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MONTHLY MAINSTORMING

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G.S PAPER I

1. CULTURE

The Intangible cultural heritage of humanity tag of UNESCO can be used to drive international and domestic tourism in the country. Explain

KEY POINTS

- The grandeur of Durga Puja should be marketed globally to make the event as big as the Rio Carnival.
- For that, one needs to effectively market the ethnic glitter and the irresistible attraction of the world's biggest street festival to the external world.
- In fact, the ICH tag can be used as support for economic well-being, community health, and drawing strategies for cultural tourism contributing to the uniqueness of a destination.
- In fact, in some parts of the world, the strategy of tourism development focuses on the most intangible of cultural elements.
- The intangible heritage performance and festival experience for tourists may establish a new kind of relationship between the artist and the visitor as art-sales relations, characterised by a direct, personal, and economic-based exchange.
- Understandably, every intangible heritage is different in its dynamics, and the effects of such Unesco honour may not be the same on gigantic events such as Kumbh Mela (a 2017 entry) or Durga Puja in Kolkata.
- We need to facilitate unleashing the hidden opportunities within such intangible heritages.
- Thus, one needs to create a tourist-friendly infrastructure to make rupees full of the soft essence of nycatanthes of Puja days, for example. That's a daunting task, indeed.

2. SOCIETY

Near-universal social security pensions would be significant in expanding the public support for the elderly in the country. Discuss

KEY POINTS

- The share of the elderly (persons aged 60 years and above) in India's population, close to 9% in 2011, is growing fast and may reach 18% by 2036 according to the National Commission on Population.
- Among persons aged 60 and above, 30% to 50% (depending on gender and age group) had symptoms that make them likely to be depressed.
- The first step towards a dignified life for the elderly is to protect them from destitution and all the deprivations that may come with it.

- A pension can help them to avoid extreme dependence on relatives who may or may not take good care of them, and it may even lead relatives to be more considerate.
- Eligibility can even be self-declared, with the burden of time-bound verification being placed on the local administration or gram panchayat.
- India's social assistance schemes have low budgets and make a big difference to large numbers of people (about 40 million under NSAP). They are well worth expanding.
- Social security pensions, of course, are just the first step towards a dignified life for the elderly.
- They also need other support and facilities such as health care, disability aids, assistance with daily tasks, recreation opportunities and a good social life.

Although India's working-age population will continue to grow, it would need to keep an eye on declining fertility rate. Substantiate

KEY POINTS

- The average number of children per woman in the reproductive age group has declined by 50%, from an average of five children per woman in 1951 to 2.4 children in 2020, according to the World Population Prospects 2022.
- The Indian setting is no different, with its fertility rate falling below the replacement level for the first time to 2.0 in 2021, according to the latest National Family Health Survey (NFHS).
- A fall in fertility rate beyond replacement level would have a negative effect on the proportion of the working population, which in turn will affect output in an economy.
- An ageing population will also affect global interest rates negatively as the share of people over 50 years will form almost 40% of the population by 2100. In their book T
- The fall in fertility around the globe has been a result of decades of demographic process, and hence needs scientific and sustainable policies for mitigation.
- Though the benefits of demographic dividend are being reaped, the below replacement level fertility rate would mean a smaller dividend window than expected.
- India, like other countries in the globe, would need to be equipped to aid the patten of more tiny feet sooner or later.

Narrowing the gender pay gap is a great opportunity in achieving social justice for the country. Examine

KEY POINTS

- India is among the most important countries when it comes to the global economic growth and structural transformation story.
- Despite notable progress in closing the gender pay gap over time in India, the gap remains high by international standards.
- Indian women earned, on an average, 48% less compared to their male counterparts in 1993-94.

- Since then, the gap declined to 28% in 2018-19 as in the labour force survey data of the National Sample Survey Office (NSSO).
- The pandemic reversed decades of progress as preliminary estimates from the Periodic Labour Force Survey (PLFS) 2020-21 show an increase in the gap by 7% between 2018-19 and 2020-21.
- In 2017, the Government amended the Maternity Benefit Act of 1961, which increased the 'maternity leave with pay protection' from 12 weeks to 26 weeks for all women working in establishments employing 10 or more workers.
- While the gender pay gap is slowly narrowing, at the current rate of progress it will take more than 70 years to close it completely.
- Equal pay for work of equal value is necessary to close the gender pay gap. Closing the gender pay gap is key to achieving social justice for working women, as well as economic growth for the nation as a whole.

G. S PAPER II

3. EDUCATION

Tamil Nadu's breakfast scheme is a good model to improve school education and public health of the country. Discuss

KEY POINTS

- The Tamil Nadu government's launch of the free breakfast scheme for schoolchildren is an instance of a policy initiative with far-reaching consequences for school education and public health.
- Multiple studies across the globe indicate that eating breakfast regularly confers positive outcomes on students, affecting their ability to focus, learn and retain information positively.
- School performance improves, as do behaviour and cognition, but a regular breakfast also takes care of diet quality, micronutrient sufficiency, anaemia and height and weight issues in children.
- The government has targeted providing schoolchildren an average of 293 calories and an average protein input of 9.85 gm per day.
- The Centre's midday meal guidelines prescribe between 450-700 cal per child per day, and a protein intake of 12-20 gm per day.
- The government, rich with its experience of dealing with the mid-day meal scheme over several decades, must avoid the errors of omission.
- The commission including pilferage, poor quality of food, delays in sanctioning funds, and caste-related disruptions that have been hurdles in its path earlier.
- Other State governments would also do well to be inspired by Tamil Nadu, which has allowed its intent to triumph over the state of its finances, finding money to fund this very crucial aspect of nation building ensuring the growth and development of children.

4. HEALTH

It is critical for India to conduct a national survey on food insecurity to assess the impact of the COVID-19 pandemic on food security. Explain

KEY POINTS

- Data from the latest edition of the State of Food Security and Nutrition in the World (SOFI) report show that India retains the dubious distinction of being the country with the largest population of food insecure people.
- Since 2017, SOFI presents two key measures of food insecurity: the conventional measure called the Prevalence of Undernourishment (PoU).
- The PMSFI uses the Food Insecurity Experience Scale (FIES), a gold standard in food security measurement developed by the Food and Agriculture Organization of the United Nations (FAO), for estimating globally-comparable prevalence rates.
- Although FAO-GWP surveys are conducted in India, India is among the few countries that do not allow publication of estimates based on these surveys.
- Not only do the supply-side data show a much higher level of per capita availability of food than the amount of food that is captured to have been consumed in the surveys, even the direction of change between the two does not seem to be consistent.
- The significant rise in food insecurity, as shown by these data, is a clear manifestation of the overall economic distress during this period marked by a deepening agrarian crisis, falling investments across sectors and shrinking employment opportunities.

5. GOVERNMENT POLICIES

How does the Pradhan Mantri Gati Shakti plan will give fillip to the logistics efficiency in the country? Explain

KEY POINTS

- A recent paper by IMF on 'Road Quality and Mean Speed Score' ranked India 127th among 162 countries in terms of road transport speed.
- PM Gati Shakti Master Plan provides a comprehensive database of ongoing and future projects of Infrastructure Ministries of Centre and States.
- One of the main themes of Gati Shakti is multi-modal connectivity. It aims at seamless integration of systems and policies alongside efficient project management.
- For instance, NHAI being responsible for the roads till district headquarters, State PWD or Rural Development Department comes into the picture thereafter and BRO looks after border areas.
- Gati Shakti will help in the coordinated completion of roads at the same time, thereby providing seamless connectivity and opening various opportunities.
- Combining ULIP Data with AI and ML tools can lead to a prediction of trends and evidence-based intervention can be done both by government and private entities.

- The Indian logistics industry is still largely disorganised and fragmented and suffers from a skewed intermodal mix. For instance, in 2020, Rail's share stood at merely 18 per cent as compared to Road's share of 71 per cent.
- It is expected that pieces of the Indian logistical puzzle will fall in right place to make India globally competitive.

In the context of the recent freebie debates, do you agree with the view that the current forms of welfare programmes need to be revisited? Comment

KEY POINTS

- Elections in India are usually a time of enticing promises and elaborate offers when all politicians are suddenly and touchingly concerned by the everyday plight of the common citizen.
- Free electricity and water, cheaper food grain and fuel, bicycles, phones, laptops and wads of cash usually appear on the menu of offerings.
- The government cannot announce new schemes after the declaration of poll dates because of the model code of conduct.
- It directed the EC to frame guidelines with regard to the content of manifestos in consultation with all the recognised political parties.
- Oxfam's 2022 annual report on inequality in India has many troubling, stark revelations.
- This directly led to a rise in fuel prices impacting the prices of essential commodities such as foodgrain, which only impact the poor.
- These policies are the main reason that helped make the rich richer, while the national minimum wage has remained at Rs 178 a day since 2020.
- The so-called "freebie" promises like cheap foodgrains and free items of utility have actually done considerable good to further the dream of democracy.
- Starvation deaths haven't occurred since Rs 1-2 kg rice was introduced. The distribution of bicycles had improved enrollment and retention of girls in schools in Bihar.

The country needs to make the right interventions in order to revamp its patent ecosystem. Examine

KEY POINTS

- The recent report of the Economic Advisory Council to the Prime Minister (EAC-PM), highlights the significance of a robust patent system for a knowledge economy and for the promotion of technological innovations.
- A major concern expressed in the EAC-PM report is the long pendency of processing patent applications in India.
- The total number of patent applications to the Indian patent office has increased by 48% between 2010-11 and 2020-21, largely driven by applications by residents.

- It is worth examining if perverse incentives have been created in the process, which encourage the filing of patent applications even when the innovator knows that their claims will not pass scrutiny.
- The higher education sector of India is rising in prominence in the research and development spending and patenting landscape of India.
- The growing prominence of this sector in patenting activity indicates the priority it attaches to commercially significant technological innovations.
- India's score for this indicator has in fact declined over the last few years, from 47.8 in 2015 to 42.7 in 2021.
- As the patent system is a critical aspect of the national innovation ecosystem, investing in the patent ecosystem will help in strengthening the innovation capability of India.

The Government needs to upgrade its thinking on privacy before seeking to control digital applications. Do you agree with this view? Comment

KEY POINTS

- The draft telecommunication Bill, put out last week for public comments, hints at a disturbing governmental pursuit, for more control over a range of digital applications and over-the-top streaming services that millions of Indians use daily.
- It seeks to do this by bringing them under the ambit of telecommunication services, the operation of which would require a licence that is if the draft provisions do go through.
- It is all well to state, as the Government has done, that the country requires a new legal framework, and not the existing one that is based on the Indian Telegraph Act, 1885, to deal with the realities of the 21st century.
- A similar clause under the IT rules brought in last year requiring messaging apps to enable the identification of the first originator of the information on its computer resource has been challenged in the Court.
- While this is not to underplay the mounting challenges for ensuring security, the repeated attempts by the Government to be able to tap into all kinds of communication.
- It is done without making sure the common man has a legal armour in the form of a data protection law, is extremely problematic.
- The Government needs to upgrade its thinking on users and privacy. This draft needs to go back to the drawing board.

The Dharamshala Declaration aims to recognise India's potential in supporting global tourism and domestic tourism. Explain

KEY POINTS

- The Dharamshala Declaration' aims to recognise India's role in contributing towards global tourism as well as focusing on recovery by also promoting domestic tourism .
- Tourism Ministry has come up with a strategy and action plan to encourage more Indians to travel domestically and explore India's natural, cultural, and spiritual beauty while simultaneously reaching the goal of an 'Ek Bharat Shrestha Bharat'.
- The pandemic has also given us the time to reset and rethink the way forward for tourism in India.

- The guiding principles include promoting sustainable, responsible and inclusive tourism in line with our civilisational ethos.
- The National Tourism policy also aims to give impetus to digitalisation, innovation and technology through the National Digital Tourism Mission and skilling through the Tourism and Hospitality Sector Skill Mission.
- The policy also gives a special impetus to private sector participation through public-private-partnerships (PPP).
- The country has an opportunity to position itself as a major tourism destination during India's presidency of the G20.
- During this time, the plan is to ensure due rigour, dedication and showcase the country's cultural richness while welcoming the world to India.
- By 2030, India is estimated to grow at 7%-9% compounded annual growth rate and we expect the enabling policy framework to bring in \$250 billion in GDP contribution from tourism.

6. POLITY

The constructive role of Department Related Standing Committee improves the efficiency of law making process in the country. Analyse

KEY POINTS

- Parliament had only limited legislative time this session and could pass only five pieces of legislation.
- The percentage of Bills having been referred to the DRSCs during the tenures of the 14th (2004-2009), 15th (2009-2014) and 16th Lok Sabhas (2014-2019) has been 60%, 71% and 27%, respectively.
- Speaker of the Lok Sabha and the Chairman of the Rajya Sabha have powers to refer Bills to a DRSC of Parliament.
- The prerogative of the House to refer the Bills to the Standing committee, through an amendment, would, of course, remain unaffected.
- The committees can be given a fixed timeline to come up with the recommendation and present its report which can be decided by the Speaker/Chairman.
- The Speaker/Chairman should have the right to fix a time limit, if the government of the day asks for it and the demand is found to be reasonable by the Speaker/Chairman.
- Between two sessions, there is generally enough time to organise committee meetings for discussions on Bills in the parliamentary committees.
- When it comes to the budget proposals of the Ministries, the committees should not limit themselves to discussing just the budget proposals and endorsing them with a few qualifications here or amendments there.

Fraternity is among the basic values inscribed in the Preamble of the Constitution of India. Discuss

KEY POINTS

- These principles of liberty equality and fraternity are not to be treated as separate items in a trinity. They form a union of trinity in the sense that to divorce one from the other is to defeat the very purpose of democracy.
- Significantly, the responsibility for bringing this about does not rest with the state but seems to be the responsibility of the individual citizen
- The idea of fraternity is based on the view that people have responsibilities to each other.
- It is economic on one plane; on others it is regional, caste and religious. Some are spelt out, others understated, still others assumed.
- Recent studies on religious minorities who constitute around 20% of India's population have traced discrimination relating to them to perceptions that relate to the very origins of thinking that brought about the partition of August 1947.
- Article 51A(e) of the Constitution does not differentiate between citizens on any of the categories mentioned above and makes it an all-encompassing duty.
- Its ambit therefore is universal; its observance, by the same logic, has to begin at the base of the ladder of citizenship rather than the top but does not spare the leadership from the obligation to promote and practise it.

Do you think that the Election Commission of India is right in rejecting the idea of permanent president for a political party? Comment

KEY POINTS

- The Election Commission of India (ECI) has rejected the idea of a 'permanent president' for a party. The ECI says such a step is inherently anti-democratic.
- There is merit in the ECI's view and its insistence on internal democracy, as no individual should be elected leader for life.
- Any party that participates in a democratic process, and wants to govern and legislate, should include formal and periodic election of office-bearers as part of the way it functions as an association.
- Increasingly, the fragmentation of India's polity into a federalised, multi-party system has also given way to domination by "charismatic" individuals or their families.
- Mainly because of the nature of support that these parties enjoy or due to their financing structures which necessitates centralised control by a single coterie or a family.
- The ECI has periodically used guidelines issued for registration of parties under Section 29A of the Representation of the People Act, 1951 to remind parties to conduct elections and to ensure that their leadership is renewed, changed or re-elected every five years.
- However, with dynasticism and a lack of internal democracy becoming a matter of public debate, perhaps public pressure would finally bear upon parties to do the right thing.

The power to block online content must be used sparingly by the Government of India, with sensitivity towards freedom of speech. Discuss

KEY POINTS

- The Government's order asking YouTube to remove 45 videos from 10 channels can be seen as a justified response to growing concern over the propagation of hate and communally sensitive material
- Section 69A of the IT Act, which empowers the Government to block content, was upheld by the Supreme Court only after it noted that the rules.
- The latest order invokes the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.
- It has a procedure by which an inter-departmental committee considers complaints on content and makes recommendations.
- The Authorised Officer has to take the approval of the Secretary, I&B, before directing the publisher or intermediary to block the relevant content.
- There is an emergency provision under which the Secretary may order content blocking as an interim measure.
- All such blocking orders are meant to be examined by a review committee, which ought to meet once in two months, but it is not known whether the panel meets regularly.
- The Government, which discloses how many videos it has got removed, must also reveal the outcome of such reviews, if any.
- However, the power to block online content must be used sparingly and with sensitivity towards key freedoms and due process.

7. JUDICIARY

In Benami property cases, the Supreme Court has wisely placed restrictions on retrospective penal action in a civil law. Explain

KEY POINTS

- The Supreme Court's unambiguous assertion of the Constitutional principle of prohibiting retrospective criminal laws has to be welcomed.
- The judgement provides relief to thousands of property-holders like the respondent company in the present case which faced criminal prosecution for transactions that were denominated as "benami" prior to 2016.
- The presumption was that Article 20 barring retrospective criminal legislation would not influence these prosecutions because the law was not being applied retrospectively; it already existed in the statute book.
- The government accordingly argued before the Supreme Court that the 2016 Act was not substantive but only procedural in operationalising the 1988 Act.

- But the Court rightly gauged the problem as “a tussle between the normative (subjective opinion) and positivist (hypothesis that can be empirically tested) positions regarding the nature of a crime and punishment”.
- A punitive provision cannot be couched as a civil provision to bypass the mandate under Article 20(1) of the Constitution which follows the settled legal principle that “what cannot be done directly, cannot be done indirectly”.
- The Court ruled against retrospective application of the confiscatory provision in Section 5, but left the question of its prospective application open. Yet, the provision is suspect.
- In sum, crucial Constitutional boundaries have been spelt out by the apex court as a reminder to lawmakers.

Lack of forensic evidences is influencing the quality of justice delivery in the country. Do you agree with this view? Comment

KEY POINTS

- The analyses and results of forensic laboratories at the State/Central level are critical for the criminal justice system.
- This ranges from crime scene reconstruction, photography, collection and packaging of evidence, digital and cyber forensics, examination of handwriting, signatures, photograph, fingerprints and currency, and chemical and biological forensics, among others.
- The right to a bias-free and speedy investigation is the right of every citizen enshrined under Article 21 of the Constitution.
- For a moment, consider the 4.7 crore cases pending in India at different levels of the judiciary. Out of these, four crore are pending at the District Court level and many might be pending due to lack of forensic report.
- For evidence of biological or chemical nature, chances of contamination and scope of manipulation are directly proportional to the time taken to analyse them thereby increasing the margin of error in a scientific procedure and therefore the final case itself.
- There has been discourse in civil society that calls for an increased judge-to-population ratio, as the judicial system in India is under tremendous pressure.
- In a scenario with a significant number of pending cases, one can imagine the volume of pendency caused by lack of forensic processing on time.

Analyse the various rationale and concerns of live streaming of the Supreme Court proceedings in India.

KEY POINTS

- The Supreme Court in a full court decided to live stream its proceedings in crucial Constitution Bench cases.
- The Supreme Court approved a set of guidelines suggested by the A-G, which included allowing transcripts and archiving the proceedings.
- Broadcasting court proceedings is a step in the direction of transparency and greater access to the justice system, but there are concerns around the impact of live streaming both on judges and the people watching the proceedings.

- Video clips of proceedings from Indian courts are already on YouTube and other social media platforms with sensational titles and little context.
- There are fears that irresponsible or motivated use of content could spread disinformation among the public.
- However, the A-G suggested that the court must retain the power to withhold broadcasting, and to also not permit it in cases involving:
 - a) Matrimonial matters,
 - b) Matters involving interests of juveniles or the protection and safety of the private life of the young offenders,
 - c) Matters of National security,
 - d) To ensure that victims, witnesses or defendants can depose truthfully and without any fear.
 - e) To protect confidential or sensitive information, including all matters relating to sexual assault and rape
 - f) Matters where publicity would be antithetical to the administration of justice, and
 - g) Cases which may provoke sentiments and arouse passion and provoke enmity among communities.

8. INTERNATIONAL RELATIONS

India cannot address the unfinished agenda of South Asian integration without engaging Pakistan. Explain

KEY POINTS

- At a time Pakistan is reeling from a monsoon with one-thirds of the country under water that has affected 33 million people India must step up engagement, including extending humanitarian assistance to its neighbour.
- There is no reason why it can't help Pakistan as it has helped Sri Lanka and Afghanistan. Pakistan is also desperately short of foreign exchange to import essentials and is seeking IMF assistance.
- India, too, withdrew MFN status to Pakistan in February 2019 after the Pulwama terror attacks. MFN status ensures non-discriminatory trade between partner countries.
- There is no reason why India cannot significantly increase its imports from that country beyond items like dates. India's trade with Pakistan dwindled to \$516 million in FY22 while our two-way trade with Bangladesh is 35-times larger, at \$18 billion.
- The uptick in Pakistan's recent imports is a favourable augury for commerce to resume even if it is only food and vegetables for starters. Due to its bilateral problems with Pakistan.
- India has preferred regional groupings like the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation to the South Asian Association for Regional Cooperation.
- Unfortunately, the truth is that as the dominant power in the region, India cannot address the unfinished agenda of South Asian integration without engaging Pakistan.

The fifth Australia-India Leadership Dialogue has enough potential to generate momentum in bilateral ties. Explain

KEY POINTS

- Indians are today the largest source of skilled migrants in Australia and the economic relationship, already robust, could potentially be transformed if the promise of the new Australia-India Economic Cooperation and Trade Agreement (ECTA) is realised.
- The Australia-India Leadership Dialogue is critical because ideas matter in a relationship as much transactions and negotiations do.
- The Leadership Dialogue is also important because ultimately, people and real connections matter.
- Technology and the cyberworld can blind us into believing that face-to-face conversations are outdated.
- From cyberthreats and artificial intelligence (AI) governance in a geopolitically turbulent region, to how they will decarbonise their economies.
- Countries help each other develop trusted supply chains through critical minerals cooperation, to how India's tech talent can help address Australia's skills gaps through migration.
- Australia wants to find alternative markets to China and diversify supply chains for its critical minerals.
- As a country with reserves of about 21 out of the 49 minerals identified in India's critical minerals strategy, Australia is well placed to serve India's national interests required for India's carbon reduction programme.
- As India marks 75 years of Independence and surpasses the United Kingdom as the fifth largest global economy, the momentum around this fifth Australia-India Leadership Dialogue and the bilateral fruit it may bear should not be underestimated.

Bangladesh is becoming central to India's neighborhood first policy. Do you agree with this view? Comment

KEY POINTS

- Bangladesh is now central to India's "Neighbourhood First Policy", particularly given the economic crisis affecting Pakistan and Sri Lanka.
- There is an agreement on the water-sharing formula for the river Kushyara that flows into Bangladesh from Assam's Silchar district.
- India has requested the finalisation of the temporary water sharing accord on the Feni river, which meets Tripura's water requirements.
- Bangladesh has announced 200 scholarships to descendants of children of Indian military personnel who laid down their lives in the 1971 War of Liberation.
- The rising energy demand in Bangladesh has led to the 1,320 MW thermal power plant being built at Rampal by the NTPC in a 50:50 joint venture.
- Around \$8 billion Line of Credit (LoC) has been extended to Bangladesh, including \$500 million for defence-related procurement.

- China's footprint in Bangladesh has increased via the BRI, as part of Beijing's concerted effort to influence New Delhi's neighbours.
- Bangladesh has been careful in assessing China's "debt-trap" diplomacy, given the economic crises in Pakistan and Sri Lanka.
- The Rohingya refugee issue has imposed a huge burden on Bangladesh. PM Hasina raised this issue and called on India to help in repatriating the refugees to Myanmar.

A global pandemic treaty will enhance a global pandemic preparedness for future health emergencies. Discuss

KEY POINTS

- Health-care systems have been stretched beyond their capacity and gross health inequity has been observed in the distribution of vaccines, diagnostics, and therapeutics across the world.
- The monopolies held by pharma majors such as Pfizer, BioNTech, and Moderna created at least nine new billionaires.
- As of March 2022, only 3% of people in low-income countries had been vaccinated with at least one dose, compared to 60.18% in high-income countries.
- India's response to the COVID-19 pandemic and reinstating global equity by leveraging its own potential has set an example to legislators worldwide.
- India was unfettered in its resolve to continue the shipment of vaccines and other diagnostics even when it was experiencing a vaccine shortage for domestic use.
- In the COVID-19 pandemic, we have seen a multitude of initiatives to address the pandemic and to do better in the future such as the Vaccine Alliance.
- Further, it should mobilise nation states to agree on a set of common metrics that are related to health investments and a return on those investments. These investments should aim to reduce the public-private sector gap.
- Finally, a global pandemic treaty will not only reduce socioeconomic inequalities across nation states but also enhance a global pandemic preparedness for future health emergencies. India must take the lead in this.

India's emergence as the fastest-growing economy will ensure a further quantum leap in strategic and economic ties with Japan. Explain

KEY POINTS

- The 2+2 dialogue also coincided with North Korea passing a new law declaring its irreversible status as a nuclear weapons state.
- It is striking in terms of the resolve expressed by the Japanese side to fundamentally reinforce Japan's defence capabilities within the next five years.
- Clearly, Japan is freeing itself from self-imposed shackles in order to develop robust capacities to tackle the emerging security threats from China and North Korea.

- A key outcome of this round of talks was the agreement to launch the Joint Service Staff talks between the Japan Joint Staff and the Indian Integrated Defence Staff.
- Interestingly, MILAN 2022 witnessed the first-ever participation by not just Japan but all the Quad nations, as well as France and South Korea.
- Bilateral priorities such as the India-Japan Industrial Competitive Partnership, the Supply Chain Resilience Initiative and cooperation in clean energy are expected to show faster results as India and Japan gear up to assume the presidency of the G-20 and the G-7, respectively.
- Another area of potential cooperation is in the manufacturing of drones. Japan's largest drone manufacturer, ACSL, has already established a joint venture in India with Delhi-based Arc Ventures.

India's participation in the Shanghai Cooperation Organisation summit is a clear signal of pursuing multi-alignment with its partners worldwide. Explain

KEY POINTS

- To begin with, the visit reinforces his commitment to an Indian foreign policy that balances various blocs pitting India's membership of the SCO and BRICS against its membership of the Quad, groups such as the I2U2, and the Indo-Pacific Economic Framework (IPEF).
- This was highlighted more recently with India joining the Russian-led 'Vostok' Army Exercises along with China, and plans to host SCO-RATS (or the Regional Anti-Terrorist Structure of the Shanghai Cooperation Organization).
- India is the only country that would form the intersection, a part of all of those groupings.
- Although India is no longer a part of the railway connectivity project from Chabahar, Iran has asked for support with "above ground" equipment and parts for its plans to extend the rail line from the Afghan border outpost to Turkmenistan, the shortest possible route for India.
- This would also tie in with the Modi government's plans to build a connectivity framework that counters the China-Pakistan-Economic Corridor from Gwadar, which China plans to connect through Afghanistan to Central Asia.
- No trade with India is possible without a reversal of New Delhi's Article 370 moves in Jammu and Kashmir, formal communication has all but ended.
- A powerful backchannel with National Security Adviser Pakistani military interlocutors is evidenced by the ceasefire being largely maintained at the Line of Control.

Abraham Accords have led to greater regional cooperation and increased opportunities for India. Explain

KEY POINTS

- Israel, the United Arab Emirates and Bahrain signed the United States-brokered Abraham Accords.
- It was a historic moment for our peoples and nations, fostering new hope for peace and prosperity in the Middle East.
- It also brought exciting opportunities for India and its thriving business community, which enjoys strong relations and engagement with our countries.

- The boost to regional connectivity has also benefited the people of India. The thriving Indian diaspora throughout the Gulf can now fly directly from the UAE to Israel or from Israel to Bahrain.
- Indian students are travelling back and forth, obtaining easier access to our universities, and exploring international study programmes.
- I2U2 partners will mobilise private sector capital and expertise to help modernise infrastructure, decarbonise industries, improve public health, and promote the development of green technologies.
- I2U2 combines the strengths and resources of each member country to find innovative solutions to pressing global challenges and will serve as a model for multilateral cooperation with other like-minded countries.
- In efforts to build upon the success of the Accords, United States, Israel, the UAE, and Bahrain alongside India will continue to prioritise the greatest benefit to our people and ensure lasting impact for generations to come.

Current Geo-political events demand a reorientation of the India's foreign policy. Do you agree with this view? Comment

KEY POINTS

- The Shanghai Cooperation Organisation (SCO) meeting in Uzbekistan, was a test case for governments on how to deal with current conflicts and attempt new guidelines for the future.
- The special significance of this in-person SCO meeting lay in the fact that it was taking place when the world stood at the crossroads, in the wake of the Russia-Ukrainian conflict.
- India's presence at the meeting of the Council of Heads of State of the SCO was significant, reflecting a desire to be a part of both blocs, without antagonising either.
- India's foreign policy should be creative enough to leave an opening for an improvement in India-China relations over the longer term.
- Refashioning relations with China over the longer term is important, but attention also needs to be given on how to manage relations in the near term in the context of the growing closeness in China-Russia relations.
- India's strategic and foreign policy establishment cannot afford to overlook the nuclear aspect, given that the country is wedged between two active, and hostile, nuclear powers China and Pakistan.
- It may well necessitate giving up many of the existing policy constructs, providing for a wider outreach, and ensuring that our policy is not merely in step with current needs but is always a step ahead.

If the Global South were to work in plural inclusive ways, it could make the world a better place for itself. Examine

KEY POINTS

- The international system is witnessing geopolitical changes and a push for competitive great power hegemony. The United States leads with its goal for primacy in the international system.
- Countries of the Global South, especially India, China and others, are being blamed for the failing sanctions against Russia in the context of the Ukraine war.

- The truth is that the Global South, with a few exceptions (except seven), wants a quick and negotiated end to this terrible war; all oppose the sanctions regime and all advocate neutrality.
- The reasons for neutrality include: the needs for regime survival especially because many in the South are dependent on Russian energy, fuel, fertilizers, wheat, commodities and defence equipment.
- Most of these Southern countries would not like to be a part of security or military alliances with either the West or the Russian or Chinese sides.
- The Global South has made a statement on its development, for better terms for trade for which it needs strategic autonomy.
- If the Global South were to voice collective concerns on existential threats from climate change, ecological devastation, inequalities and increasing militarisation, and work in plural inclusive ways, it could make the world a better place for itself.

Discuss the significance of India's role in initiating the reforms in global multilateral institutions.

KEY POINTS

- Indian External Affairs Minister visit to the United States has set the stage for an expansive range of bilateral and multilateral diplomacy by India.
- India's call for this structural overhaul of global multilateral institutions incorporates institutional accountability and a wider representation of the developing countries.
- At least three recent global developments reflective of the UN's functional evaluation have stood out in India's quest for a reform of the UN.
- It highlighted the UN's institutional limitations when countries closed their borders, supply chains were interrupted and almost every country was in need of vaccines.
- The international isolation of Russia and Iran as well as increasing the United States' Taiwan-related steps could usher in these changes more rapidly than expected.
- India's call for reform of the UNSC has grown in the past few years. In this regard, hosting of a ministerial meeting of the G4 (Brazil, India, Germany and Japan) holds special significance.
- The L.69 group's vast membership spread over Asia, Africa, Latin America, Caribbean and Small Island Developing States could bring about a wider global consensus on the issue of the UNSC reforms.
- With starker divisions between countries as result of the Russia-Ukraine war and lingering pandemic-induced restrictions, the need for the UN's reform is likely to be felt more palpably than ever before.

The Seti river hydro-electric project signed between India and Nepal is win-win situation at bilateral and regional levels. Examine

KEY POINTS

- Historically, the 750MW West Seti Hydroelectric Project was thought of in the early 1980s as a 37 MW run-of-the-river scheme.

- Nepal issued the developing licence to France's Sogreah, which prepared a pre-feasibility study in 1987 proposing the scheme without building a dam.
- In 2011 Nepal revoked the licence of the West Seti Hydropower Company Limited in which SMEC had a majority stake, and handed it over to China.
- The decision to involve India is a sign that Nepal is reposing its faith in India to complete the project. If completed, it is expected to provide India the much-needed leverage in future hydropower cooperation.
- It is ironic that despite its huge hydropower potential, Nepal experiences power shortages during peak time, increasing its dependence on India to bridge the shortfall.
- Nepal is concerned that the electricity rates and supply from India is inadequate to meet the rising demands.
- the project can also be extended to other regional partners under the Bangladesh-Bhutan-India-Nepal (BBIN) framework for cross-border energy cooperation.
- For example, if the combined estimated hydropower potential in Nepal and Bhutan, along with the potential of Northeast India, is effectively harnessed, a cross-border energy market can be created and optimally operationalised.

The Centre for Bay of Bengal Studies can enhance the India's overall framework for maritime engagement. Discuss

KEY POINTS

- The official launch of the CBS has once again demonstrated India's commitment to advancing constructive agendas by forging connections and setting up platforms for all those with an interest in the Bay.
- CBS will offer collaborations in areas such as geo-economics and geopolitics, ecology, trade and connectivity, maritime security, maritime law, cultural heritage, and blue economy to generate opportunities for the Bay region.
- This will strengthen India's overall framework for maritime engagement, which aims to advance sustainable economic growth for all by fostering closer nautical ties.
- The Bay has a biodiverse marine environment. It receives water from some of the world's largest rivers. It is a partially enclosed sea that has given rise to several geological characteristics.
- Problems such as population growth, altered land use, excessive resource exploitation, salinisation, sea level rise, and climate change are exerting significant strain on the Bay's environment.
- A dead zone has formed as a result, and the mangrove trees that protect the shore from the fury of nature are under more threat than ever.
- For a better knowledge of challenges, and strategies to overcome them for the sustainable development of the region, more focused and interdisciplinary study is required on these issues.

G.S PAPER III

9. ECONOMY

India's growth path in the next few years must depend on robust domestic investment and sector wise growth. Substantiate

KEY POINTS

- The National Statistical Office's real GDP growth estimate of 13.5% for the first quarter of 2022-23 is 2.7% points lower than the Reserve Bank of India's earlier assessment of 16.2%.
- This indicates that the performance of the Indian economy is not fully normalised yet which would be consistent with a growth of 6.5% to 7%.
- On the demand side, all major segments showed magnitudes in 1Q of 2022-23 that were higher than their corresponding levels in 1Q of 2019-20.
- The ratio of gross fixed capital formation to GDP at current prices is 29.2% in 1Q of 2022-23 which is 1% point higher than the investment rate of 28.2% in the corresponding quarter of the previous year.
- The Centre's capital expenditure grew by 62.5% during the first four months of 2022-23. This momentum needs to be maintained.
- This would be facilitated by a buoyant growth in the Centre's gross tax revenues, which showed a growth of nearly 25% during the first four months of the current fiscal year.
- India's growth path in the next few years must depend on domestic investment picking up. Sector-wise growth in investment must be the focus of policymakers in removing bottlenecks and creating a favourable climate.

The Development of Enterprise and Service Hubs can achieve self-reliance and boost exports of the country. Do you agree with this statement? Comment

KEY POINTS

- In the Budget 2022-23, the Finance Minister had proposed the replacement of the SEZ law with a new legislation — Development of Enterprise and Service Hubs (DESH).
- The primary objective of DESH is to create an export promotion ecosystem, aligning trade policy framework with the WTO rules, inculcating the spirit and enthusiasm among entrepreneurs, ensuring greater transparency.
- A few sectors such as IT & IT enabled services, gem and jewellery, pharma have benefited under the SEZ Act but they failed in facilitating a large scale economic transformation vital for a country like India.
- The DESH draft is historic as it brings in scale, scope, system, and synergy in India's manufacturing operations achieving the twin objectives of import-substitution as well as achieving export excellence.
- It also underlines the importance of addressing the existing tug of war on revenue matters (Minimum Alternate Tax, Dividend Distribution Tax among others).
- Considering this, the DESH Bill must identify the sectors of opportunities for global trade which are engineering, electronic and electrical automobiles pharmaceuticals and plastics.

- The DESH Bill should work on twin-objectives of substituting imports and stimulating exports.
- It should also offer a better enabling environment (ease in entry and exit, single window, fiscal and non-fiscal incentives).
- India's policymakers can offer more than the bench-marks of similar incentives in ASEAN countries where many units are relocating under China-plus-One strategy.

Discuss the efforts that are required to form collectives and the formalization of rural agriculture.

KEY POINTS

- There are numerous challenges associated with their informal and decentralised nature, the ultra-tiny scale of their operations and the imperfect rural markets that restrict their competitive abilities. Determined efforts are therefore required in the following critical areas.
- Markets need to be studied, mapped, and tagged to the rural production clusters having special advantages.
- Devoid of scale, capital and bargaining power, primary producers are forced to purchase inputs on credit at a higher price and sell their produce in distress.
- Rural producers do not have the wherewithal to invest in critical aspects such as technology, digital solutions, training of manpower, etc.
- Rural producers generally sell their produce/products without much value addition and get a smaller share in the consumer price. They also lack adequate storage space and capital to hold stocks.
- Most of the rural producers are semi-literate and employ untrained manpower. This limits their ability to adopt modern business practices.
- Formalization and registration of rural producers, therefore, would be useful in providing them with a unique identity, mapping production clusters, and targeting interventions.
- Organized businesses have their representative forums such as associations, federations, etc, for facilitating consultations with the government and other stakeholders.
- This would help strengthen the consultative approach to upgrading the rural production ecosystem.

Trade 4.0 will help India move up the global value chain by delivering quality products and services using advanced technology. Explain

KEY POINTS

- The contribution of exports can dramatically change, both positively and negatively.
- External shocks, such as global economic slowdown, fluctuating valuation of foreign currencies, and changes in policies by importing countries.
- India's services export has increased rapidly over the past decade with computer services accounting for around 49 per cent of the total exports in FY2021.
- India can benefit from the changing trade landscape and by capturing a greater share of global technology services.

- The government's role as the creator, facilitator, enforcer and negotiator will be critical in India's progress towards the Trade 4.0 revolution.
- Trade 4.0 will necessitate jurisdiction and laws to strengthen international patent rights; re-design intellectual property and its protection; ensure privacy and personal data/consumer protection.
- For instance, big data analytics will help identify customers and plan demand, whereas AI and smart robots will help reduce transport, logistics, and inventory costs.
- Currently, India's exports account for only 2.1 per cent of the global exports of goods and services; its share in global merchandise exports is even smaller at 1.7 per cent.
- Trade 4.0 will help India increase its participation in and move up the global value chain by delivering quality products and services using advanced technology.

Centre and the Reserve Bank of India will have to work in tandem to control prices without destabilising growth. Analyse

KEY POINTS

- The optimism about moderation in consumer inflation, fuelled by the decline in CPI inflation in July to 6.7 per cent, has been doused by a higher-than-expected reading of 7 per cent for August.
- The increase in August was led by food inflation, which shot up to 7.6 per cent in August from 6.7 per cent in July.
- While inflation may not increase too much from current levels, it is likely to remain elevated, and above the Reserve Bank of India's comfort zone in the coming months.
- Prices of cereals and pulses have cooled slightly in recent weeks while edible oil prices are down quite sharply over the past few months.
- Inflation in fuel and lighting is also unlikely to spike too much in the coming months since pressure on global crude oil prices are evenly balanced.
- Core inflation is however likely to be sticky due to private consumption reviving with reopening of the economy and producers continuing to hike prices gradually.
- The turnaround in foreign portfolio flows into equity as well as debt in August offers some leeway to the central bank in monetary tightening.
- Both the Centre and the RBI will have to join hands and work in tandem to control prices without destabilising growth.

Do you think that the Productive Linked Incentive scheme alone can induce investment in the Indian economy? Examine

KEY POINTS

- Schemes such as PLI have been floated by the government to encourage industry to invest more in capital that will result in higher output which, in turn, will be rewarded with a cash-back of 4-6 per cent.
- In FY21, which is the latest year for which this information is available, the biggest contributor was the household sector with a share of 39 per cent.

- The other significant entity is the PSU (non-financial) with a share of around 10 per cent.
- The dominant sector here is real estate, with a share of 26.5 per cent, followed by manufacturing with 14.3 per cent.
- Investments here will be driven by the regulatory environment as telecom is one sector that has been embroiled in several controversies since the start of the last decade.
- Therefore investment needs to go beyond the PLI which pertains to manufacturing to address challenges in terms of demand.
- This can be accomplished with more spending, through higher incomes being spent after being generated, which in turn leads to the issue of job creation.
- Also, we have to look at all sectors when providing incentives, and not just manufacturing. This can be a pointer for future policy decisions on investment.

Atmanirbharta is a means for regaining India's share in the global economy and improving the quality of life for the citizens. Discuss

KEY POINTS

- With the onset of colonial rule and its concomitant wealth drain, India's share in world GDP was reduced to a mere 4 per cent by 1950.
- Today, India's share in world output remains at 4 per cent in nominal terms while its share in world population has increased to 18 per cent and rising.
- Our share in global manufacturing, which was also more than 20 per cent prior to the deindustrialisation under colonial rule plummeted to 2 per cent by 1947. By 2019, we have managed to increase it only to 3.1 per cent.
- Therefore, we must set ourselves the target of achieving at least a 16 per cent share in global GDP and a 20 per cent share in global manufacturing for true Atmanirbharta.
- Every country attempting to successfully make the transition from a low-income economy to an upper middle income economy has had to expand its exports of both goods and services.
- It is important that the RBI ensures a neutrality of exchange rate between exports and imports. Exports should not be penalised by an over-valued exchange rate.
- In essence, Atmanirbharta should be seen as a means for regaining India's share in the global economy while simultaneously improving the quality of life for the common Indian.

Discuss the measures needed to be taken by the Government of India to increase its sporting performance and soft power.

KEY POINTS

- Until recently there has been no empirical evidence whether performance in the Olympics or other world championships improved soft power or not.
- Here are some recommendations for the Indian government to increase the country's sporting performance and soft power.

- India should concentrate on forging MoUs with nations that excel in specific sports.
- The aim should be to train Indian players overseas. For example, Australia and the United Kingdom can assist us in swimming given their standing here.
- When it comes to running, negotiating collaborative training agreements with African countries such as Kenya would be ideal. There should be no politics in seeking or even offering assistance.
- India needs to boost the number of athletes under TOPS — at least 500 athletes should train under the scheme to foster a competitive climate, in turn aiding performance.
- private investment needs to be harnessed to develop infrastructure. The better a country performs in sporting events the greater a sports person's interest in their sports atmosphere.
- The Government should also work on a public-private partnership (PPP) model to create basic sporting infrastructure, as recommended by NITI Aayog, at the district level so that talent can be captured at an early stage. Soft power is not an end but a means to an end.

10. AGRICULTURE

Do you think that the One Nation One fertilizer scheme help farmers in utilizing the fertilizers effectively? Critically Analyse

KEY POINTS

- Under the scheme, all fertiliser companies, State Trading Entities (STEs) and Fertiliser Marketing Entities (FMEs) will be required to use a single “Bharat” brand for fertilisers and logo under the PMBJP.
- The price of the most used fertiliser, urea, is controlled by the government, meaning all manufacturing companies sell at a fixed MRP, which is just 10-20 per cent of production costs.
- The government provides 80-90 per cent of the cost of production to the manufacturers in the form of a subsidy.
- Besides paying subsidies to companies for the cost of production, the government also pays manufacturers freight subsidies- or the cost of ferrying their products to the end-user.
- One rationale is that if manufacturers stop selling urea distinctively under individual brands, there would be no need for Indian Farmers Fertiliser Cooperative (IFFCO) to move fertilisers across states, thus reining in the fertiliser subsidy expenditure.
- The Chief Economic Advisor noted in the Economic Survey of 2016 that the fertiliser sector is highly regulated, which causes a major distortion in the sector.
- Experts thus call for Direct Benefit Transfer (DBT) to farmers and decontrolling the price of fertilisers, so that the system empowers farmers by giving them a range of choices and motivates manufacturers to make better products.

Discuss the link between normal monsoon and its effects on food prices in the country.

KEY POINTS

- The progress of the monsoon too is tracked by the market, and the sounds of a drought can depress the indices.
- However over the years there has been a change in this pattern with the monsoon arriving and leaving later.
- It is hence not surprising that, towards the end of August, the area under cultivation for rice and pulses is lower than last year.
- In the case of pulses it will be even more challenging because production of tur, urad and moong have been good in the past, and by the law of averages, production was likely to be lower this year.
- Therefore, even with a good monsoon this year, with just 6 sub-divisions being classified as being deficient in rainfall so far as against 13 in 2021, shortages are still possible.
- A reason for the severance in the relation is that the government has tended to increase the MSPs every year.
- While procurement takes place mainly in rice and wheat as there is a direct link with the PDS, the MSPs tend to have an influence on the benchmark prices for other products.
- In the last four years, we have had an annual feature of tomato and onion inflation caused by late withdrawal of the rains. Therefore a good monsoon is good news, but does not preclude the other disturbances.

The curriculum related to agricultural discipline needs to be reformed for better outcomes. Do you agree with this view? Substantiate

KEY POINTS

- Agriculture and allied sector, being the primary source of livelihood for about 58 per cent of India's population, accounted for 18.8 per cent of the country's overall Gross Value Added (GVA) during FY22.
- The present-day challenges of food production, considering its impact on the environment, call for producing more with less resources (land and water) and adapting to climate change and greater weather variability, while balancing the nutrition and energy needs.
- Therefore, a paradigm shift is needed with a focus on the three pillars, namely, productivity, sustainability and resilience to equip farmers with a seamless integration of traditional practices with scientific innovations for sustainable intensification.
- With one of the largest agricultural research systems in the world —the National Agricultural Research and Education System (NARES) India has 27,500 agricultural scientists.
- The National Agricultural Higher Education Project (NAHEP), launched by ICAR in 2017, with the objective of enhancing competitiveness while designing market-oriented course curriculum.
- High order mechanisation, automation, resource-conserving and productivity enhancing technologies, precision agriculture, Artificial Intelligence (AI), blockchain technologies, Big Data analytics, IoT.
- There is a need to encourage socially responsible research with meaningful outcomes to suit the changing rural economic landscape, aligning with the Sustainable Development Goals (SDGs).

- This would also be a potential source of employment for educated rural youth, besides being an effective means of enhancing the economic viability of farming.

Climate crisis threatens food security. In this context, discuss how challenging it is for agriculture to survive climate change?

KEY POINTS

- While large parts of the country reel under floods, drought-like conditions stare at farmers in UP, West Bengal, Bihar and Jharkhand, which are among the top paddy-producing States.
- A study by the Council for Energy, Environment and Water (CEEW) has found that over 75 per cent of India's districts are vulnerable to extreme climate.
- Punjab takes about 5,400 litres of water to grow one kilogram of rice, five times as much as China uses, pointing to the State's low water productivity.
- That's why 131 of the 148 blocks in the State are overexploited. About 15 lakh shallow tube wells dig deeper and deeper every year.
- Brazil set an example and became the top producer of sugarcane and soybean without using fertilisers.
- In India, a few States are already at the vanguard of this revolution. Sikkim is a 100 per cent organic State, and Andhra Pradesh aims at 100 per cent natural farming by 2027.
- Support technology innovation and adoption to mechanise labour-intensive activities associated with sustainable agriculture practices.
- Instead of input-based subsidies for fertiliser and power, incentivise outcomes such as annual nutrition output per hectare and enhanced ecosystem measures such as water conserved or desertification reversed.
- Regular comparisons of outcomes amid climate change are important for safeguarding farm income, nutrition, food security and natural resources.

In what ways, the state government can give boost to agri-tourism in the country? Discuss

KEY POINTS

- Agri-tourism includes a variety of activities and services and it is in general considered to be a low-investment, low-risk sector.
- It can fuel rural economies through the multiplier effect and the benefits shared amongst different businesses within the community.
- The fundamental concept of agri-tourism was entrepreneurial diversification of a farm.
- Revenue from agri-tourism is growing at an annual rate of 20 per cent in India. Maharashtra is the first State to formulate an agri-tourism policy, which aims at rural development.
- The report of the committee on Doubling of Farmers' Income (DFI) emphasised the need for a policy for developing agri-tourism.
- Some of the measures that must be considered while implementing agri-tourism are:
 - a) State governments must form a separate committee for formulating guidelines for agri-tourism.

- b) State tourism departments must provide a separate licence under agri-tourism to be eligible for getting loans and tax benefits.
- c) Co-operative societies may be included in providing loan facilities to develop agri-tourism.
- d) Local administrations such as village panchayats can help in the coordination and facilitation of agri-tourism.
- e) State tourism departments must organise seasonal festivals along with agri-tourism farms for a wider reach.
- f) Rural youth may be trained for agri-tourism by offering diploma/certified courses.

A judicious blend of public and private investments is essential to meet the capital required for financing sustainable agriculture. Explain

KEY POINTS

- India's need to prioritise the strategies for financing sustainable agriculture becomes imperative with the Cabinet's approval of the updated Nationally Determined Contributions (NDCs).
- India now stands committed to reducing the emissions intensity of its Gross Domestic Product (GDP) by 45 per cent from the 2005 level by 2030 against the earlier target of reducing emissions intensity by 33-35 per cent, submitted in October 2015.
- The agriculture sector contributes for about 18 per cent of green house gas emissions (GHGs), according to the Indian Network for Climate Change Assessment (INCCA), Ministry of Environment and Forests.
- Hence, there is an urgent need to adopt climate smart agricultural practices for ensuring food security as well as for meeting the commitments of net-zero emissions.
- Policy incentives like price support, procurement, input subsidies, etc., have played a significant role in shifting to intensive mono-crop cultivation of rice and wheat from pulses, coarse cereals and oilseeds.
- A comprehensive regulatory framework is essential to ensuring transparent flow of green finance and avoid green washing with requisite disclosures and tracking mechanisms in place.
- In this regard, the Securities Exchange Board of India has been taking initiatives like disclosure guidelines, and a framework for issuing green bonds.
- Thus, for India to ensure its food security, while complying with the NDCs, it is essential to prioritise financing sustainable agriculture.

The derivatives market can provide reliable price signals and help farmers and other stakeholders to take informed decisions. Explain

KEY POINTS

- The central problem that various policies in the agriculture sector strive to solve is the risk associated with the enterprise of farming.
- Futures and options are derivative instruments that derive their value from an underlying asset, and derivative contracts involve an agreement to buy or sell the asset at an agreed price on a future date.

- Put options can be of great use to lock onto a minimum price for farmers at the time of sowing itself while also allowing them to gain from the open market in case prices rise.
- This means if the price of the commodity falls in the future, the farmer can sell at the pre-decided price to the seller, but if the price rises, the farmer can sell in the open market.
- The government must consider creating an AgriPut Fund to pay fully or partly the initial premium. CSR activities can also be utilised for the same.
- In the case of perishable items like tomatoes, there have been instances of farmers dumping their produce on roads due to the low prices.
- A healthy derivatives market can disseminate reliable price signals to help both farmers and other stakeholders take more informed decisions.
- The market has the potential to turn the farmers' fortunes and enable them to become entrepreneurs, Atmanirbhar in the true sense.

11. SCIENCE & TECHNOLOGY

The programmes of Government of India to empower women in the field of science and technology will usher in gender parity by 2047. Critically examine

KEY POINTS

- The Government of India has been ramping up efforts to remove gender inequality by providing incentives for women's higher education.
- Knowledge Involvement in Research Advancement through Nurturing (KIRAN), i.e., a plan under the Department of Science and Technology again to encourage women scientists in science and technology and also preventing women scientists from giving up research due to family reasons.
- In India, about 43% of women constitute the graduate population in STEM, which is one of the highest in the world, but there is a downside to this; only 14% of women join academic institutions and universities.
- The more prestigious the institute, the lower the number of women employees. For example, in IIT Madras only 31 out of 314 professors (10.2%) and in IIT Bombay only 25 out of 143 professors (17.5%) are women.
- The number of women in senior management positions in the corporate sector in India is 39%, which is higher than the global average.
- It is hoped the programmes that have been initiated by the Government to empower women in the workforce will usher in gender parity by 2047, which would mark the centenary of India's Independence.

Cooperative federalism is necessary in handling the cyber-crime happening across the country. Substantiate

KEY POINTS

- There has been a steady spike in cases of cybercrime in the last five years. According to the National Crime Records Bureau (NCRB), from 12,317 cases of cybercrime in 2016, there were 50,035 cases registered in 2020.

- The broad 'guidelines for the identification, collection, acquisition, and preservation of digital evidence' are given in the Indian Standard IS/ISO/IEC 27037: 2012, issued by the Bureau of Indian Standards (BIS).
- The guidelines, if followed meticulously, may ensure that electronic evidence is neither tampered with nor subject to spoliation during investigation.
- Allahabad High Court observed that the Indian Computer Emergency Response Team (CERT-IN) expert was not provided with the details of the Internet logs, router logs and laptop logs to prove whether the Internet was physically operated on the fateful night.
- Further, the Information Technology (IT) Act, 2000 insists that offences registered under the Act should be investigated by a police officer not below the rank of an inspector.
- Most cybercrimes are trans-national in nature with extra-territorial jurisdiction. The collection of evidence from foreign territories is not only a difficult but also a tardy process.
- Therefore, 'data localisation' must feature in the proposed Personal Data Protection law so that enforcement agencies are able to get timely access to the data of suspected Indian citizens.

Artificial Intelligence has vital and responsible role for tackling the problem of corruption in the country. Explain

KEY POINTS

- India having witnessed a great leap in digital revolution, emerging technologies such as Artificial Intelligence (AI) could be explored to reduce corruption at various layers and departments of government.
- While top-down approach is based on the view that institutions are shaped by the existing laws, bottom approach views institutions as emerging through customs, beliefs, traditions etc.
- AI and blockchain technology can be used to combat corruption in the health sector. Pharma companies sometimes bribe doctors to get their medicine prescribed.
- This can be reduced through employment of AI and blockchain to facilitate information availability to patients on effectiveness of medicines.
- This requires digitisation of revenue records available with state governments coupled with simultaneous implementation of AI tools.
- Linking of revenue records across India may also facilitate detection of frauds as also ownership of benami property/transaction across States.
- Application of AI across banks and financial institutions for fraud detection, suspicious transactions and financial crimes is key.
- However, the challenges in this regard include getting the factual information from various sources and uniform maintenance of database structure across various states.
- For application of AI, quality of data sets, coupled with skill to explain the datasets is imperative, which requires training for those involved in collecting and interpreting of data.

12. DISASTER MANAGEMENT

***Do you think that the Bengaluru's flooding is a wake-up call for India's policymakers?
Comment***

KEY POINTS

- India Meteorological Department admitted that there is scope to improve forecasting for urban flooding episodes .
- The runaway pace of urbanisation has resulted in a frenetic pace of house and road building encroaching upon lakes, ponds and wetlands.
- It takes only a drizzle to bring metros to their knees as storm water drains are rarely de-silted in time and rainwater inundates roads and habitations.
- While there is an improvement in IMD's predictions in this regard, accuracy is not high at a location-specific level.
- To provide advance information about flooding events, the IMD chief said there is a need to install more Doppler radars than the 34 that are currently in operation to at least 67 all over the country by 2025.
- The lack of risk-proof spatial and urban planning that can check uncontrolled housing expansion on lake beds and wetlands needs to be addressed.
- Gaps in the civic administration need to be plugged. Many of the concerned departments are highly prone to corruption.
- The travails of flood-hit Bengaluru call for a similar policy response. There is also the need to coordinate relief efforts with NGOs and social media-friendly private initiatives to survive the ravages of climate change.

13. ENVIRONMENT

In the context of water scarcity in India, there is a compelling need to reuse the wastewater for better water use efficiency. Analyse

KEY POINTS

- In India, the situation of water scarcity is grim with close to 600 million people facing acute water shortage.
- According to a report by Observer Research Foundation (ORF), the demand for water in India is expected to grow at a 2.8 per cent Compounded Annual Growth Rate (CAGR) from 2010 to 2030, facing a potential supply gap of 50 per cent by 2030.
- According to a research by the Central Pollution Control Board (CPCB), industries utilise over 500 billion cubic metres of the total amount of fresh water available each year.
- According to the ORF report, if India reuses 80 per cent of its untreated wastewater from 110 of its most populous cities, 75 per cent of projected industrial fresh water demand can be met by 2025 replacing fresh water use.
- The recently adopted National Framework on the Safe Reuse of Treated Wastewater provides operational guidelines for States to take up programmes on wastewater reuse.

- One of the ways in which industries can efficiently manage their water is by converting their wastewater into high quality clean water that can be used for their internal purposes.
- With appropriate waste water reuse technology and right implementation, industries and apartments can definitely rethink their wastewater usage and leverage on its potential to the best possible level.

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