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G.S PAPER I

1. SOCIETY

In what ways the patents hurdle can be avoided ensuring social justice and improvising the battle against pandemic. Elaborate

KEY POINTS

- In order to achieve global herd immunity and prevent new strains of COVID-19, vaccines need to be affordable.
- This can happen through patent owners voluntarily licensing their products to other companies, especially Indian producers who are experienced at mass-producing low-cost medications.
- This can also be done by temporarily suspending patent rights for COVID vaccines, an option that is being pursued by India and South Africa through the World Trade Organization (WTO).
- Decades of struggles over patent rights and access to medications for HIV/AIDS demonstrate that it is possible to navigate patent restrictions using something called “voluntary licenses” where a patent holder decides to license a product to other producers.
- While TRIPS alarmed public health experts because of its potential to raise the price of essential medicines, voluntary licensing agreements between pharmaceutical producers were able to bring down the price of AIDS medications despite the TRIPS regulations.
- The Doha addendum, Section 5c, offers AIDS, malaria and tuberculosis as examples of what qualifies as a health emergency. By this standard, COVID-19 should easily qualify.
- Some favour ensuring access to COVID-19 vaccines through the COVAX programme, which was established to purchase vaccine doses and donate them to low-income countries but does not involve modifying patent rights.

The pandemic has highlighted that to handle any social problem there is a need for a collective action that coordinates the aspirations of several groups of stakeholders. Explain

KEY POINTS

- Community actions enabled society to overcome the failure of the state and market.
- The empowered group of secretaries has also identified the role of civil society during this period of crisis.
- The task for the NITI Aayog should be to address specific issues involving the pandemic without losing much time.
- NITI should create mechanisms for facilitating the creation of a required space for community initiatives that are already playing an important role.
- NITI should partner with willing state governments to explore the launch of platforms that promote cross-learning and experience-sharing to reduce the cost of operations and to avoid reinventing the wheel.
- The scope for the usual bureaucratic hassles should be minimised and opportunities for participation of communities in decision making and their implementation at local levels may be explored.



- The advantage for NITI is DARPAN, its portal for all voluntary organisations/non-governmental organisations engaged in development activities.
- The challenge would be to work on an ecosystem that facilitates the entry of new actors, which have grown out of new social and economic policies. Several informal entities, start-ups and others, at times undefined, may also have to be engaged.
- Breathe India and HelpNow represent an array of options that have come up from IITians. These apps have facilitated access to oxygen concentrators, hospitals and ambulances.

2. GEOGRAPHY

Though the forecast of cyclones are accurate, government of India is still facing huge challenges in mitigating its impacts. Examine

KEY POINTS

- Cyclone Tauktae swelled into an extremely severe cyclonic storm, dumping enormous volumes of water all along the west coast, and caused loss of life in Kerala, Karnataka, Goa, Maharashtra and Gujarat, before weakening overland.
- This year's pre-monsoon season presented a double jeopardy, caught as they were between a fast-spreading virus variant and an unrelenting storm.
- The twin crises have, however, strained the capacities of multiple States, especially the coastal ones.
- The India Meteorological Department (IMD) launched an impact-based cyclone warning system designed to reduce economic losses by focusing on districts and specific locations.
- Together with ground mapping of vulnerabilities, this is a promising approach to avoid loss of life and destruction of property.
- The importance of precise early warnings cannot be overemphasised, considering that the Arabian Sea has emerged as a major source of severe cyclones.
- Their intensity is aggravated by long-term rise in sea surface temperatures linked to pollution over South Asia and its neighbourhood.
- Build sturdy homes of suitable design, create adequate storm shelters, provide accurate early warnings, and ensure financial protection against calamities through insurance for property and assets.



GS PAPER -II

3. INDIAN POLITY

The Union government must ensure convergence of political will by setting up a National Unity Cabinet with the purpose of overcoming the pandemic situation. Explain

KEY POINTS

- International Labour Organization notes that at least 400 million informal workers have been pushed into poverty by the pandemic.
- Unity Cabinet would encompass India's best minds representing the Opposition, professionals and industry leaders with proven expertise.
- The decision-making in such a cabinet will not be blinkered by individual ideological proclivities.
- Apart from instilling a sense of trust and hope, the Unity Cabinet would be equipped and empowered to specifically tackle the combined financial, social, and health crises gripping our country.
- Since Parliament is in recess and parliamentary panel virtual meets have also been ruled out, the National Unity Cabinet can approve ordinances that allow for a preemptive policy-based approach, rather than relying on GOs that tend to be ad-hoc in nature.
- A Unity Cabinet can also forge domestic solidarity that would enable India to be more assertive in international fora to ensure unimpeded imports of crucial materials and secure intellectual property rights exemptions.
- The Supreme Court, very recently, set up a National Task Force (NTF) to streamline oxygen allocation and guarantee the availability of essential drugs, medicines to the states.
- The Cabinet Secretary will act as its convenor comprising doctors and medical experts across the country.

4. JUDICIARY

Do you think that the judicial intervention during pandemic encroached the executive domain in the country? Examine

KEY POINTS

- Judicial intervention in response to the Union government's response to the health crisis, with the Supreme Court order forming a 12-member national task force for the effective and transparent allocation of medical oxygen to the States and Union Territories.
- The Court has also mandated it to review and suggest measures for ensuring the availability of essential drugs and remedial measures to meet future emergencies during the pandemic.
- When the Karnataka High Court ordered last week that the Centre should supply 1,200 tonnes of medical oxygen daily to the State, the Centre rushed with a challenge to the apex court.

- Several High Courts and the Supreme Court are examining different aspects of the pandemic response, including availability of beds and oxygen.
- The trend did raise concerns about the judiciary encroaching on the executive domain.
- There is some merit in the argument that allocation of resources based on a formula related to the present and projected requirements of each State is indeed an executive function.
- However, as the daily infection numbers and death toll have acquired frightening levels, the constitutional courts felt obliged to take it upon themselves to protect the right to life and good health of the population.
- The Court was not usurping the executive's role, but only wanted to facilitate a dialogue among stakeholders.

Does establishing the National Tribunal Commission entail restructuring of the present tribunals system in the country? Analyse

KEY POINTS

- The Ordinance Tribunals Reforms (Rationalisation and Conditions of Service) Ordinance 2021 has met with sharp criticism for not only bypassing the usual legislative process, but also for abolishing several tribunals such as the Film Certification Appellate Tribunal without any stakeholder consultation.
- Developing an independent oversight body for accountable governance requires a legal framework that protects its independence and impartiality.
- In India, executive interference in the functioning of tribunals is often seen in matters of appointment and removal of tribunal members, as well as in provision of finances, infrastructure, personnel and other resources required for day-to-day functioning of the tribunals.
- One of the main reasons that has motivated the idea of NTC is the need for an authority to support uniform administration across all tribunals.
- The NTC could therefore pave the way for the separation of the administrative and judicial functions carried out by various tribunals.
- A 'corporatised' structure of NTC with a Board, a CEO and a Secretariat will allow it to scale up its services and provide requisite administrative support to all tribunals across the country.
- It could set performance standards for the efficiency of tribunals and their own administrative processes.
- Administrative roles of the NTC include providing support services to tribunal members, litigants, and their lawyers.
- For this purpose, it would need to be able to hire and supervise administrative staff, and to consolidate, improve, and modernise tribunals' infrastructure.

The Supreme Court's digitalisation vision is expected to improve the access to justice in the country. Substantiate

KEY POINTS

- Citizen-centric services that have been disrupted or perhaps irreversibly altered have required a recalibration.
- Access to justice is a key citizen need that requires a futuristic approach to enhance efficiency, equity, and ease.
- The Supreme Court of India's eCourts Committee ('Vision'), phase- 3 is a progressive and transformational roadmap for how technology and justice can be intertwined and optimised.
- This allows innovation and downstream benefits of real-time big data to accrue to all who are involved with delivery of justice in India.
- A key NITI Aayog reform, and focused upon in the Vision, is Online Dispute Resolution (ODR).
- The NITI Aayog established a committee chaired by Justice (Retd) AK Sikri to formulate an action plan for ODR in India.
- The goal is to put in place a report and an action-plan that enables ODR in a sustainable framework now and adapts to become an option of first recourse for several categories of claims in a dynamic fashion.
- The key goals and strategy prioritise the creation of a core digital infrastructure that can enable the development of services for dispute containment and resolution by the judiciary.
- Benefits for citizens include more optimal scheduling mechanisms, online digital filings, and different mediums of hearings, thereby increasing timely access to courts from anywhere.

5. GOVERNANCE

Lack of planning is the major reason behind the shortage of equipments during pandemic crisis. Do you agree with this view? Elaborate

KEY POINTS

- People are constantly calling Lokmat offices seeking help to secure beds, obtain oxygen cylinders or arrange for vaccines and medicines. The situation is horrifying.
- The Indian-made Covaxin, which was being distributed free, will now cost Rs 400 to the states and Rs 1,200 to private hospitals.
- When the private hospitals were converted into vaccination centres, it was announced by the Prime Minister that Rs 250 will be the ceiling Rs 150 towards cost of the vaccine plus Rs 100 towards the service charge.
- CNN recently reported a Washington University study that claims that the death toll in India could rise to more than 13,000 a day.
- Short-sightedness and a lack of timely preparation is a big reason for this situation. Senior officials and experts in the government knew that there is no option other than the vaccine in the fight against COVID.

- The Serum Institute invested Rs 2,000 crore on its own and received Rs 2,200 crore from the Bill and Melinda Gates Foundation.
- There should be micro-planning at the local level and a website for every district to dispense complete information from beds to oxygen, medicines and ventilators at a click.
- There is a need to accelerate the vaccination drive in the rural areas as well.

A federal country with unitary bias has the responsibility to maintain the balance between political leadership at central and state levels. Critically analyse

KEY POINTS

- It is an obligation of the Centre to refrain from bypassing the elected leadership while dealing with States.
- The Prime Minister addressing district magistrates, or collectors, does have a precedent. The defence then was that such direct interactions were permissible under the Constitution, citing Articles 256 and 257.
- These provisions stipulate that the States are obliged to comply with laws made by Parliament and also allow some directions from the Union government.
- If the Prime Minister belongs to one party, and the officials addressed are from a State run by another, there is bound to be resentment that the elected representatives of the State are being bypassed.
- In the present case, it is true that the Centre has a major role in the pandemic response. The Disaster Management Act has been invoked to specify guidelines on lockdowns, restrictions and relaxations and to ensure smooth medical supplies.
- However, it would be in the larger interest of the country if events and discussions are held in such a way that the political structures at the State are not seen to be undermined.

Indian bureaucratic machinery requires the approach of new public governance model for better service delivery to its citizens. Analyse

KEY POINTS

- Despite its efforts, bureaucracy has emerged as a major concern for the ineffective response to the COVID-19 crisis. This inadequacy is the reflection of the outdated nature of public bureaucracy.
- A generalist officer is deemed an expert and as a result, superior, even if the officer works in one department or ministry today and in another tomorrow.
- Specialists in every government department have to remain subordinate to the generalist officers.
- Healthcare professionals who are specialists have been made to work under generalist officers and the policy options have been left to the generalists when they should be in the hands of the specialists.
- The reform often suggested in India is new public management. This as a reform movement promotes privatisation and managerial techniques of the private sector as an effective tool to seek improvements in public service delivery and governance.



- The most appropriate administrative reform is the model of new public governance.
- This model is based on collaborative governance in which the public sector, private players and civil society, especially public service organisations (NGOs), work together for effective public service delivery.
- As part of new public governance, a network of social actors and private players would take responsibility in various aspects of governance with public bureaucracy steering the ship rather than rowing it.

6. GOVERNMENT POLICIES

In the context of pandemic, discuss about the social security schemes that should be given priority by the government to sustain the livelihood of labour.

KEY POINTS

- The Indian economy had been slowing down even before the pandemic, and suffered from low job creation and chronically poor working conditions for a large chunk of the labour force.
- The researchers estimate nearly 15 million workers were unable to find work at the end of 2020, from the 100 million that lost jobs in the April – May 2020 lockdown.
- During the lockdown, 61% of working men remain employed and 7% lost employment while only 19% of women workers remained employed while a whopping 47% suffered a permanent job-loss at the end of 2020.

Priority

- The Union government will need to make larger allocations to MGNREGA while PDS and Jan-Dhan can be used to mitigate immediate pain.
- National Social Assistance Programme, to uphold the provisions of article 41 of the constitution, the government needs to come with a scheme to ensure social security and old-age support for workers.
- PMEGP, Pradhan Mantri Employment guarantee programme a credit-linked subsidy scheme which promotes self-employment through setting up of micro-enterprises, where subsidy up to 35% is provided by the Government through Ministry of MSME.

Recognizing the importance of National Cadet Corps at university level will strengthen the educational outcomes of the youth in India. Discuss

KEY POINTS

- University Grants Commission (UGC) forwarded for consideration to all vice-chancellors of universities across India a proposal of the Directorate General, National Cadet Corps (NCC), aimed at including NCC as an elective subject in curricula.
- NCC is the world's largest uniformed youth volunteer organisation. It has a better gender ratio than any other uniformed organisation in the country with girl cadets accounting for one-third of the total.
- NCC training has a transformative effect, making cadets more disciplined and committed.

- They learn to relate to common people including during crises and empathise with larger social and developmental causes.
- NCC tenures should result in extra credit in promotions. This will ensure over time that the senior echelons of the armed forces have sufficient exposure to Indian society and its aspirations.
- NCC structure needs to evolve in a direction in which the youth, regardless of socio-economic background, are drawn to it as a means of advancing both character and career and rendering national service.
- A better mix of cadets will promote cohesion among the youth, particularly through the camaraderie experienced during training camps.
- The UGC has taken a good step but whether the universities will accept the proposal is not assured.

Urgent action from central government is the need of the hour to save rural India from the impacts of pandemic. Explain

KEY POINTS

- The Covid-19 crisis is forcing us to evaluate our priorities. It is important that the government executes and implements the delivery of vaccines and healthcare services on a war footing.
- The panchayat is now pivotal for tackling the Covid-19 epidemic as the virus has reached the villages and is rapidly ravaging the countryside.
- State officials and district commissioners should actively report both positive numbers and deaths as it is important to have the right data.
- If the state government underreports the numbers or fudges the data, it will harm, rather than help, the state as it will get a lower allocation of oxygen and more deaths will follow.
- In a village, families with Covid-positive members should be given kits consisting of medicine, thermometers and oximeters.
- It is important for the caregivers to know the oxygen level if they need to understand the severity of the infection. Village homes do not have oximeters or even thermometers; providing these should be an immediate task.
- The delivery of the kits should be made through the panchayat as most panchayats are headless, especially in Haryana, after their terms expired.
- For this provision, there has to be correct testing data, and mobile testing vans need to be introduced in service immediately.
- The Union government should decentralise crucial decisions to the state governments. The state governments must trust its officers to deliver.



Considering the pandemic, priority should be give to the laws and procedures for the care and protection of orphaned children. Discuss

KEY POINTS

- The second wave of the COVID-19 pandemic now sweeping India has left many children orphaned and vulnerable.

Options to help

- Any individual who finds an orphan child or even any child who needs care and protection under the circumstances, should immediately call the toll free Childline number 1098.
- Intimate the district protection officer concerned whose contact details can be found on the National Tracking System for Missing and Vulnerable Children portal.
- Approach the nearest police station or its child welfare police officer who is specially trained to exclusively deal with children either as victims or juvenile delinquents.

Established process

- The procedure of adoption is totally transparent and its progress can be monitored from the portal of the statutory body, the Central Adoption Resource Authority.
- The Supreme Court in Bachpan Bachao Andolan vs Union of India directed all Directors General of Police, in May 2013, to register a first information report as a case of trafficking or abduction in every case of a missing child.
- Similarly, each district is supposed to have its special juvenile police unit, headed by an officer not below the rank of a Deputy Superintendent of Police.
- Therefore, orphaned children who have lost both their parents or abandoned or surrendered due to the COVID-19 pandemic must not be neglected and left to face an uncertain future.

Considering the present situation, the state needs to do undertake a range of measures that prioritize the right to life of its citizens. Elaborate

KEY POINTS

- The majority of India's working population is today reeling from the impact of multiple crises: a health emergency more ferocious than any in independent India

Criticisms

- The Supreme Court directed the Centre and the State governments of Punjab, Haryana and Uttar Pradesh to provide free rations without insisting on ID proof to all migrant workers.
- It did not extend the facility to the country as a whole; it did not extend the facility to cover cash payments by the state besides meals and ration;

Vaccine

- The most brazen violation of the right to life by the state at present is its vaccine policy.



- Being vaccinated against COVID-19 is essential for defending one's right to life; and since the state must respect everyone's right to life.
- At least 90% of workers are informal, with no legal or social protection, denied adequate compensation over the past year of lockdowns.

Range of measures

- Among them are enabling expanded production and central procurement of COVID-19 vaccines, and distribution to States for free immunisation to all;
- universal access to free foodgrains of 5 kg per month to all those who require it for the next six months; cash transfers of ₹ 7,000 per household for at least three months to those without regular formal employment;
- Increased resources to the Integrated Child Development Services to enable revival and expansion of their programmes;
- Making the MGNREGS purely demand-driven, with no ceilings on the number of days or the number of beneficiaries per household;
- Interstate migrant workers act 1979 to be reformed for the welfare of labours.

In the context of central vista redevelopment project, the government of India should give importance to national archives of India. Explain

KEY POINTS

- The National Archives of India (NAI) complex is slated for major changes under the Central Vista Project.
- Conflicting reports indicate that the heritage structure that is part of the National Archives complex will be retained but that additions to the original plot will be demolished later in the project.
- The lack of clarity around the plans for preservation, transfer and access of these national records is a cause for concern.
- The absence of public consultations and the aggressive pursuit of the Central Vista project during a national crisis raises important questions not just about the future of historical research.
- Archives are essential to the relationship between a state and its citizens. The production, storage, and use of information about the population is central to the work of governance.
- The National Archives' website as of today has no notification about the pending demolition, plans for the safe removal of materials and any indication of how long access might be cut off for the public.
- The pandemic has highlighted the historically constituted regional inequalities.
- In a sense, we collectively imagine the archive as a place for verification, for evidentiary exploration, for empirical robustness, to support the frame of our present reality.



Suggest basic measures which are necessary to handle the consequences of third wave of the pandemic in the country.

KEY POINTS

- The second wave of Covid-19 in India, has overwhelmed society, governments and local administrations. We need to be fully prepared for the third wave.

Measures

- The capacity for vaccine production must be ramped up at the earliest. More compliant units should manufacture at least Covaxin.
- All vaccines must be procured by the Centre at a reasonable price, recommended by an Expert Committee like it is done for essential drugs.
- A special group must examine how testing capacity can be expanded, and quickly. This may require additional manufacturing and availability of consumables and other ancillary requirements.
- A national lockdown perhaps is not desirable, but local lockdowns, depending upon evolving situations, will continue.
- Sufficient beds have to be kept ready at all hospitals. But for each city, town or PHC area, we should have temporary oxygenated hospitals planned which can be made quickly operational.
- Oxygen supplies have to be increased and rationalised. All district hospitals must get oxygen plants, with piped supply in next three months, funded by PM Cares.
- Decentralised centers should be opened where people can refill/exchange empty oxygen cylinders, with supply from the concerned local administration.
- Medical care and treatment protocols must be standardised quickly by an expert group and be well publicised, one that is updated on fortnightly basis.

In order to rebuild the devastating effects of pandemic, India needs to prioritise universal vaccination. Discuss

KEY POINTS

- Immunising a country that is home to almost one-fifth of the world's population is certainly no easy task.
- Across India, only a few private hospitals have the requisite inventory to vaccinate this age group. Because of scarcity of vaccines, many states have already rolled back their inoculation programs for the newly added segment.
- CoWin and Arogya Setu Apps have furthered our vaccine inequity. It is difficult for anyone without a certain degree of technical know-how to navigate them.
- India will have to urgently accelerate vaccine production to get over these shortcomings.
- The Serum Institute of India currently produces 2.4 million doses a day, and Bharat Biotech will produce around two million shortly.

- The government could invoke compulsory licensing to transfer technology from our existing manufacturers to other organisations with capacity.
- There are a few organisations within and outside India working on intranasal and oral drop COVID-19 vaccines.
- These projects, if successful, would be game-changers, as these highly scalable solutions are ideal for Indian conditions.
- New viral strains are proving to be dangerous to even the younger population, including children.
- With more mutations and future waves looming over us, recovering and rebuilding from the devastating social and economic ill effects of the virus.

Reforming the Protection of Children from Sexual Offences Act 2012 is necessary to account for the better protection of children. Do you agree with this view? Comment

KEY POINTS

- India has sought to “protect children from offences of sexual assault, sexual harassment and pornography” through the Protection of Children from Sexual Offences Act (POCSO).
- With growing international jurisprudence around these issues, and in line with the UN Convention on the Rights of the Child, India must revise its legal and procedural methods to deal with historical child sexual abuse.
- Provisions in the Criminal Procedure Code (CrPC) prohibit judicial magistrates from taking cognisance of cases beyond a specific time period.
- As such, any reporting of an offence, under Section 354 of the IPC, more than three years after the date of incident would be barred by the CrPC.
- This presents an insurmountable legal barrier against the registration of historical child sexual offences which took place before 2012.
- One of the major drawbacks of delayed reporting is the lack of evidence to advance prosecution.
- Union Ministry of Law and Justice, at the request of the then Minister for Women and Child Development, clarified that no time limit shall apply for POCSO cases.
- Though this was a welcome clarification and would help strengthen the POCSO jurisprudence, it still fails to address the plight of children who were victims of sexual abuse before 2012.



As several states are under lockdown again, urgent response is needed from the centre to overcome distress in rural areas. Discuss

KEY POINTS

- Right to Food campaign and the Centre for Equity Studies published a 'Hunger Watch' report which compared the pre-lockdown situation to assess the impact of the nationwide lockdown.
- The migrants have again become vulnerable due to the lockdown in different cities.
- 81% of the people whom they reached out to said that work had mostly stopped since 2021 and 76% of the workers said they are short of food and cash and require immediate support.
- In this context, there is an urgent need to strengthen the public distribution system (PDS) and the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).
- The government should expand PDS coverage immediately and include all eligible households under the schemes.
- The Centre had allocated ₹ 73,000 crore for 2021-22 for MGNREGS and notified an annual increment of about 4% in wages.
- A large population is facing hunger and a cash crunch. The situation is only becoming more dire as the pandemic continues to rage on. Therefore, the Union government should prioritise food and work for all and start making policy reforms right away.

Government of India needs to intervene in the dairy sector to prevent the impending crisis. Analyse, in the context of pandemic.

KEY POINTS

- In the first wave of the Covid-19 pandemic, agriculture and allied sectors put up a spectacular performance with an annual growth of 3.4 per cent.
- In the farm-dependent population comprising cultivators and agricultural labourers, those involved in dairying and livestock constitute 70 million.
- Unpaid female family labour supplies a major part of the labour requirement for milk production.
- A growth rate of 6 per cent per annum in milk production provides a great support to farmers, especially during drought and flood.
- However, given the nature of production and sale of milk in India, milk producers are highly susceptible to even minor shocks as the demand for milk and milk products are sensitive to changes in the employment and income of consumers.
- Unlike sugarcane, wheat, and rice-producing farmers, cattle raisers are unorganised and do not have the political clout to advocate for their rights.
- Though the value of milk produced outweighs the combined value of the output of wheat and rice in India, there is no official and periodical estimate of the cost of production and Minimum Support Price for milk.



- Dairy farmers need the following to continue their vocation: a stable market and remunerative price for liquid milk; uninterrupted supply of fodder and cattle feed at a reasonable price, regular supply of veterinary services and medicines.

Though the Reserve Bank of India's transfer is a much-needed buffer for the economy, there are risks in depending on these surpluses. Analyse

KEY POINTS

Surplus

- The Reserve Bank of India's decision to transfer surplus to the Centre comes as a windfall to the government, at a moment of second wave of the pandemic.
- RBI has generated a surplus that is over 73% higher than what it posted for the 12-month period, is also noteworthy.
- The RBI's annual report, released on Thursday, shows that a sharp 63% contraction in expenditure was a major factor in boosting the surplus, especially as income fell by 11%.

Risks

- While the Reserve Bank has ensured that it maintains contingency reserves at exactly 5.5% of the overall size of its balance sheet, the level of its reserves provides little to safeguard against an unexpected financial crisis.
- The transfer from contingency fund to income is essentially an accounting arrangement to increase income.
- Even though it is transparent and formula, by Bimal Jalan committee, it doesn't have the potential of true income.
- Further, it sends a negative signal to foreign investors and credit rating agencies.
- It would make policymakers to remember that the central bank is ultimately the lender of last resort.
- The surplus can support the government but government should not depend on RBI's surplus to handle the financial crisis.

7. HEALTH

In the context of one health approach, the battle against pandemic can be used as an opportunity to meet India's One Health targets. Explain

KEY POINTS

- One Health' is an approach to designing and implementing programmes, policies, legislation and research in which multiple sectors communicate and work together to achieve better public health outcomes.

Framework

- In keeping with the long-term objectives, India established a National Standing Committee on Zoonoses as far back as the 1980s.



- And this year, funds were sanctioned for setting up a 'Centre for One Health' at Nagpur.
- Further, the Department of Animal Husbandry and Dairying (DAHD) has launched several schemes to mitigate the prevalence of animal diseases since 2015.

Need for coordination

- Scientists have observed that there are more than 1.7 million viruses circulating in wildlife, and many of them are likely to be zoonotic.
- To achieve targets under the 'One Health' vision, efforts are ongoing to address challenges pertaining to veterinary manpower shortages, the lack of information sharing between human and animal health institutions.
- These issues can be remedied by consolidating existing animal health and disease surveillance systems e.g., the Information Network for Animal Productivity and Health, and the National Animal Disease Reporting System.

If patents continue to determine global access to vaccines and drugs, then fighting pandemics will remain a distant dream for most countries. Analyse

KEY POINTS

- Vaccines are badly required by the world, Remdesivir and Tocilizumab, and medical equipment like ventilators and oxygen concentrators.
- The Covid-19 crisis underpins the importance of flexible global trade rules, rules linking ownership of intellectual property (IP) to cross-border movement of products involving IP.
- One of the most effective ways in which global trade rules can contribute to better access of vaccines and medicines is by enabling compulsory licensing.
- The WTO's rules allow countries to issue compulsory licences to domestic producers for manufacturing patented drugs and other products.
- India's Patents Act of 2005 provides for issue of compulsory licences in public health emergency.
- Compulsory licences need to be issued fast for enabling Indian companies to make patented vaccines and critical drugs.
- Compulsory licensing provisions under India's Patents Act are WTO-compliant. At the same time, it is important for India to work with the US, the UK and other countries, which had opposed India's proposal at the WTO.



In order to handle future pandemics, there is a need to create an all India National Health service. Do you agree with this view? Analyse

KEY POINTS

- The current surge in COVID-19 infections has exposed problems amounting to near-chaos throughout Indian healthcare.
- The Central and State governments are now coordinating measures within and across their respective jurisdictions.
- For example, the railways are running special trains carrying oxygen supplies, and the military is also involved in supply chains.
- The Supreme Court's call for a national supply plan has been publicly criticised in the political sphere.

National health service

- In 1946, the civil servant Sir Joseph Bhore submitted to the then government a detailed proposal for a national health service broadly modelled on the British National Health Service or NHS.
- Bhore went further by recommending that preventive and curative medicine be integrated at all levels.
- The result is a mighty achievement in public policy, politics, and the provision of top-class universal healthcare, including training, research, and changing engagement with the public as society changes.
- The service is funded entirely from general taxation.
- The budget includes payment to general practitioners, most of whom remain private providers but are paid by the state for treating NHS patients.

Problems in the NHS

- Among them are largely unintended inequalities in the time and attention given to patients of different social classes.
- Huge and frequent reorganisations imposed by Central government, and often ideologically driven underfunding.

With the widening digital divide, majority of rural population is excluded from the vaccination drive in the country. Do you agree with this view? Comment

KEY POINTS

- Technology is serving us during this crisis and it is natural for it to be viewed as a measure for vaccination.
- The principal response has been through the CoWin portal that has been launched by the Government of India to digitise the vaccination drive.
- The most obvious criticism of the portal is its mandatory nature for vaccination in the 18-44 age group.
- CoWin has come under criticism for its propensity to exclude people who are still on the other side of the digital divide as well as for its inherent design issues.



- In the absence of the internet and without knowledge of how the portal functions, the majority of India's rural population is being discriminated
- The issue of data protection and cyber security. They exist in multiple variations and risk exposure of medical healthcare data through third-party providers.
- Use of Aadhaar-based facial authentication for access to vaccines creates further technical barriers for universalisation of vaccination with a worrying prospect of false negative results.
- The available technical studies consistently demonstrate high error rates in facial authentication.
- The technology is not mature enough for deployment and a pandemic is an inappropriate time for experimentation.
- The technocratic approach in using digital systems has prioritised data collection and efficiency over vaccine equity.

In what ways India can reprioritise the health care services at various level to handle the impacts of future pandemics. Explain

KEY POINTS

- India needs to enhance the surveillance system, vaccinate quickly, and reprioritise healthcare services

Surveillance strategy

- The Central and State government should use real-time data by encouraging reliable reporting and initiating standardised definitions.
- India missed building containment and mitigation measures while Maharashtra was seeing a surge in cases during the second wave.
- A strong surveillance system reporting the minimum number of cases will thus provide reliable early markers of an impending wave.
- Concurrent genomic sequencing in real-time in the fixed proportion of samples will give us an idea of the likelihood of the variants causing several outbreaks.

Vaccinating the population

- India can emerge as the world's biggest exporter of vaccines in addition to helping citizens in the country.
- The Central government should proactively reach out to all the vaccine manufacturing firms and invite them to collaborate with Indian firms under the 'Make in India' programme.
- India needs to fast-track the manufacturing of all vaccines which have been approved for use by various regulatory authorities through a single-window clearance.
- India can become a soft superpower if it facilitates faster manufacturing by helping the Indian industry.

Robust public health workforce

- Doctors and nurses have to bear the burden mainly because of a depleted or absent public health workforce.



- It is an essential to hire front-line workers in public health who can engage in surveillance and contract-tracing, and mobilise people for primary healthcare services, including vaccination.

8. EDUCATION

Recognizing the importance of National Cadet Corps at university level will strengthen the educational outcomes of the youth in India. Discuss

KEY POINTS

- University Grants Commission (UGC) forwarded for consideration to all vice-chancellors of universities across India a proposal of the Directorate General, National Cadet Corps (NCC), aimed at including NCC as an elective subject in curricula.
- NCC is the world's largest uniformed youth volunteer organisation. It has a better gender ratio than any other uniformed organisation in the country with girl cadets accounting for one-third of the total.
- NCC training has a transformative effect, making cadets more disciplined and committed.
- They learn to relate to common people including during crises and empathise with larger social and developmental causes.
- NCC tenures should result in extra credit in promotions. This will ensure over time that the senior echelons of the armed forces have sufficient exposure to Indian society and its aspirations.
- NCC structure needs to evolve in a direction in which the youth, regardless of socio-economic background, are drawn to it as a means of advancing both character and career and rendering national service.
- A better mix of cadets will promote cohesion among the youth, particularly through the camaraderie experienced during training camps.
- The UGC has taken a good step but whether the universities will accept the proposal is not assured.

The consequences of pandemic have provided government of India an opportunity to make medical education a public good. Do you agree with this view? Comment

KEY POINTS

- The serious shortage of health workers, especially doctors, in some northern States is a major impediment for achieving the health-related Sustainable Development Goals.
- Health workers are critical not just for the functioning of health systems but also for the preparedness of health systems in preventing, detecting and responding to threats posed by diseases such as COVID-19.
- The doctor-population ratio in northern States is far short of the required norm, while the southern States, barring Telangana, have enough doctors in possession.
- There is no denying that in order to meet the significant shortfall of qualified doctors in northern States, scaling up of medical education is warranted.

- Through the implementation of such a policy, the private sector in medical education will be encouraged; it will also directly aid the corporatisation processes of healthcare provisioning while the under-resourced public health system will be a collateral damage.
- The corporatisation will make the services very costly and exclude them from getting care.
- Thus, it would shut the door on a large number of medical aspirants who would otherwise have a strong motivation to work in rural areas but do not have the means to finance themselves.
- Solving doctor shortage, therefore, needs long-term thinking and commitment from the political leadership.
- Medical education is a public good as its purpose is to improve the population health and decrease disease burden.

9. INTERNATIONAL RELATIONS

In the era of changing geo-politics, India should be confident that India-Japan bilateral ties are getting strengthened profoundly. Examine

KEY POINTS

- Tokyo and Washington drilled down to brass tacks on their joint security partnership given the need to address China's recent belligerence in territorial disputes in the South and East China Seas as well as in the Taiwan Strait.
- Both sides affirmed the centrality of their treaty alliance, for long a source of stability in East Asia.
- The two allies earmarked billions in funding for the deployment of secure 5G networks, committed to building digital infrastructure in developing countries.
- Both powers repeatedly emphasised their vision of a Free and Open Indo-Pacific that respects the rule of law, freedom of navigation, democratic norms and the use of peaceful means to settle disputes.
- In just a decade, New Delhi and Tokyo have expanded high-level ministerial and bureaucratic contacts, conducted joint military exercises and concluded military pacts such as the Acquisition and Cross-Servicing Agreement (ACSA) logistics agreement.
- The disagreements over India's insistence on data localisation and continued reluctance to accede to global cybersecurity agreements such as the Budapest Convention.
- While Japan has poured in around \$34 billion in investments into the Indian economy, Japan is only India's 12th largest trading partner and trade volumes.
- A Suga-Modi Summit would undoubtedly devote much attention to evolving a joint strategy towards key third countries and multilateral bodies.



There is strong will on the part of Indian and Britain to have a fresh basis for a robust bilateral relationship. Analyse

KEY POINTS

- Beyond the immediate relief supplies of oxygen and other medical equipment needed to treat COVID victims, India and the UK must tap into the enormous potential for bilateral strategic cooperation in the health sector.
- Britain and the G-7 are well-positioned to help transform India's internal capabilities as well as benefit from them in the management of future global pandemics.
- On trade, for example, both are on the rebound from their respective regional blocs. Britain has walked out of the European Union and India has refused to join the China-centred Regional Comprehensive Economic Partnership.
- Although both will continue to trade with their regional partners, they are eager to build new global economic partnerships.
- Delhi, which is looking at a neighbourhood that has been transformed by the rise of China, needs as wide a coalition as possible to restore a semblance of regional balance. Britain could also contribute to the strengthening of India's domestic defence industrial base. The two sides could also expand Delhi's regional reach through sharing of logistical facilities.
- Delhi and London are said to be exploring an agreement on migration and mobility to facilitate the legal movement of Indians into Britain.

In various ways, consequences of the pandemic will shape the content and conduct of India's foreign policy. Examine

KEY POINTS

- Being boxed in a China-dominated region will provide New Delhi with little space to pursue its regional, geopolitical ambitions except in the Indo-Pacific region.
- COVID-19, will prevent any ambitious military spending or modernisation plans and limit the country's attention on global diplomacy and regional geopolitics.

Shaping the foreign policy

- From competing with China's vaccine diplomacy, New Delhi today is forced to seek help from the international community, to deal with the worsening COVID-19 situation at home.
- While the United States seemed hesitant, at least initially, to assist India even as the pandemic was wreaking havoc in the country.
- Even though New Delhi did not accept the aid offers from Pakistan and China, these offers sounded more than the usual diplomatic grandstanding that states engage in during natural calamities.
- The pandemic would, at the very least indirectly, impact India's policy of maintaining strategic autonomy.



- The strategic consequences of the pandemic are bound to shape and structure New Delhi's foreign policy choices as well as constrain India's foreign policy agency.
- New Delhi might do well to get the region's collective focus on 'regional health multilateralism' to promote mutual assistance and joint action on health emergencies.

Discuss the role of Diaspora in USA towards assisting India in handling the consequences of pandemic.

KEY POINTS

- Considering the pandemic situation, after intensive inter-agency consultations in, the US government came up with a positive response to India's requirements.

Package of assistance

- The US Defence Production Act's provisions are being reconsidered. The authorities have agreed to approve the supply of filters needed for the manufacture of the Covishield vaccine.
- A comprehensive plan has been prepared for the supply of oxygen-related equipment, including generation systems, cylinders and setting up of field hospitals with oxygen beds.
- A special focus is on stepping up commercial supplies of therapeutics, especially remdesivir. Immediate shipment of 1,00,000 vials by Gilead Sciences has been arranged.
- US Development Corporation will fund the Indian vaccine firm BioE to expand its manufacturing capacity.
- The US-India Strategic Partnership Forum is helping with 12 ISO containers for the transport of oxygen to India. The US-India Business Council has appealed to its members to offer assistance.
- It is easy to see behind America's turn around the benign hand of the Indian diaspora, backed by friendly American public figures and proactive diplomacy by India.
- When it comes to health-related cooperation, the US needs to internalise that helping India is really helping the world. Vaccines produced in India are meant not only for Indians but for the people of Africa, Asia and Latin America.

A critical assessment of the stand-off at Ladakh will enable India's foreign policy in managing the strategic competition with China. Discuss

KEY POINTS

- More broadly, the India-China bilateral relationship has ruptured. Political relations are marked by hostility and distrust.
- On the Line of Actual Control (LAC) and beyond, India's military and political leaders will need to learn the right lessons from Ladakh, to ensure they are better postured to meet the challenge of Chinese coercion.

Lessons

- The Indian military's standing doctrine calls for deterring adversaries with the threat of massive punitive retaliation for any aggression, capturing enemy territory as bargaining leverage in post-war talks.
- This action served to deny that key terrain to the Chinese People's Liberation Army (PLA), and gave the Indian Army a stronger defensive position.
- China is more likely to be deterred with the threat of political costs, rather than material costs.
- India successfully raised the risks of the crisis for China through its threat of a political rupture, not military punishment.
- To the extent that China adjusted its position in the Ladakh crisis, it did so because it was responding to the cumulative effect of multiple pressure points most of which were out of India's control.
- India should consider accepting more risk on the LAC in exchange for long-term leverage and influence in the Indian Ocean Region.
- India has traditionally been the dominant power in the Indian Ocean Region and stands to cede significant political influence and security.
- New Delhi will have to make tough-minded strategic trade-offs, deliberately prioritising military modernisation and joint force projection over the ground-centric combat arms formations required to defend territory.
- Chinese troops continue to camp on previously Indian-controlled land, and worse, India may jeopardise its long-term leverage in the more consequential Indian Ocean Region.

International Maritime Organization's move to reduce pollution of the air by ships, ironically, drives up water sea-water pollution. Explain

KEY POINTS

- International Maritime Organization's (IMO's) Sulphur 2020 vision estimates that the capping standards for sulphur content in ships's fuel will lead to a 77% drop in overall sulphur oxide emissions from ships an annual reduction of 8.5 million tonnes of SOx.
- UN body, started the enforcement of a rule banning sulphur-heavy fuel. Since sulphur-light fuel can be very expensive, it allowed ships to install exhaust scrubbers that use high-volume, high-speed, water spray to absorbs pollutants from the exhaust.
- There are two types of scrubbers open-loop ones that dumps the scrubber wastewater into the sea at the port and closed loop ones that treat the wastewater before dumping.
- While the ban on sulphur-rich fuel has driven up fitting of scrubbers 250 ships in 2015 versus 4,300 ships in 2021 data from early last year showed the scrubbers were overwhelmingly open-loop.
- Both kinds of scrubbers have led to the dumping of 10 gigatons of scrubber wastewater containing dangerous pollutants and toxic chemicals, including carcinogenic hydrocarbons.
- This has endangered not just sensitive marine ecosystems along the most popular sea routes, but also threatens human health through seafood-consumption.



- Against this backdrop, as India embarks on its Sagarmala programme, it will need to keep in that it can't allow one kind of pollution to mutate into another in the name of green action.

Discuss about the role of stakeholders which can build a strong momentum in shaping the trade policy of India and Pakistan.

KEY POINTS

- The rejection by the Pakistan government of the recent proposal made to it by the Economic Coordination Committee (ECC) to import sugar, cotton and cotton yarn from India was disappointing.
- India withdrew the Most Favoured Nation (MFN) status of Pakistan and imposed a customs duty hike of 200% on imports.
- A deeper examination of the trade measures and data indicate that there is more concrete evidence of trade between the two countries even after the imposition of restrictions.

Stakeholders

Informal meetings at executive level

- To determine the outline of trade policy and smoothen the trade relations.
- Strengthen the engagement at executive level to implement the policy

Regional groupings

- South Asian Association for Regional Cooperation to involve officials at regional level.
- Work towards the welfare of the region by establishing relations between India and Pakistan.

Diplomatic engagement

- To prevent the further tensions between the countries at the borders.
- To promote the trade at borders.
- The trade measures impacted several important domestic and export industries, even though the volume of trade was small at \$2.56 billion in 2018-19.
- Governments of both countries need to recognise that there are significant costs of non-cooperation.
- Business organisations and chambers of commerce can play an important role in influencing the shaping of the India-Pakistan trade policy.



GS PAPER III

10. INDIAN ECONOMY

In the context of pandemic induced poverty, the 12th Ministerial Conference of World Trade Organisation must deliver a permanent solution on public stockholding for ensuring food security. Discuss

KEY POINTS

- The work for the 12th Ministerial Conference (MC 12) of the World Trade Organization (WTO) to be held in Geneva.
- The fisheries-subsidies negotiations have been underway for the past 20 years, and their conclusion is important to secure livelihoods of millions of people engaged therein.
- The Appellate Body of the Dispute Settlement Mechanism of the WTO has been lying dysfunctional due to non-appointment of new members.
- One of the mandated issues in agriculture negotiations at the WTO is to work towards a permanent solution on public stockholding for food security purposes.
- While the Peace Clause, as negotiated at the Bali Ministerial Conference (2013), provides some flexibility from such restrictions, it requires fulfilment of burdensome transparency and notification conditionalities.
- For India, when the entire country went into lockdown, public food stocks played a pivotal role in ensuring continued supply of food grains to the country's poor.
- The government could enhance supply of subsidised wheat and rice to the poor only because of the robust public stockholding mechanism it had.
- It is ironical that some WTO members are not realising the critical role public stocks play under circumstances like the ongoing pandemic when every economic activity including the supply chains are severely affected.

In order to have a nudge towards spontaneous formalization, major transformations are required in the informal sector in the country. Explain

KEY POINTS

- 'Vocal for local', a distinct and decisive shift in consumer preferences towards locally-produced goods and services.
- The size of India's informal sector accounts for about 50% of GVA and a major share in the export basket.
- Most firms are micro in size and deploy little capital. They have a small scale of production, substandard/unbranded quality of products, and localised scope of procuring raw material and marketing their products.
- They are vulnerable to business downturns and other market uncertainties, as reflected in high mortality. Their access to cheap, reliable and long-term credit sources is highly restricted.



Transformations

- Enterprises must undergo internal transformation, progressively converging at incremental formalisation through spontaneous economically-viable units.
- It requires infusion of capital to ensure enhanced labour productivity and higher wages.
- They must pick their products and markets with utmost care.
- India is a labour-surplus economy. The informal sector employs more than 80% of India's workforce.
- To generate good quality jobs, diversification (both horizontal and vertical) must be encouraged. Vertical diversification entails products not just be partly produced or assembled in India, they must be the end-products of fully indigenised and integrated production and supply chains, from design to made in India.
- Horizontal diversification involves expansion into newer products and markets, smartly aligning with India's comparative advantage of surplus labour.

India needs to break out of the import substitution trap before it can become an export powerhouse.

Do you agree with this view? Comment

KEY POINTS

- India's exports have never really lived up to their potential because it is simply not competitive enough.
- India's exports crawled between 2011 and 2019, while neighbouring Bangladesh's were galloping.
- In the apparels space, for instance, where we have a distinct edge, southern and southeastern Asian nations like Vietnam and Bangladesh are now strong competitors.
- They've been smart to come up with better labour and land policies, ensuring the business environment is friendly.
- In India, infrastructure remains hopelessly inadequate, labour policies are rigid, and it is still not quite easy to do business.
- The biggest problem, though, is the approach of our policymakers who would rather look inwards and stay protectionist.
- India has opted out of global trade pacts, most recently, the 15-nation RCEP.
- India's high GDP growth in the past has been directly related to exports growth and not so much to local consumption.
- In FY16 and FY17, exports crashed to \$262 billion and \$276 billion, respectively, from above \$300 billion the previous three years, regaining momentum on this very low base in the subsequent three years.



11. ENERGY

India's power sector is capable of conducting energy audits for effective power distribution throughout the country. Do you agree with this view? Critically analyse

KEY POINTS

- Union government published the draft regulations for mandatory conduct of energy audits of distribution companies (discoms) on a yearly basis.
- The proposed energy audit will be a complete audit, beginning right from the periphery of the discom where it receives power from the transmission lines till the end-consumer.
- So, audits would be conducted on the 33 kv lines, 11 kv lines, at the feeder level and also at the distribution transformers (DTs).
- AT&C is derived through an amalgamation of the technical and commercial parameters of the discom.
- Commercial parameters would include billing efficiency and collection efficiency of the discom. Hence it is possible to improve upon the AT&C loss figure (meaning a lower figure) through a higher billing and collection efficiency.
- The AT&C estimate for a discom varies throughout the year since billing and collection efficiency usually improves manifold towards the end of a financial year.
- To read all the meters simultaneously, we would need the facility of smart-meters that can be read off-site, or at least the data should be logged, which can be retrieved subsequently.
- While exact figures regarding the installation of smart-meters at the consumers' end is not available, it is rumoured that it will not be more than 1%.

A more evidence-based and integrated approach can simplify India's pursuit of self-reliance in solar manufacturing. Discuss

KEY POINTS

- The MNRE has announced plans to levy basic customs duties (BCD) on imports of solar PV modules and cells to help reduce India's reliance on external supply and promote domestic solar manufacturing.
- A CEEW-CEF analysis indicates it is possible for India to achieve greater self-reliance in solar manufacturing through time-bound application of BCD.
- China's vertically integrated ecosystem provides module-makers cheaper access to raw materials, whereas Indian firms rely on imports in the absence of cost-competitive domestic options.
- Higher unit labour and overheads in India account for the remainder of the price gap.
- Rationalising Basic Customs Duty: Based on the foregoing, BCD of 20%, rather than the excessive 40%, on modules may be sufficient to bridge the price gap between domestically-produced and imported modules.



- Other cost-reducing measures, such as manufacturing parks offering low-cost logistics and electricity, or the proposed PLI scheme, can further bolster competitiveness and reduce the required duty amount.
- As domestic production scales up, duties can be tapered down and subsequently withdrawn over a pre-defined time frame. We estimate duty support over a ten-year period is sufficient for Indian industry to achieve competitiveness.

There is a need to reform India's fiscal management law in order to have a counter cyclical impact in the economy. Examine

KEY POINTS

- When output falls below the economy's potential, the government must add to aggregate demand and stimulate economic activity. This is called a counter-cyclical fiscal policy.
- The FRBM legislation was enacted to avoid wastefulness of financial resources. To achieve this, bounds were imposed on deficit measures (fiscal or revenue deficits and debt were capped at certain proportions of gross domestic product).
- Fiscal policy by means of a parameter often used by the International Monetary Fund (IMF) called the fiscal impulse.
- The fiscal impulse measures the change in fiscal stance, which, in turn, is a measure of the fiscal balance adjusted for business cycles, and shows whether fiscal policy is expansionary or contractionary.
- Fiscal policy generally responds a year after an economic slowdown, when the new annual budget has an opportunity to make a course correction.
- Data for 15 complete fiscal years since the FRBM Act came in, only on four occasions has the fiscal policy been counter-cyclical since 2004-05.
- While retaining the numerical bounds on fiscal deficit, leeway can be granted to achieve the target averaged over a couple of years, instead of each year individually.
- Some provision can be made to modulate growth of expenditure such that the constituent components coupled with their multiplier values.

Reforming subsidy regime is required to create a fiscal space for the government for better economic recovery in the country. Elaborate

KEY POINTS

- India's growth forecasts are now 1-2 percentage points lower owing to the second wave of coronavirus.
- Vaccine shortage means the post-lockdown reopening will plant seeds of another round of infections; dampened, uncertain prospects of mass rapid vaccination.
- Qualitative and quantitative distinctions include the virus' lethality and spread, severe human and economic scarring, fear-persistence as a result and from the anticipated third wave with magnification.



- MSMEs are affected by shutdowns hurting sales and raw material procurements, through supply chain linkages, and inability to withstand prolonged pressures.
- A stretching pandemic of unknown duration and spread means worsening employment-income situation for the susceptible population segments.
- The government also neglected sharing its views nor revise fiscal rules (the FRBM Act) or present a detailed medium-term fiscal adjustment plan since the budget presentation.
- It is time for the government to think along structural lines, and start preparing fiscal space for this emergency of unknown magnitude and longevity.
- The reforms to agriculture marketing and institutional structures, accounting transparency by bringing subsidy arrears (food, fertilisers) on the balance sheet, raising LPG prices, have all been commendable efforts in this direction.
- This must aim to reduce subsidies over the medium-term, starting now howsoever modestly in order to display commitment and restore credibility.

12. INFRASTRUCTURE

There is a need to strengthen the infrastructure for Jandhan-Aadhar-Mobile trinity to handle the pandemic in rural areas. Discuss

KEY POINTS

- The year 2020-21 was exceptional, where the farm sector expanded by 3 per cent, even as the Indian economy as a whole contracted by 6.5 per cent.
- Covid-19 cases being very low in rural areas last year and the government exempting agricultural activities from lockdown restrictions.
- The availability of that cushion is in doubt today, with the second wave of the pandemic not sparing even the hinterlands.
- The scope of MGNREGA works is also limited when Covid has made deep inroads into rural areas.
- The focus should, instead, be more on cash transfers. There's no better time to put to use the JAM (Jan Dhan-Aadhaar-Mobile) infrastructure than now.
- the Jan Dhan scheme is proving to be a boon for millions of Indians seeking financial assistance during the ongoing countrywide COVID-19 lockdown.
- Its strong interlinkage with the mobile linked Aadhaar scheme has facilitated swift transfer of money into bank accounts of beneficiaries without pilferage or corruption.
- With the lockdown placing immense strain on the household budgets of several sections of society, the JAM trinity is acting as a safety net and helping millions who need immediate monetary aid.



13. S&T

Accelerated the use of digital technologies in India has caused the socio-economic inequalities in the country. Examine

KEY POINTS

- The novel coronavirus pandemic has accelerated the use of digital technologies in India, even for essential services such as health and education, where access to them might be poor.

Economic inequality

- The bulk of the Indian population, however, is suffering a huge economic setback.
- Several surveys conducted over the past 12 months suggest widespread job losses and income shocks among those who did not lose jobs.

Education

- According to National Sample Survey data from 2017, only 6% rural households and 25% urban households have a computer. Access to Internet facilities is not universal either: 17% in rural areas and 42% in urban areas.
- The Azim Premji Foundation, suggest that between 27% and 60% could not access online classes for a range of reasons: lack of devices, shared devices, inability to buy data packs.

Health

- Right now, the focus is on the shortage of essentials: drugs, hospital beds, oxygen, vaccines.
- In several instances, developing an app is being seen as a solution for allocation of various health services.
- It is assumed that these will work because of people's experience with platforms such as Zomato/Swiggy and Uber/Ola.
- Patients are being charged whatever hospitals like, and a black market has developed for oxygen cylinders.

Online sharks

- It is also alarming if the pandemic is being used to create an infrastructure for future exploitation of people's data.
- Given that we lack a data privacy law in India, it is very likely that our health records will end up with private entities without our consent.



Artificial Intelligence is a significant factor behind the most important tool in the world's arsenal against pandemic. Elaborate

KEY POINTS

- Defence Research and Development Organization's Atman AI, developed along with 5C Network and HCG Academics, incremental progress in the larger picture.
- Atman AI can detect Covid-19 infection and its severity from radiological images of the lungs within seconds.
- Given RTPCR testing is already quite stretched and computerised tomography (CT) is both expensive and not readily available in many geographies.
- Atman AI will help early detection with obvious cost-benefits. And, with ability to detect severity, it can play a seminal role in triage decisions in hospitals/tele-consultations.
- Given it is based on machine-learning the AI tool 'learnt' to identify radiological signatures of Covid-19 from chest X-rays of RTPCR-positive patients with each image fed to it.
- Mumbai-based Qure.ai, Business Standard reports, is using AI to identify people at high risk of Covid-19 well in advance while Facebook's tool can predict four days in advance more accurately than human experts if a patient will need intensive care by studying sequential chest X-rays.
- Tamil Nadu's and Telangana's use of AI apps to detect mask-usage violations, machine-learning apps that can detect Covid-19 from sound of cough, etc, the examples of technology being used in the fight against the pandemic are now many.
- The National Digital Health Mission gives India the opportunity to build on health data with relevant citizen-interest safeguards to make more and more such tools for securing the country's future health.

A data-driven approach to climate resilience necessitates certain fundamental reforms in the country's data-ecosystem. Analyse

KEY POINTS

- The adoption of data-driven tools for managing pandemic induced disruption also offers an opportunity to restructure the data ecosystem for managing the disruptions of future that are more likely to be driven by climate change.
- In Indian context, the National Data Sharing and Accessibility Policy (NDSAP), 2012 recognises the importance of data in improving decision making.
- The sharing of data in this platform, apart from others, is further streamlined through the nodality of Chief Data Officer (CDO) in respective ministries.
- There is a need to collect complete datasets required to assess climate risks and vulnerabilities.
- It requires targeted research for designing better questionnaires and identifying new nodes for data collection.
- The data collected has to be made reliable and usable through an accountability framework.



- As the CDO currently doesn't operate in the same legal framework as a Chief Information officer (CIO) under the Right to Information (RTI) Act, there exists no liability for errors and omissions.
- The National Data Governance Centre was planned to be set up in 2019 for precisely this objective, i.e., holding all public data and establishing guidelines for its management, sharing and monetisation.
- Data is truly useful when it can provide actionable information, and this is particularly needed for climate-action at sub-national levels.

Do you think that the Information Technology rules 2021 goes against the landmark judgments upholding the key fundamental rights in the country? Examine

KEY POINTS

- The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, which threaten to deprive social media platforms.
- The Rules must be credited for they mandate duties such as removal of non-consensual intimate pictures within 24 hours, publication of compliance reports to increase transparency.
- To propound the problem at hand, the Information Technology Act, 2000, does not regulate digital media.
- An intermediary is now supposed to take down content within 36 hours upon receiving orders from the Government.
- The other infamous flaw is how these Rules undermine the right to privacy by imposing a traceability requirement.
- These regulations in the absence of a data protection law, coloured in the backdrop of recent data breach affecting a popular pizza delivery chain and also several airlines highlight a lesson left unlearned.
- The problem here is that to eliminate fake news, the Rules proceed to hurriedly take down whatever an arbitrary, ill-decided, biased authority may deem as "fake news".
- The Rules create futile additional operational costs for intermediaries by requiring them to have Indian resident nodal officers, compliance officers and grievance officers.
- Therefore, not only do these Rules place a barrier on the "marketplace of ideas" but also on the economic market of intermediaries in general by adding redundant financial burdens.

14. ENVIRONMENT

Despite focusing more on decarbonisation, India can gradually phase out the use of fossil fuel energy basket by increasing the share of natural gas. Discuss

KEY POINTS

- India must first green its fossil fuel energy basket, can be done by increasing the share of natural gas.
- It will not require industries to invest heavily in retrofitting their systems; and it will allow the government to meet its objective of providing secure and affordable energy.

**Measures**

- The authorities must prioritise natural gas. They must recognise its versatility.
- The authorities must correct the current disincentivising policy distortions. One for gas produced from domestic fields by the public sector companies; one for gas produced by private companies; one for production from deep waters offshore under high temperature etc.
- The taxation system is also comparably regressive. It is a cascading structure so that the tax rates increase as the gas flows from one zone to another.
- The authorities should revamp the structure of the industry. The Gas Authority of India Ltd (GAIL) is currently engaged in the production, transportation and marketing of gas.
- This allows GAIL to leverage its ownership of the bulk of the gas pipelines to deny its competitors access to the market.
- The policy calls for assured and common access to all marketers but GAIL can bend the policy to its advantage without breaching it.

In the context of climate change, the sea-level rise is expected to have various consequences in the country. Explain

KEY POINTS

- The phenomenon of rising seas has been observed all over the world, including India, and its impact explored in a special report published by the United Nations' Intergovernmental Panel on Climate Change (IPCC)
- The east coast, hemmed by the Bay of Bengal, is often pelted by cyclones, and the hitherto placid Arabian Sea on the west warmed up to brew four cyclones last year a first in over a century.
- The oceans have risen consistently and, worryingly, it has risen faster in recent decades. The rise accelerated to 3.2mm a year between 1993 and 2015, and 3.6mm a year between 2006 and 2015.
- City residents can't forget the floods of 2005, relentless rain, coupled with storm surges and high tides, killed over 1,000 people. Recent studies have shown a three-fold increase in rainfall over the Western Ghats and central India.
- SLR will impede the quick drainage of rainwater into the sea during times of high tide.
- The range we have from India is too wide anything between 3mm and 16mm.
- There is a need for robust baseline data so that scientists and researchers in India will have something to bank on in the future.
- Compared to other seas, the Indian Ocean has been warming consistently every year for over 50 years; the average temperature rose by a degree Celsius in 1951-2015.



It is right time for the country to adapt environmental fiscal reforms to ensure sustainable development. Explain

KEY POINTS

- The Indian government announced a pandemic-related stimulus package in FY 2020-21 though there was large decline in tax revenue.
- The Economic Survey of India 2019-20 has outlined the fact that an increase in public spending from 1% to 2.5-3% of GDP, as envisaged in the National Health Policy of 2017, can decrease out-of-pocket expenditure from 65% to 30% of overall healthcare expenses.
- India currently focuses majorly on the command-and-control approach in tackling pollution.
- The eco tax rate ought to be equal to the marginal social cost arising from the negative externalities associated with the production, consumption or disposal of goods and services.
- Environmental tax reforms generally involve three complementary activities: (a) eliminating existing subsidies and taxes that have a harmful impact on the environment; (b) restructuring existing taxes in an environmentally supportive manner; and (c) initiating new environmental taxes.
- In India, eco taxes can target three main areas: one, differential taxation on vehicles in the transport sector purely oriented towards fuel efficiency and GPS-based congestion charges; two, in the energy sector by taxing fuels which feed into energy generation; and three, waste generation and use of natural resources.
- The implementation of an environmental tax in India will have three broad benefits: fiscal, environmental and poverty reduction.