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TOPICS COVERED

1. New Chabahar pact 'not exempt' from Iran sanctions: U.S. (GS Paper II: India-Iran)
2. Wax treatment for joint injury (GS Paper III: Basic Science)
3. Young people fade away when there is no vision (GS Paper II: Education)
4. Candid notes on the NHRC's status deferral (GS Paper II: Quasi Judicial Body)
5. The challenge of extra-pulmonary TB (GS Paper: Basic Science)
6. On the importance of regulatory sandboxes in artificial intelligence (GS Paper II: Governance)

New Chabahar pact 'not exempt' from Iran sanctions: U.S.

Suhasini Haidar
NEW DELHI

The new 10-year agreement between India and Iran to develop the Chabahar port carries the "potential risk" of sanctions, the U.S. State Department said on Tuesday, casting a cloud over whether the special exemption India had received from the U.S. in 2018 will still be applicable for the next phase of development and investments in the Iranian project.

In particular, India's plans under the new agreement to invest approximately \$120 million in equipment for the port and a credit window of \$250 million are likely to be under the scanner if the U.S. decides against extending its sanctions carve-

out for India.

In response to specific questions about the long-term contract signed between India Ports Global Ltd. and Port and Maritime Organisation of Iran on Monday, in the presence of Shipping Minister Sarbananda Sonowal and his Iranian counterpart Mehrdad Bazrpash in Tehran, the State Department spokesperson said the U.S. had noted the agreement and said there was "no" specific exemption for it.

"We're aware of these reports that Iran and India have signed a deal concerning the Chabahar port," U.S. State Department spokesperson Vedant Patel said.

"As it relates to the United States, U.S. sanctions on Iran remain in place and we'll continue to enforce



Officials during the signing of the deal between India Ports Global Ltd and Ports and Maritime organisation of Iran on Monday. PTI

them," he said, adding that all entities considering business deals with Iran "need to be aware of the potential risk that they are opening themselves up to and the potential risk of sanctions".

The statement by the U.S. that came hours after

the signing of the contract in Iran is significant as India has thus far managed operations at Chabahar's Shahid Beheshti Terminal despite stringent sanctions on companies otherwise dealing with Iran.

In 2018, a carve-out made by the previous

Trump administration had been seen as a considerable success for India-U.S. diplomacy, and for India's plans to support the then-democratic government in Afghanistan.

Carve-out clause

According to the U.S.'s carve-out clause, detailed in amendments to the Iran Freedom and Counter-Proliferation Act (IFCA) made in November 2018, the U.S. President could authorise exemptions to sanctions imposed against Iran in two cases: humanitarian aid for Iranian people, and assistance for Afghanistan.

Section 1244 of the IFCA (f) states that "The [US] President may provide for an exception from the imposition of sanctions under this section for reconstruction assistance or

economic development for Afghanistan" provided it is in the "national interest of the United States".

A third exception, a six-month waiver on oil imports from Iran ran out in 2019, and India complied with the U.S. demand to "zero out" its purchases of Iranian oil.

The External Affairs Ministry declined to comment on the U.S.'s response. However, it is understood that officials are studying the comments with a view to whether they indicate any impact on the U.S. position on India's future dealings on Chabahar.

With election under way in India, and due in the U.S. later this year, a clearer picture may not, however, appear for several months.

Wax treatment for joint injury



Q: I fractured my ankle five months ago. Under continuous stress, say when you

leave your legs dangling for over an hour, they swell up. On the doctor's advice, I underwent wax treatment. What is the basis for using wax? Can one not use hot water instead of wax?

A: The swelling in the ankle and foot is due to an **increased accumulation of lymphatic fluid** around the injured area. This is because of **gravity**.

The principle behind wax treatment is the latent heat given off by the molten wax (above **45 degrees C**) during its cooling process.

This heat enlarges the blood vessels (a process called vasodilation) below the applied area and helps to effectively drain the accumulated fluid.

This temperature is quite bearable and soothing. But the latent heat given off by hot water, at about 100 degrees C, is certainly harmful to the human body.

Hot water can also be used at bearable temperatures but it cools far more rapidly than



The latent heat given off by the molten wax during cooling enlarges the blood vessels and helps to drain the accumulated fluid. GETTY IMAGES

molten wax.

In the case of molten wax, moreover, the latent heat given off during its change of state, from liquid to solid, helps in vasodilation as well.



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Wax treatment for joint injury (15 May)

"I fractured my ankle five months ago. When I leave my legs dangling for over an hour, they swell up. My doctor suggested wax treatment. Why wax? Can't I just use hot water instead?"

- Swelling in the ankle and foot happens due to the build-up of lymphatic fluid around the injury, especially when the legs are left hanging for long.
- Wax treatment works by using the heat from molten wax (above 45 degrees Celsius) during its cooling process.
- The heat from the wax enlarges the blood vessels (vasodilation) below the applied area, helping to drain the accumulated fluid effectively.
- The temperature of the wax is bearable and soothing.
- Hot water, on the other hand, can be harmful to the body, especially at its boiling point of about 100 degrees Celsius.
- While hot water can be used at bearable temperatures, it cools down much faster than molten wax.
- Additionally, the heat released during the wax's change from liquid to solid state also aids in vasodilation.



Young people fade away when there is no vision (15 May)

- Recently, two young people in Kota, Rajasthan, committed suicide due to the stress of entrance exams, which is a common occurrence in the area known as the "coaching capital" of India.
- Every year, many students across India take their lives because of the pressure of competitive exams and social expectations, often mentioned in suicide notes.
- The author is concerned about this trend and urges immediate attention to prevent more tragedies.
- Family pressure is identified as a significant factor contributing to the stress students face, but the author believes it can be mitigated with better priorities and awareness.

- The author suggests that examination boards and regulating authorities can control other factors contributing to student stress.
- The author emphasizes the need to prioritize students' well-being over exams and grades, stating that policies should prioritize students' needs.
- It is suggested that young people need to be reassured of their importance and that policies and practices should prioritize their welfare.

The rise of coaching institutes

- The National Testing Agency (NTA) bases entrance exams for various courses on the NCERT/CBSE syllabus, which is considered positive.
- However, the proliferation of coaching institutes and their harsh methods are causing immense stress for students.
- Many students who succeed in these exams sacrifice a normal adolescence, becoming socially inept and overly focused on academics.
- These students lack social skills beyond academic subjects and are often described as "walking machines."
- Coaching institutes often operate in unsafe buildings and impose rigorous schedules on students, starting as early as 5 a.m. and lasting until 10 p.m. or later.
- Some residential coaching institutes even take over students' lives from a young age, depriving them of a normal childhood.
- The author questions the purpose of schools if coaching centers are turning students into "zombies" focused solely on exam preparation.

After school

- The Common University Entrance Test (CUET) was recently introduced for undergraduate and post-graduate courses at Delhi University.
- CUET replaces the reliance on school-leaving board marks or undergraduate marks for admission.
- Teachers have complained about the poor quality of students admitted through CUET, citing their inability to think critically, grasp basic concepts, and lack of social skills.
- Many coaching centers have emerged near the University and in rural areas, promising students admission into courses.
- Some parents, including first-generation learners, have fallen for these promises, often taking loans they cannot afford.
- However, relying solely on CUET scores has not been effective, leading to unsatisfactory outcomes over two years.
- The National Eligibility-cum-Entrance Test (NEET) and Joint Entrance Examinations (JEE) present even more challenging situations.

- The casualties of these circumstances are the children, who represent the future of India and the world.
- The author suggests strengthening government schools by hiring good teachers and improving infrastructure, while private schools can fulfill additional needs.
- While the National Education Policy focuses on schools, more emphasis should be placed on the quality of school education.
- State, CBSE, and other boards should be standardized to avoid undermining the efforts students put into their education.
- If necessary, a common entrance exam can be considered, but only if deemed necessary.

Focus on the personal interview

- Entrance examinations should include a personal interview component where students can discuss their strengths and interests.
- Academic scores from 12 years of schooling should not be disregarded by exams like CUET or JEE.
- Class 12 board exams should carry sufficient weightage, along with personal talents and abilities showcased in a personal interview.
- JEE, CUET, or NEET can be additional criteria, but not the sole determinant for admission.
- Personal interviews provide students with the opportunity to express themselves to a respectful interview panel.
- St. Stephen's College has successfully employed personal interviews for over 70 years, leading to positive outcomes and preventing desperate measures.
- **Personal interviews help students realize their worth beyond just academic marks.**
- While personal interviews are not easy and require time and attention, they offer every student the chance to understand their value.
- Including personal interviews in entrance exams can help prevent young people from perishing due to stress and pressure.
- Teachers, parents, policymakers, and parliamentarians, especially those from Kota, should prioritize the well-being of young people to ensure their future.

Candid notes on the NHRC's status deferral

(15 May) (GS Paper II: Polity (Quasi-Judicial Body))

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Candid notes on the NHRC's status deferral

The National Human Rights Commission of India (NHRC) was formally informed late last week that the deferral of its status would continue for a year more. The deferral was put in place by the sub-committee on accreditation (SCA) of the **Global Alliance of National Human Rights Institutions (GANHRI)** for a year, in 2023. While the SCA did not agree with the plea of some leading international non-governmental organisations, to put the NHRC in category 'B', it also rejected India's request to lift the deferral.

The NHRC chairperson, a former Justice of the Supreme Court of India, Justice Arun Mishra, and the government may have been unhappy with the continuing deferral but are sure to be relieved that they have avoided the ignominy of a downgrade. The NHRC, directly and, the government, from behind the scenes, had lobbied hard for the deferral to be removed and the cloud over India's 'A' status goes away. Justice Mishra retires in early June and, if the new government to be formed in June after the general election 2024 does not reappoint him, he will be the first NHRC chairman to leave the organisation with the sword of Damocles hanging over his head. This would only strengthen the initial doubts raised about his appointment.

The NHRC brochure

A peep into Justice Mishra's approach to human rights is available from a **brochure published by the NHRC, titled 'Human Rights 75'**. The document was put out as part of the celebrations of 'Azadi ka Amrit Mahotsav'. In its introduction the document sought to establish that "India's earliest civilisations... laid the fundamental edifice for some basic human rights principles". To substantiate this point it referred to ancient texts such as the *Vedas* and the *Upanishads*. It rightly asserted that **they promoted the exploration of spiritual truths**. Thereafter, the



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Benefits

Much of the criticism of the West for weaponising human rights is valid, but the continuing deferral of the NHRC's status must lead to hard questions in India

publication went on to state, "The concept of justice and fairness is also central to ancient Indian literature. The *Manusmriti*, while reflecting the social norms of its time, also outlines principles of justice, including punishment proportionate to the crime".

For crores of historically disadvantaged Indians, the *Manusmriti* is the fountainhead of the evil of discrimination and violence they have suffered. Its mention in a NHRC document, despite the routine caveat attached to the reference, will be outrageous to them and to those who are pledged to uphold the Indian Constitution. Was the *Manusmriti's* mention an oversight or does it reflect the considered views of Justice Mishra? Even at this stage a clarification would be useful. He would certainly know that the foundational values of the Indian Constitution are in direct conflict with the basic postulates of the *Manusmriti*.

Drifting away from the Paris Principles?

Certainly, the GANHRI's decision has not been influenced by the reference to the *Manusmriti* but because of the belief that India has not been adhering to the **Paris Principles**. In early 2017, the SCA had put the NHRC in the deferral category but it was lifted after a review later that year. Hence, India retained its 'A' status.

In a public note on that occasion, the NHRC had stressed the importance of the 'A' status. It stated, "A status accreditation also grants participation in the work and participation of the GANHRI, as well as the work of the Human Rights Council and other UN mechanisms". On the Paris Principles the NHRC noted, "The United Nations' Paris Principles provide the international benchmarks against which the National Human Rights Institutions (NHRI) can be accredited". The Paris Principles were adopted by the UN in 1993. The NHRC stated that the Paris Principles set out "six main criteria that NHRI are

expected to meet. These are: **Mandate and competence, Autonomy from Government, Independence guaranteed by a Statute or Constitution, Pluralism, Adequate Resources; and adequate powers of investigations**. The GANHRI found the NHRC, India compatible with these criterion" and so gave it 'A' status. That was then. But now, the GANHRI's doubts continue, obviously.

This is a peer-reviewed evaluation

The GANHRI evaluation process is a peer-reviewed one and hence cannot be dismissed as the government has done, since 2019, any criticism of the human rights situation in India. Indeed, External Affairs Minister S. Jaishankar has been especially sensitive to charges of the Narendra Modi government **falling short in observing civil liberties and fundamental freedoms**. He has, in response to criticism of India on these issues, **pointed to the deficiencies in the West on these fronts**. He has been acclaimed in India for doing so. Much of the criticism of the West for weaponising human rights is valid but the diplomacy of criticising the West and those who lecture India need not have been abrasive. Firmness does not need the use of the bludgeon of harsh language but the rapier of logic and reason. It also requires the acceptance that India, like all other countries, is not perfect. But such approaches are considered timid in these muscular times.

It is not clear if the Jaishankar muscular approach was adopted by the NHRC in dealing with the SCA. If it was, it has obviously not succeeded. The continuing deferral proves this. But there is a more substantial issue involved. This is the attitude of the government towards the NHRC. Doubts arise because of the nature of the appointments to it and also because of the continuing vacancies in the body. Finally, the NHRC itself has a lot to introspect about.

The NHRC(National Human Rights Commission of India) is a statutory body constituted under the Protection of Human Rights Act, 1993. It's responsible for protecting and promoting human rights in India, as defined by the act: "Rights Relating To Life, liberty, equality and dignity of the individual guaranteed by the constitution or embodied in the international covenants and enforceable by courts in India". The National Human Rights Commission is under the Ministry of Home Affairs.

Members: The National Human Rights Commission (NHRC) is composed of a Chairperson and eight other members. Those eight members are: Four full-time members. Four deemed members.

Established: October 12, 1993

Chairperson: Arun Kumar Mishra

Headquarters: New Delhi, India

Global Alliance of National Human Rights Institutions (GANHRI) is recognised, and is a trusted partner, of the United Nations. It has established strong relationships with the UN Human Rights Office, UNDP and other UN agencies, as well as with other international and regional organisations, NGOs, civil society and academia.

- **Vision:** A world where everyone everywhere fully enjoys their human rights.
- **Mission:** To unite, promote, and strengthen National Human Rights Institutions (NHRIs) to operate in line with the Paris Principles and provide leadership in the promotion and protection of human rights.
- **Founded:** 1993 (originally as the International Coordinating Committee of NHRIs).
- **Headquarters:** Geneva, Switzerland.

Structure and Governance

- GANHRI is a membership-based organization with a global reach.
- It has a governance structure that includes a Bureau consisting of 16 A-status NHRIs representing the four regions of GANHRI (Africa, Americas, Asia Pacific, and Europe).
- The UN Human Rights Office acts as the secretariat for GANHRI.

Membership

- As of December 2023, GANHRI has 120 members:
 - 88 A-status accredited NHRIs (considered fully compliant with the Paris Principles)
 - 32 B-status accredited NHRIs (considered partially compliant with the Paris Principles).

Activities

- GANHRI works to strengthen the independence and effectiveness of NHRIs around the world.
- It provides training and capacity-building programs for NHRIs.
- It advocates for the protection and promotion of human rights at the national, regional, and international levels.

Relationship with the UN

- GANHRI is a unique non-UN body whose internal accreditation system, based on compliance with the Paris Principles, grants access to UN human rights committees.
- It has a close working relationship with the UN Human Rights Office, UNDP, and other UN agencies

- The National Human Rights Commission of India (NHRC) was informed that its deferral status would continue for another year.
- The deferral was decided by the sub-committee on accreditation (SCA) of the Global Alliance of National Human Rights Institutions (GANHRI) in 2023.
- Some leading international non-governmental organizations proposed categorizing NHRC in category 'B', but this was not accepted by the SCA.
- India's request to lift the deferral was also rejected by the SCA.

- NHRC chairperson, Justice Arun Mishra, and the government may not be happy about the continuing deferral but are relieved to avoid a downgrade.
- NHRC and the government lobbied hard to remove the deferral and regain India's 'A' status.
- Justice Mishra is set to retire in early June, and if the new government elected after the 2024 general election does not reappoint him, he will be the first NHRC chairman to leave with unresolved issues.
- This situation may raise doubts about Justice Mishra's appointment as NHRC chairman.

The NHRC brochure

- Justice Arun Mishra's approach to human rights is evident from a brochure titled 'Human Rights 75' published by the NHRC.
- The brochure was released as part of the celebrations of 'Azadi ka Amrit Mahotsav'.
- It claims that India's earliest civilizations laid the foundation for basic human rights principles, citing ancient texts like the Vedas and Upanishads.
- The brochure also mentions the Manusmriti, stating that it reflects principles of justice, including proportional punishment for crimes.
- However, for many historically disadvantaged Indians, the Manusmriti is associated with discrimination and violence they have suffered.
- Mentioning the Manusmriti in an NHRC document, despite the usual disclaimer, may be perceived as outrageous by those committed to upholding the Indian Constitution.
- It raises questions about whether the mention of Manusmriti reflects Justice Mishra's considered views or if it was an oversight.
- Clarity on this issue would be helpful, especially considering the foundational values of the Indian Constitution are in direct conflict with the Manusmriti's principles.

Drifting away from the Paris Principles?

- GANHRI's decision to defer NHRC's status is not influenced by the mention of Manusmriti but due to concerns that India is not adhering to the Paris Principles.
- In early 2017, SCA placed NHRC in the deferral category, but it was lifted after a review later that year, allowing India to retain its 'A' status.
- NHRC emphasized the importance of 'A' status, stating it grants participation in GANHRI's work, the Human Rights Council, and other UN mechanisms.
- The Paris Principles, adopted by the UN in 1993, provide international benchmarks for accrediting National Human Rights Institutions (NHRIs).
- NHRC noted that the Paris Principles outline six main criteria for NHRIs to meet: Mandate and competence, Autonomy from Government, Independence guaranteed by a Statute or Constitution, Pluralism, Adequate Resources, and adequate powers of investigations.
- NHRC was found compatible with these criteria by GANHRI, leading to its 'A' status.

- However, GANHRI's doubts about NHRC's adherence to the Paris Principles persist, resulting in the continued deferral of NHRC's status.

This is a peer-reviewed evaluation

- The evaluation process by GANHRI is peer-reviewed and cannot be disregarded, despite the Indian government's dismissal of criticism regarding human rights since 2019.
- External Affairs Minister S. Jaishankar has been sensitive to allegations of the Modi government's shortcomings in upholding civil liberties and fundamental freedoms.
- Jaishankar has responded to criticism by pointing out deficiencies in the West on these issues, earning praise in India for doing so.
- While criticism of the West for weaponizing human rights is valid, diplomatic responses need not be abrasive but should rely on logic and reason.
- However, such approaches may be considered timid in current times favoring muscular approaches.
- It's uncertain if Jaishankar's muscular approach was employed by NHRC in dealing with the SCA, as the continued deferral suggests it hasn't succeeded.
- There are concerns about the government's attitude toward NHRC, including doubts about appointments and ongoing vacancies within the body.
- NHRC itself needs to reflect on its actions and decisions.

Lame excuses (15 May)

Biren Singh continues to blame ethnic violence on 'illegal migration'

- Over three years ago, a coup d'état in Myanmar led to the junta seizing power and cracking down on demands for democracy and ethnic rights.
- As a result, many citizens, especially ethnic minorities, fled to neighboring countries like India to escape violence and repression.
- Refugees from Myanmar's Sagaing region and Chin State sought refuge in Mizoram and Manipur.
- In Mizoram, refugees, especially those of Chin ethnicity, were treated favorably by the local Mizo people, considered as ethnic brethren.
- However, in Manipur, led by Chief Minister N. Biren Singh, refugees did not receive such favorable treatment and were stigmatized.
- The Manipur government, with a preponderance towards ethnic majoritarianism, conflated refugee issues with cross-border drug trade.
- Recent moves by the Manipur government, such as ending the Free Movement Regime and announcing plans to fence the India-Myanmar border, reflect this stance.
- Chief Minister Singh attributed violence in Manipur, including ethnic conflicts, to his government's actions against "poppy cultivation" and "illegal immigration."

- However, this viewpoint oversimplifies and biases the ethnic conflict, highlighting the government's failure to build confidence among the Kuki-Zo community.
- The militarization of Manipuri society, including vigilante groups with sophisticated weapons, has exacerbated law and order problems, reflecting poorly on the government's handling of the situation.
- Without a change in approach and leadership in Manipur, the situation is likely to worsen.

The challenge of extra-pulmonary TB (15 May)

- Tuberculosis (TB) primarily infects the lungs, known as pulmonary TB, but about 20% of cases affect other organs like lymph nodes, brain, gut, and eyes, termed as extra-pulmonary TB (EPTB).
- Organs like the brain and eyes have immune privileges, allowing TB infections to persist even after lung TB is treated.
- EPTB presents a public health challenge, possibly larger than estimated, as it is harder to detect and may resemble other non-TB conditions.
- The World Health Organization (WHO) reports over 10 million new TB cases annually, with India accounting for 27% of the global burden.
- However, estimating the burden of EPTB is challenging as it often doesn't show up on regular TB tests and can affect any part of the body.
- Many EPTB cases may not have accompanying lung infections, making their true prevalence hidden.
- While efforts to eliminate TB primarily focus on pulmonary TB due to its higher burden and role in spreading infection, EPTB affects a significant number of people.
- Underdiagnosis of EPTB can lead to irreversible damage to infected organs, such as vision loss or blindness.
- Therefore, it's essential to address TB comprehensively, considering its various forms and complexities.

Knowledge gap

- The main challenges in addressing extra-pulmonary TB (EPTB) are lack of awareness among physicians and insufficient diagnostic and treatment criteria.
- Despite TB-causing mycobacteria being isolated in various organs, including the eyes, many healthcare providers treating TB are unaware of this connection.
- Accurately diagnosing EPTB and initiating proper treatment is challenging even for those who are aware of the disease.
- Lack of formal protocols for exchanging information among specialists in different medical fields leads to fragmented knowledge about EPTB.

- In 2014, experts from various health institutions, WHO, and Cochrane Infectious Disease Group collaborated to develop INDEX-TB guidelines for managing EPTB in India.
- They also released clinical practice points for 10 organs affected by EPTB, but evidence quality was adequate only for five organs, and the implementation of these guidelines has been limited.
- There's a need for a unified approach to EPTB management, especially in high TB burden countries like India.
- Hospitals must improve data collection on EPTB cases, as current numbers rely on TB departments of large public hospitals, while specialist departments managing EPTB often have inconsistent data practices.
- Specialist departments should capture patient data and share it with the National TB Control Programme to improve data accuracy in Ni-kshay, the national patient management portal for TB control, especially regarding EPTB cases.

Research priority

- Key aspects of extra-pulmonary TB (EPTB), including how the infection spreads and the TB bacterium's interactions with our organs, are not fully understood.
- EPTB patients may continue to exhibit disease markers even after completing anti-TB therapy, leading to ongoing symptoms.
- For example, in the eyes, an autoimmune response triggered by the original TB infection can cause persistent inflammation even after treatment.
- Similar immunological mechanisms may exist in other organs affected by EPTB, prolonging the disease even after bacteria have been cleared.
- Understanding these mechanisms requires collaboration among different medical specialties and the use of advanced immunological tools like single-cell RNA sequencing.
- Without understanding these mechanisms, physicians may continue prescribing long-duration anti-TB therapy, which may not effectively resolve the disease and can expose patients to treatment toxicity.
- Currently, there are no standardized diagnosis and treatment protocols for all organs affected by EPTB, and clinical trials are needed to develop them.
- The existing INDEX-TB guidelines, formulated over a decade ago, need updating with the latest data and experience, incorporating inputs from various specialized healthcare areas.
- Approximately one in five TB patients have EPTB, but many cases go undiagnosed, and those diagnosed often cannot access proper care unless they visit specialized health facilities.
- It's essential to improve awareness and understanding of EPTB and develop comprehensive protocols to ensure proper diagnosis and treatment for affected individuals.

On the importance of regulatory sandboxes in artificial intelligence (15 May)

On the importance of regulatory sandboxes in artificial intelligence

Regulatory sandboxes have become a significant instrument in various countries, used to evaluate innovations within a defined and monitored time frame while being subject to regulatory oversight and controlled constraints

Sanhita Chauriha

The advancement of Artificial Intelligence (AI) technologies has posed both unprecedented opportunities and complex challenges for societies worldwide. As AI applications continue to proliferate across industries such as healthcare, transportation, finance, and more, concerns have emerged regarding ethical implications, data privacy, and potential risks associated with their deployment. In response, many governments and regulatory bodies have turned to innovative approaches such as "AI regulatory sandboxes" to strike a balance between fostering AI innovation and ensuring responsible development.

To regulate but not restrict

Regulatory sandboxes have become a significant instrument in various countries, used to evaluate innovations within a defined and monitored time frame while being subject to regulatory oversight and controlled constraints. This approach serves as a valuable tool for policymakers, furnishing them with empirical evidence regarding the advantages and potential risks associated with emerging technologies. Moreover, an evidence-based approach empowers policymakers to adopt a well-informed stance in crafting legal and policy responses that foster beneficial innovation. For businesses engaged in these sandboxes, insights gleaned from a study on 'fintech regulatory sandboxes' indicate that this controlled environment enhances access to funding by mitigating information imbalances and reducing regulatory costs. Such multifaceted utility positions regulatory sandboxes as a catalyst for fostering innovation, supporting economic growth, and ensuring responsible governance in a rapidly evolving landscape of emerging technologies.

While the inception of the first formal regulatory sandbox is often attributed to the Financial Conduct Authority in the U.K., numerous other nations have subsequently introduced or announced similar initiatives to assess innovations spanning various industries. According to data from the World Bank, as of November 2020, there were approximately 73 regulatory sandboxes, both announced and operational, within the financial sector across 57 jurisdictions. In India, all financial sector regulators, including the Reserve Bank of India, Securities and Exchange Board of India, Insurance Regulatory and Development Authority of India, Pension Fund Regulatory and Development Authority, and International Financial Services Centre Authority, have launched their respective regulatory sandboxes.

Expanding beyond finance, Karnataka has enacted the Karnataka Innovation Authority Act, 2020, establishing an Innovation Authority dedicated to promoting and regulating innovative technologies through a regulatory sandbox model. Notably, the recently passed Telecommunications Act 2023 proposed a regulatory sandbox where the central Government has the authority to establish one or more regulatory sandboxes, as prescribed, to promote and facilitate innovation and technological development in the field of telecommunications, specifying the manner and duration for their implementation.

The benefits of regulatory sandboxes

In the discourse surrounding AI regulation, the concept of regulatory sandboxes emerges as a compelling avenue for exploration. When one considers the necessity of stringent, detailed regulation or favouring adaptable strategies like soft or self-regulation, the introduction of a regulatory sandbox remains a viable option. Firstly, such a

sandbox provides a controlled environment for experimentation, offering invaluable insights into AI technologies capabilities and limitations while fostering collaboration between innovators and regulators. Additionally, it promotes transparency and accountability by requiring participants to disclose information about their AI models, addressing concerns about opacity and enabling tailored regulations. Furthermore, by mandating risk assessments and safeguards, the sandbox encourages responsible innovation, mitigating potential societal impacts of AI applications and nurturing a culture of ethical development within the industry.

Article 53 of the European Union's AI Act, has the provision of a regulatory sandbox to test technology before making it mainstream. Additionally, Spain became the first European country to have established the statute of the Spanish Agency for the Supervision of Artificial Intelligence (AESIA), ahead of the European regulation on artificial intelligence. This regulation will mandate member states to designate a 'national supervisory authority' responsible for overseeing the implementation of regulations related to AI.

Globally, there is a competitive race to regulate and harness AI's vast potential. The EU has come up with an AI Act, the U.S. has released a white paper on the AI Bill of Rights, and the U.K. has a national AI Strategy. China is trying to regulate various aspects of AI like generative AI while Singapore is following an innovation-friendly approach.

India's approach to AI

In India, NITI Aayog released a discussion paper outlining a national strategy for AI, which led to the establishment of the national AI Portal. The Ministry of Electronics and Information Technology (MeitY), released a report on AI Innovation 2023 highlighting India's AI

vision through seven working groups. The latest proposal of the Digital India Act, 2023 also talks about regulating AI by creating a separate set of laws and regulations.

India's interest in regulating AI is grounded in a multifaceted approach encompassing economic ambitions, ethical considerations, job creation, industrial transformation, and overall societal welfare. As a global technology hub, the chair of the Global Partnership on Artificial Intelligence and the Delhi Declaration, India aspires to foster innovation in alignment with its cultural and ethical values. A comprehensive regulatory sandbox can be envisioned to guide businesses, researchers, and policymakers, steering AI development towards sustainable growth.

A regulatory sandbox should not be viewed as an approach to directly govern AI, but rather as a progressive step preceding formal legislation. It serves as a preparatory measure tailored to India's specific circumstances, paving the way for future regulatory actions aligned with the country's needs and developments in the AI landscape. By providing a controlled environment for testing innovative AI applications, a regulatory sandbox enables stakeholders to assess risks, refine regulatory frameworks, and foster collaboration between regulators, industry players, and other stakeholders. This collaborative approach not only promotes responsible AI deployment but also positions India at the forefront of shaping effective and adaptive regulatory frameworks for emerging technologies. Given the distinct Indian context, it becomes pivotal to determine which approach is most viable and efficient in striking a balance between fostering AI innovation and ensuring ethical, transparent, and accountable AI implementations.

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- Regulatory sandboxes are like safe spaces where companies can test new innovative ideas, especially in the field of technology, without facing all the regular regulations and restrictions right away.
- It allows them to experiment, gather data, and understand how their ideas work in the real world without the usual legal consequences.
- It's a way to encourage new ideas and innovations while still protecting consumers and the market.

Regulatory sandboxes have become a significant instrument in various countries, used to evaluate innovations within a defined and monitored time frame while being subject to regulatory oversight and controlled constraints

- The development of Artificial Intelligence (AI) technologies presents both great opportunities and complex challenges for societies globally.
- AI applications are spreading across various sectors like healthcare, transportation, finance, etc., but this raises concerns about ethics, data privacy, and potential risks.
- To address these concerns, governments and regulatory bodies are adopting innovative strategies like "AI regulatory sandboxes."
- These sandboxes are environments where AI technologies can be tested and developed under controlled conditions.
- They aim to strike a balance between encouraging AI innovation and ensuring responsible development by providing a framework for testing and evaluating AI systems.
- Through regulatory sandboxes, stakeholders can identify and mitigate potential risks associated with AI deployment while promoting innovation and growth in the AI sector.

To regulate but not restrict

- Regulatory sandboxes are significant tools used in various countries to evaluate innovations within a defined timeframe while under regulatory oversight and controlled constraints.
- They provide policymakers with empirical evidence about the advantages and potential risks of emerging technologies, enabling them to make well-informed decisions on crafting legal and policy responses.
- For businesses in these sandboxes, studies suggest that this controlled environment enhances access to funding by reducing information imbalances and regulatory costs.
- Regulatory sandboxes are seen as catalysts for fostering innovation, supporting economic growth, and ensuring responsible governance in the rapidly evolving landscape of emerging technologies.
- The UK's Financial Conduct Authority is often credited with introducing the first formal regulatory sandbox, but many other countries have since followed suit.
- As of November 2020, there were approximately 73 regulatory sandboxes, both announced and operational, in the financial sector across 57 jurisdictions worldwide.
- In India, all financial sector regulators have launched their regulatory sandboxes, and Karnataka has enacted the Karnataka Innovation Authority Act, 2020, establishing an Innovation Authority dedicated to promoting and regulating innovative technologies through a regulatory sandbox model.
- The Telecommunications Act 2023 in India proposed a regulatory sandbox where the central government has the authority to establish one or more sandboxes to promote innovation and technological development in the field of telecommunications.

The benefits of regulatory sandboxes

- Regulatory sandboxes are proposed as a valuable tool in the discourse surrounding AI regulation, offering an alternative to strict, detailed regulations.
- These sandboxes provide a controlled environment for testing AI technologies, allowing for experimentation and collaboration between innovators and regulators.
- They promote transparency and accountability by requiring participants to disclose information about their AI models, addressing concerns about opacity and enabling tailored regulations.
- Additionally, regulatory sandboxes mandate risk assessments and safeguards, encouraging responsible innovation and mitigating potential societal impacts of AI applications.
- Article 53 of the European Union's AI Act includes provisions for a regulatory sandbox to test technology before mainstream implementation.
- Spain has established the statute of the Spanish Agency for the Supervision of Artificial Intelligence (AESIA), preceding the European regulation on AI.
- Globally, there's a competitive race to regulate and harness AI's potential, with the EU, the US, the UK, China, and Singapore all developing strategies and regulations in this area.

India's approach to AI

- In India, NITI Ayog released a discussion paper outlining a national strategy for AI, leading to the establishment of the national AI Portal.
- The Ministry of Electronics and Information Technology (MeitY) released a report on AI Innovation 2023, highlighting India's AI vision through seven working groups.
- The Digital India Act, 2023 proposes regulating AI through separate laws and regulations.
- India's interest in regulating AI encompasses economic ambitions, ethical considerations, job creation, industrial transformation, and societal welfare.
- India aims to foster innovation in alignment with its cultural and ethical values as a global technology hub and chair of the Global Partnership on Artificial Intelligence.
- A comprehensive regulatory sandbox is envisioned to guide AI development towards sustainable growth.
- The regulatory sandbox is not meant to directly govern AI but to precede formal legislation, serving as a preparatory measure tailored to India's specific circumstances.
- By providing a controlled environment for testing AI applications, the sandbox allows stakeholders to assess risks, refine regulatory frameworks, and foster collaboration.
- This collaborative approach promotes responsible AI deployment and positions India at the forefront of shaping effective regulatory frameworks for emerging technologies.

- It's crucial to determine the most viable and efficient approach for India to strike a balance between fostering AI innovation and ensuring ethical, transparent, and accountable implementations.

MAINS PRACTICE QUESTION:

Question: Discuss the potential of Artificial Intelligence (AI) in improving the effectiveness of e-governance in India. (150 Words/10 Marks)

Wholesale price inflation hit a 13-month high in April (15 May)

Prices of food articles rise at the fastest pace in four months; potatoes and onions surge 72% and 60%, respectively, lifting vegetables inflation to 23.6%, while paddy prices rise more than 12%

- In April, India's wholesale price inflation reached a 13-month high at 1.26%, up from 0.53% in March.
- This increase was mainly due to a surge in food prices and a 1.4% rise in fuel and power prices, marking the end of 11 months of deflation.
- On a month-on-month basis, the Wholesale Price Index (WPI) increased by 0.8%, the highest rise since July 2023.
- Primary articles and food prices rose by almost 2% in April, while manufactured products saw a 0.5% increase.
- In April, the price rise in primary food articles reached a four-month high of 7.74%, with vegetable prices increasing by 23.6%.
- Potatoes and onions experienced significant inflation, with rates of 72% and 59.8%, respectively, up from March.
- Paddy prices also rose by more than 12%.
- The Wholesale Food Index rose by 5.5%, the highest rate in eight months, while the deflation in manufactured products narrowed to 0.4% in April, down from 0.8% in March.

Comparison between the Wholesale Price Index (WPI) and the Consumer Price Index (CPI)

1. Meaning:

- WPI: It tracks the change in prices of goods sold in bulk by wholesalers.
- CPI: It monitors the change in prices paid by customers to retailers.

2. Publisher of Index:

- WPI: Published by the Ministry of Commerce and Industry.
- CPI: Published by the National Statistical Office, Ministry of Statistics and Programme Implementation, and Labour Bureau.

3. Base Year:

- WPI: Base year is 2011-12.
- CPI: Base year is 2012.

4. Frequency:

- WPI: Components like primary articles, energy products, and power are published weekly, while the overall index is monthly.
- CPI: Published on the 14th of every month.

5. Source:

- WPI: Based on production values of items.
- CPI: Based on daily household expenditures.

6. Measurement:

- WPI: Measured at the first stage of the transaction, involving wholesale dealers and manufacturers.
- CPI: Measured at the final stage of the transaction, where customers pay the price.

7. Number of Items:

- WPI: Includes 697 items covering primary articles, fuel, and manufactured products.
- CPI: Covers 448 items in rural areas and 460 items in urban areas.

8. Weightage of Item:

- WPI: Food group accounts for about 24.4% of total weight.
- CPI: Food group weighs about 39.06%.

9. Service Status:

- WPI: Excludes services.
- CPI: Includes services like housing, education, and medical care.

10. Commodities:

- WPI: Tracks items like minerals, basic metals, machinery, and manufacturing.
- CPI: Monitors education, communications, housing, recreation, transportation, and beverages

PRELIMS PRACTICE QUESTIONS:

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| <p>Question 1: Solar storms are eruptions of energy from the Sun's surface. What is a potential consequence of a strong solar storm on Earth's infrastructure?</p> <p>(a) Increased crop yields due to enhanced sunlight</p> <p>(b) Disruption of power grids and communication networks</p> <p>(c) Improved air quality due to reduced solar radiation</p> <p>(d) Faster melting of polar ice caps</p> | <p>Answer: (b) Disruption of power grids and communication networks</p> <p>Explanation: Strong solar storms can cause geomagnetic storms on Earth, which can disrupt electrical currents in power grids and communication networks. This can lead to blackouts and outages.</p> |
| <p>Question 2: What is a preventative measure some countries take to mitigate the effects of solar storms on their infrastructure?</p> <p>(a) Planting more trees to absorb solar radiation</p> <p>(b) Investing in stronger and more resilient power grids</p> <p>(c) Stockpiling additional fossil fuels for power generation</p> <p>(d) Launching satellites to deflect solar flares</p> | <p>Answer: (b) Investing in stronger and more resilient power grids</p> <p>Explanation: Upgrading power grids with surge protection and redundancy measures can help minimize disruptions caused by solar storms.</p> |
| <p>Question 3: Wax treatment for joint injuries involves applying heated paraffin wax. What is the intended benefit of this therapy?</p> <p>(a) Reduce inflammation significantly</p> <p>(b) Promote rapid healing of fractures</p> <p>(c) Improve blood circulation and provide temporary pain relief</p> <p>(d) Completely restore full range of motion in a joint</p> | <p>Answer: (c) Improve blood circulation and provide temporary pain relief</p> <p>Explanation: Paraffin wax therapy is used for its mild heat which can:</p> <p>Improve blood flow to the area, potentially aiding in the healing process.</p> <p>Offer temporary relief from pain and stiffness associated with joint injuries.</p> |
| <p>Question 4: Wax treatment is NOT generally recommended for which of the following conditions?</p> <p>(a) Sprains and strains</p> <p>(b) Open wounds or irritated skin</p> | <p>Answer: (d) All of the above</p> <p>Explanation: Wax treatment might not be suitable for all joint injuries. It's generally not recommended for:</p> |

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| <p>(c) Arthritis with significant inflammation (d) All of the above</p> | <p>Open wounds or irritated skin: The heat can worsen irritation or cause burns. Arthritis with significant inflammation: The heat might further aggravate inflammation. Conditions where increased blood flow is not desirable: In some cases, increased blood flow could be counterproductive.</p> |
| <p>Question 5: The Grande Prairie Forest Area is located in which province of Canada? (a) British Columbia (b) Alberta (c) Saskatchewan (d) Manitoba</p> | <p>Answer: (b) Alberta Explanation: The Grande Prairie Forest Area is situated in the province of Alberta, Canada.</p> |
| <p>Question 6: The Grande Prairie Forest Area is part of the boreal forest biome. What are some of the characteristic tree species found in this biome? (a) Oak, maple, birch (b) Spruce, pine, fir (c) Teak, mahogany, ebony (d) Palm, banyan, rubber</p> | <p>Answer: (b) Spruce, pine, fir Explanation: The boreal forest biome, also known as taiga, is characterized by coniferous trees like spruce, pine, and fir. These trees are well-adapted to the cold winters and short growing seasons of the region.</p> |
| <p>Question 7: The Grande Prairie Forest Area might be economically important for the following reason(s): (a) Extensive farming and agriculture (b) Rich deposits of minerals and resources (c) Production of timber and wood products (d) All of the above</p> | <p>Answer: (c) Production of timber and wood products Explanation: The Grande Prairie Forest Area, with its abundance of coniferous trees, is likely a source of timber that can be used for various wood products in the lumber and construction industries</p> |
| <p>Question 8: What are some of the key rights enshrined in the Consumer Protection Act for Indian consumers? (a) Right to information about products and services (b) Right to safety from hazardous goods and services (c) Right to fair and responsible pricing (d) All of the above</p> | <p>Answer: (d) All of the above Explanation: The Consumer Protection Act grants consumers various rights, including: Right to information: Consumers have the right to be informed about the product or service they are purchasing, including details like price, composition, and manufacturing. Right to safety: Consumers have the right to be protected from unsafe goods and services that could cause harm. Right to fair and responsible pricing: Consumers are protected from unfair pricing practices like misleading discounts or excessive pricing.</p> |

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| <p>Question 9: In case of a consumer complaint under the Consumer Protection Act, which of the following bodies can the consumer approach for redressal?</p> <p>(a) Local police station only (b) District Consumer Forum (c) High Court directly (d) Manufacturer of the product</p> | <p>Answer: (b) District Consumer Forum Explanation: The Consumer Protection Act establishes a three-tier redressal system for consumer disputes. The first level is the District Consumer Forum, handling claims with a value up to Rs. 1 crore.</p> |
| <p>Question 10: Which of the following is NOT a right provided to consumers under The Consumer Protection Act, 2019?</p> <p>a) Right to safety b) Right to be informed c) Right to return goods for any reason d) Right to seek redressal</p> | <p>Answer: c) Right to return goods for any reason Explanation: The Consumer Protection Act, 2019 grants consumers several rights to protect their interests. These include the right to safety, right to be informed, and the right to seek redressal. However, the act does not explicitly grant consumers the unrestricted right to return goods for any reason. Instead, it allows consumers to return goods only if they are defective, deficient, or not as advertised. Option Analysis: a) Incorrect. The right to safety is indeed provided to consumers under The Consumer Protection Act, 2019. This includes protection from hazardous goods or services. b) Incorrect. The right to be informed ensures that consumers have access to accurate information about the quality, quantity, potency, purity, price, and standard of goods or services. d) Incorrect. The right to seek redressal empowers consumers to seek compensation or resolution for grievances arising from the purchase of goods or services.</p> |
| <p>Question 11: Question: Under The Consumer Protection Act, 2019, which authority is responsible for the settlement of disputes between consumers and companies?</p> <p>a) Central Consumer Protection Authority (CCPA) b) National Consumer Disputes Redressal Commission (NCDRC)</p> | <p>Answer: b) National Consumer Disputes Redressal Commission (NCDRC) Explanation: The National Consumer Disputes Redressal Commission (NCDRC) is the apex consumer dispute redressal forum established under The Consumer Protection Act, 2019. It handles disputes involving claims exceeding Rs. 1 crore or those against</p> |

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| <p>c) District Consumer Disputes Redressal Forum (DCDRF) d) State Consumer Disputes Redressal Commission (SCDRC)</p> | <p>decisions of State Consumer Disputes Redressal Commissions. Option Analysis: a) Incorrect. The Central Consumer Protection Authority (CCPA) is responsible for promoting, protecting, and enforcing consumer rights, but it does not directly handle dispute resolution between consumers and companies. c) Incorrect. The District Consumer Disputes Redressal Forum (DCDRF) is responsible for handling disputes involving claims up to Rs. 1 crore at the district level. It is not the highest authority for dispute resolution. d) Incorrect. The State Consumer Disputes Redressal Commission (SCDRC) handles disputes involving claims between Rs. 20 lakhs and Rs. 1 crore at the state level, but it is not the apex authority for dispute resolution.</p> |
| <p>Question 12: What does the Wholesale Price Index (WPI) measure in the context of inflation? a) Consumer price fluctuations at the retail level b) Changes in the cost of goods and services purchased by households c) Price changes of goods sold in bulk by manufacturers and wholesalers d) Fluctuations in the prices of goods and services traded on the stock market</p> | <p>Answer: c) Price changes of goods sold in bulk by manufacturers and wholesalers Explanation: The Wholesale Price Index (WPI) measures the average change in the selling prices received by producers at the wholesale level. It reflects price changes of goods sold in bulk by manufacturers and wholesalers, providing insights into inflationary trends in the early stages of the supply chain. Option Analysis: a) Incorrect. Consumer price fluctuations at the retail level are measured by the Consumer Price Index (CPI), not the Wholesale Price Index (WPI). b) Incorrect. Changes in the cost of goods and services purchased by households are also reflected in the Consumer Price Index (CPI), not the Wholesale Price Index (WPI). d) Incorrect. Fluctuations in the prices of goods and services traded on the stock market are not measured by the Wholesale Price Index (WPI), which focuses on wholesale price changes of goods.</p> |

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| <p>Question 13: What is the base year for the calculation of Wholesale Price Inflation (WPI) in India?</p> <p>a) 2001-02 b) 2011-12 c) 2015-16 d) 2020-21</p> | <p>Answer: b) 2011-12 Explanation: The base year for the calculation of Wholesale Price Inflation (WPI) in India is 2011-12. This serves as the reference point against which price changes are measured.</p> |
| <p>Question 14: In India, who is responsible for the compilation and publication of the Consumer Price Index (CPI)?</p> <p>a) Ministry of Finance b) Reserve Bank of India (RBI) c) Central Statistical Office (CSO) d) Securities and Exchange Board of India (SEBI)</p> | <p>Answer: c) Central Statistical Office (CSO) Explanation: The Central Statistical Office (CSO) under the Ministry of Statistics and Programme Implementation is responsible for the compilation and publication of the Consumer Price Index (CPI) in India. Options a), b), and d) are incorrect because they represent other governmental bodies with different responsibilities.</p> |
| <p>Question 15: Question: Which of the following items is typically NOT included in the calculation of Consumer Price Index (CPI)?</p> <p>a) Food and beverages b) Housing c) Stock market investments d) Transportation</p> | <p>Answer: c) Stock market investments Explanation: Consumer Price Index (CPI) typically includes items such as food and beverages, housing, and transportation, which represent expenses incurred by consumers in their daily lives. However, stock market investments are not considered part of consumer spending and are therefore not included in the CPI calculation. Options a), b), and d) are incorrect because they represent items that are commonly included in CPI calculations.</p> |