



MONTHLY MAINSTORMING

A compilation of Mains questions with model answers, from Current Affairs of the month





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SEPTEMBER 2021

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SEPTEMBER 2021

G.S PAPER II

1. GOVERNMENT POLICIES

It is time to address the problem digital divide in the country and requires special, urgent and focused efforts of the Government of India. Elaborate

KEY POINTS

- Absence of digital literacy, or the inability to use a computer, device or smartphone, is the second reason for lack of access to digital technology.
- If we do not rapidly make investments to make India 5G ready, inability to roll out the latest technology will become another obstacle to providing state of the art digital services to most.
- The pandemic has further magnified the adverse consequences of this divide. Only about 15% of government schools have broadband connections and about 40% have tablets or computers.
- During the recent second wave of Covid 19, the upper and middle classes in urban areas had access to teleconsultation and could voice their distress on social media.
- The CoWIN platform for vaccination, commendable by itself, stands out as a striking example of inequity as only the digitally savvy can use this application.
- The Universal Service Obligation Fund of the Telecom department alone is inadequate to finance this expenditure.
- To design and construct digital highways, their rural branches, and ensure their optimum utilisation by sharing the infrastructure, an empowered entity needs to be set up which is accountable for quality and timeliness.
- Connectivity, devices and handholding assistance of trained persons at village service centres, schools and clinics is imperative.

For e-Shram to become a watershed, there is a need to relook certain features associated with it.

Examine

- Centre launched its e-Shram portal to create a national Aadhaar-seeded database of unorganised workers which it hopes to use for effectively targeting social security schemes.
- Under the Unorganised Workers' Social Security Act, 2008, a similar attempt was made, but it resulted in the registration of just 120 million workers.
- Workers can register on the portal with the help of Aadhaar and bank account details, following which they will get a 12 digit unique number.



- While rural distress can be contained, migrant workers fall through the cracks in the absence of any central register to enumerate them.
- Clearly, an electronic registration system that can be accessed anywhere is the need of the hour.
- A decentralised registration process, involving the participation of municipalities, panchayats and civil society groups, should take the place of a bureaucratised one.
- The Centre should advertise and educate the masses. It should be easy for workers registered under other welfare boards to enlist on this portal.
- For those without Aadhaar, other national IDs such as voters' card should be permitted. The e-Shram push should be backed by the money it needs.
- The portal should be able to handle the data of more than 400 million people. In sum e-Shram needs some hard work to get going.

Do you think that the Centre should accept Telecom Regulatory Authority of India's proposals for promoting broadband connectivity? Explain

- Access to secure, reliable, and affordable high-speed broadband services is a clear and urgent priority for every citizen.
- In order to address the supply side of the problem, the TRAI has proposed that operators rolling out fixed-line broadband networks should be given licence fee exemptions.
- To support the demand side of the equation, the regulator has suggested a pilot scheme to reimburse 50 per cent of the monthly fixed-line broadband subscription charges.
- In order to streamline Right of Way permission processes for laying optical fibre, the TRAI has proposed a web-based national portal with clear roles defined for the Central, State, and local body authorities.
- This portal will provide a huge relief to telecom companies who continue to face huge bottlenecks at the local level when it comes to laying cable.
- The Centre has set a target of providing universal broadband connectivity at 50Mbps to every citizen.
- The regulator must also ensure that operators are meeting the quality of service parameters as consumers are still grappling with basic network issues like voice call drops and interrupted data services.
- If the Centre wants to really prepare the country's telecom sector for the upcoming digital revolution, it must ensure that TRAI's recommendations become a reality.



The Production-Linked Incentive scheme for the textile sector shows that the Government of Indian has relentlessly shifted towards global textiles trade. Explain

KEY POINTS

- India's textile and clothing exports on the other hand have continued to remain dominated by cotton and other natural fibre-based products, with Man Made Fibre having contributed less than 30% of the country's \$35.6 billion in overall sectoral exports in 2017-18.
- And MMF's share remained relatively unchanged in the last fiscal as well when the sectoral exports were about \$33 billion.
- While policy makers have been cognisant of the need to bolster support for the MMF segment.
- The task of crafting a meaningful initiative that would engender enhanced investment in capacity creation, leading to increased exports.
- The aim of the scheme is to specifically focus investment attention on 40 MMF apparel product lines, 14 MMF fabric lines and 10 segments or products of technical textiles.
- The inclusion of intermediate products at industry's request also reflects the Government's keenness to ensure the scheme ultimately delivers on the broader policy objectives.
- On the face of it, the scheme appears designed with a fair deal of thought, but its operational success is likely to hinge on entrepreneurs.
- The existing companies weigh the risk-reward equation, especially at a time when the pandemic-spurred uncertainty has already made private businesses leery of making fresh capital expenditure.

Government-owned scheduled commercial banks not only provide tremendous comfort level to depositors but also render services effectively. Examine

- Privatising one or two banks, due to various reasons, is quite different from privatising a major chunk of public sector banks.
- Already we have substantial presence of new generation private sector banks which are giving enough competition to the government banks.
- The major problem faced by banks is on account of non-performing assets, which is common for both the private and public sector banks.
- The government may also have difficulty in providing additional capital to the government banks on account of fiscal constraint and the banks are in need of additional capital to maintain Capital Adequacy Ratio for continuing their lending operations.
- The 1,926 town cooperative banks in 2004 have shrunk to 1,551 in 2018, as per an RBI report.
- Banks owned by sovereign government provides tremendous comfort level to depositors.



- Attempting to privatise all banks is simply undermining the tremendous contribution of these banks to the country over the years.
- The nationalisation of private banks in 1969 resulted in the opening of tens of thousands of branches in remote corners of the country.
- But state-owned banks, while trying to be profitable on the one hand, provide many services in public interest. Only government banks provide services to the common people at affordable cost.

Do you think that the relief cum reforms package of the central government is enough for the stressed telecom sector? Analyse

KEY POINTS

- The extent of stress in the sector as well as the far-reaching economic consequences of protracted distress in the industry.
- The Government decided to offer telecom service providers the option of a four-year moratorium on the payment of outstanding AGR and spectrum purchase dues.
- The Government's moratorium offer should relieve the burden of finding the funds to service these liabilities at the loss-making telco, giving it the space to focus on continuing to provide vital telecom services.
- The after-effects of the competitive in call and data tariffs are still being felt by the surviving operators and the issue of a floor price is one among many.
- To be sure, the Government has sought to address several anomalies in the policy regime including the definition of Adjusted Gross Revenue that had led to the large build-up of dues and protracted and ultimately pointless litigation.
- Non-telecom revenue will hereafter be excluded from the AGR, a long-standing demand from the telcos. The
 telcos would also not have to pay any spectrum usage charge for airwaves acquired in future auctions, could
 share spectrum without incurring any additional cost, and hold the airwaves acquired at an auction for 30
 years instead of 20.
- Several procedural norms have also been simplified. Still, the prospects of the sector diminishing to a duopoly remain high.

The problem of unemployment in the country is yet to receive the significant attention from the government. Do you agree with this view? Comment

- The government finally released the Periodic Labour Force Survey (PLFS) results, most of the fracas pertained to the historically high unemployment rate of 6.1 per cent in 2017-18.
- Inflation hurts almost the entire population. Equally importantly, high inflation rates can upset financial markets that in turn exert pressure on regulators to keep inflation in control.



- Lack of adequate jobs is an economic problem that merits more analytical and policy attention than the political attention it gets in India.
- India's LFPR is at around 40 per cent when the global rate is close to 60 per cent. It is important that this belief in the futility of a job hunt is overcome by an explosive creation of new good quality formal jobs.
- With due respect to all forms of labour, it cannot be the desire of a nation to move people away from high productivity, better quality jobs in manufacturing to low productivity employment in agriculture or as gardeners or security guards in the household sector.
- Employment opportunities need to expand in areas where labour is deployed to deliver higher productivity for enterprise and higher returns to labour.
- The investment climate needs to be business-friendly and government interventions must shift away from supply-side support to spurring demand.

The recent pandemic reinforces that a good urbanization is the most powerful technology for poverty reduction. Explain

- Urbanisation gets a bad name in rich and poor countries because megacities 10 million-plus populations are
 unpleasant places to live for people who are not rich or powerful.
- Migrants that left our cities during the first lockdown last year are back because they were not running towards cities, but running away from sub-scale economic wastelands estimates suggest that 2 lakh of our 6 lakh villages have less than 200 people.
- India's local government challenge reflects what historians call path dependence; unlike others, our
 democracy didn't evolve bottom-up with local government rolling up into state governments that came
 together as a nation.
- Good urbanisation is also crucial to delivering economic justice for women, children and Dalits.
- Poor quality urbanisation has meant men-only migration, leaving the women with all the hard labour of farm work, raising the children, and looking after in-laws, while having virtually no recourse to health services, or to even emotional support of the spouse.
- Good urbanisation getting power and funds to cities needs chief ministers to sacrifice self-interest.
- Their reward will be undying duas of millions waiting for high-quality jobs and opportunities. India is lucky that Norman Borlaug prevailed over William Vogt in the food technology debate.
- As the post-Covid urbanisation debate gains momentum, we hope the wizards will again prevail over the prophets.



The inclusion of Government Securities in global bond indices can counter the volatility arising from Fed policy normalization. Do you agree with this view? Analyse

KEY POINTS

- The US Federal Reserve has taken a definitive step towards normalising its easy monetary policy and this can have ramifications for financial markets across the globe.
- This implies that global liquidity that is fuelling asset price inflation globally will not be impacted in the coming year.
- the progress made towards including Indian sovereign bonds in global bond indices is welcome.
- The introduction of Fully Accessible Route (FAR) for FPIs investing in G-secs in 2020 was the first major step towards this move.
- Not only will this inclusion result in annual inflows of \$18.5 billion over the next decade, as reported by Morgan Stanley, these flows are likely to be more stable and long-term in nature, when compared to the hot money that is influenced by central bank actions and global liquidity.
- The Centre should however decide on the taxation of these securities when both the buyer and seller are not Indian citizens and the intermediary is also outside India.
- Other minor bottlenecks such as simplifying the registration process for FPIs wishing to invest in G-secs, improving the trade matching system and providing access to hedging tools to FPIs should also be expedited.

Social registries are key to ensuring that the development gains are realised while enabling welfare delivery effectively. Explain

KEY POINTS

- A social registry essentially attempts to harmonise information systems to create a registry of citizens to establish their eligibility for social welfare programmes.
- The 2011 Socio-Economic and Caste Census (SECC) helped in facilitating targeted interventions under various schemes and consideration to undertake the SECC again is currently underway.

Lessons

Data collection

- Data collection is the single most important step in the process of creating a social registry.
- Similar efforts are needed in India to build awareness around consent and mainstream privacy consciousness among the masses.
- The effort by the Government of Odisha to link 20 State scheme datasets to identify authentic beneficiaries for its KALIA scheme is one such example.

Decentralisation

• The institutional arrangements for managing social registries vary across the world.



• In India, given the number of beneficiaries, unique development contexts across regions and multiples welfare schemes will be more prudent and secure.

Independence

- Instituting independent administrative bodies can help detect and deter delivery gaps and leakages, and also serve as a source of subject-matter expertise.
- In India, along the lines of the National Health Authority for the health sector, creating other bodies which could provide independent sector-specific expertise and evaluation of the programme must be considered.

2. EDUCATION

The Samagra Shiksha scheme aims to make learning more equitable and inclusive, joyful and bring synchronization in the experience of both teachers and learners. Explain

KEY POINTS

- Samagra Shiksha or holistic education is essentially joyful education: It encompasses the physical, social, emotional, and mental well-being of the child alongside academic and skill development in an integrated format.
- For the first time, pre-school infrastructure and workshop/laboratory cum classroom for vocational education shall also be funded in the 2.0 scheme.
- For retention after class 8 and 10, the scheme will provide transport for students to attend formal school.
- It aims to attract 16 to 19 year-old out-of-school children through the Open School system.
- The NIPUN Bharat Mission for foundational literacy and numeracy is a first-time component under the new Samagra Shiksha.
- Gender-related interventions have been strengthened by giving additional funds for extending Kasturba Gandhi Balika Vidyalayas to grade 12, and provisioning of sanitary pad vending machines and incinerators in all girls' hostels.
- The self-defence training component is now extended from grades 6 to 12. Disabled girls from pre-school to grade 12 will now get a separate amount as a stipend and separate funding for aids and appliances, etc.
- A special assessment cell is being set up in each SCERT to take assessment reforms forward in all states/UTs.

The new edition of the National Institutional Ranking Framework highlights the crucial areas to be focused for development of higher education. Analyse

KEY POINTS

National Institutional Ranking Framework (NIRF) for higher education may offer many advantages. Its
signalling effect may help students, faculty, and prospective employer, respectively, to help them choose
institutions for admission.



- The most useful purpose that the ranking can serve is to identify areas of improvement and then proactively to work to overcome those deficiencies and thus ensure quality and promote excellence.
- Analysed in this context, even the top 100 universities in NIRF, present a very disquieting trend which warrants urgent attention.
- The NIRF 2020 ranking reveals that the best university in the country scored 92.16% on research performance.
- The score drastically declined to 60.52% for the 10th best university.
- NIRF does not disclose data on the total number of teachers but amongst a few statistics that it reports includes the total expenditure on salaries of teaching and non-teaching staff.
- The data disclose in no uncertain terms that on an average, the higher the expenditure on salaries of the staff, the higher is the ranking of the university.
- The larger the number of research scholars, the higher the ranks of the universities .
- To conclude, the fund and the faculty, the two most neglected areas, are critical not only for research performance but also for the overall ranking.

3. HEALTH

Addressing the sanitation issue is an integral part in tackling nutrition challenges in the country. Do you agree with this view? Comment

- A recent UNICEF report stated that nearly 12 lakh children could die in low-income countries in the next six months due to a decrease in routine health services and an increase in wasting.
- The National Family Health Survey (NFHS 5) indicates that since the onset of the pandemic, acute undernourishment in children below the age of five has worsened, with one in every three children below the age of five suffering from chronic malnourishment.
- According to the World Health Organisation, 50 per cent of all mal- and under-nutrition can be traced to diarrhoea and intestinal worm infections, which are a direct result of poor water, sanitation and hygiene.
- The global nutrition community has long emphasised that WASH are a sure-shot way of bolstering the country's nutritional status.
- Childhood diarrhoea is a major public health problem in low- and middle-income countries, leading to high mortality in children under five.
- According to NFHS 4, approximately 9 per cent of children under five years of age in India experience diarrhoeal disease.
- Safe drinking water, proper sanitation and hygiene can significantly reduce diarrhoeal and nutritional deaths.



• An integrated approach to nutrition and WASH at the individual, household, and community levels along with Covid management will serve to tackle the problem of mal- and under-nutrition.

A robust disease surveillance system is required for the country to prevent further disease outbreaks. Elaborate

KEY POINTS

- As per data from the fourth round of sero-survey, Kerala and Maharashtra States could identify one in every six and 12 infections, respectively;
- In a well-functioning disease surveillance system, an increase in cases of any illness would be identified very quickly.
- An example is Kerala, arguably the best performing disease surveillance system amongst the India States, as it is picking the maximum COVID-19 cases; it could pick the first case of the Nipah virus in early 2021.

Measures needed

- The government resources allocated to preventive and promotive health services and disease surveillance need to be increased by the Union and State governments.
- The emerging outbreaks of zoonotic diseases, be it the Nipah virus in Kerala or avian flu in other States as well as scrub typhus in Uttar Pradesh, are a reminder of the interconnectedness of human and animal health.
- The 'One Health' approach has to be promoted beyond policy discourses and made functional on the ground.
- There has to be a dedicated focus on strengthening the civil registration and vital statistics (CRVS) systems and medical certification of cause of deaths (MCCD).
- It is also time to ensure coordinated actions between the State government and municipal corporation to develop joint action plans.
- Indian States urgently need to do everything to start detecting diseases, which will prepare the country for all future outbreaks, epidemics and pandemics.

4. INDIAN POLITY

While introducing laws, Union government needs to have the consent of the state government to uphold the spirit of federalism. Analyse

- The Kerala Legislative Assembly unanimously passed a resolution against the Electricity (Amendment) Bill, 2020, while the Tamil Nadu Legislative Assembly passed a resolution against the controversial farm laws.
- Parliament passed the farm laws without consulting the States. The laws, essentially related to Entry 14 (agriculture clause) belonging to the State List.



- The new draft Indian Ports Bill, 2021, proposes to change the status quo by transferring the powers related to planning, developing and regulating the non-major ports to the Maritime State Development Council (MSDC).
- The power to regulate the sector was vested with the State Electricity Regulatory Commissions (SERCs), which were manned by individuals appointed by the State government.
- The amendment proposes the establishment of a Centrally-appointed Electricity Contract Enforcement Authority (ECEA) as the sole authority having jurisdiction over matters regarding the sale, purchase or transmission of electricity.
- The Sarkaria Commission Report had recommended that there should be a coordination of policy and action in all areas of concurrent or overlapping jurisdiction through a process of mutual consultation.
- The Venkatachaliah Commission, had recommended that individual and collective consultation with the States should be undertaken through the Inter-State Council under Article 263.
- The essence of cooperative federalism lies in consultation and dialogue, and unilateral legislation without taking the States into confidence will lead to more protests on the streets.

5. GOVERNANCE

The Supreme Court guidelines have laid down a clear and cogent process for creating accountable citizen-centric police force. Explain

- One major cause for the tardy progress of police reforms is the lack of public awareness and sustained interest in law enforcement.
- The Supreme Court mandated that all postings, from the officer-in-charge of a police station to the head of the department, should be based on merit.
- The court had directed the formation of Establishment Boards for unbiased postings, transfers, promotions and other service-related matters regarding police officers.
- It involved the Union Public Service Commission for the selection of heads of state police forces.
- The court's insistence on fixed tenure to all operational heads is to give adequate time to police leaders to implement their policies.
- The creation of Security Commissions at the Centre and in states as directed by the court would ensure robust policy-making at both levels.
- It would also protect the police from unwarranted political pressures, enabling them to concentrate on core issues.
- The court has further sought a separation of law and order and crime investigation. It would reduce the workload of police officers.



- Another police reform that is entirely in the interest of citizens is establishing "complaint authorities" at district and state levels.
- It is in the interest of all of us to pursue police reforms vigorously and to hold Union and state governments accountable for their failure to do so.

In the context of improving public policies, the use of social media by civil servants of the country act as double edged sword. Examine

KEY POINTS

While there are many people, including former civil servants, who are in favour of civil servants using social
media in their official capacity, others argue that anonymity, the defining feature of Indian bureaucracy, gets
compromised in the process.

Usage of social media

- Social media has also created a positive outlook towards an institution long perceived as opaque and inaccessible.
- Social media has increased awareness among people about government policies and programmes.
- It provides an opportunity to bureaucrats to shape the public discourse and engage with the public while being
 politically neutral.
- Both values and facts are getting reshaped due to fake news and systematic propaganda within public policy circles as well.
- Anonymity and opaqueness have already been watered down through the Right to Information Act of 2005.

Criticisms

- Social media is getting used by civil servants for self-promotion.
- Through their selective posts and promotion of these posts by their social media fans, civil servants create a narrative of their performance.
- It is not a formal set-up where accessibility and accountability are based on uniformity of treatment.
- Social media accountability is no alternative to institutional and citizen-centric accountability.

6. INTERNATIONAL RELATIONS

How Israel and India can lead the way to establish solutions for the developing world to mitigate the impacts of climate change?

- In California and Canada, temperatures reached unthinkable records of above 50 degrees Celsius.
- The Intergovernmental Panel on Climate Change 2021 analysis shows that the window of opportunity to limit temperature rise to 1.5 degrees Celsius to avoid the worst impacts of climate change is closing.



- In India, the Himalayan glaciers, the source of major rivers and aquifers supplying water to hundreds of millions of Indians, are disappearing at an alarming rate.
- India has made enormous investments in renewable energy sources, to increase the use of solar, wind, biomass, waste, and hydropower energies.
- Israel has learned to establish agriculture in the desert and arid areas, to recycle 90 per cent of its wastewater, and to desalinate drinking water.
- It has cultivated a groundbreaking industry of animal protein substitutes, and knows how to preserve forests in conditions of drought and aridity.
- Products such as poultry, milk, eggs and more are being produced in laboratories using methods that emit almost no greenhouse gases.
- Israel's climate innovation also provides solutions in the fields of compressed-air energy storage, energy generation from sea waves.
- It is clear to everyone today that there is not one single country, strong and developed as it may be, that can cope with this unprecedented crisis alone.
- The only way to do this is by working together, sharing information and experience, and providing mutual support.

How Indian and Germany can unleash their hidden potential to mitigate the impending consequences of climate change? Discuss

- India and Germany agreed that global warming must be kept to well under 2 degrees Celsius and, if possible, to 1.5 degrees.
- India is one of few countries that looks set to deliver on the national goals it set itself as part of the Paris agreement. Compared to other G20 countries, its per capita emissions are very low.
- India now has the opportunity to make its massive investments in infrastructure over the next 15 years climate-smart and climate-resilient.
- The EU has adopted an ambitious Green Deal to achieve net-zero greenhouse gas emissions by 2050 and to decouple economic growth from consumption of natural resources.
- In 2015, India's Prime Minister and Germany's Federal Chancellor agreed to further strengthen the two countries' strategic partnership.
- On this basis, Germany and India have succeeded in building up a cooperation portfolio worth almost 12 billion euros.
- Indo-German development cooperation focuses on three areas: The transition to renewable energies, sustainable urban development and sustainable management of natural resources.
- As a pioneer of energy transition, Germany is offering knowledge, technology transfer and financial solutions.



• Ultimately, we believe that global climate goals and the SDGs can only be achieved through cooperation between governments, the private sector, science, and civil society.

Do you think that Shanghai Cooperation organization can stabilize the uncertainties in Afghanistan? Comment

KEY POINTS

- Seen from the subcontinent, the SCO certainly looks better than the South Asian Association of Regional Cooperation (SAARC).
- That India and Pakistan, whose differences have prevented even regular meetings of SAARC, are actively participating in the SCO, would point to its attractiveness.
- The SCO's importance for Afghanistan seems self-evident when you look at its sponsors and members. Its founding leaders are the two great powers of the east Russia and China.
- While military confidence building measures have grown under the SCO banner, Russia had its own security organisation for the region, called the Central Security Treaty Organisation (CSTO).
- The Central Asian members of the SCO have quarrels of their own, and have struggled to develop collective approaches to their common regional security challenges.
- Turkmenistan, which is not part of SCO, has been quite open to engaging the Taliban in sync with its principles of neutrality.
- Iran, which has ethnic and linguistic links with the Persian-speaking Tajiks, appears equally worried about the Taliban's policies towards minorities.
- Given this divergence, it is unlikely that the SCO can come up with a "regional solution" for the Afghan crisis. The only real Afghan convergence today is between Pakistan and China.
- Delhi has sought to make full use of the SCO's diplomatic possibilities without any illusions about its effectiveness.

Examine the various reasons behind the formation of Quad grouping and mention its significance.

- Following the Indian Ocean tsunami, India, Japan, Australia, and the US created an informal alliance to collaborate on disaster relief efforts.
- The Quad was supposed to establish an Asian Arc of Democracy but was hampered by a lack of cohesion amongst its members and accusations that the group was nothing more than an anti-China bloc.
- In 2017, faced again with the rising threat of China, the four countries revived the Quad, broadening its objectives and creating a mechanism that aimed to slowly establish a rules-based international order.



- However, despite its lofty ambitions, the Quad is not structured like a typical multilateral organisation and lacks a secretariat and any permanent decision-making body.
- Quad has focused on expanding existing agreements between member countries and highlighting their shared values.
- Quad does not include provisions for collective defence, instead choosing to conduct joint military exercises as a show of unity and diplomatic cohesion.

Significance

- In 2020, the trilateral India-US-Japan Malabar naval exercises expanded to include Australia, marking the first official grouping of the Quad.
- In 2021, the Quad leaders met virtually and later released a joint statement titled 'The Spirit of the Quad,' which outlined the group's approach and objectives.

India's diverse relationships in the West must be deployed in full measure to prevent a split in the Indo-Pacific coalition. Explain

KEY POINTS

- Delhi today is a part of a difficult conversation between the US, UK, France, Europe, and Australia points to the growing depth and diversity of India's relations with different parts of the West.
- India's contemporary diplomacy takes a nuanced view of internal dynamics in the West, and recognises the political agency of individual states, and develops wide-ranging relationships with the Western nations.
- The last few years have seen an intensification of India's strategic engagement with France. For example, the government has overcome the earlier reluctance in Delhi to work with Paris on Indian Ocean security.
- India has made a determined effort to build a new partnership with Britain, which is the fifth-largest economy
 in the world, a leading financial hub, a technological powerhouse, and punches well above its weight in global
 affairs.
- The UK and its settler colonies have long been the preferred destination for the Indian diaspora (besides the US).
- Delhi is figuring out that the diaspora politics can be played both ways. The transformation of India's relations with Australia has occurred despite entrenched scepticism in the foreign policy bureaucracy.
- There is enough room for the US, UK, France, and Europe to collaborate with Indo-Pacific partners in overlapping coalitions to develop high technology and defence-industrial cooperation in all the areas.

Do you think that the participation of China in CPTPP (Comprehensive and Progressive Trans Pacific Partnership) will change regional balance in Asia? Comment

KEY POINTS

• China has applied for joining the CPTPP (Comprehensive and Progressive Trans Pacific Partnership).



- The CPTPP is a major free trade agreement (FTA) between 11 Asia-Pacific countries that are all members of the APEC (Asia-Pacific Economic Cooperation).
- As an APEC member, China is justified in wishing to join a deal comprising 11 other APEC members.
- Technically, there can't be any opposition to China's joining the deal if it is willing to accept the terms and conditions for becoming a member.
- Concessions and China's willingness to abide by the terms of the CPTPP might be influenced by several factors.
- First, the CPTPP will give it deeper access in member economy markets than some of its existing FTAs, such as the RCEP (Regional Comprehensive Economic Partnership) and bilateral FTAs with the ASEAN, and Australia and New Zealand.
- The CPTPP's coverage of market access is much wider, both in terms of tariff cuts it entails, as well as the new generation trade issues it covers.
- Most importantly, after RCEP, joining CPTPP will enable China to firmly control trade governance in the Asia-Pacific and influence the rules of trade in the region.
- The regional economic balance can change significantly. Certainly not great news for India, US and other movers and shakers of the Indo-Pacific.

India-Nepal relations can be strengthened by using the water resources for common developmental uses. Explain

- Some of Nepal's biggest river systems originate in the Himalayan glaciers which then flow into India through Bihar.
- It is a necessity that there is process-driven coordination between the Centre and the Government of Bihar to handle the flooding in Nepal's Terai and North Bihar
- It is essential that Nepal shows the required will to find a long-term solution with India in ending a perennial disaster.
- After sustained coordination between the Centre and the State (Bihar) and expedited interventions by India
 with Nepal, Kathmandu gave its conditional permission for manpower and machinery operation in the Nepal
 area of Kosi basin.
- In the best spirit of friendship, Nepal and India should restart the water dialogue and come up with policies to safeguard the interests of all those who have been affected on both sides of the border.
- Optimisation of the infrastructure will be decisive in finding an alternative paradigm of flood management.
- Moreover, it is also linked to how the Himalayan glaciers and the green cover are managed.
- Water cooperation should drive the next big India-Nepal dialogue, and despite the challenges, wisdom should prevail to turn the crisis into an opportunity, for the sake of development and environmental protection.



Having scale of challenges and opportunities in outer space, demands urgent and sweeping reform by the country. Analyse

KEY POINTS

- Delhi's new strategic interest in outer space is based on a recognition of two important trends.
- One is the centrality of emerging technologies in shaping the 21st-century global order. The other is about the urgency of writing new rules for the road to peace and stability in outer space.
- The new emphasis on space cooperation is part of a much larger technology agenda outlined by India and its Quad partners.
- India has been strengthening its maritime domain awareness through bilateral agreements as well as the Information Fusion Centre for the Indian Ocean Region (IFC-IOR) at Gurugram.
- Space situational awareness (SSA) involves monitoring the movement of all objects natural (meteors) and man-made (satellites) and tracking space weather.
- The growing strategic salience of outer space demands substantive national policy action in India. Delhi has undertaken some reforms in recent years like letting the private sector participate in space activity.
- It has also taken tentative steps to cope with the unfolding military challenges in outer space. It has also initiated space security dialogue with close partners like the US, Japan, and France.
- The scale of the challenges and opportunities in outer space, however, demand more urgent and sweeping reform.

G.S PAPER III

7. AGRICULTURE

Discuss the contributory factors that need significant attention for effective implementation of Farmers Producers Organization Scheme

- The government's 10,000 Farmer Producer Organisation scheme has given a major thrust to the FPO movement.
- From corporates to public service organisations, everyone has committed towards promotion of FPOs.
- FPOs, in their formative years, are required to strengthen their governance mechanism, engagement with producer members, and liaising with external agencies (like buyer, and input providers) for securing resources, etc.
- FPOs need to derive support from different group of stakeholders (farmer, government, buyers, NGOs etc), each with different norms and expectations.



- For example, the expectation of a government certifying agency for organic produce would be very different from a that of a corporate buyer.
- The certifying agency would focus on diligence while the buyer would be driven by reliability and quality.
- Need to give a better price to farmers for their produce or offering input services at reasonable cost.
- FPOs are required to internalise that different stakeholders have different yardsticks to measure the success of their venture.
- While the farmer as member may be looking at receiving timely credit from the FPO as the vital indicator for success, the corporate buyer may measure a FPO's success based on quality of the product.

How does the India Digital Ecosystem of Agriculture will improve the efficiency of agricultural sector in the country? Explain

KEY POINTS

- India Digital Ecosystem for Agriculture will incorporate a National Farmers Database, a sort of 'super Aadhaar' for farmers which will enable anyone with access to the database to uniquely identify a landholder.
- By cross-linking with Aadhaar and linking it with the land records database, a unique FID, or a farmers' ID, is sought to be created.
- With the FID, a user can get one-click access to virtually the entire universe of a farmer's activities.
- From PMKISAN direct benefit transfers, to soil health cards, extension services such as plant and crop health information with the FID database powering it all.
- The 'agristack', the government is hoping, will help eventually achieve the goal of doubling farmers' income, if not by 2022, which looks totally unachievable at the moment, but at least around the next big election.
- Then there are women farmers. According to a recent survey by Oxfam, as much as three quarters of the full-time labour on a farm are women.
- A substantial portion of small landholdings and tenant farms are also managed by women but almost
 everywhere in India, land titles continue to be held by men.
- There is also the big concern over data privacy. Giving away this kind of sensitive, financial and landholding information in the absence of a data privacy law raises multiple concerns over potential misuse.

Wisdom lies in investing more in animal husbandry including fisheries and fruit & vegetables for improving farmers' income. Substantiate

KEY POINTS

• The Dalwai Committee confirmed that the target of doubling farmers' incomes in real terms was to be achieved over seven years with the base year of 2015-16, and it would require a growth rate of 10.4% per annum to double farmers' real income by 2022-23.



- An average agricultural household earned a monthly income of Rs 10,218 in 2018-19 in nominal terms, which increased from Rs 6,426 in 2012-13.
- In nominal terms, the compound annual growth rate turns out to be 8% between 2012-13 and 2018-19.
- But a closer look at the individual states indicates that Gujarat and Saurashtra & Kutch region had 27% and 38% deficient rainfall than its Long Period Average respectively, in 2018-19.
- What these indicate is that the scope for augmenting farmers' incomes is going to be more from farming of animals (including pisciculture).
- It is worth noting that there is no MSP for products of animal husbandry or fisheries and no procurement by the government.
- It is demand-driven, and much of its marketing takes place outside APMC mandis. This is the trend which will get reinforced in the years to come as income of the people goes up and diets diversify.
- The best way to invest is incentivise private sector to build efficient value-chains based on a cluster approach. The Modi government has started working in this direction, but much more needs to be done.

8. INDIAN ECONOMY

Having consistently improved its score in Ease of Doing Business, there is a still a long way ahead for India in making better progress. Explain

- India's world ranking, from 142 in 2014 among 190 countries, went up to 130 in 2015, 100 in 2017, 77 in 2018 and 63rd in 2019.
- India was lauded by the World Bank for being among 10 top world reformers, especially for a large country.
- India's progress has been steered by dramatic improvement in a few parameters, mainly in 'resolving insolvency' (from 108 in 2018 to 52 in 2019).
- On this front, the Department of Justice has been monitoring an array of legislative and policy reforms in coordination with e-Committee of Supreme Court and the High Courts of Delhi, Bombay, Calcutta and Karnataka.
- The idea is to ensure fair, well laid out rules, clear laws, reduce litigation involving the government and strengthen commercial dispute resolution mechanism and enforcement of contracts.
- The most significant and decisive step, however, has been to bring legislation repealing the contentious 'retrospective tax'.
- The Supreme Court upheld the arbitral award of an Emergency Arbitrator in proceedings at the Singapore International Arbitration Centre.
- With one party being a global e-commerce giant and the other being one of India's largest retail companies, a speedy decision and judgment, could go a long way in further strengthening EoDB.



• India today is the first choice for global investors in the on-going geo-political situation, as evidenced by a record 23 'unicorns' in the country.

The central bank should remain the regulator for the government securities (G-sec) market. Do you agree with this view? Comment.

KEY POINTS

- The RBI has been facing criticism, of late, due to the manner in which it is controlling government bond yields.
- While the central bank has reiterated that the yield management is critical for keeping borrowing costs in the
 economy low, it has also acknowledged that low bond yields are needed to control the government's interest
 burden.
- The central bank currently needs all its powers to support the government in the ongoing crisis.
- Control over the G-sec market is critical in order to discharge many of its key functions such as management of systemic liquidity, regulating foreign exchange market and maintaining financial stability.
- With the central bank being the repository of G-secs and overseeing the trading in these securities, it can efficiently balance system liquidity and manage the liquidity caused by foreign portfolio and FDI flows, thus keeping exchange rate stable and interest rates across maturities under check in order to foster growth.
- It is uncertain if moving primary issuances of government bonds to stock exchanges will work as the composition of participants in equities is quite different from the G-sec market, which is institution-driven.
- India began working towards this bifurcation in 2018 with the proposal to set up public debt management cell in the Budget division but there has not been much progress on this since.

As Non-Banking Financial Companies have become systemically important, regulation must be on a par with scheduled banks to ensure financial stability. Discuss

- NBFCs in India are shadow banking entities, with light-touch regulation from the RBI.
- Shadow banks are a group of financial intermediaries facilitating creation of credit in the financial markets but not subject to full-suit regulatory surveillance.
- This allows them to be agile to exploit new business opportunities but may also lead to creative accounting and financial engineering.
- In India NBFCs, typically, lend at high interest rates, by sourcing funds from commercial banks.
- Some public sector banks were put under the RBI's Prompt Corrective Action framework, which restricted growth of their business.



- As a result, some NBFCs capitalised on this opportunity and expanded their balance-sheet size rapidly. In the process, NBFCs ended up giving loans to non-creditworthy/non-investment grade borrowers, too.
- They borrow through money market instruments such as Commercial Paper for cost effectiveness and keep rolling them over to fund their long-term loan assets, thereby facing asset-liability mismatches apart from liquidity and re-pricing risks.
- Systemic risks should be properly mitigated by preventing NBFCs from maintaining relationships with banks/financial institutions.
- The RBI has to ring-fence NBFCs by constantly monitoring them through CAMELS (Capital adequacy, Asset quality, Management efficiency, Earnings, Liquidity, Systems), and risk based performance supervision frameworks.

Will the Limited Liability Partnership (LLP) Amendment Bill 2021 provide an impetus to the ease of doing business reforms? Analyse

- The government shepherded the Limited Liability Partnership (LLP) Amendment Bill, 2021 through Parliament in an attempt to provide an impetus to the 'ease of doing business' reforms.
- It is essential to understand that an LLP, by virtue of its structure, enjoys the benefit of fewer compliance and due diligence laws compared to a corporate governed by the Companies Act, 2013.
- It has widened the scope to raise capital through the issue of non-convertible debentures, introduced auditing standards, special courts and a class of Small LLP as a parallel to the small corporates under the Companies Act.
- For a better adjudication process, the amendment also mandates the establishment of Appellate Tribunals, and Special Courts for speedier trials.
- For instance, non-compliance of quasi-judicial orders will now be dealt under the contempt jurisdiction of the tribunals formed under the Act to adjudicate and resolve corporate civil disputes.
- It has been introduced to expand the risk appetite of the LLPs, thereby increasing their expected profit margins.
- A cursory glance at the amendment sheds a ray of hope among start-ups and smaller corporate entities.
- Earlier, the authorities had opened up the LLP for foreign investment via the automatic route. This amendment is projected to deepen the bond market, and enhance taxation efficiency, thereby furthering the ease of doing business.



Despite the uncertainties, it is rational for the Monetary Policy Committee to support the recovery of the economy and be in line with the projected inflation. Discuss

KEY POINTS

- In the monetary policy resolution announced, the Monetary Policy Committee (MPC) decided to keep the policy repo rate under the liquidity adjustment facility (LAF) unchanged at 4 per cent, and consequently, the reverse repo rate and the marginal standing facility (MSF) rate were also kept unchanged.
- It also decided to continue with the accommodative monetary policy stance till the economy recovers from the shock of the Covid-19.
- However, the minutes of the MPC meeting indicated that there was some divergence of opinion among the MPC members regarding this resolution.
- The dissenting view argued against the accommodative stance of the MPC as the projected inflation is beyond the target inflation rate set.
- While a plurality of views within the MPC could make the monetary policy decision-making process more mature.
- The latest quarterly GDP statistics show that though there is a significant quarter-on-quarter nominal growth rate, that is largely because of the base effect.
- It also shows that in real terms, many industrial and services sub-sectors have not yet reached the pre-Covid
 production levels.
- There was also a suggestion in the MPC committee that the reverse-reportate should be increased.
- The reverse-repo rate allows the banks to park their additional funds with the RBI and earn interest rates.
- Unlike some of the developed countries, the size of the fiscal policy measures has been relatively modest in India.

A citizen may be financially included but may not be financially integral part of the Indian economy. Analyse in the context of financial inclusion

- The country fall short the adequacy of the financial products that people find access to. The journey from inclusion to integration is not only about making products available and accessible, but also about making them relevant, applicable, and acceptable.
- The first challenge in making products broadly available is bridging the gap between supply and demand of capital.
- For India to overcome these challenges, the existing infrastructure must be adapted to our new purpose, providing easy-to-use, customer-centric experiences.
- It is also critical we recognise that the conventional method of one-size-fits-all is no longer viable.



- Products must be designed and delivered intelligently to meet the customer where they are, and by keeping in mind that they use products to reach their goals.
- This involves tailoring the products to the needs and income profile of the customer, including being cognisant of their environment, geography, and demography.
- Financial service providers are consequently dissuaded from attempting to reach rural, financially excluded groups, and the availability of financial services, therefore, remains an urban privilege.
- By using the power of machine learning and cloud infrastructure, we can significantly lower operating costs while offering customers affordable, bespoke financial products that help them reach their goals.
- Financial education assists people in making sound financial decisions. These are not just challenges of the Indian market, but other economies too.

Card Tokenization can enhance customer confidence on digital payments, also making payment transaction convenient. Elaborate

KEY POINTS

- Tokenisation is a process of replacing sensitive data with non-sensitive data. In payments cards industry, it is typically used to replace cardholder's card number (i.e., PAN) with a surrogate value called a 'token'.
- Tokenisation provides for both convenience and security of payment transactions. The concept has been widely adopted in the payment card industry globally.
- The increasing adoption of digital payments begets demands for further improving convenience, resilience, security, real-time and cost.
- Multiple methods of tokenisation exist within payments and vary depending on the parties in the payment ecosystem (merchants, acquirers, card networks or issuers).
- In merchants' or acquirers' tokenisation method, sensitive card information is stored in a secured vault and a token is used for processing payment transactions within their environment.
- Tokenisation can be implemented using a variety of storage mechanisms viz. device-based, cloud based, app-based and card-on-file (CoF) and payment channels like NFC, MST, in-app, QR code, etc.
- RBI laid down directions for card tokenisation whereby, as an initial step, card-network-enabled tokenisation was allowed through mobile phones and tablets.
- The new extension has enabled the industry to offer tokenisation service benefits of enhanced security, reduced fraud risk and less payment disruption (also read dropouts) across a wide variety of use cases.

The creation of bad banks will enable the growth of the Indian economy in various ways. Do you agree with this view? Comment

KEY POINTS

• One of the recently announced reforms pertains to reducing frictions when it comes to allocation of capital across various sectors, especially when capital is stuck in inefficient firms or in unviable projects.



- It is regarding the Cabinet approval for what is commonly referred to as a 'NARCL' —National Assets Reconstruction Company Limited.
- It addresses a major bottleneck to India's growth over the last few years due to heightened risk aversion in the banking sector.
- This risk aversion was largely an outcome of piling up of non-performing assets in the system due to excessive lending between 2008 to 2012.
- The mechanism is such that the bad bank will pay the banks and purchase these NPAs while it works on recovering the money that is owed to the banks.
- While the National Asset Reconstruction Company Limited (NARCL) will acquire assets from various banks,
 the India Debt Resolution Company Ltd (IDRCL) will be responsible for management of these assets.
- The structure of the bad bank is conducive for providing a final solution to the banking sector stress and it builds on a series of other reforms that have been initiated since 2015.
- Hopefully, this will culminate the legacy issue of NPAs once and for all and in process it will create a far more resilient, modern and dynamic banking sector.

Discuss the possible and feasible fiscal strategies that are required for sustaining the economic growth of the country.

- Central direct taxes peaked at 6 per cent of GDP in 2018-19. The average over the last decade was 5.5 per cent it rose to 6 then fell.
- The 15th Finance Commission (FC) estimates the feasible improvement of tax/GDP ratio is 0.7 percentage points each for the Union and the States by 2025-26.
- The quality and composition of Centre and State spending can be improved by restructuring expenditure towards raising capacity and lowering costs. Direct benefit transfers are reducing leakages.
- Since past decisions have left the government with large resources that are poorly monetised, asset monetisation can help transform the expenditure profile to supporting quality public goods and services.
- Income tax payers are still disproportionately low, comprising largely of the salaried, but even so the share of households in direct taxes has risen to 75 per cent.
- Technology and databases can be used to increase the tax base, while keeping rates reasonable, even as taxpayer compliance costs, harassment and litigation are reduced.
- Industrial policy that uses taxes/tariffs/subsidies to promote activity must be time-barred and conditional with strict sunset clauses.
- Local taxes and user charges have to rise as part of empowering the 3rd Tier and will be more acceptable to the extent they are linked to clear benefits.



A fool-proof cyber security system needs to become a primary focus for a rapidly digitizing Banking, Financial services, and insurance (BFSI) system. Examine

KEY POINTS

• Taking into account that there have been data breaches for technologically savvy banks as well, financial institutions need to start looking at cybersecurity as a priority.

The threats

Phishing

• Attempting to obtain sensitive information such as credit card details, etc. for fraudulent activities, by disguising oneself as an authentic, trustworthy entity via electronic communication is known as phishing.

Unencrypted data

 One of the most common issues faced by banks today, is unencrypted data, which becomes a gateway for hackers or cybercriminals.

The challenges

- As is the case with the new technology introduction, raising awareness amongst people regarding cybersecurity has been quite a challenge.
- With the advent of social media and its increased adoption, hackers have learned to exploit the medium.
- Recent global attacks have brought to everyone's notice the threat posed by ransomware.

The solutions

Integrated security

• Integrated security hence, becomes much beneficial, as the various elements can work and communicate together.

Machine learning and big data analytics

Data analytics and machine learning are essential for leveraging cyber resilience.

Anti-virus and anti-malware applications

- Updated antivirus and anti-malware applications offer the best protection from attacks that can be potentially disastrous.
- Hence, a fool-proof cybersecurity system, that doesn't compromise with data pertaining to customers and financial institutions, is something that needs to become a primary focus for a rapidly digitising BFSI system.



North Eastern Region offer tremendous potential in terms of growth and development of the services sector. Examine

KEY POINTS

• The 'Look East' policy of 1991 gave way to the 'Act East' policy" of 2015. The objective of the latter is to promote economic cooperation, cultural ties and strategic relationship with countries in the Asia-Pacific region.

Financial services

- Barring Sikkim, the NER lags behind in terms of financial inclusion.
- The sector can spur regional growth and it has both efficiency and equity implications.

ICT connectivity

• If India can tap into Bangladesh's submarine cable networks, then a combination of optical fibre, satellite and microwave technologies could be used to provide digital connectivity in NER.

Tea and bamboo:

- India's tea infrastructure and regulations are far superior to those of its neighbours.
- Online Indian tea auctions provide transparent prices.
- Tourism:
- The natural beauty combined with its religious and historical sites can spur tourism.
- Both short and long trips can generate foreign revenue. The border haats between India and Bangladesh must be enhanced.

Logistics

- The current infrastructural investment will boost demand for logistics services. India is developing several airports in the region.
- Bagdogra airport, Darjeeling, is the only international airport in North Bengal, and it is close to many districts in Bangladesh and Nepal.

9. ENERGY

In the context of Draft electricity rules 2021, discuss the various challenges present in providing open access to the green energy in the country.

- Ministry of Power came out with the Draft Electricity (Promoting renewable energy through Green Energy Open Access) Rules, 2021.
- State after State, electricity distribution utilities (Discoms) have ensured that open access never emerged a viable alternative for industries or for generators.



- Issues like delays in government approval for such an arrangement, restrictions imposed on open access transactions, transmission charges, cross-subsidy surcharges, wheeling losses and charges, transmission and distribution losses have ensured open access remains economically unviable.
- The quantum of green hydrogen would be computed by considering the equivalence to the green hydrogen produced from one MWh of electricity from the renewable sources or it's multiple.
- These draft rules also propose guidelines for green energy open access and state that the Appropriate Commission shall put in place regulations in accordance with this Rule to provide Green Energy Open Access to consumers who are willing to consume the green energy.
- The implementation would require support from SERCs (State Electricity Regulatory Commissions) and State Discoms, given that the intra-State open access regulations are governed by the respective State regulators.
- While it is a positive move to let renewable generators supply directly to consumers and regulators now will have to make the required rules, what needs to be seen is its implementation by the Discoms.

10.INFRASTRUCTURE

The government needs to invest in transport and logistics to put India's exports on a sustained growth path. Substantiate

- Over the past few months, there has been a high degree of optimism regarding India's export prospects,
- There are good reasons for optimism; exports have exceeded \$163 billion, which is nearly 23% higher than the level achieved in the corresponding period in 2019-20.
- India's exports surged on the back of consistent recovery of the global economy, especially in the country's main export destinations.
- India's exporters must override these uncertainties to maintain the exceptional growth in exports recorded in the first half of 2021.
- The government has lent a helping hand to exporters by notifying the new export promotion scheme, the Remission of Duties and Taxes on Exported Products (RoDTEP).
- Efficiencies of trade-related infrastructure in India continue to be relatively low, notwithstanding the improvements over the past decade.
- Consider, for example, the turnaround time of ships in ports, which is an indicator of how efficiently ports can handle cargoes.
- In 2020, the average turnaround time for Indian ports was 2.62 days, while the global average in 2019 was 0.97 days.
- Thus, bridging the gap in port efficiencies can make considerable dent in the cost of doing business, thereby lending competitive edge to India's exports.



11. S&T

Do you think that the country is assured of significant growth in this era of distributed intelligence? Explain

KEY POINTS

• Distributed intelligence refers to separating the processing in a large system into multiple subsystems or extracting certain functions from the main system and placing them into separate sub-system.

India's strengths

- With India's large population, the amount of data being generated and processed in the cloud and on devices across the country is unmatched.
- The data generated by this ecosystem can be used to provide detailed user insights for further growth and development.
- The Indian government is actively involved in seeding new innovation, with supportive policies such as the National Strategy on Artificial Intelligence by NITI Aayog.

Innovative use cases

- India's Ministry of Power launched its Smart Meter National Programme, which put distributed intelligence to use and enabled distributors to achieve 95 per cent billing efficiency.
- Amazon launched its Smart Storess program in India, turning retail stores into "digital storefronts" that allow smart and contactless product selections and payments.
- By deploying smart agriculture-as-a-service solutions, using smart sensors and other devices to generate data and develop insights on factors like weather and soil conditions.
- Distributed intelligence presented solutions with healthcare systems that offer contactless continuous remote monitoring of patients in hospitals or homes.
- As the pandemic forced the closure of schools and colleges, several solutions emerged to change how students learn inside and outside the classroom.

12. DISASTER MANAGEMENT

In order to manage the after effects of tropical cyclonic storms India must create a social safety net. Do you agree with this view? Comment

KEY POINTS

• Tropical cyclones laden with moisture and accumulated energy pose a growing challenge, as they have the propensity to inflict heavy damage to lives and property.



- There have been some distressing deaths and inevitable material losses for many, and the focus must now be on relief and rehabilitation:
- The northern Indian Ocean, of which the Arabian Sea and the Bay of Bengal are a part, experiences only a minority of tropical storms annually.
- Their destructive impact on the subcontinent is severe due to a dense population and poor capacity to absorb large quantities of rainfall dumped in a short period over cities and towns.
- Financial arrangements to insure the population against material losses also remain weak, and as the
 experience in West Bengal with cyclone Amphan demonstrated last year, relief measures can easily fall victim
 to corruption.
- The IPCC, in its scientific report on 1.5° C warming, said with a high degree of confidence that changes in the climate system, including the proportion of tropical cyclones, would experience a larger impact from increasing warming.
- The Centre and all States cannot afford to allow large-scale losses to communities to continue each year, and, going beyond disaster response, must put in place institutional structures and insurance systems for financial protection.
- Cities must prepare to harvest every deluge that brings vast quantities of water, so vital to sustain mass populations.

13. INTERNAL SECURITY

Addressing smaller insurgencies in the north eastern region is crucial for enhancing internal security of the country. Elaborate

- The tripartite agreement signed by the Centre, insurgent groups active in Karbi Anglong, and the Assam government, marks the culmination of an extended process of negotiation to end insurgency in the region.
- According to the Memorandum of Settlement, greater autonomy will be devolved to the Karbi Anglong Autonomous Council; the identity, language, culture of Karbi people will be protected.
- The Naga insurgency has been an inspiration for these separatist movements, which exploit alienation caused by an insensitive and exploitative state, and engage in extortion.
- They have tried to build on older memories of kinship and legacies of ancient kingdoms and refute the umbrella of the nation state.
- Insurgents who negotiate for peace are accommodated in state legislatures or Autonomous Councils.
- In Assam's hill districts of Dima Hasao and Karbi Anglong, separatism that rejected Sixth Schedule status transformed into a demand for an autonomous state under Article 244(a) of the Constitution after militancy peaked in the 1990s.



- The Karbi Anglong agreement falls short of fulfilling that demand though it promises more autonomy than currently enjoyed by the Autonomous Council under the Sixth Schedule of the Constitution.
- Autonomous Councils are often captured by vested interests, who invoke fears of a militant past, and the enhanced development funds are diverted to private parties.

Though the threat of insurgency has reduced in the country, but its potency in some areas still exists. Analyse

KEY POINTS

- Ministry of Home Affairs noted that the geographical influence of the Maoists has reduced from 96 districts in
 10 States in 2010 to 41 now.
- Armed struggle has found few takers beyond select pockets untouched by development or linkages with the welfare state;
- The organisation is limited to the remote and densely forested terrains of central and east-central India.
- This has followed the predictable path of most Maoist insurrections that retained armed struggle to achieve their aims in the Philippines and Peru, for example leaving behind death and violence rather than enabling genuine uplift of the poor.
- The Maoist insurgency still has potency in South Bastar in Chhattisgarh, the Andhra-Odisha border and in some districts in Jharkhand.
- These States must focus on expansive welfare and infrastructure building even as security forces try to weaken the Maoists.
- The Maoists must be compelled to give up their armed struggle and this can only happen if the tribal people and civil society activists promoting peace are also empowered.
- The Union government and the States must continue to learn from successes such as the expansion of welfare and rights paradigms in limiting the movement.

14. ENVIRONMENT

Considering the significance of Himalayan region, the Government of India needs to regulate the construction of hydroelectric projects. Substantiate

- In every disaster, the increasing anthropogenic pressure in this area has been found to be a direct or an indirect contributor.
- The most recent example is the Rishi-Ganga valley disaster which claimed over 200 lives as the river turned into a flood carrying a heavy load of silt and debris and demolishing hydropower projects along its course.



- The affidavit filed recently by the Ministry of Environment, Forest and Climate Change (MoEFCC) in an ongoing matter in the Supreme Court of India has recommended the construction of seven partially constructed hydroelectric projects in the Uttarakhand Himalaya.
- After the Kedarnath tragedy of 2013, in suo motu cognisance by the Supreme Court, an expert body (EB-I) was
 constituted to investigate whether the "mushrooming of hydro-power projects" in the State of Uttarakhand
 was linked to the disaster.
- In its findings, EB-I said there was a "direct and indirect impact" of these dams in aggravating the disaster.
- The sustainability of the dams in the long term is highly questionable as hydropower solely relies on the excess availability of water.
- The recent events such as the Rishi Ganga tragedy and the disasters of 2012 (flashfloods), 2013 are examples of how hydroelectric projects which come in the way of high-velocity flows aggravate.

How does the green hydrogen act as clean alternative fuel and helps in aiding the word decarbonisation goals? Explain

KEY POINTS

- 'Green hydrogen', the emerging novel concept, is a zero-carbon fuel made by electrolysis using renewable power from wind and solar to split water into hydrogen and oxygen.
- This 'Green hydrogen' can be utilised for the generation of power from natural sources wind or solar systems and will be a major step forward in achieving the target of 'net zero' emission.
- According to studies by the International Renewable Energy Agency (IREA), the production cost of this 'green source of energy' is expected to be around \$1.5 per kilogram ,by the year 2030
- India is also gradually unveiling its plans. The Indian Railways have announced the country's first experiment of a hydrogen-fuel cell technology-based train by retrofitting an existing diesel engine; this will run under Northern Railway on the 89 km stretch between Sonepat and Jind.
- The project will not only ensure diesel savings to the tune of several lakhs annually but will also prevent the emission of 0.72 kilo tons of particulate matter and 11.12 kilo tons of carbon per annum.
- It is high time to catch up with the rest of the world by going in for clean energy, decarbonising the economy and adopting 'Green hydrogen' as an environment-friendly and safe fuel for the next generations.

As climate targets evolve, investment criteria change and trade barriers emerge, India needs to consider various technological options. Explain

- Carbon capture, utilisation and storage (CCUS) involves capturing emissions from a power plant or industrial unit and either reusing it for another purpose or sequestering it in geologically feasible location.
- Renewables, alone, will not suffice. Heavy industries need high-intensity heat.



- Industries will account for nearly a third of India's emissions in 2050, at which time nearly two-thirds of industrial energy would still be derived from fossil fuels.
- Without CCS/CCUS, the path to decarbonising the industrial sector becomes that much harder.
- The push for green (renewables-derived) hydrogen is certainly helpful, but CCS would play a role in bending the emissions curve.
- CCUS continues to faces three key challenges: It is still too expensive, risky (public concerns about safe carbon storage), even if carbon could be embedded in products like synthetic fuels, CCUS does not remove atmospheric CO2.
- The options range from nature-based solutions, like forests and regenerative farming, to converting biomass, burning it in power plants and capturing carbon.
- Some firms are already experimenting with internal carbon prices before choosing technologies.
- The transition to a low-carbon future is both necessary and complicated. After renewables, industrial emissions reduction and atmospheric carbon removal will be frontiers of climate technologies.
