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MONTHLY MAINSTORMING

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MONTHLY MAINSTORMING

AUGUST 2022

G.S PAPER I

1. HISTORY

Nehru's outstanding legacy is deeply laid in India's growth story since Independence. Explain

KEY POINTS

- Nehru's vision of India was anchored in a set of ideas such as democracy, secularism, inclusive economic growth, free press and non-alignment in international affairs and also in institutions that would lay the foundation for India's future growth.
- Nehru saw them occupying the commanding heights of a stable, self-sustaining economy with people's welfare as their central mission.
- Nehru's inclusive vision ensured that these institutions spanned the entire social spectrum. When the IITs were planned, Nehru also established a network of Kendriya Vidyalayas.
- Nehru saw the importance of promoting small and cottage industries and set up the Khadi and Village Industries Commission.
- Election Commission of India and the Planning Commission relate to the fundamentals of the Nehruvian vision: the triumph of democracy along with development.
- Nehru's institutions flourished under the management of a group of accomplished persons who shared his idealism and his vision of a modern India.
- Indian Oil became the first Indian company to be listed in the Fortune 100, in 2014.
- Amul emerged as the country's best known consumer brand and India became the largest milk-producer in the world.
- It is an incredible transformation in scale and depth to unfold in 75 years. It all began with one man's dream and the many shrines of growth and development that he built.

2. SOCIETY

Labour force participation of Indian women is dropping steadily and urgent policy actions are required. Analyse

KEY POINTS

- World Economic Forum's gender gap report 2022, where India was ranked at 135th position out of 146 countries.
- The rank in economic participation and opportunity was particularly abysmal with India at 143rd position.
- This poor performance is largely due to a very low participation of Indian women in the work force.
- From 30.7 per cent in 2006, the proportion of working age women taking part in paid work dropped to 19.2 per cent in 2021, according to the World Bank.
- While the pandemic could be partly responsible for severe job losses among women, the percentage of employed women has been quite low over the past decade, averaging 21 per cent between 2012 and 2021.
- An IMF blog estimates that closing the gender gap for countries ranking in the lower half in gender inequality could increase GDP by an average of 35 per cent.
- It is good that women are given longer time to recover after delivering a child and are allowed time to take care of their infants at a critical period, but asking companies to bear the entire burden of paid leave is not fair.
- If the government steps up to compensate companies for their payouts during maternity leave, more companies may come forward to employ women.

If there are more women in workforce, there will be better food security in the country. Do you agree with this view? Comment

KEY POINTS

- A study by researchers at the Indian Statistical Institute (ISI) and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) reinforces the need to enhance female labour force participation (FLFP) to improve food security and health outcomes.
- Engagement of rural women in the labour market not only generates income that relaxes the budget constraint of the household but also empowers them with financial independence.
- As women direct a greater share of resources towards richer nutrients, the ensuing liquidity allows for the purchase of a more diversified food basket. Thereby, improving the nutritional intake of the households.
- But the involvement of women in the labour force may increase their time burden.
- It may also take away time from unpaid activities that generate goods for self-consumption and other domestic chores, including cooking. The study rules out any reduction in the value of the goods produced at home coming from FLFP.
- Improved household dietary diversity along with empowered women who have better control over the food choices they make for themselves as well as their children offset any pernicious effects of an increased time burden.
- This evidence also highlights the need to increase women's participation in the rural labour force by designing appropriate institutional, technological, financial and market interventions.

Women's labour force participation has to be increased to unleash the potential of women in the country. Examine

KEY POINTS

- India's female labour force participation rate is at an alarmingly low level, compared not just with peer economies but also with some least developed countries.
- From 30-32% in the first decade-and-a-half of liberalisation, it has seen a sharp downward turn to 25.1% in 2020-2021, covering the first and second waves of the pandemic, according to the latest Periodic Labour Force Survey data.
- India's first Time-Use Survey showed, just 20.6% of women aged 15-59 were involved in paid work, while 94% participated in unpaid work at home and elsewhere.
- To encourage women's participation in the workforce, many fundamentals still need fixing, though there has been some progress under these heads over the past couple of decades.
- To begin with, nutrition gaps need to be addressed, as the continued prevalence of significant levels of anaemia among women in India shows.
- Women in India also are more likely to have poorer health than their peers in some comparator economies, as data from the World Economic Forum's Gender Gap Report 2022, shows.
- This is imperative as estimates suggest that closing the employment gap between men and women could expand the gross domestic product by close to a third by 2050.

G.S PAPER II

3. EDUCATION

Critically analyse the issues in making mother tongue the medium for higher studies in the country.

KEY POINTS

- The NEP provides for more higher educational institutions and programmes in higher education to use the mother tongue or local language as a medium of instruction, besides offering programmes bilingually.
- Effective 2021-22, the AICTE granted approval to 19 engineering colleges in 10 States for having engineering courses in six Indian languages.
- The Council has also developed an “AICTE Translation Automation AI Tool” that translates English online courses in 11 Indian languages.
- SWAYAM, an open online courses platform of the Central government, has been offering some popular courses in Indian languages too.
- In Tamil Nadu, for instance, the bid to impart engineering education through the Tamil medium has not created any impact despite the principal political players using language as a political tool.
- It would not be out of place to highlight issues about standards and the quality of teaching of Indian languages in schools.
- Be it Gujarati or Hindi or even Tamil, students have been found to fail in their public examinations in language papers.
- There is also the point of diminished employability outside the region of the language.
- If the Government is serious in taking forward its stated position of creating higher education access to certain sections, it should dispassionately study the advantages and the disadvantages.

4. HEALTH

A National Tribal Health Mission can be the path to a peaceful health revolution tribal people in India. Elaborate

KEY POINTS

- Few people are aware that nearly 11 crore tribal people (enumerated as Scheduled Tribes (ST) in the Census of India (2011) live in India.
- They constitute 8.6% of India’s population, the second largest number of tribal people in any country in the world.
- Tribal people heavily depend on government-run public health care institutions, such as primary health centres and hospitals, but there is a 27% to 40% deficit in the number of such facilities, and 33% to 84% deficit in medical doctors in tribal areas.
- National Tribal Health Action Plan with a goal to bring the status of health and healthcare at par with the respective State averages in the next 10 years.
- Committee suggested nearly 80 measures to address the 10 priority health problems, the health care gap, the human resource gap and the governance problems.

- Committee suggested allocation of additional money so that the per capita government health expenditure on tribal people becomes equal to the stated goal of the National Health Policy (2017), i.e. 2.5% of the per capita GDP.
- If actualised, the Tribal Health Mission can be the path to a peaceful health revolution for the 11 crore tribal people. India needs to demonstrate to them that democracy offers a caring solution to their wounds.

5. POLITY

The bedrock of a functioning democracy is a flourishing legislature and effective parliamentary sessions. Analyse

KEY POINTS

- The refrain that standards of parliamentary functioning have taken a beating in recent years is not without merit.
- In terms of the time spent on deliberating legislation, the conduct of fruitful debates, the quality of discussion, the reliance and participation of expert opinion.
- Much of this deterioration is a consequence of representatives of political parties utilising Parliament more to showcase political spectacle than to use it as a forum for serious legislative functioning.
- The officials in charge of maintaining decorum and order meanwhile have chosen to take punitive actions in suspending 27 MPs.
- This has been exacerbated by the ruling party's stance on Opposition requests for a debate on key issues such as price rise.
- A revocation of the suspensions and dialogue will go a long way in mending relations.
- As the farmers' protests that raged on for more than a year showed, the lack of adequate parliamentary process in deliberating legislation of consequence can result in social conflict and a democratic deficit in outcomes.
- There are enough tools, mechanisms, structures and precedents in India's parliamentary history that can be relied upon by the current set of legislators to bring back useful deliberation.

6. JUDICIARY

Do you think that the Supreme Court needs to lay down norms for release of convicts on remission? Comment

KEY POINTS

- Public-spirited activists have done well to challenge in the Supreme Court the premature release of 11 convicts who were serving life terms for the gang-rape of a woman and the murder of at least seven people during the 2002 anti-Muslim pogrom in Gujarat.
- Bilkis Bano, the survivor, has not moved the courts so far, but it is clear that the controversial order of the Gujarat government, granting remission to the convicts, should be subject to judicial review.
- While passing this order, the Bench also said the remission should be considered under a policy framed in July 1992, as that was the prevailing policy on the date of their 2008 conviction.
- This meant that the bar on granting remission to those convicted for murder and rape, found in the current policy, will not apply to these convicts.
- There are at least two grounds on which the remission order appears illegal. First, the State government made a decision on its own without consulting with the Centre.
- Under Section 435 of the Code of Criminal Procedure, such consultation with the Centre is mandatory in cases probed by the CBI.
- It can also spell out the contours of a rational remission policy, one that will be informed by humanitarian considerations as well as the scope for reform of the offenders and their sense of remorse.

7. GOVERNANCE

In what ways the governance in the sports field can be democratized effectively in the country. Explain

KEY POINTS

- The autonomy of international and national sports federations is a vital pillar of the sports movement.
- This status enables sports bodies to act independently through their own democratic structures, free from governmental and external influence.
- The Indian version is the National Sports Development Code, 2011, fondly known as the Sports Code.
- The Sports Code assembles dozens of government notifications issued over a few decades, and interpreting its provisions is not a task for the fainthearted.
- With elections to be held, the underlying premise was that athletes were not adequately represented in the electoral colleges and that only such a radical reform would ensure representation of their voice.
- The Olympic Charter has a provision for the election of athlete representatives as members of the National Olympic Committee and their boards.
- It sets a minimum of two athletes as members and one as an executive committee member of the National Olympic Committee (that is, the IOA) but has no upper limit for either.
- Every district, state and national sports body must have athlete commissions and athlete representation of such bodies embedded in decision-making in reasonable numbers.
- When the institutional checks and balances of sports governance are not working, not even the most brilliant eminent-athlete-administrator can be expected to turn the tide.

8. GOVERNMENT POLICIES

The success of the 5G auctions proves that the Government of India has learnt the lessons from its earlier flaws. Discuss

KEY POINTS

- The successful conclusion of the 5G auctions has an important lesson for the government, which has long treated spectrum sales as a revenue-generating machine.
- The government's move to come out with a relief package for the telcos in September 2021 was thus merited, and the auction results are proof of this.
- Apart from the Rs 1.5-trillion-plus that it was able to mop up, the fact that the premium 700 Mhz band spectrum, which did not find any takers in the previous two auctions, also got sold this time, is quite noteworthy.
- Government provided a four-year moratorium to the operators on paying their large adjusted gross revenue (AGR) dues, which came about through the 2019 ruling of the Supreme Court.
- The decision not to levy spectrum usage charge on airwaves bought in future auctions.
- That 71% of all spectrum on offer got sold this time (against only 40% in the past two auctions in 2016 and 2021) certainly shows that the government does not lose out if policy measures are aimed at bringing a balance between the interests of exchequer, industry, and consumers.
- The government should now take more steps to put the sector on the track to even higher growth.

The government schemes and initiatives should not only aim to achieve the quantifiable targets but also ensure quality. Explain

KEY POINTS

- Taking cognizance of the people who have returned from urban employment hotspots to their native towns and villages, the Government has launched the PM Garib Kalyan Rojgar Abhiyan with a total outlay of Rs. 50000 crores in 2020 to ensure continuity of their livelihood.
- The program not only has several policy measures for strengthening economic activity and employment but also has a component for skilling, reskilling and upskilling.
- The skill mapping exercise which is being undertaken in collaboration with the State and district administration is providing us an estimate of skills supply present in rural India.
- However, India experiencing a 'demographic dividend' of its lifetime has never been able to undertake formal employment, output or skills projections for the future and continues to rely on general economic projections for policy response.
- A strategic view of 'skills' is also essential for economy-wide productivity gains. Transforming India into a 'middle- income' country shall require huge productivity gains across economic spheres.
- In turn, gains in productivity are directly proportional to candidates entering the workforce being able to match skills with aspirations.

- The global and national backdrop provides us with an opportunity to accord 'strategic' status to the human capital so that it can be intertwined with economic planning and it presages the changes in the real economy rather than follows it.

In various ways the employment-income crisis in the country can be handled effectively. Explain

KEY POINTS

- The Ukraine war, high inflation though lower than many developed nations the changing workforce requirements in the post-Covid world, all call for a transformational education-skill continuum.
- Tamil Nadu's opportunities for skilling for all, and Madhya Pradesh's pilot in some villages for full employment through the Livelihood Mission are worth emulating.
- Tamil Nadu and Maharashtra's fairly good student-teacher ratio in higher education, with a large number of technical and service-oriented institutions and courses, explains women's higher work participation as well.
- A database of all men and women seeking employment or enterprise support needs to be drawn up for each and every local body, rural or urban.
- Livelihood initiatives have demonstrated how a community cadre of Bank Sakhis and Bank Mitras and a community-based recovery mechanism help in reducing non-performing assets and in ensuring timely credit where it is needed.
- Rural Self Employment Training Institutes (RSETIs) ought to emerge as the enterprise hub for their respective districts.
- Courses in partnership with the Krishi Vigyan Kendras can meet the skill deficits in mechanisation and modernisation of agriculture and allied activities.
- All of this could also benefit from merging the skills ministry with the Ministry of Education, as that is where we can leverage partnerships for a higher-order economic activity requiring higher-order skill sets. This alone will tackle the employment-income crisis.

The enactment of the Personal Data Protection Bill into law by the Government of India would have helped create a framework for redress. Discuss

KEY POINTS

- The Ministry's attribution of the withdrawal to the JPC Report is also at odds with the proposed amendments of the JPC, which did not recommend withdrawing the PDP Bill in favour of a comprehensive legal framework.
- The lack of clarity is compounded by the fact that the circular does not establish any timelines on when the new Bill will be introduced in Parliament, or when it will be passed.

- When the Supreme Court of India affirmed the right to privacy in its historic K.S. Puttaswamy judgment in 2017.
- It referred to the Government's Office Memorandum constituting the B.N. Srikrishna Committee to suggest a draft Data Protection Bill.
- Bill's expansive exemptions allowed the state to exempt the entire application of the law simply as if it was "expedient" to do so in the interest of national security or public order.
- PDP Bill, 2019 as well as the JPC's version established a strong regulator (the Data Protection Authority) with a lot of power, but very little independence or accountability.
- Despite concerns around surveillance and increased cost of compliance expressed by civil society and the private sector, the Government did not endorse cross-border data transfer.
- Even if the PDP Bill is not the most privacy-respecting law, it provides a certain desirable level of protection to the personal data of individuals.

The policy priority with respect to population needs to focused on augmentation of the quality of life. Elaborate

KEY POINTS

- The United Nations' World Population Prospects (WPP), 2022, forecasts India becoming the most populous country by 2023, surpassing China, with a 140 crore population.
- India reached a significant demographic milestone as, for the first time, its total fertility rate (TFR) slipped to two, below the replacement level fertility (2.1 children per woman), as per the National Family Health Survey.
- Having the largest population with one of the world's lowest employment rates is another enormous hurdle in reaping the 'demographic dividend'.
- In 2011, the sex ratio was 943 females per 1,000 males; by 2022, it is expected to be approximately 950 females per 1,000 males.
- India stands 101 out of 116 nations in the Global Hunger Index; this is pretty daunting for a country which has one of the most extensive welfare programmes for food security through the Public Distribution System and the Midday Meals Scheme.
- India is called a young nation, with 50% of its population below 25 years of age. But the share of India's elderly population is now increasing and is expected to be 12% by 2050.
- We should be prepared with suitable infrastructure, conducive social welfare schemes and massive investment in quality education and health.

The Competition Amendment Bill 2022 has opened the floodgates of regulatory developments for India in various ways. Discuss

KEY POINTS

- Among several proposed changes, one of the most significant is the introduction of an additional "deal value" criterion for assessing whether a transaction (M&A) requires mandatory approval from the CCI.

- Under the existing rules, the M&A will require a CCI approval if it crosses specified asset or turnover thresholds.
- The case that has regularly been cited to demonstrate the need for DVT is Facebook/Whatsapp.
- Despite a purchase price of c.\$19 billion, the acquisition of WhatsApp by Facebook availed benefit of de minimis exemption in India.
- Expediting the merger review timelines is a major focus of the Bill. The prima facie review of 30 working days has been curtailed to 20 working days.
- For a notifiable transaction, the parties are not permitted to acquire any shares prior to receiving CCI approval i.e., standstill obligation.
- This has created hurdles for open-market purchases or stock-market acquisitions where time is the essence, and without any prior disclosures to the public.
- Under the existing framework, the cartel agreement between competitors (i.e., engaged in similar trade) is presumed to have an appreciable adverse effect on competition in India.
- The changes introduced are revolutionary, visionary, and innovative; however, much depends on its successful implementation.

Pradhan Mantri Jan Dhan Yojana has the potential to promote financial inclusion in the country. Substantiate

KEY POINTS

- According to Census 2011, around 42 per cent of households in all, and a little less than half of the households in rural India, did not have access to banking/financial facilities (PMJDY 2014).
- The major objective of the scheme is to provide universal access to banking facilities to every household, and access to credit, insurance and pension facilities to every adult individual.
- JAM trinity (linking of Jan Dhan Yojana, Aadhaar and mobile numbers) was initiated to transfer government subsidies and benefits directly into accounts of the intended beneficiary.
- It is interesting to note that out of 43.04 crore Jan Dhan accounts, 55.47 per cent (23.87 crore) account-holders are women and 66.9 per cent (28.70 crore) of such accounts are in rural and semi-urban areas.
- The JAM trinity was further leveraged by the government to mitigate the impact of the Covid pandemic through immediate Direct Benefit Transfer (DBT) to rural households under Gareeb Kalyan Yojana, stimulus package under the AtmaNirbhar package, loans to MSMEs, etc.
- The UPI system has played crucial role in bringing large excluded sections within the ambit of financial services, lowering overall infrastructure cost of banking services in remote areas.
- To achieve the cherished goal of providing access to financial services to each adult, emphasis should be given on quality rather than quantity.

Code for pharmaceutical marketing must be implemented for better regulation of pharmaceutical industry in the country. Explain

KEY POINTS

- The Supreme Court is currently hearing a plea to make the Uniform Code for Pharmaceutical Marketing Practices (UCPMP) a statutory requirement.
- This is an unexceptionable case in as much as the nexus between doctors and pharma companies is a well-known secret.
- The more serious examples of this nexus are when doctors are offered paid-for junkets to attend medical conferences, or given fees to act as lead investigators on clinical trials or in endorsing key research papers.
- This is a sensible suggestion on the face of it but it is an open question whether the conversion of a voluntary code into a statutory one will change the situation appreciably, even if the penalties imposed are severe.
- The ambit of the UCPMP is currently the focus of a tussle between the Department of Pharmaceuticals, which comes within the purview of the Ministry of Chemicals and Fertilisers, and the Ministry of Health.
- Whichever institution ultimately gains control of this vital regulatory function, however, will need to be armed with the organisational heft to keep track of transgressions of this massive industry with over 3,000 companies and 10,500 manufacturing facilities.
- In that context, the inability to staunch the proliferation of fake drugs does not raise much confidence for enforcing the UCPMP.

9. INTERNATIONAL RELATIONS

The International North South Transport multi-modal corridor is a laudable initiative and helps India to consolidate its multi-alignment strategy. Explain

KEY POINTS

- International North South Transport Corridor (INSTC), a 7,200-km multi-modal transport corridor that combines road, rail and maritime routes connecting Russia and India via central Asia and Iran.
- The INSTC's launch provides missing pieces of the puzzle about India's refusal to condemn Russia's invasion of Ukraine.
- India's investment in the INSTC is exemplified by its involvement in Iran's Chabahar port and the construction of a 500-km Chabahar-Zahedan railway line.
- The India Ports Global Limited, a joint venture between the Jawaharlal Nehru Port Trust and Kandla Port Trust, will develop the port along with Iran's Aria Banader.
- IRCON International will contribute to constructing the railway line. A special economic zone around Chabahar will offer Indian companies the opportunity to set up a range of industries.
- INSTC can shape a north-south transport corridor that can complement the east-west axis of the China-led Belt and Road Initiative (BRI).
- The INSTC offers a platform for India to closely collaborate with Russia, Iran and Central Asian republics.
- The INSTC has received far less media attention than initiatives such as the Quad, the BRI and the New Development Bank.

- However, as a transcontinental multi-modal corridor that aims to bring Eurasia closer together, the INSTC is a laudable initiative in its own right.

Switzerland's foreign policy strategy seeks to further advance ties with India. Explain

KEY POINTS

- India is a priority for Switzerland. This is emphasised in Switzerland's foreign policy strategy that seeks to further advance ties with India.
- Switzerland intends to further deepen its innovation cooperation with India. With over 330 Swiss companies, Switzerland is the 12th largest investor in India.
- About 100 Swiss companies manufacture locally and support the Make in India initiative.
- Trade talks between Switzerland (European Free Trade Association EFTA) and India are high on the priority list.
- Digitalisation is emerging as a relatively new area of engagement with enormous potential for Switzerland and India.
- Switzerland plays a leading role in researching new technologies and is home to many innovative and world-leading technology companies.
- As one of the most innovative countries of the world, Switzerland seeks to engage with India, the leader of the Industry 4.0 revolution, in areas ranging from digital governance to digital self-determination.
- In the Security Council, Switzerland will do everything possible to ensure sustainable peace. Switzerland is a truly peace-loving country that has contributed significantly to peacebuilding, conflict prevention and mediation.
- Switzerland desires effective UN institutions. India has been advocating for a reform of the Security Council.
- Switzerland's fourth priority in 2023 and 2024 will be to contribute to improving the United Nations Security Council's effectiveness towards greater transparency and accountability.

Revitalising regional trade networks will help maintain peace and stability in the Indian Ocean. Explain

KEY POINTS

- The resilience of the Indian Ocean rim ports and their hinterland is because of their smallness.
- Their small boats, dhows and dhonis, increased and decreased in tonnage depending on the trade available.
- The recent Chinese attempts to consolidate the Indian Ocean trade routes under the road and belt initiative are yet to materialise.
- Host countries of the Belt and Road ports have gone or are going bankrupt, defaulting on their sovereign debt.

- Sri Lanka has gone into default, East African port countries look shaky, and Pakistan stands on the brink of sovereign default.
- There might be an argument for economies of scale and mega ports. This argument rarely holds water when robust small units with more flexibility and agility produce more inclusive and sustainable returns.
- Attempts to restructure the debt of the Indian Ocean port cities and proceed with the same mega infrastructure programmes must not be the future vision of the Indian Ocean states.
- Commodities to trade are in abundance. Ship type, wind and fuel hybrid propulsion can bring in more efficiencies.
- Revitalising regional trade networks will be for the advantage of not only the port city economies in distress but also to maintain peace and stability in the Indian Ocean.

The 75th anniversary of independence offers Delhi and Dhaka a special opportunity to elevate the ambition for their bilateral partnership. Explain

KEY POINTS

- Trans-boundary bus services, reopening of railway lines, and the revitalisation of waterways are restoring connectivity in the eastern subcontinent that was severed.
- Bilateral trade volumes have grown by leaps and bounds in recent years touching nearly \$16 billion last year.
- India and Bangladesh have also developed inter-connected power grids facilitating Dhaka's purchase of power from India.
- It currently buys about 1200 MW of power from India and an additional 1500 MW is in the pipeline.
- The progress on the India-Bangla front could have been more expansive if the governments of West Bengal were enthusiastic about regionalism in the eastern Subcontinent.
- For India, the expansive partnership with Bangladesh has significantly eased its security challenges and laid the basis for peace and prosperity in the eastern subcontinent.
- Many of these issues are alive and continuously threaten to destabilise the growing strategic partnership.
- Solving problems and tending to the relationship must necessarily be a continuous effort rather than episodic. Nor can Delhi and Dhaka take each other for granted and let domestic politics overwhelm the logic of bilateral cooperation.
- The 75th anniversary of independence offers Delhi and Dhaka a special opportunity to elevate the ambition for their bilateral partnership.

A transformative shift is required in G20 grouping from commitments on aid and trade to collaboration around science and technology. Explain

KEY POINTS

- The primary role of the G20, which accounts for 95% of the world's patents, 85% of global GDP, 75% of international trade and 65% of the world population, needs to be reoriented to prevent a clash of ideas to the detriment of the global good.

- India should seek collaboration on limited focus areas around science and technology, building on resolutions of the United Nations General Assembly (UNGA) and other multilateral bodies.
- Emerging economies are no longer to be considered the source of problems needing external solutions but source of solutions to shared problems.
- BRICS provides an appropriate model for governance institutions suitable for the 21st century where a narrow group of states dominated by one power will not shape the agenda.
- Space is the next frontier for finding solutions to problems of natural resource management ranging from climate change-related natural disasters, supporting agricultural innovation to urban and infrastructure planning.
- Open access to geospatial data, data products and services and lower costs of geospatial information technology facilities do not require huge financial resources.
- Countries in the region will support building on the 1971 UNGA Declaration designating for all time the Indian Ocean as a zone of peace and non-extension into the region of rivalries and conflicts that are foreign to it.

What are the lessons that India should learn from the recent standoff which occurred in Taiwan? Elaborate

KEY POINTS

- For those of us in India watching the events as they unfold around Taiwan, there are valuable lessons to be learnt.
- To begin with, consider this. A small island of 23 million people has decided to stand up to one of the strongest military and economic powers on the planet, braving existential consequences.
- India is a far more powerful nation armed with nuclear weapons and with a 1.4 million standing military against whom China has only marginal territorial claims. And yet, India continues to be hesitant about calling China's bluff.
- The most important lesson from the Taiwan standoff for policymakers in New Delhi is the importance of articulating red lines and sovereign positions in an unambiguous manner.
- New Delhi needs to unambiguously highlight the threat from China and the sources of such a threat. .
- China today is a revisionist power, challenging the regional order; is intent on using force to meet its strategic objectives, and is desirous of reshaping the regional balance of power to suit its interests.
- The close economic relationship with China has not stopped Taiwan from asserting its rights, nor has it backed down under Chinese threats.

India and the European Union should focus on their areas of convergence for strengthening bilateral ties. Discuss

KEY POINTS

- The 15th India-EU Summit, in July 2020, provided a common road map to guide joint action and further strengthen the partnership over the next five years.
- Bilateral trade between the two surpassed \$116 billion in 2021-22.

- Beyond the economic partnership, India and the EU have several avenues of collaboration.
- For example, the 'green strategic partnership' between India and Denmark aims to address climate change, biodiversity loss and pollution.
- India and the EU regularly conduct joint military and naval exercises which reflects on their commitment to a free, open, inclusive and rules-based order in the Indo-Pacific.
- The first maritime security dialogue between the two in 2021 focused on cooperation in maritime domain awareness, capacity-building, and joint naval activities.
- France's on-time delivery of 36 Rafale fighter jets and willingness to offer Barracuda nuclear attack submarines to the Indian Navy reflects the growing level of trust in their relationships.
- Furthermore, the Science and Technology Joint Steering Committee between the two focus on areas such as healthcare, Artificial Intelligence, and earth sciences.
- In 2020, there was an agreement for research and development cooperation in the peaceful uses of nuclear energy between the European Atomic Energy Community and the Government of India.
- The proactive resumption of the ambitious India-EU free trade and investment agreement in 2021 is a step in the right direction.

India should stick to the plan to better the lives of the Rohingya until their return home. Substantiate

KEY POINTS

- The details showed that the Government had indeed been considering moving the Rohingya, who live on land donated by an Islamic charity, after their previous homes were burnt down.
- In broader terms, the Rohingya housing issue seems to be an example of the clash between the government's foreign policy commitments and its domestic politics.
- The plan was to move the migrants from squalor to apartments built for the Economically Weaker Sections on the outskirts of Delhi, but that they would also be provided facilities and protection by the Delhi police proof of how India had always welcomed refugees.
- The treatment of the Rohingya, who fled to India in 2012 and 2017 after state-sponsored ethnic cleansing, has also been far from the Government's much-touted slogan of "vasudhaiva kutumbakam".
- The Rohingya have been driven out of homes in Rajasthan and Haryana, stigmatised by local authorities and intelligence agencies who accuse them of criminal and even terrorist intent.
- New Delhi has also failed thus far to play its role as a "Regional leader" in convincing Myanmar to provide its citizen's homes and assurances of safety,
- Also in brokering dialogue between Dhaka and Naypyidaw to ensure their return; about a million Rohingya live in Bangladesh, and an estimated 40,000 in India (Pakistan and Saudi Arabia house about 7,00,000 between them).

Discuss the ideas that can be utilized to maintain G20's primacy and as an effective instrument of global governance.

KEY POINTS

- The G20 membership represents nearly 90% of the world's GDP, 80% of global trade, and 67% of the planet's population.
- It is an advisory body, not a treaty-based forum and, therefore, its decisions are recommendations to its own members.
- G20 presidency offers a unique branding opportunity for India's recent achievements, including the ability to combat COVID-19 effectively at home and abroad through vaccine aid and diplomacy.
- A single-year presidency does not empower the host to change the world, but India can provide evidence of its domestic successes, tested at the continental scale, for global adoption.
- Another exceptional coincidence is that all three members of IBSA India, Brazil, and South Africa will hold the G20 presidency consecutively in 2023, 2024, and 2025.
- India will be obliged to take a broader view of the G20 agenda to synthesise divergent interests of all constituents of the forum.
- An important aim should be to end Africa's marginalisation by elevating the African Union (AU) from permanent observer to a full-fledged member of the G20, thus placing it on a par with the EU.
- It is possible to weld them together to create a holistic and comprehensive approach for the Indian presidency of the G20.

By enjoying proximity with the West and its ties with other powers India can act as a balancer and leader. Analyse

KEY POINTS

- National interest drives foreign policy, but more is at stake here, the policy is anchored in a nuanced balancing of interests and values. National security remains the key driver.
- By enjoying proximity with the West and demonstrating the capability to cooperate and communicate with the "other" side Russia, the time-tested partner, and China, the principal adversary but also a consequential neighbour India now acts as a balancer and leader.
- More needs to be achieved in regional cooperation and integration. Having concluded that SAARC's shelf life is over, New Delhi accords priority to BIMSTEC, but this train runs too slow.
- The Indo-Pacific has emerged as a principal theatre for Indian diplomacy. The increased emphasis on cooperation with Japan, Australia and the US has turned the Quad into a strong forum.
- Across the Western shores, prospects have improved with the establishment of I2U2 (India, Israel, U.S. UAE) this became possible due to the progress in India-UAE, India-Israel and UAE-Israel relations.
- Positioning Africa's eastern and southern flanks as a part of the Indo-Pacific could enable India to craft a series of initiatives to strengthen cooperation in maritime activity, economic development, and the blue economy.
- The increasing engagement of the wider public especially the youth and business community with foreign policy issues reflects the maturity and sophistication of Indian democracy.

Should India return to the use of nuclear weapons as major instruments of great power military strategy? Comment

KEY POINTS

- An international conference to review the Nuclear Nonproliferation Treaty concluded at the United Nations in New York last week without a consensus document.
- The Ninth Review conference in 2015, for example, ended without an agreement because of major differences over establishing a Middle East zone free of weapons of mass destruction.
- The non-nuclear state parties usually complained about the lack of progress in implementing the disarmament provisions of the NPT.
- The situation today is worsened by the absence of any dialogue between the nuclear powers on arms control.
- The invasion of a non-nuclear weapon state, Ukraine, by a nuclear weapon power, Russia, has generated a whole series of new questions.
- China's political campaign against the AUKUS arrangement has found some resonance in South East Asia.
- India, which commissioned Asia's first nuclear power station more than 50 years ago, is stuck today with a total generating capacity of barely 7,000 MW.
- India must also recognise and adapt to the return of nuclear weapons as major instruments of great power military strategy.
- After 1998, India premised its strategy on building "credible minimum deterrence". The time has come to reflect on the "credible" side of that strategy and redefine what the 'minimum' might be.

G.S PAPER III

10. ECONOMY

Online Dispute Resolution can help prevent the litigation risk and provide insights into consumer problems. Discuss

KEY POINTS

- Online Dispute Resolution, or ODR as it is popularly called, has the propensity to work alongside the incumbent setup and deliver quick, affordable and enforceable outcomes.
- The ODR is not restricted to the use of legal mechanisms such as mediation, conciliation and arbitration in an online environment but can be tailor-made for the specific use case keeping the participants in mind.

- From making dispute resolution simple to handling complex multi-party disputes; from 24x7 accessibility from the remotest regions to availability in regional languages.
- Many e-commerce companies have turned to the ODR with the realisation that in order to maximise transactions it is important to ensure a positive dispute resolution experience.
- For example, the eBay Resolution Center uses the ODR and resolves over 60 million disputes between small traders every year through a platform that enables dealers and purchasers to directly communicate and, for the most part, without the assistance of a third party.
- For instance, the National Payments Corporation of India (NPCI) has mandated platforms in the UPI ecosystem to adopt the ODR for complaints and grievances connected to failed transactions.
- A dispute resolution framework that includes a customised ODR process can play a role in the network achieving its steep five-year target of adding \$48 billion in gross merchandise value to India's e-commerce market.

The recent monetary policy decision clearly emphasised on withdrawal of accommodation while supporting growth. Discuss

KEY POINTS

- Monetary Policy Committee (MPC) unanimously approved a 50-bps repo-rate hike, taking it to 5.4%, the steepest in recent times.
- With the average inflation figure hovering around an 'uncomfortable' 6.8% mark, the policy clearly focuses on steps to bring inflation below 6%, the upper limit of the Reserve Bank of India's (RBI's) tolerance band.
- Besides inflation, the design of RBI's monetary policy has been influenced by global factors, including geo-political forces, financial market volatilities, energy and commodity prices and local factors of widening CAD and currency volatility due to higher imports and capital outflows.
- The Indian economy is expected to grow faster than its Asian peers and even other global economies.
- Bank credit has demonstrated strong growth, particularly with higher consumption and manufacturing activity.
- Urban consumption has ranged from stable to strong across segments including contact-intensive services, which have rebounded significantly.
- Considering all these factors, the MPC will be focused on controlling inflation while keeping the flexibility to provide liquidity and take measures when needed to support growth.
- Any further decline in commodity prices augurs favourably for domestic businesses and consumers.
- However, the worsening global outlook and rising uncertainty can take a toll on India's exports and private sector capex, respectively.

Recent buoyancy in Goods and Services Tax collections should be used to usher in reforms in the tax system. Analyse

KEY POINTS

- The idea of compensating the states was mooted to provide necessary financial comfort to the states, who were apprehensive of a fall in their revenues.
- After all, the states were giving up their exclusive right to levy many taxes including the one on goods under the value-added tax (VAT) system that had been introduced from 2005.
- The idea was that the revenue from the cess would be used by the Centre to repay the loans.
- Remember that the continuation of the cess beyond five years in the current form has affected the GST rate architecture.
- The beneficial impact of an early reduction or withdrawal of the cess on inflation would also be significant.
- It is, therefore, necessary for the Centre and the states to examine closely how soon the enhanced cess collections in the coming months could help early repayment of the loans and end the levy.
- This will be an opportunity for the GST Council to introduce the much-delayed rate rationalisation, removal of exemptions and reduction in the number of rate slabs.
- With buoyant revenues, this will be an opportunity for effecting the much-awaited reforms in the GST system.
- Rationalising rates and reducing bands can further sustain the revenue growth that is already in evidence. Wasting this opportunity would be a costly mistake.

Do you think that the Unified Payment Interface based payments needs to be charged in the country? Analyse

KEY POINTS

- A sustainable and efficient payment system can be built only if the usage charges are fixed at a level that balances the interests of both users and operators.
- The discussion on UPI-based payments is particularly important since a zero-charge framework has been mandated by the Centre for these transactions since 2020.
- This was done with a view to speed up the digitisation of money transfers and payments and to reduce cash usage; neither users nor merchants are currently charged for UPI-based transfers or purchases.
- The merchant discount rate (MDR) charged on UPI transactions should be a factor of transaction value and can be market determined. But the RBI should set an upper limit on the MDR to protect users.
- The MDR for these instruments needs to be higher to compensate the issuer for the interest-free credit given to the user and the credit risk borne.
- The central bank needs to ensure that MDR on these instruments move lower by laying down an upper limit, which could be linked to the policy rate.
- The RBI could consider charging the banks for using the RTGS and NEFT systems as the central bank incurs capital as well as recurring expenses to facilitate these services.

Universal Basic Insurance is a better proposition than Universal Basic Income. Do you agree with this view? Comment

KEY POINTS

- Social security mainly encompasses food security, health security and income security.
- India operates the widest spectrum of social security schemes which cater to the largest number of people than any other country.
- The Indian food security programme, for example, has over 800 million beneficiaries being provided heavily subsidised food grain under the National Food Security Act (NFSA).
- About 120 million children are provided free lunch under the Mid-Day Meal Scheme.
- The insurance penetration (premium as a percentage of GDP) in India has been hovering around 4% for many years compared to 17%, 9% and 6% in Taiwan, Japan and China, respectively.
- Two, though the economy largely remains informal, data of that informal sector are now available both for businesses (and for unorganised workers (through e-Shram, which is the centralised database of all unorganised workers).
- As a result of the recent initiatives by the Government, the Goods and Services Tax (GST) portal has 13.5 million registrations and the e-Shram portal has over 280 million registrations.
- As a prototype of a social security portal based on such data, the social registry portal, 'Kutumba', developed by Karnataka is available as a blueprint.
- Till the Indian economy grows to have adequate voluntary insurance, social security can be boosted through the scheme of universal basic insurance.

Analyse the major issues influencing the framework of fiscal federalism in the country.

KEY POINTS

- As both the Union government and States are expected to work closely in a co-operative federal structure, frictions arising out of these exchanges might have repercussions on both resource sharing and expenditure prioritisation.
- A set of issues related to Goods and Services Tax (GST) such as the rate structure, inclusion and exclusion of commodities, revenue sharing from GST and associated compensation.
- Second, State-level expenditure patterns especially related to the welfare schemes of States.
- A key issue of recent debates between the States and the Centre is the quantity and quality of public expenditure by the States.

- While States demand more fiscal space for increasing discretionary spending, the Centre is pushing for more fiscal discipline by reducing the scope for discretionary spending and limiting States to focus on mandatory expenditures.
- In a federal system, States' fiscal stress gets spilled over to the Centre, leading to a situation of overall magnified fiscal slippages.
- Fiscal expansion financed through debt and the resultant debt accumulation have important impacts on the economy both in the short run as well as in the long run.
- The Centre, too, on its part needs to demonstrate commitment to fiscal discipline by sticking to announced fiscal glide path to ensure the sustainability of a frictionless co-operative federal structure.

11. AGRICULTURE

India is moving towards self-reliance in edible oils. Do you agree with this view? Comment

KEY POINTS

- India is the second largest edible oil market in the world. It consumes, on an average, 21 million tonnes (mt) of edible oil each year, of which, 7-8 mt are produced locally.
- The industry battled with price volatility and increased working capital requirements, while keeping the plants running with paltry supply from alternative origins.
- The topmost priority should be to finalise win-win agreements with countries and trade blocs that can grow as alternative supply sources for instance, Malaysia for palm oil and Mercosur nations for soyabean and sunflower oils.
- With 10-12 per cent of the projected 2030 imports taken care through the Oil Palm Mission, the possibilities of augmenting local supply through other high oil-yielding oilseeds must be studied.
- Mustard is one of those which has the potential to grow, both in terms of demand and supply.
- There is enough headroom for acreage expansion as mustard currently accounts for about 10 per cent of the rabi crop acreage.
- To accelerate the process, planting of genetically modified mustard seed developed in India by our scientists must be allowed.
- This will give an immediate fillip to its adoption and yields, boosting farmers' income and triggering increased acreage and production.

What are the various policy measures that have helped increase exports in food processing industries in the country? Explain

KEY POINTS

- Farmers' income has risen around 1.7 times since FY18 with a decisive upward shift in mean income, especially where the farmers have engaged in cash crops.
- For the first time in 2021, agri-exports crossed \$50 billion, which is a commendable given the pandemic challenges.

- Cluster development: As part of the Agriculture Export Policy, 46 unique product-district clusters have been identified for export promotion. Banana cluster (Ananthpur); Pomegranate cluster (Maharashtra).
- Country-specific strategy: An interaction was carried out with 60 Indian Missions and stakeholders to identify the products, their potential and way forward for preparing country-wise agri-export strategies.
- Virtual buyer-seller meets: 24 of such meets were organised with various countries. E-catalogues were released, with details of participant exporters, importers and trade associations.
- Virtual trade fair (VTF): APEDA took an initiative to develop its own VTF application. The virtual platform provides an opportunity for agri importers of several countries and our exporters to interact.
- There is a lot of scope for R&D in agriculture, especially in the development of high-yielding seeds, creation of an efficient plant disease forecast system, and effective post-harvest management.
- The efficacy and adequacy of these initiatives may be reviewed to see whether any additional support is required.

Investment in research on agricultural sector delivers higher returns than any other form of support to farmers in the country. Substantiate

KEY POINTS

- A study by ICRIER and the Syngenta Foundation found that the marginal returns in terms of number of people brought out of income poverty or higher agri-GDP growth are 5-10 times more if the public money is spent through investments in agri-R&D.
- The government realises this. At the G20 Agriculture Ministers meet last year, India stressed the need to increase investment in agricultural research and development amid the challenges of climate change and expected increase in food demand by 2030.
- In this year's Economic Survey, the chapter on Agriculture noted: "Research shows that every rupee spent on agricultural research and development, yields much better returns (11.2), compared to returns on every rupee spent on fertiliser subsidy (0.88), power subsidy (0.79), education (0.97) or on roads (1.10).
- Increasing R&D spending on agriculture is, therefore, not only a vital necessity for ensuring food security, but also important from the socio-economic point of view."
- It is high time that the government walked it. This is particularly true of State governments, whose primary responsibility is agriculture.
- Over the years, they have de-emphasised research, and cut back on extension, in favour of more populist quick fixes. This needs to change.

The water accounting method should be introduced in all canal command areas to improve the water use efficiency in the country. Explain

KEY POINTS

- The Central Water Commission data shows that the potential created through MMI projects has increased from 97 lakh hectares (lha) in 1951 to 479.70 lha in 2012, an almost five-fold increase.
- Generally, when a dam is constructed for irrigation purposes, a notional cropping pattern is prepared to estimate its irrigation potential.

- Accordingly, in a canal irrigation scheme, only certain crops should be cultivated with a certain percentage of area.
- There is no denying the fact that the canal irrigation sector faces many problems including low investment efficiency, poor financial recovery and low water use efficiency.
- But, the sluggish trend in the development of canal irrigation happens mainly due to data problems and violation of notional cropping pattern.
- One of the main reasons why canal irrigation is criticised is because there is no proper water accounting method. The introduction of canal water accounting method in Maharashtra in 2000 resulted in a huge increase in water use efficiency.
- Therefore, the water accounting method should be introduced in all canal command areas, as it will reveal how much water stored in the dams has been used for what purpose, its efficiency and the real status of the canal area.

12. ENERGY

***Do you think that the Government of India needs to revisit the gas pricing formula?
Comment***

KEY POINTS

- If India wants to make natural gas one of its major sources of fuel then it may need to take a relook at its existing domestic gas pricing mechanism.
- Today, gas price in the spot market is around \$47 per mmBtu (gas is measured in million British thermal unit).
- There are two major drivers, one is European demand now shifting from Russian gas to LNG supplies, and which also impacts the Asian consumers.
- India's gas price is determined at an average price of LNG imports into India and benchmark global gas rates.
- Total consumption in India is 175 million standard cubic metre a day (MMSCMD), of this 93 MMSCMD is met through domestic production and 82 MMSCMD through LNG imports.
- Currently, India revises its domestically produced gas price on a half yearly basis based on a cocktail formula worked out considering the volumes and prices prevailing at major international markets such as Henry Hub, National Balancing Point, Alberta and Russia.
- The argument put forth is that the formula is based on markets which are either very matured or are themselves producers and not exactly India-specific.
- India has set the target to raise share of natural gas in energy mix to 15 per cent by 2030, and to attain this, the entire eco-system needs to be addressed.

Being self-sufficient in strategic minerals is critical for India to achieve its green energy goals. Elaborate

KEY POINTS

- The IEA also projects that the total critical mineral demand for EVs will grow almost 30 times from 0.4 million tonnes in 2020 to 11.8 million tonnes by 2050, based on its Sustainable Development Scenario.
- This shift to mobility via electric vehicles and rapid scaling of power generation via renewables will be a non-starter without an adequate supply of metals such as copper, aluminium, lithium and nickel.
- India, a net exporter of refined copper, turned into a net importer in 2018-19. The rise in imports may be attributed to the closure of the Sterlite plant, which produced 400,000 MT per annum and contributed 40 per cent of the country's total copper production.
- The government has shown its intent by augmenting the manufacturing capacities of vital industrial inputs through PLIs and direct infrastructure spending to crowd-in private sector capital.
- The PLI schemes will incentivise the manufacturing of electric vehicles, solar photovoltaics and automotive cell (ACC) batteries, according to Crisil.
- For instance, the import duty on copper concentrate (raw material for the copper refining industry) is 2.5 per cent compared to the zero rates of India's competitors like China, South Korea and Japan.
- However, inconsistencies in environmental laws, regulations and standards can undoubtedly be ironed out, and institutional mechanisms at the State and central levels.

13. DISASTER MANAGEMENT

In the context of climate change, India needs to devise long-term flood management policies. Analyse

KEY POINTS

- India's rapidly altering geo-climatic and socio-economic conditions are among the major causes of increasing frequency and flood-related damage in States.
- According to the Global Climate Risk Index 2021, India was the seventh worst hit country in 2019 due to extreme weather-related events.
- According to the Central Water Commission Report 2022, death from floods increased from 37 in 1953 to 1,815 in 2020.
- The damages and casualties from floods are rising at a staggering pace due to rapid climate changes. Frequent floods have an adverse impact on the economic development of the country as well.

- As the problem of urban flooding is becoming more severe, and losses are increasing each year, the issue merits concerted attention from policymakers with appropriate implementation of the NDMA guidelines on Urban Flooding 2010.
- National Flood Commission recommendations have failed to achieve much success in mitigating floods, and the data show that flood damage and fatalities have only increased years.
- In addition, the construction of flood shelters in coastal districts, improving river connectivity, construction of river embankments, and providing *pucca* houses to poor households in low-lying areas will be salutary.
- A National Disaster Database, too, will help policymakers and academics devise long-term flood management policies.

14. S & T

If Global Data Protection Regulation marked a decisive moment in consumer data protection, MiCA could point to responsible crypto management. Explain

KEY POINTS

- European Parliament and Council, the legislative arms of the European Union, came to a provisional agreement on long-awaited regulations on crypto, namely, the Regulation of Markets in Crypto-Assets, or MiCA.
- The European market is second to the United States economically and behind Asia in terms of the number of Internet users.
- The GDPR introduced a framework for seeking user consent and introduced several progressive rules such as the right to forget.
- The Supreme Court of India has also held that the right to privacy is a fundamental right and an integral part of the right to life and liberty.
- Now, Europe is showing us the path to regulate crypto assets, it proposes to regulate crypto asset services and crypto asset issuers.
- By regulating these entities, Europe intends to provide consumer protection, transparency, and governance standards, regardless of the decentralised nature of the technology.
- For instance, under MiCA, crypto asset service providers will be liable in case they lose investors' assets, and will be subject to European market-abuse regulations, including those on market manipulation and insider trading.
- Then, MiCA goes further to put forth specific regulations for stablecoins, rightly demarcating them from other crypto assets.
- But like the GDPR did for data protection, Europe has shown the way forward to regulate crypto in a good manner.

LiFE movement harnesses the power of the individuals and collective action across the world to address the climate crisis. Explain

KEY POINTS

- LiFE was launched on World Environment Day with a vision of harnessing the power of individual and collective action across the world to address the climate crisis.
- The objective of the movement is to nudge individuals and communities to adopt simple and specific climate-friendly behaviours in their daily lifestyles.
- For instance, an individual can carry a reusable cloth bag instead of a plastic bag; or walk short distances instead of driving; or turn off electrical appliances from the sources when not in use; or prioritise public transport wherever possible and take other similar actions.
- LiFE plans to methodically break down this mental model by nudging the world to consume responsibly, rather than consuming less.
- By nudging the consumption patterns of the society at scale, LiFE can also trigger a huge boost for the sustainability market.
- Live responsibly: The Covid pandemic is a wake-up call to all of us that no matter how much technological progress we make as a global society, we all remain at the mercy of the natural world.
- As the world moves in fits and starts towards its shared commitment to achieve ambitious climate goals, the time is ripe for India to lead the LiFE movement and mainstream it into the climate narrative.

By 2047 India could become a knowledge economy powered by cutting-edge research. Do you agree with this view? Comment

KEY POINTS

- Research and innovation, fuelled by technology, will catalyse the kind of non-linear growth that will make the country one of the world's top three economies and bring it closer to developed nation status by 2047.
- The government aims to raise public spending on healthcare to 2.5 per cent of GDP by 2025.
- India must aspire to raise healthcare spending to 5 per cent of GDP by 2047 to truly deliver standardised and quality universal healthcare.
- India's pharmaceutical industry is at the global forefront as "the Pharmacy of the World", ranking third in terms of pharmaceutical production by volume.
- Research Linked Incentives (RLIs) can provide the impetus for the pharma industry to increase R&D investments, as well as encourage greater industry-academia partnerships.
- As a nation, we must give women the opportunities and freedom to engage in productive work in the economic mainstream and liberate them from the shackles of unpaid labour.

- Female participation in the formal labour force in India is currently estimated at a dismal 24 per cent, among the lowest in developing nations.
- To achieve the full potential of the opportunities offered by a green economy transition, India will need to formulate and implement environmental change policies that reconcile development and sustainability goals.

The Council of Scientific and Industrial Research has undertaken its mission effectively since Independence. Explain

KEY POINTS

- The immediate priority of the CSIR was to establish a number of national laboratories under its umbrella, and also promote similar organisations independently.
- A key mandate of the CSIR was, therefore, to help develop local industries by making contemporary technologies available and training requisite manpower.
- A prominent example of the CSIR's contributions in this context has been in developing the leather industry.
- The making of finished leather products had remained elusive in the absence of a well-established leather industry and relevant technologies.
- Further, the CSIR-CLRI routinely trained the next generation manpower for the leather industry.
- Similarly, production of anti-HIV drugs by processes developed in CSIR laboratories provided the necessary impetus to the growth of generic pharmaceutical companies.
- The Aroma Mission of the CSIR in recent times has been transforming the lives of thousands of farmers across the country.
- The cultivation of lavender in the Union Territory of Jammu and Kashmir has been attracting attention worldwide as India's 'Purple Revolution'.
- Moreover, the ancient wisdom of integrating science and spirituality by enhancing our understanding of nature in association with that of the human mind and spirit will be the fond hope of the science and technology community of India.

15. ENVIRONMENT

Decarbonization is a challenge that can be solved with multiple technologies in the country. Elaborate

KEY POINTS

- Emissions can also be cut significantly through shared mobility and scrapping older vehicles.
- All these pathways are critical if India has to keep its international commitment of reducing its carbon intensity by 45 per cent by 2030 (from 2005 base levels).
- The government has set a very ambitious target of 30 per cent of all passenger vehicles sold by 2030 to be EVs.
- Government is rightly pursuing multiple options bio-fuel (ethanol and compressed bio-gas) including flex-fuel vehicles, compressed natural gas (CNG), hydrogen, hybrid electric vehicles (HEVs) apart from EVs.

- Ethanol: Ethanol blending has finally taken off after many false starts. Today, the nation has achieved 10 per cent blending and a target has been set for 20 per cent by 2025. Ethanol-blending involves reduction in emission at almost no higher cost for consumers (both fuel and vehicles price).
- Gas: CNG vehicles are again a low-cost option in driving decarbonisation. They do not cost much higher than ICE vehicles and emit much lesser GHGs.
- Hybrids: Hybrid electric vehicles is another pathway. They cost more than a ICE vehicle but less than an EV and cut emission by 40 per cent.
- Hydrogen: Vehicles powered by hydrogen, experts say, are at least a decade away. They appear to be most promising for India in terms of emission obligation (zero emission) and energy security (zero imports).

Promoting partnerships among different stakeholders can nurture the forest economy in the country. Analyse

KEY POINTS

- Forests play a crucial role in supporting rural livelihood. An estimated 200 million forest-dependent people collect several valuable products from India's jungles.
- A three-pronged approach will convert forests into a space of opportunity. First, increase visibility by formalising the first-mile production system using digital technology. The Jan Dhan-Aadhaar-Mobile trinity provides a ready-made working solution.
- Second, achieve economies of scale through community-based enterprises for aggregation and market linkage.
- Third, increase productivity by setting up processing for value-addition at the local level.
- The recognition of community forest resource rights under the Forest Rights Act, 2006 is an easy solution to ensure the long-term sustainability of forests.
- The only reason why forests are protected and will be protected in the future is if the local communities living in and near the forest profit from it in tangible ways.
- The lynchpin of such an effort is a partnership between local communities as the custodians of forest resources, industry leaders using the products of these forests as raw material, and government agencies facilitating and regulating the creation of jobs and wealth.
- In Gujarat, for instance, communities in the Narmada district are managing forests while also supplying bamboo to the paper and pulp industry.

Development of mountain areas over the years is upsetting the ecological balance. Suggest appropriate measures to sustain the ecological balance.

KEY POINTS

- At least 25 people were killed over the weekend as torrential rains triggered flash floods and landslips in Himachal Pradesh and Uttarakhand.
- A recent report released by Himachal Pradesh's Department of Environment, Science and Technology underlines that mountain areas are highly vulnerable to natural disasters, where development over the years has compounded the problem by upsetting the ecological balance of various physical processes.

Measures to maintain ecological balance

- SECURE Himalayas project is spread over 6 years.
- The objective of the project is to secure people's livelihood, restore, conserve and use sustainably the high range ecosystems of the Himalayas.
- The key focus of the project is on improving the enforcement to ensure the reduction in wildlife crime, protection of snow leopard and other endangered species and ensuring a secure livelihood to the people in the region.
- Protecting the people's livelihood has taken topmost importance under the SECURE Himalaya since the relative remoteness and isolation of the communities in the mountains (which includes tribal communities) has rendered them the last preservers of their heterogeneous culture and local knowledge that has a global impact.
- A good example of this is the protection plan for snow leopards in India's Spiti valley. The Himalaya protection programme can achieve even more, if Pakistan, China, and Afghanistan join the initiative.

With respect to carbon trading, analyze the critical factors which can help in attaining the climate goals of the country.

KEY POINTS

- The Lok Sabha recently passed a Bill to set up a nationwide carbon trading market. Carbon trading is an important way to reduce the cost of cutting emissions.
- Common carbon currency: India already has two energy trading mechanisms Perform Achieve Trade (PAT) for energy efficiency and Renewable Energy Certificates (REC) for renewable energy.
- A common carbon currency will also improve the liquidity of the market making it more dynamic and responsive to demand and supply.
- Diversity of sectors: The cost of reducing carbon varies significantly across sectors.
- For instance, under the UK's Climate Change Agreements Scheme, the regulator inks umbrella emissions reduction deals with sectoral industry associations that then meet the target collectively.
- Policies for innovation and competitiveness: A carbon market that incentivises deep decarbonisation beyond the low-hanging fruit will require complementary policies that spur innovation in new green technologies.

- Long-term price signal: Creating stable and long-term demand in the carbon market is important to maintain a sustained price signal to spur investment.
- Stakeholder capacity building: In our simulation, companies with prior experience in GHG estimation and management made more effective trading decisions.
- A carbon market can be an effective economic policy in India's toolkit to support the uptake of these new energy sources and technologies.

G.S PAPER IV

16. ETHICS

Corruption is a reflection of crisis in ethics and moral values of the public servants in the country. Discuss

KEY POINTS

- The Prime Minister's theme at the Red Fort rightly was that handling corruption was a joint endeavour between the government and the public.
- Without a union of minds and endeavour little can be achieved to enhance our moral credibility. A bribe taker cannot flourish without a bribe giver. It is as simple as that.
- What the common man is most agitated about is the dishonesty of government officials, both in the higher echelons and at the bottom.
- Digitisation has no doubt streamlined the issue of critical documents such as birth/death certificates and driving licences.

- Corruption however remains unbearable in areas such as registration of documents relating to buying and selling property and sanction of planning permissions to put up new buildings.
- Rates of illegal under-the-table payments have been fixed for different stages of a project however small or big they may be. This accounts for the high real estate prices.
- Deterrent laws and executive action alone cannot bring down levels of dishonesty. The analogy is with conventional crime.
- Consensus among criminologists is that stiffer sentences are not accompanied by a dip in crime.
- Unless our future generations are indoctrinated in favour of honesty in their careers there is precious little to hope for them.

SHANKAR IAS ACADEMY