty that looks at more factors than just income or consumption. For a more complete knowledge of deprivation and poverty, it considers several aspects of poverty, such as health, education, and style of life. The index is based on the methodology used by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP) to construct the Global MPI.

How it is used to estimate poverty in India?

- **Health Dimension:** This dimension considers factors such as nutrition, child mortality, and maternal health. It examines whether individuals have access to adequate nutrition and healthcare services.
- **Education Dimension:** The education dimension assesses whether individuals have access to education and can complete at least six years of schooling. It also considers the enrolment and attendance rates of school-age children.
- **Standard of Living Dimension:** This dimension includes indicators related to access to clean water, sanitation, electricity, housing quality, and assets. It looks at the living conditions of individuals and households.

How does India's MPI differ from the Global MPI?

- **Indicators:** The national MPI measures deprivations across the three dimensions of health and nutrition, education, and standard of living. But India's MPI is not the same as the Global MPI. For instance, India's MPI has 12 variables, while the Global MPI has 10. The two additional variables in India's MPI are maternal health and bank account.
- **Index Preparing agency:** Global MPI is based on the methodology used by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP). While national MPI is framed by NITI Aayog.
- **Policymaking:** Policymakers can pinpoint the precise dimensions and indicators of deprivation that are most pervasive in India according to the national MPI. This information makes it easier to customize treatments to address the unique problems faced by various communities and regions in India. On the other hand, the global MPI offers a uniform framework for contrasting poverty across nations and monitoring worldwide advancements in eliminating multidimensional poverty.
- **External factors:** India's diverse population and vast geographical variations contribute to a wide range of living conditions and challenges. The Indian MPI takes into account these contextual factors to provide a more accurate and nuanced picture of poverty within the country. The global MPI, while comprehensive, does not capture the full spectrum of India's diverse circumstances.

Conclusion:

The MPI for India is a country-specific adaption of the global MPI framework that has been altered to take into account the particular socioeconomic circumstances, difficulties, and goals of India. It contributes to the larger global endeavour to comprehend and confront multidimensional poverty from a variety of angles while providing a more specialized method for measuring and addressing it within the nation.

29. Discuss the Supreme Court's initiative in issuing a handbook on combating gender stereotypes. Evaluate the implications of stereotyping language for women's safety, well-being, and the larger pursuit of justice.

Introduction: Give a brief description of the handbook.

Body: What are the implications of stereotyping language for women's safety, well-being, and the larger pursuit of justice?

Conclusion: Way forward.

Recently, the Supreme Court issued a handbook on combating gender stereotypes. The 30-page ***Handbook on Combating Gender Stereotypes*** aims to free the judiciary and the legal community from the mechanical application of gender stereotypical language in judgments, orders, and court pleadings. These gender stereotypes undermine "the transformative project of the law and the Constitution of India, which seek to secure equal rights to all persons, irrespective of gender" in addition to harming the outcome of a legal case. They also promote harmful ideas about women and, in fact, all people across the gender spectrum.

What are the implications of stereotyping language for women's safety, well-being, and the larger pursuit of justice?

- **Undermine gender equity:** A study at Carnegie Mellon University has found that cultural stereotypes words like *"devoted wife"*, and *"career woman"* in various languages about women being more suited to the domestic sphere, have undermined gender equity efforts in STEM careers. This harms women's educational and employment prospects.
- **Victim Blaming:** In situations involving harassment, assault, or violence against women, the use of stereotypical language can result in victimization. When language indicates that women are to blame for their abuse because of how they appear, behave, or make decisions, it deters reporting and compromises efforts to bring perpetrators to justice.
- **Safety:** Women may be hesitant to report occurrences or pursue justice when society upholds stereotypes that cast doubt on the veracity of their experiences of harassment or violence. This lack of reporting prevents necessary action from being taken and supports a culture of impunity.
- **Impartiality:** Judges' impartiality is compromised by gender stereotypes. Their impression of whether violence has occurred in situations like the rape of sex workers, the rape of married women by their husbands, or domestic violence in same-sex relationships is also influenced by how they understand criminal offenses.
- **Negative Perception:** Women are frequently portrayed in gender stereotypes as being emotionally and physically weaker than males. This idea may cause people to believe that women are more likely to be the targets of harassment, aggression, and other forms of harm which has implications for their safety and well-being and the larger pursuit of justice.

Conclusion:

Gender stereotypes distort the law's application to women & reinforce ideas contrary to our constitutional ethos. Predetermined preconceptions in judicial decision-making go against the judge's obligation to decide each case fairly, impartially, and independently. There is a sincere hope that the handbook will mark a significant milestone in the journey toward a more just and equitable society.

30. Critically analyze the provisions of the Registration of Births and Deaths (Amendment) Bill, 2023. Discuss the potential benefits and drawbacks of the amendments.

Introduction: Give context of the bill.

Body: What are its salient features and benefits and drawbacks?

Conclusion: Way forward.

Recently, Parliament passed the Registration of Births and Deaths (Amendment) Bill, 2023 which allows the use of a birth certificate as a single document for admission to an educational institution, issuance of a driving licence, preparation of voter list, Aadhaar number, registration of marriage or appointment to a government job.

Features of the bill:

- **Database of birth and deaths:** The bill makes it compulsory for the Registrar General of India to maintain a national-level database of births and deaths, and the same is to be maintained by the Chief Registrar of births and deaths in every State.
- **Connecting database:** These databases provide information to update the National Population Register, the Aadhaar database, electoral rolls, ration cards, passports, and other databases at the national level as may be required. The use of the national database must be approved by the central government.
- **Electronic certificate:** The Act provides that any person may obtain an extract from the register related to any birth or death in electronic form or otherwise.
- **Appeal process:** Any person aggrieved by any action or order of the Registrar or District Registrar may appeal to the District Registrar or Chief Registrar, respectively. Such an appeal must be made within 30 days from receipt of such action or order. The District Registrar or Chief Registrar must give their decision within 90 days from the date of appeal.

Discuss the potential benefits and drawbacks of the amendments.

- **Violation of Constitution:** Mandatory use of birth certificates of persons for certain purposes like admission in educational institutes & preparation of electoral roll may violate Article 21A & Article 326.
- **Violation of Privacy:** Linking the Aadhar details of the informant who is in charge of the institution where the birth has taken place with the birth certificate of a newborn violates the informant's right to privacy.
- **Violation of Data Protection Bill:** The Bill does not require consent from the person whose data is being linked & shared across various databases. It only requires the approval of central and state governments. This goes against the mandate of "informed consent" specified under the Draft Digital Personal Data Protection Bill, 2022.
- **Transparency:** The legislation will help create a national and state-level database of registered births and deaths which eventually would ensure efficient and transparent delivery of public services and social benefits and digital registration.
- **Grievance redressal:** Any person aggrieved by any action or order of the Registrar or District Registrar may appeal to the District Registrar or Chief Registrar.
- **Good Governance:** The centralized database is anticipated to increase administrative effectiveness by offering a trustworthy and unified source of information. The law is in line with India's ambitions to undergo a digital transformation, indicating a commitment to modernize administrative operations for better citizen services.

Conclusion:

Union Government should address the challenges that can arise from the implementation of the bill and engage state governments to ensure smooth implementation of the bill. Courts must ensure that the bill passes the test of constitutionality with reasonable restrictions allowed.

31. Analyze the impact of pilot fatigue on aviation safety in India. What measures have been taken by the regulatory authorities, and what further steps are needed to ensure the well-being of pilots and passengers?

Introduction: Briefly describe the issue.

Body: Analyse the impact of pilot fatigue on aviation safety & measures to deal with it.

Conclusion: Way Forward.

Recently there have been instances where pilots have refused to operate flights citing fatigue which has often led to inconvenience and delays for passengers. In India, the civil aviation safety regulator **Directorate General of Civil Aviation (DGCA)** keeps a close watch on flight duty time limitation (FDTL) norms compliance by airlines as well as flight crews. Globally, FDTL regulations are considered important to ensure that crew fatigue does not compromise flight safety. It is worth noting that flight crew fatigue and exhaustion are seen as major factors contributing to human errors in aircraft operations, which can lead to catastrophic accidents.

What is the impact of pilot fatigue on aviation safety in India?

- **Impaired Reaction Time:** Fatigue slows down cognitive and physical responses, affecting a pilot's ability to react quickly to unexpected situations.
- **Reduced Situational Awareness:** Fatigue can lead to reduced attention, memory lapses, and decreased awareness of the aircraft's position and surroundings.
- **Poor Decision-Making:** Fatigue can impair a pilot's judgment and decision-making abilities, potentially leading to incorrect choices in critical moments.
- **Errors in Communication:** Communication breakdowns among pilots and air traffic controllers can occur due to fatigue-related cognitive deficits.

What steps can be taken to ensure the well-being of pilots and passengers?

- **Strict implementation of ICAO guidelines:** DGCA must ensure strict enforcement of ICAO guidelines related to rest periods between flight duty periods, guidelines for scheduling night operations, and norms for operating ultra-long-haul flights.
- **International Experience:** The Ministry of Civil Aviation (MoCA) must frame these regulations based on ICAO standards and international best practices of the US aviation regulator Federal Aviation Administration (FAA) and the European Union Aviation Safety Agency (EASA).
- **Airlines' responsibility:** Every airline is required to formulate its own FDTL scheme, which must be compliant with the regulations issued by the DGCA. Airlines could provide at least two days off every week and proper rest periods between flights for the pilots.
- **New practices:** Airlines should try new practices like preparing flight crew rosters in advance, training flight crew on fatigue management, maintaining fatigue reports of the crew & responsive action on these reports.
- **Addressing Pilot shortage:** India has emerged as the world's third-largest aviation market & will require additional pilots every year over the next few years to keep up with the expected pace of fleet expansion.

Conclusion:

DGCA & Ministry of Civil Aviation must step up efforts & engage with airline companies to address crew fatigue and exhaustion which are seen as major factors contributing to human errors that lead to catastrophic accidents.

32. Compare and contrast genome-edited (GE) crops with genetically modified (GM) crops. Discuss the implications of Genome-Edited (GE) crops for agricultural innovation in India.

Introduction: Give definition of GM & GE crops.

Body: Difference between GE crops with GM crops. What is the implication of GE crops for agricultural innovation in India?

Conclusion: Way forward.

In GM crops, foreign genes are inserted into a plant's DNA to introduce specified features, such as pest resistance or herbicide tolerance. In GE crops, the plant's DNA is precisely altered, without the introduction of foreign DNA, by deleting, adding, or changing a few selected genes.

Difference between contrasting genome-edited (GE) crops with genetically modified (GM) crops:

- **Method used:** The foreign genes are frequently introduced into the plant's genome via bacterial or viral vectors in traditional GM techniques. Genome editing methods like CRISPR-Cas9 are frequently utilized because they enable precise, targeted alterations.
- **Regulation:** GM crops have faced public and regulatory scrutiny due to concerns about potential unintended effects and the use of antibiotic resistance markers. Regulatory approaches to GE crops vary by country, and some countries may regulate them differently than traditional GM crops.
- **Commercial Use:** In India, GM crops are currently subject to strict "environmental release" laws, including for field testing and seed production in addition to commercial farming. Such release is subject to approval from the MoEFCC unique Genetic Engineering Appraisal Committee (GEAC). On the other hand, GE plants that are "free of exogenously introduced DNA" have been exempted by MoEFCC from the need for GEAC approval for open field trials leading to commercial release.

What is the implication of GE crops for agricultural innovation in India?

- **Reduce impact on the environment:** Reduced pesticide and water use from GE crops with features like insect resistance or drought tolerance could be good for the environment and farmers' livelihoods.
- **Improved crop varieties:** Using GE technology, scientists can create crop types with specific modifications, such as increased nutritional value, disease resistance, and abiotic stress tolerance. This might boost India's food security and agricultural output.
- **Fast breeding process:** GE technology permits quicker production of crop varieties with desired features than conventional breeding techniques. This might hasten the introduction of enhanced varieties to address new problems.
- **Customized Crops:** GE technology can be tailored to suit local agro-climatic conditions, potentially leading to the development of region-specific crop varieties optimized for Indian conditions.

Conclusion:

Genome-Edited (GE) is very important for a country like India which is a huge importer of edible oils. The massive import bill forces India to boost domestic oilseeds production through focused breeding to improve crop yields, pest and disease resistance, and product quality. The recent example of GM hybrid mustard and the new GE low-seed high-leaf glucosinolate lines can be seen as major plant breeding advancements that can go some way towards bringing down the dependence on imported vegetable oils.

33. Analyze the factors contributing to the growing epidemic of drug addiction in Kashmir. What preventive measures can be taken to address the issue?

Introduction: Describe the context of question.

Body: Highlight the factors contributing to the growing epidemic of drug addiction & measures that can be taken to address the issue.

Conclusion: Way forward.

Various newspaper reports have revealed a devastating epidemic of drug addiction, mostly affecting young men, across Kashmir impacting several families & their children, stretching the state's public health system and posing a new challenge to the security forces. According to data from India's Ministry of Social Justice and Empowerment, approximately 8 percent of the population, roughly 10 lakh residents, are drug addicts. This alarming situation calls for urgent attention and comprehensive solutions to combat the widespread abuse of drugs such as heroin, cannabis, opioids, and sedatives.

What factors have contributed to the growing epidemic of drug addiction in Kashmir?

- **Poverty & Unemployment:** Numerous young people are vulnerable and disillusioned as a result of the high unemployment rate and the lack of available economic prospects which lead some individuals to experiment with drugs out of boredom or frustration.
- **Easy accessibility of drugs:** Kashmir is geographically located near the Golden Crescent and hence there is easy availability of heroin (Golden Crescent refers to illicit opium production areas in Iran, Afghanistan, and Pakistan).
- **Conflict & Trauma:** Numerous people have experienced trauma, stress, and anxiety as a result of the region's prolonged conflict and political unrest. To cope with these emotional and psychological difficulties, some people turn to drugs.
- **Lack of awareness:** People may underestimate the effects of drug usage as a result of inadequate education and awareness initiatives. The lack of recreational facilities in the valley has contributed to the growing menace of drug use.
- **Religious stigma:** Due to the religious taboo connected with alcohol consumption in the Valley and the fact that the population is predominately Muslim, adolescents are turning to heroin as a coping and recreational tool.

What preventive measures can be taken to address the issue?

- **Community Engagement:** Communities may shift young people's attention away from drug use by getting involved in programs that provide them with healthy alternatives, such as sports, the arts, and vocational training.
- **Institutional support:** The state government in cooperation with civil society has worked to increase the number of DDC (drug de-addiction centres) to reduce the stigma around addiction and seek treatment.
- **Limit supply chain:** Law enforcement should strengthen efforts to limit the supply chain of drugs by curbing drug trafficking from neighbouring countries & states like Punjab & Haryana.
- **Rehabilitation and Treatment Centres:** Establishing well-equipped rehabilitation centres and treatment facilities, along with trained medical professionals, can provide individuals struggling with addiction the help they need.
- **Skill development:** The likelihood of young people turning to drugs can be decreased with the help of programs that emphasize skill development, job training, and entrepreneurship.

Conclusion

Mains Marathon Compilation for the Month of August, 2023

The drug crisis poses a governance test for the J&K administration to end the narco-terror network across the state. Political and economic empowerment of people and civil society is necessary for thwarting the designs of the drug cartels.

34. Analyze the success of the PLI scheme in boosting mobile phone exports. What are the challenges and limitations of the scheme in achieving self-sufficiency in manufacturing?

Introduction: Define PLI scheme.

Body: Highlight its progress and challenges and limitations of the scheme.

Conclusion: Way Forward.

Production Linked Incentive (PLI) is a program that the Government of India introduced in 2020 to promote domestic manufacturing in several industries by offering cash incentives to producers that fulfill particular production targets. The plan seeks to improve production and exports, attract foreign investment, foster job growth, and lessen reliance on imports.

Success of the PLI Scheme:

- **Export Promotion:** The scheme's focus on boosting exports of mobile phones has led to increased production capacity, which in turn can contribute to higher export numbers. For eg, mobile phone exports jumped from \$300 million in FY2018 to an astounding \$11 billion in FY23.
- **Reduced Import Bill:** By promoting domestic manufacturing and exports, the PLI scheme has the potential to reduce the trade deficit by increasing exports and decreasing imports of finished mobile phones. For eg, India imported mobile phones worth \$3.6 billion in FY2018, which dropped to \$1.6 billion in FY23.
- **Job creation:** Increased production has the potential to create jobs across the entire value chain, from manufacturing to supply chain and logistics, benefiting local employment rates. According to Government sources PLI scheme has created around 1,20,000 new direct jobs and nearly 2,50,000 new indirect jobs in 24 months.

Challenges and limitations of the scheme:

- **Infrastructure bottlenecks:** Infrastructure gaps, especially in terms of power, logistics, and connectivity, can pose significant challenges to companies looking to scale their operations under the PLI scheme.
- **Regulatory hurdles:** Despite efforts to simplify the regulatory environment, Indian businesses often grapple with red tape, bureaucratic hold-ups, and complex regulatory requirements that can slow down or complicate the implementation of the PLI scheme.
- **Access to capital:** Despite the financial incentives provided by the PLI scheme, businesses, especially small and medium-sized enterprises, often face difficulties in accessing affordable capital. This can limit their ability to invest in new technologies, expand capacity, or upgrade their infrastructure.
- **Geopolitical factors:** Fluctuations in global trade dynamics and geopolitical tensions can impact the outcomes of the PLI scheme. For instance, trade restrictions, tariffs, or changes in the global supply chain can affect the export potential of companies benefiting from the scheme.

Conclusion:

PLI program could expand India's domestic manufacturing capacity and encourage the export of mobile phones. The complexity of the supply chain, infrastructure, level of competition, and dynamics of the global economy present obstacles to achieving total self-sufficiency in manufacturing. For the scheme to be successful and for the Indian mobile phone sector to

Mains Marathon Compilation for the Month of August, 2023

thrive over the long term, a well-balanced strategy that takes these issues into account and concentrates on creating a strong and competitive manufacturing ecosystem is essential.

35. Discuss the significance of the Election Commission's independence in the context of India's democratic setup. How does the proposed bill impact this independence?

Introduction: Give brief description of ECI.

Body: Significance of EC & how does the proposed bill impact this independence.

Conclusion: Way forward.

The Election Commission of India (ECI) is an autonomous and permanent constitutional body established under Article 324 responsible for organizing free and fair elections in the Union and States of India. The Constitution grants the ECI the power of direction, superintendence, and control of elections to Parliament, state legislatures, the office of president of India, and the office of vice-president of India. Recently, the Central Government introduced a Bill that proposed that the selection panel for appointing the Election Commission, comprising the Chief Election Commissioner (CEC) and other Election Commissioners (ECs), will consist of the Prime Minister as the chairperson, the Leader of the Opposition as a member, and a Union Cabinet Minister nominated by the Prime Minister as another member instead of Chief Justice of India.

Significance of the Election Commission's independence in India's democratic setup:

- **Free & fair elections:** The ECI is responsible for conducting elections at various levels of government, including national and state elections. Its primary role is to ensure that elections are conducted in a free, fair, and transparent manner, upholding the principles of democracy.
- **Voter registration:** The ECI is in charge of overseeing the voter registration procedure and working to inform the populace of the value of voting. This encourages diversity and guarantees that eligible citizens can take part in the political process.
- **Prevention of Electoral Malpractices:** The Election Commission of India (ECI) takes action to stop election malpractices like vote manipulation, booth capturing, and corruption. To maintain the integrity of the elections, it sends out observers and prosecutes anyone who violates the law.

How does the proposed bill impact this independence?

- **Full Executive control:** The presence of the CJI was required to usher in the impartiality and insulate the appointment process from the Executive's interference. The present bill gives the executive total control over the appointment process.
- **Issue in order of precedence:** The bill specifies that the salary of the CEC would be equivalent to that of the Cabinet Secretary which is the same as that of the SC judge but rank in the warrant of precedence is being reduced.
- **Protection of EC:** One extremely important provision of the Bill is that it seeks to protect the two Election Commissioners from removal, bringing them on par with the CEC. They can be removed through a process of impeachment like a SC judge.
- **Qualification of EC:** The fact that the CEC and other ECs will be chosen from "persons who are holding or have held a post equivalent to that of secretary and shall be persons of integrity, who have knowledge of and experience in the management and conduct of elections" is another positive aspect of the Bill.

Conclusion:

In the current national and international climate, maintaining the institutional autonomy of the EC is crucial. Trust in electoral institutions has been declining everywhere. The Indian Election Commission has long served as a shining example of democracy around the world.

Mains Marathon Compilation for the Month of August, 2023

To maintain this reputation, we must make sure all the necessary protections are in place to dispel any doubts about its reliability and standing.

36. Discuss the potential benefits and challenges for India in engaging with the Northern Sea Route (NSR).

Introduction: Briefly explain NSR route.

Body: Discuss its benefits and challenges with regards to India.

Conclusion: Way forward.

The Northern Sea Route (NSR), which spans four seas of the Arctic Ocean, is the quickest shipping route for moving goods between Europe and nations in the Asia-Pacific area. The route, which spans 5,600 km, starts at the Kara Strait, which separates the Barents and Kara seas and ends in Provideniya Bay, which is in the Bering Strait. Recently, Murmansk, or (NSR), has witnessed a significant rise in Indian cargo highlighting India's greater interest in the NSR.

What are the intended benefits for India in engaging with NSR?

- **Alternate route:** The NSR is essentially a passage linking Europe with East Asia benefitting countries like China, Japan, and South Korea. This route is more promising and is being regarded as an alternative to the present shipping route connecting Europe with Asia via the Suez Canal and the piracy-infested Gulf of Aden.
- **Scientific studies and research:** Since the Svalbard Treaty was signed in February 1920, India has been involved in the Arctic, and the country is currently conducting several scientific research and studies there. This includes research in the fields of glaciology, marine biology, hydrology, and atmospheric science. Eg, Himadri, a research station, Svalbard.
- **Untapped resources:** The region also constitutes the largest unexplored prospective area for hydrocarbons remaining on the Earth. According to estimates, the Arctic Sea contains between 10 and 20 percent of the world's oil and close to 30 percent of its natural gas. There could be sizable quantities of coal, zinc, and silver as well.

What are some of the challenges?

- **Environmental concerns:** One of the most dramatic effects of global warming is seen in the Arctic region where the Arctic Sea has been melting rapidly. The NSR passes through environmentally sensitive areas, and increased shipping activity in the Arctic could have ecological implications.
- **Geopolitical Dynamics:** The NSR passes through Russia's territorial waters, and India's engagement with the route could involve diplomatic negotiations with Russia and other Arctic states.
- **Security:** Piracy, maritime mishaps, and search and rescue operations could pose security concerns as the Arctic assumes greater geopolitical and economic relevance.
- **International regulations:** India would need to navigate international regulations governing Arctic shipping, including those related to safety, environmental protection, and indigenous rights.

Conclusion:

India's geographical position and ambitious projects like the Chennai-Vladivostok Maritime Corridor present promising economic and strategic benefits for India. India's approach to the Arctic region is defined by the Arctic Policy of 2022 which is guided by UN Sustainable Development Goals.

37. How has the transition from a planned economy to a market-mediated economic system impacted India's fiscal federalism?

Introduction: Give a brief context of the shift from a planned economy to a market economy.

Body: How has this transition impacted fiscal federalism?

Conclusion: Way forward.

Since the early 1990s, India has carried out significant economic changes that have resulted in a more market-oriented approach while keeping some aspects of a mixed economy. These reforms, often referred to as the "economic liberalization" or "economic reforms," aimed to open up India's economy to global markets, reduce government intervention, and encourage private sector participation. This paradigm shift was indeed followed by the transformation of a two-tier federation into a multi-tier fiscal system following the 73rd and 74th Constitutional Amendments, the abolition of the Planning Commission and its replacement with NITI Aayog, the passing of the Fiscal Responsibility and Budget Management (FRBM) Act & finally the Goods and Services (GST) Act giving major changes to India's fiscal federalism.

How has this transition impacted fiscal federalism?

- **State autonomy:** State governments now have more freedom to create and carry out economic policies as a result of economic liberalization. This is also visible in the implementation of important programs like MGNREGA, RTE, & Food Security Act. There is also a demand to shift education from Concurrent to the State list.
- **Devolution of fiscal powers:** While states have gained more autonomy vis-à-vis Central Government, there is a lack of autonomy for local government institutions vis-à-vis state governments. There is a serious need to give more powers to third-tier institutions based on the 3F (Functions, Funds, Functionaries).
- **Tax reforms:** The introduction of the Goods and Services Tax (GST) in 2017 was a major step in fiscal federalism. It replaced a complex web of indirect taxes levied by both the central and state governments, streamlining the tax system and enhancing revenue collection efficiency.
- **Disparity among states:** Some states were better positioned to take advantage of the new economic opportunities, while others experienced difficulty in adjusting to the changing economic landscape. Economic reforms contributed to growth but also raised worries about growing economic inequities across states. This can be seen in the analysis of the Human Development Index (HDI) & per capita income data of states.

Conclusion:

The responsibility of balancing fiscal federalism rests on the mandate of the 16 Finance Commission which should start by constituting a uniform financial reporting system comprising all levels of government. There is a greater need to review the off-budget borrowing practices of both the Union and the States to maintain fiscal discipline. Finally, 16 FC should ensure that equity and HDI should be considered in the horizontal distribution of tax devolution.

38. How can clean tech solutions be integrated into existing government programs to enhance their impact on rural livelihoods? What challenges do clean tech manufacturers face in bringing their products to rural customers, and how can these be addressed?

Introduction: What are clean tech solutions?

Body: How can they be integrated into government programs and what are challenges associated with it?

Conclusion: Way forward.

Integrating clean tech solutions into existing government programs can greatly enhance their impact on rural livelihoods by promoting sustainable development, improving access to basic services, and fostering environmental conservation.

How can clean tech be integrated into government programs?

- **Access to clean energy:** In rural locations with limited access to power, cleantech solutions like solar lamps, solar home systems, and mini-grids can deliver dependable, clean energy.
- **Agriculture management:** Using effective irrigation systems, solar-powered water pumps, and soil monitoring technology, cleantech solutions can increase agricultural productivity. These technologies can be incorporated into government agricultural programs to increase crop yields and water consumption effectiveness. For example, solar dryers converting throwaway tomatoes into sun-dried ones in Andhra Pradesh, and biomass-powered cold storages helping farmers in Maharashtra sell lemons.
- **Convergence of tech with livelihood programs:** There is a need to support government programs by enabling their implementation using clean tech. For eg, Pradhan Mantri MUDRA Yojana can be used to enable the adoption of clean tech. Pradhan Mantri Formalisation of Micro food processing Enterprises (PM-FME) can be used to unlock support for solutions like solar dryers, energy-efficient multipurpose food processors, or solar grain mills. Pradhan Mantri Matsya Sampada Yojana can be leveraged towards adopting solar refrigerators and dryers for fishing communities.
- **Financing of clean-tech solutions:** This requires support from the banking industry and government support. There is a need to involve self-help groups, farmer-producer organizations, and individual micro-entrepreneurs in rural areas.
- **Multi-stakeholder partnerships:** There is a need to enable multi-actor partnerships between technology innovators, manufacturers, distributors, service providers, financiers, and market-linkage players to enable an overall ecosystem for enabling cleantech solutions.

What are the challenges faced by manufacturers?

- **Lack of awareness:** Rural customers might not be aware of the benefits and availability of cleantech solutions and be hesitant to adopt such solutions.
- **Affordability:** Due to their scarce financial resources, many rural communities find it difficult to afford the upfront expenditures of cleantech solutions.
- **Last mile connectivity:** It might be difficult for manufacturers to reach remote clients since rural areas frequently lack adequate infrastructure and distribution networks.
- **Maintenance and Services:** Rural customers might lack technical knowledge for product maintenance and repairs. The lack of strong service centres might discourage people from adopting such solutions.
- **Cultural norms and behaviour:** Some cleantech solutions might require changes in traditional practices or behaviors. Manufacturers need to take into account cultural preferences and adapt their products accordingly.

Conclusion:

Mains Marathon Compilation for the Month of August, 2023

Various studies have shown that cleantech solutions can be a big boost to the rural economy. India's rural economy, which is made up of 120 million farmers and 34 million microbusinesses, frequently struggles due to inconsistent access to electricity and a reliance on costly imported diesel. These cleantech innovations that are run on renewable energy can reduce India's reliance on imported fuel, prevent the loss of perishable food, improve rural livelihood chances, and present a \$50 billion investment opportunity for bankers and investors.

39. Elaborate on the significance of educational aid for religious minorities in India. What are the implications of reduced funding on the educational prospects of minority communities?

Introduction: Give brief introduction about religious minorities.

Body: Highlight significance of educational aid to minorities & implication of reduced funding on educational prospects of minorities.

Conclusion: Way forward.

India is home to over 30 crore or 20% of people belonging to religious minority communities which include six religions notified under the National Commission for Minorities Act, 1992. Among them, Muslims make up the largest religious minority but face challenges in various sectors which vary from their low participation in salaried jobs to a large proportion of people in the informal sector, characterized by low wages, weak social security, and poor working conditions.

What is the significance of educational aid for religious minorities in India?

- **Improving socio-economic status:** NITI Aayog report has pointed significant disparity in education accessibility between Muslims and the general population. Access to education can lead to better job prospects and higher incomes, contributing to the overall empowerment of minority groups.
- **Commitment to diversity:** The provision of educational aid to religious minorities strengthens the commitment to inclusivity and diversity, ensuring that all citizens, regardless of their religious origin, have access to high-quality education.
- **Preservation of Cultural and Religious Heritage:** Educational aid can help preserve the unique cultural and religious heritage of minority communities.
- **Representation and Diversity in Professions:** Adequate education for religious minorities can lead to greater representation in various professions, including politics, academia, business, and more

Implications of reduced funding on their educational prospects:

- **High drop-out rate:** Various surveys have pointed to a low rate of enrolment (4.6%) for Muslims in higher education compared to other groups. Also, the highest proportion of out-of-school (4.43%) children in the country belong to Muslim communities leading to low educational attainment and limited opportunities.
- **Underrepresentation:** Reduced educational chances may prevent minorities from entering certain professions including academia, government, and professional positions, which would result in a lack of diversity and representation in important sectors of the economy.
- **Strain on social harmony:** Religious minority communities may experience marginalization and frustration as a result of educational differences, which could put a strain on intercommunity relations and social cohesion.

Mains Marathon Compilation for the Month of August, 2023

- **Loss of cultural heritage:** Lack of funding could make it difficult for organizations working to preserve the religious and cultural traditions of minorities to carry out their missions, thereby resulting in the loss of priceless customs and practices.

Conclusion:

Niti Aayog has suggested enhancing budgetary allocation for various schemes, recommending a 15% annual increase from 2019-20. It also recommended increasing the number of scholarships for girls from minority communities by 10% every year. Further, scholarships should be made demand-driven, along with additional financial resources to enhance unit costs. The total budget allocation for the Ministry of Minority Affairs should be significantly increased, given the level of deprivation in the educational attainment of minorities.

40. Analyze the significance of BRICS in representing the interests of the Global South.

How does the expansion of BRICS membership reflect the group's value and its potential to influence global economic and political dynamics?

Introduction: Describe BRICS briefly.

Body: What is its significance & how can new BRICS influence global economic and political dynamics?

Conclusion: Way forward.

BRICS is the acronym for the five fastest-growing nations of the world, namely Brazil, Russia, India, China, and South Africa. It was formed to encourage cultural, commercial, and political operations among BRICS nations. The BRICS nations are all leading developing or newly industrialized nations and have gained importance in the emerging and fairer multi-polar world order. Recently there has been a discussion to invite six countries — Argentina, Egypt, Ethiopia, Iran, Saudi Arabia, and the UAE — to join BRICS as full members.

What is the significance of BRICS in representing the interests of the Global South?

- **Economic potential:** The BRICS brings together five of the largest developing countries of the world, representing 41% of the global population, 24% of the global GDP, and 16 % of the global trade. This economic clout gives them the ability to advocate for the interests of the Global South in international economic forums and negotiations.
- **Alternate economic governance model:** Western powers have historically dominated international organizations and decision-making processes. These important non-Western economies can unite through BRICS to contest this dominance. It contributes to redefining the international economic order's rules and norms and presents an alternative narrative to that of global economic governance.
- **Voice of Global issues:** BRICS represents the Global South's voice collectively in international negotiations. These nations may strengthen their impact on the international scene by cooperating and promoting shared viewpoints on topics like trade, climate change, and development financing.

How BRICS 2.0 can influence global economic and political dynamics?

- **Global Recognition of Grouping:** The proposed countries if decided to join will make BRICS more representative of a larger share of the world population, global GDP, and international trade. This will increase its global recognition notwithstanding the negative view taken by the West.

Mains Marathon Compilation for the Month of August, 2023

- **Increase political & economic clout:** The new BRICS-XI will have more political clout as it will be more representative of different continents and will have nations with strategic locations like Iran & Ethiopia. The New Development Bank will be recapitalized with the assistance of Saudi Arabia and the UAE, increasing its ability to finance development initiatives.
- **Cooperation on vital issues:** The new BRICS 2.0 can engage on vital issues like UNSC membership for the original BRICS members — India, Brazil, and South Africa & finalizing on issue of BRICS currency in trade and financial transactions “between BRICS as well as their trading partners”, for “fast, inexpensive, transparent, safe and inclusive payment systems.”

Conclusion:

New BRICS can offer fresh impetus to resolve border issues between India & China and, the Ukraine crisis while posing a challenge to India in balancing its ties with the West on the one hand and its active articulation and pursuit of the interests of the Global South on the other.

41. Discuss the implications of the suspension on Indian wrestlers participating in UWW (United World Wrestling) sanctioned events.

Introduction: What is the context of the question?

Body: What can be the implications of the decision of UWW?

Conclusion: Way forward.

Recently, United World Wrestling (UWW), the world governing body for the sport, has taken a major decision to suspend the Wrestling Federation of India (WFI) for the inability to conduct an election within a stipulated period. This means that Indian wrestlers cannot compete under the national flag in UWW events, including the World Championships in Belgrade in September. This has further put the spotlight on the role of Wrestling Federation of India (WFI) which was earlier in the news because of allegations of sexual harassment against WFI president Brij Bhushan Sharan Singh.

What can be the implications of this decision?

- **International embarrassment:** WFI suspension does not impact the players directly as they continue to participate in international tournaments but won't be allowed to display the tricolour on their jerseys.
- **Insult to national symbols:** WFI suspension will lead to no display of the Indian tricolour flag at major sporting events. Even if an Indian wins the competition the national anthem will not be played causing huge embarrassment to our nation.
- **Low number of tournaments:** The longer the suspension lasts, the more difficult it will become for India to resolve the issue. It will impact the sport as India will receive less number of invitations to participate in world events related to wrestling.
- **Funding:** The WFI suspension will inflict a huge blow on the funding WFI used to receive from UWW. This will increase the financial burden on WFI, which will impact wrestlers and their support personnel including individuals with high-performance, medical, or technical roles such as coaches, assistant coaches, and sports physicians.
- **Performance of athletes:** WFI suspension will impact the performance of wrestlers negatively as they will be in a state of distress concerned about their future.

Conclusion:

There is an urgent need for WFI to hold elections for its top posts taking all stakeholders on board like state wrestling bodies to avoid factionalism. The elections should be held with

Mains Marathon Compilation for the Month of August, 2023

complete transparency according to rules & regulations framed by international bodies. A thorough and impartial investigation into the allegations of “abuse and harassment” against the former WFI chief needs to be conducted. Sports Ministry should engage all relevant stakeholders including athletes, and officials of WFI to bring reforms in the functioning of WFI & resolve all issues peacefully and amicably.

42. Examine the reasons behind the government’s decision to impose export curbs and trade controls on rice and wheat, despite record production levels. What are the potential advantages of implementing a uniform MEP (Minimum Export Price) for all rice varieties?

Introduction: Give brief description about the decision of the government.

Body: What are implications of this decision and advantages of MEP policy?

Conclusion: Way forward.

Recently, the Government imposed a ban on wheat exports & rice exports despite production of both rice and wheat hitting all-time highs compared to last year, according to Agricultural Ministry data. Rice rose from 124.37 million tonnes (mt) in 2020-21 to 129.47 mt in 2021-22 and 135.54 mt in 2022-23. Wheat fell from 109.59 mt to 107.74 mt before rising to 112.74 mt in 2022-23.

What are the reasons behind this decision?

- **Food security:** Ensuring sufficient domestic food supply is a top priority. By restricting exports, the government aims to maintain buffer stocks to safeguard against unforeseen disruptions in production or global supply chains.
- **Maintain price stability:** Export controls can reduce demand and potential inflation, which can help to stabilize domestic prices. This is crucial to ensuring that the populace can buy staple foods, especially during difficult economic times.
- **Weather conditions:** India has a high rate of production, but it is still susceptible to climatic changes like drought & climate change that could affect subsequent harvests. Export restrictions aid in reducing this risk and maintain the nation's food reserves in the event of a production deficit brought on by unfavourable weather.
- **Strategic reserves:** The government's ability to respond to situations like natural disasters or unexpected disruptions in the world food supply is ensured by maintaining sizable food reserves, supporting national security.

What are the potential advantages of implementing a uniform MEP for all rice varieties?

- **Prevent Quality manipulation:** A uniform MEP prevents exporters from downgrading the quality of rice to meet lower MEPs. This maintains fairness and quality standards in the export process.
- **Increase exports:** A uniform MEP could encourage exporters to explore a wider range of rice & wheat varieties, leading to diversified export offerings. This diversification could open up new markets and trading partners. For eg, rice varieties like Gobindohog in West Bengal, Kalanamak in eastern Uttar Pradesh’s Terai region, Chak-hao in Manipur, Red Matta in Kerala, and Ponni in Tamil Nadu have unique qualities and specific export markets.
- **Protection to farmers:** A uniform MEP would protect farmers cultivating non-basmati varieties of rice, especially those varieties that are not sold through PDS & are prone to price fluctuations and trade policy vagaries.
- **Reduce administrative burden:** A uniform MEP would ease the government's burden regarding issues related to misclassification or illegal exports of non-basmati

Mains Marathon Compilation for the Month of August, 2023

masquerading as parboiled or basmati rice. A uniform MEP would simplify the export process by eliminating the need to calculate and manage MEPs for different rice & wheat varieties.

Conclusion:

A uniform MEP policy coupled with other measures ensures that prices remain under control & inflation is brought down while simultaneously addressing concerns related to any fear of a short supply of cereal in the domestic market.

43. Elucidate the significance of the Bharat New Car Assessment Programme (BNCAP) norms introduced by the Union Minister for Road Transport & Highways.

Introduction: Give a brief description of BNCAP norms.

Body: Highlight the significance of BNCAP norms.

Conclusion: Way forward.

Recently, India has launched its crash test rating assessment system joining the list of many nations that rely on their crash test rating assessment and establish safety parameters. The new norms are labelled under the Bharat New Car Assessment Programme or Bharat NCAP & will come into effect from October 1. The norms define safety standards of motor vehicles with type approval for seating up to eight people and with a gross weight of less than 3.5 tonnes, which are either manufactured or sold in the country. Only the base model of a particular variant will be tested.

What is the significance of the new norms?

- **Standard metric to compare vehicles:** The new vehicle safety regulations will encourage automakers to steadily raise the safety ratings of their models and provide consumers with objective criteria to compare the safety tests of various vehicle types before making a purchase.
- **Less expensive & time-consuming:** Presently, car makers ship their car models abroad for testing and star grading as per Global NCAP norms which is an expensive and time-consuming affair. The new norms will significantly reduce this cost as various studies suggest per vehicle testing cost as per BNCAP is roughly 60 lakh per vehicle, while it is roughly 2.5 crore if the tests were done overseas.
- **Quality improvement:** The new regulations may increase both the national average quality of cars and the exportability of vehicles built in India. Over time, it is anticipated that the program would affect how consumers behave, create demand for safer vehicles, and encourage automakers to put a greater emphasis on safety.
- **Align Bharat NCAP with global standards:** India will also need to increase the testing parameters for Bharat NCAP over time to bring it into compliance with international standards. For instance, the U.S. NCAP also includes a roll-over test, while Japan's NCAP covers electric shock protection performance after a collision and, the performance of neck injury protection in a rear-end collision.
- **Reduce fatalities:** India has one of the highest rates of fatal traffic accidents worldwide, with almost 1.5 lakh fatalities on its roadways each year. India has committed to halving the number of traffic-related fatalities and injuries by 2030 as per the Stockholm Declaration. The new BNCAP will help India to fulfil its international obligations & save human lives.

Conclusion:

Mains Marathon Compilation for the Month of August, 2023

The new BNCAP norms are voluntary and this flexibility could offer manufacturers a loophole to avoid subjecting their new launches to safety test norms. Further strict enforcement of the new norms coupled with a dynamic education program in road safety will make the Bharat NCAP system an authentic and objective rating system to empower the customer to make an informed choice.

44. Discuss the historical and clinical evidence that suggests the role of social determinants, such as poverty and living conditions, in the incidence and mortality of TB. How has the focus shifted from these determinants to biomedical interventions over the years?

Introduction: Give brief description about TB & its current status in India.

Body: Highlight role of social determinants & shift to medical intervention in recent years.

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 role of social determinants, including poverty and living conditions, in the incidence and mortality of TB is well-established and has been a major focus of research and public health efforts.

What role do social determinants play in the incidence and mortality of TB?

- **Poverty:** A majority of TB patients in India are affected due to undernourishment. Poverty impacts their accessibility to food and their ability to get treated. It is still a big problem in India associated with problems of undernourishment and poor and unhygienic living conditions.
- **Overcrowding:** The rapid spread of TB is facilitated by the overcrowding found in slums and other informal settlements, which are frequent in areas of extreme poverty. The danger of transmission is increased by inadequate ventilation and close contact.
- **Malnutrition:** Inadequate nutrition is frequently caused by poverty. A person's immune system becomes weakened by malnutrition, making them more prone to contracting TB infection and less equipped to fight it off once infected. Various studies like RATIONS published in the Lancet journal now show that food supplementation is not just an effective treatment for people with TB, but is also an effective vaccine for their family members.

How has this focus shifted from social determinants to medical intervention in recent years?

- **Improved diagnostic methods:** Biomedical research has led to improved diagnostic tools, such as rapid molecular tests, and the development of drug regimens like Directly Observed Treatment, and Short-Course (DOTS) which are more accurate and quick diagnostic options and have improved treatment outcomes. Telemedicine and mobile health applications have improved access to healthcare services, bridging the gap for those in remote or underserved areas.
- **Drug-resistant TB:** The emergence of drug-resistant TB strains has heightened the urgency of finding effective treatments. The use of oral medications has reduced the duration of DR-TB treatment from 24 months to 6 months which is a big improvement in medical science.

Mains Marathon Compilation for the Month of August, 2023

- **Global Health Initiatives:** The global health community, including organizations like WHO, has emphasized the importance of biomedical interventions with increased funding and support to developing nations. For eg, WHO suggests the use of oral BPaLM/BPaL (Pretomanid (Pa) bedaquiline (B), linezolid (L), and sometimes moxifloxacin (M)) regimen for DR-TB patients which is found to be effective at curing 89-91 per cent of multidrug-resistant TB (MDR-TB).

Conclusion:

Nikshay Poshan Yojana launched by the Government of India in 2018 to offer food supplementation or cash transfers to buy food is a step in the right direction for TB patients. The need is to expand the coverage of this benefit to all household members of the patient to improve the chances of achieving the ambitious target of eradicating TB by 2025.

45. Critically analyze the Indus Waters Treaty (IWT) in the context of the principle of equitable allocation. How does it impact the bilateral relations between India and Pakistan?

Introduction: Brief introduction of IWT.

Body: What are its strengths and weaknesses and how has it impacted bilateral relations?

Conclusion: Suggest ways to improve the functioning of the treaty.

The Indus Water Treaty or IWT is a treaty signed in 1960 between India & Pakistan with the mediation of the World Bank which acted as a third party. IWT was signed by former Prime Minister Jawaharlal Nehru and then President of Pakistan, Ayub Khan.

Strengths & weakness of IWT:

- **Water sharing:** The Treaty allocated the three western rivers—Indus, Chenab, and Jhelum—to Pakistan for unrestricted use, barring certain non-consumptive, agricultural, and domestic uses by India, and the three Eastern rivers—Ravi, Beas, and Sutlej—were allocated to India for unrestricted usage.
- **Dispute resolution:** The PIC is an established mechanism under the IWT, which mandates it to establish and maintain cooperative arrangements for the implementation of the water distribution pact and to promote cooperation between India and Pakistan in the development of the Indus water systems.
- **Food and energy needs:** IWT is unlikely to address the growing industrial needs related to food and energy of 2 countries. The modified version of IWT should incorporate mechanisms that allow flexibility to change the quantity of water available for allocation among the parties.
- **Technological Advances:** The equitable allocation principle may not consider technological advancements in water conservation, efficient irrigation, and storage. New technologies could potentially enhance water availability for both countries, but the treaty might not encourage their full utilization.

How does it impact the bilateral relations between India and Pakistan?

- **Bilateral Engagement:** The treaty established the *Permanent Indus Commission*, which facilitates regular interaction and communication between water officials of both countries. This consistent engagement has provided a channel for dialogue even during periods of strained political relations.

Mains Marathon Compilation for the Month of August, 2023

- **Uneasiness in Pakistan:** There is uneasiness in the minds of Pakistan's leadership regarding the terms of IWT. It is sceptical about the terms of the treaty and fears whether the Indian projects on the western rivers, in particular Jhelum and Chenab conform to the technical stipulations. Pakistan has raised concerns regarding the Kishanganga dam project, Ratle hydroelectric power project alleging that these projects violate a provision of IWT.

Way Forward:

The need is to incorporate "*equitable and reasonable utilization*" and the "*no harm rule*" in the IWT which requires bridging the trust deficit between the nations. There is a need to involve all stakeholders including technocrats, climate experts, water management professionals, and scientists from both countries in the negotiation process. Finally, IWT must incorporate changes by way of amendments with both countries agreeing to amendments to maintain the continuity ensuring peace and economic prosperity in the region.

46. Analyze the challenges faced by resource-constrained countries in providing quality treatment to HIV-positive individuals. How can international partnerships and agreements help in addressing these challenges?

Introduction: Describe what is HIV & AIDS.

Body: What are the challenges faced by developing countries & how can international partnerships help in dealing with the epidemic?

Conclusion: Way forward.

HIV (human immunodeficiency virus) is a virus that attacks cells that help the body fight infection, making a person more vulnerable to other infections and diseases while Acquired immunodeficiency syndrome (AIDS) is the most advanced stage of HIV infection. At present there is no effective cure for HIV, but HIV can be controlled. The medicine used to treat HIV is called antiretroviral therapy or ART. According to WHO, there were about 37.9 million affected by HIV by the end of 2018, and 1.7 million were newly infected by it in the same year. According to the National Aids Control Organisation, in India, over 21 lakh people were living with HIV in 2017 with the highest cases in Maharashtra, followed by Andhra Pradesh, Karnataka, Telangana, and Tamil Nadu.

Challenges faced by Resource-Constrained Countries:

- **Inadequate infrastructure:** Comprehensive HIV/AIDS care is challenging to provide in many resource-constrained nations due to a lack of suitable healthcare infrastructure, including facilities, skilled healthcare personnel, and diagnostic and treatment skills.
- **Budgetary constraints:** HIV treatment programs receive limited support as a result of tight healthcare budgets. The cost of antiretroviral therapy (ART) and other required medications can make it impossible for many people and governments to afford continued treatment.
- **Social stigma:** People may be discouraged from seeking testing, care, and treatment due to social stigma and prejudice against HIV-positive people. This frequently causes delayed diagnosis and impedes the effectiveness of treatment.
- **Lack of Awareness and Education:** Limited public awareness and understanding of HIV transmission, prevention, and treatment can lead to misconceptions and misinformed behaviours, hindering efforts to control the epidemic.

How can global cooperation address in addressing these challenges?

Mains Marathon Compilation for the Month of August, 2023

- **Knowledge sharing:** International partnerships facilitate the exchange of best practices, research findings, and treatment guidelines, enabling countries to benefit from each other's experiences and successes.
- **Capacity Building:** Collaborations offer training and capacity-building programs for healthcare workers, improving their ability to diagnose, treat, and manage HIV/AIDS patients effectively.
- **Advocacy and Awareness:** International organizations raise global awareness about HIV/AIDS, reducing stigma and discrimination, and encouraging governments to prioritize the health and rights of HIV-positive individuals.
- **Finance:** Initiatives like Global Fund, a partnership set up in 2002 to battle AIDS, tuberculosis, and malaria will allow governments in developing nations to expand access to critical HIV services.

Conclusion:

Global bodies like UNO, and WHO must establish frameworks and establish best practices to control the spread of the epidemic and improve the quality of life for those affected.

47. Analyze the multi-dimensional implications of holding simultaneous elections in India.

Introduction: What are simultaneous elections?

Body: What are its implications on India's polity?

Conclusion: Way forward.

Recently, the government has constituted a committee headed by former president of India Ram Nath Kovind to explore the possibility of “one nation, one election”. The idea of “One Nation, One Election” envisages a system where elections to all states and the Lok Sabha will have to be held simultaneously. This will involve the restructuring of the Indian election cycle in a manner that elections to the States and the Centre synchronize. This would mean that the voters will cast their vote for electing members of the LS and the state assemblies on a single day, at the same time (or in a phased manner as the case may be)

What are the implications of such an exercise?

- **Economic impact:** Both the election commission's and the candidates' expenses during an election are significant administrative costs. Another important factor for corruption and the use of black money in the country is expenditure by candidates. Reduced election-related expenditure could lead to economic savings which would potentially boost economic growth.
- **Continuity in policies:** Frequent elections result in the Model Code of Conduct (MCC) being imposed for extended periods, which frequently causes policy paralysis. Simultaneous election presents a better chance of policy continuity and long-term planning, reducing the likelihood of sudden policy changes with every election.
- **Federalism:** Critics argue that simultaneous elections might undermine the federal structure of India, as states may lose their autonomy and get caught up in national politics. The state government would have to be suspended with President rule imposed to cut short their tenure in tune with Lok Sabha elections.
- **Administrative convenience:** Simultaneous elections will take away the administrative burden of the armed police forces who are frequently deployed in election duties which could otherwise be better deployed for other internal security purposes. The Election Commission can operate more efficiently and allocate resources more effectively with fewer elections.

Mains Marathon Compilation for the Month of August, 2023

- **Dominance of national issues:** In simultaneous elections, voters might end up voting more for national issues while neglecting the state and local issues like health, jobs, and education. This would eventually benefit national parties and marginalize state parties.
- **Constitutional amendment:** Simultaneous elections will bring up amendments to the Constitution, the Representation of the People Act 1951, and the Rules of Procedure of Lok Sabha and state Assemblies” which will require the consent of states and consensus among various political parties. Amending the process is a contentious process that has to be passed per the basic structure of the Constitution.
- **Impact on Diversity:** Instead of promoting equity, plurality, linguistic & cultural diversity, simultaneous elections may lead to homogenization of the country.

Conclusion:

Simultaneous elections are a delicate issue that requires consensus among all political parties. The Success of such an initiative would depend on careful planning and the ability to strike a balance between national and regional interests.

48. Critically evaluate the progress made under the National Mission for Clean Ganga (NMCG) since its inception. What are the primary challenges faced in ensuring no untreated sewage flows into the river?

Introduction: What is NMCG?

Body: Evaluate the progress made under NMCG & challenges faced.

Conclusion: Way forward.

The National Mission for Clean Ganga (NMCG), which functions under the Ministry of Jal Shakti was launched in 2014, is a significant government initiative aimed at rejuvenating and cleaning the Ganga River, which is one of India's most sacred and polluted rivers. The main objective of the Namami Gange mission is to ensure that no untreated sewage flows into the river.

Progress made under NMCG:

- **Infrastructure development:** NMCG has made significant investments in sewage treatment plants (STPs), sewer networks, and industrial effluent treatment plants (ETPs) along the Ganga and its tributaries. The ₹20,000-crore mission treats 20% of the sewage generated in the five major States which will increase to about 33% by 2024 & 60% of sewage by December 2026.
- **Biodiversity and Ecological Conservation:** There is an improvement in water quality which can be seen in rise of rise in dolphin population from 2,000 to about 4,000. There are also reports of the presence of Indian carp [a fish species] that only thrive in clean water.
- **Awareness:** Several events, workshops, seminars, conferences, and other activities are planned to establish a compelling case for community involvement in the project and public outreach. Several campaigns and programs have been launched to educate people about responsible waste disposal.
- **Monitoring:** NMCG is working to develop a water quality index based on parameters like levels of dissolved oxygen, biochemical oxygen demand, and faecal coliform to better communicate about river water quality.

Challenges faced under the NMCG program:

Mains Marathon Compilation for the Month of August, 2023

- **Untreated sewage:** One of the primary challenges is the continued discharge of untreated sewage into the Ganga. Many urban areas along the river lack adequate sewage treatment infrastructure, and compliance with regulations is often lacking.
- **Pollution:** Industries located along the Ganga basin continue to release partially or untreated effluents into the river. Maintaining compliance with pollution control standards is a recurring challenge.
- **Inter-state coordination:** Interstate coordination is a challenging endeavour because the Ganga runs through several states. It might be difficult to ensure uniform application of pollution control laws and wastewater treatment regulations.
- **Lack of funds:** The mission has struggled to advance because of funding restrictions and delays in project implementation. Delays have also been brought on by difficult bureaucratic procedures and problems with land acquisition.

Conclusion:

The need is to ensure that the state governments and the municipalities develop sufficient capacity and generate sufficient revenue to maintain STPs. For eg, a project like monetization of sludge. District Ganga Committees can be used as a decentralized monitoring network ensuring people's participation in the program.