TATHASTU
Institute of Civil Services

DAILY CURRENT AFFAIRS

19th March, 2024

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S.NO.	TOPIC
1.	Free Trade: Shaping Global Economic Discourse
2.	Prelims pointers

SC to hear petitions seeking stay on CAA

SOURCE: ***The Hindu***

TAG: **GS Paper – III** Effects Of Liberalisation On The Economy, Changes In Industrial Policy and their effects on Industrial Growth

Practice Question:

Mains

Q. Examine the evolution of free trade ideology and its contemporary challenges. Also suggest reforms needed to align global trade regimes with the vision of promoting peace, prosperity, and equitable outcomes ***(250 words)***

FREE TRADE: SHAPING GLOBAL ECONOMIC DISCOURSE

WHY IN NEWS?

- The recent discussion on free trade has attracted attention due to its nuanced nature and its implication in global trade policies, agreements, and economic strategies.

Evolution of Free Trade Ideology

- 19th-century Advocates: Figures like Adam Smith and Thomas Hobbes promoted free trade to combat despotism and reduce inequalities, viewing it as a tool for fostering peace and economic progress.
- US Populists: Opposed import tariffs, advocating for progressive income tax to counter perceived benefits to big businesses at the expense of ordinary citizens.
- Early 20th-century Socialists: Saw regulated free trade as a solution to militarism and wealth gaps, promoting global harmony.
- Liberal Reformers: Supported free trade to counter retrograde interests like business monopolies, linking economic nationalism with imperialism.

Perception and Misconceptions of Free Trade:

- Debate in Economics: Free trade has sparked debate over its contribution to rising inequality and the erosion of the middle class.
- Oversight in Globalization: Boosters of globalization often overlooked its negative impacts, empowering leaders to exploit grievances against trade.

Instrumentalization of Trade:

- Historical Examples: Free trade was entrenched in Antebellum America and imposed through coercion by British imperialism, serving colonial interests and perpetuating dominance.
- Post-World War II: While global trade aimed at peace, corporate influence prioritized profit over societal welfare.

Present Challenges to the Trade Regime:

- Corporate Influence: Multinational corporations wield significant power in trade negotiations, often neglecting broader societal welfare.
- Neglect of Key Issues: Environmental concerns, public health, and economic security are often sidelined in trade agreements.
- Deviation from Original Vision: Trade has deviated from its original purpose, becoming a source of conflict and inequality.

Lessons from History:

- Democratizing Trade: Trade must serve broader public interests, not just corporate profits.
- Realignment with Original Vision: Trade regimes should align with the original vision of promoting peace and equitable outcomes.

Reforms Needed:

- Addressing Corporate Influence: Limiting corporate influence in trade negotiations to reflect broader societal interests.
- Integration of Key Issues: Prioritizing environmental sustainability, public health, and human rights in trade agreements.
- Promoting Multilateralism: Strengthening multilateral institutions like the WTO to uphold global trade rules.

Conclusion:

- The evolution of free trade ideology reveals its nuanced nature, with both positive and negative outcomes.
- To ensure trade benefits all, policymakers must democratize trade policies and realign them with the original vision of promoting peace, prosperity, and equitable outcomes.
- By learning from history and implementing necessary reforms, global trade can move towards inclusivity, sustainability, and shared prosperity.

PRELIMS POINTERS:

19th March, 2024

TOPIC	DESCRIPTION
Innovative Material Design Shaping Future Technologies	**WHY IN NEWS?** ❖ The Ministry of Science & Technology recently announced a groundbreaking development in material science-a synthetic material design capable of controlling the temperature at which a material transitions from an insulator to a conductor. ❖ This innovation paves the way for more efficient electronic switches compared to traditional transistors. **Background:** ❖ Most materials encountered in daily life are either electrical conductors (like copper or aluminium) or insulators (like plastic or paper). ❖ However, correlated electron materials undergo a transition from insulator to metal, usually based on temperature. ❖ This transition's temperature dependence limits their usefulness in devices requiring constant operation temperatures, such as electronic switches.

Research Collaboration:

- Scientists from the Indian Institute of Science (IISc) collaborated with researchers from Japan, Denmark, and the United States to propose and demonstrate a three-layer material structure.
- This structure includes an active channel layer undergoing the metal-to-insulator transition, a charge reservoir layer controlling the transition temperature, and a charge-regulating spacer layer between them.

Material Preparation:

- The success of this work relies on preparing nanometer-thick, atomically smooth layers of materials.
- This was achieved using pulsed laser deposition, a technique allowing precise atomic layer control.
- Quality qualification of these layers was conducted using an atomic force microscope.

Significance:

- The research, published in Nature Communications, showed that a high density of electrons (>1021 electrons/cm3) could be introduced into the VO2 layer without altering its crystal structure.
- This eliminates the need for doping, a process that can affect material properties.

Future prospects:

- The study opens avenues for studying and controlling properties of exotic materials, including superconductors.
- It also suggests the possibility of developing new devices harnessing phase transitions in synthetic structures.
- The purely electronic control of phase transitions could lead to advancements in classical and quantum computing.
- This innovative research has significant implications for advancing electronic technology and understanding the behavior of complex materials.

Animal Vision with Camera Technology

WHY IN NEWS?

- Scientists have developed a specialized camera to mimic animal vision, providing insights into how different creatures perceive the world.

Purpose and Application:

- The camera aims to aid farmers in identifying fruit pests invisible to the human eye but detectable by certain animals, thereby improving pest management strategies.

Mimicking Animal Vision:

- By replicating the visual perception of animals, the camera captures images and videos that depict how animals perceive moving objects and their surroundings.

Enhanced Pest Detection:

- Farmers can leverage the camera's capabilities to spot pests more efficiently, leading to better crop protection and increased agricultural productivity.

Understanding Animal Behavior:

- This technology offers a deeper understanding of animal behavior and interactions with the environment, shedding light on evolutionary adaptations and ecological dynamics.

Advancing Agricultural Science:

- The development of the specialized camera represents a significant advancement in agricultural science, offering new tools for pest management and crop protection.

Future Prospects:

- The research opens up new avenues for studying animal vision and perception, with potential applications in various fields beyond agriculture.

Conclusion:

- The specialized camera for animal vision research holds immense promise for revolutionizing pest management practices and deepening our understanding of the natural world.
- By bridging the gap between human and animal vision, this technology paves the way for more effective agricultural strategies and broader insights into animal behavior.

Mission 414 Campaign

WHY IN NEWS?

- The "Mission 414 Campaign" is an initiative by the Election Commission (EC) of India with the aim of revitalizing voter engagement across 414 polling stations in Himachal Pradesh that witnessed less than 60% turnout in the previous Lok Sabha elections.

Key aspects of the campaign:

- Maximizing Voter Turnout: The main goal is to surpass the 60% turnout threshold set in previous elections across the designated polling stations.
- Enhancing Civic Awareness: Through awareness campaigns and cultural events, the campaign seeks to educate citizens about their electoral rights and responsibilities.
- Model Polling Stations: Transforming the identified polling stations into efficient, accessible, and inclusive centres of democracy.

The strategies deployed in the campaign include:

- Engagement Initiatives: Involving youth icons to energize young voters, distributing personalized invitation cards crafted by children, and conducting grassroots outreach programs.
- Addressing Voter Disparities: Implementing targeted interventions to address gender disparities in voter turnout, such as appointing motivational figures called "Mahila Preraks" to inspire women voters and engaging campus ambassadors to encourage female students' participation.
- Ensuring Inclusivity and Accessibility: Proactively providing facilities for persons with disabilities at polling stations and supervising them with diverse groups to promote inclusivity.
- Enhanced Voter Demographics: Focusing on engaging first-time voters and increasing youth participation through targeted outreach.

The campaign emphasizes transparency, accessibility, and inclusivity in the electoral process, aiming to empower citizens to exercise their democratic rights effectively. Through collective efforts, stakeholders promise to shape a more vibrant and representative democracy in Himachal Pradesh.

ULLAS Initiative

WHY IN NEWS?

- The Department of School Education and Literacy (DoSEL), under the Ministry of Education, Government of India, is set to conduct the Foundational Literacy and Numeracy Assessment Test (FLNAT) recently across 23 states.

Overview of ULLAS Initiative:

- The Understanding Lifelong Learning for All in Society (ULLAS) initiative aims to revolutionize education and literacy nationwide.
- It fosters a learning ecosystem to reach every individual, bridging gaps in basic literacy and critical life skills.

Objectives of ULLAS:

- Imparting basic education, digital and financial literacy, and critical life skills to citizens aged 15 and above who missed formal schooling opportunities.
- Implementation through volunteerism to cover components necessary for 21st-century citizens.

Components Covered by ULLAS:

- Critical Life Skills (including financial literacy, digital literacy, commercial skills, health care and awareness, child care and education, and family welfare)
- Vocational Skills Development (with a view towards obtaining local employment)
- Basic Education (including preparatory, middle, and secondary stage equivalency)
- Continuing Education (including engaging holistic adult education courses in arts, sciences, technology, culture, sports, and recreation, as well as other topics of interest or use to local learners)

Launch of ULLAS App:

- ULLAS app launched to serve as a user-friendly and interactive app available on both Android and iOS platforms.
- Acts as a digital gateway for learners to access diverse learning resources through the DIKSHA portal of NCERT.

Registration Process:

- Learners and volunteers can register through self-registration or by surveyors using the ULLAS app.

Conclusion:

- The ULLAS initiative, supported by the ULLAS app, aims to democratize education and literacy, providing access to learning resources for all individuals, regardless of formal schooling opportunities.

Breakthrough Sickle Cell Drug

Why in news?

- Recently, Delhi-based Akmus Drugs and Pharmaceutical Limited has unveiled a revolutionary drug for sickle cell disease (SCD).
- It is India's first indigenous, room-temperature stable solution for this genetic disorder.

Sickle Cell Disease (SCD):

- SCD is a genetic disorder affecting red blood cells, causing them to become hard, sticky, and sickle-shaped due to abnormal haemoglobin.
- This condition leads to various complications such as pain, infections, acute chest syndrome, and stroke.
- It's diagnosed through a simple blood test, often identified at birth through newborn screening.

- Treatment involves managing complications with options like bone marrow or stem cell transplantation, gene therapies, and medications like hydroxyurea to reduce symptoms and prevent complications.

About Akmus Sickle Cell Drug:

- Akmus unveiled an oral suspension of Hydroxyurea, priced at less than ₹600, making it highly accessible to patients nationwide.
- The drug is tailored for patients across all age groups and offers convenience and precision in dosage administration through provided oral syringes.

Revolutionary Aspects of the Drug:

- Temperature Stability: Unlike imported hydroxyurea, Akmus' solution doesn't require refrigeration.
- Storage Convenience:No need for stringent storage conditions like 2-8 degrees Celsius.
- Cost-Efficiency: Akmus' solution offers a more affordable alternative.

Indian Context:

- SCD is mostly prevalent in districts with high tribal populations, affecting about one in 86 births among Scheduled Tribes (STs).
- India recognizes SCD as a significant health challenge, especially among tribal communities, and has prioritised it among the top 10 health issues affecting these communities.
- The National Sickle Cell Anaemia Elimination Mission, launched in 2023, aims to eliminate SCD from India by 2047, reflecting the national commitment to addressing this health issue.

Conclusion:

- Overall, Akmus Pharmaceuticals' breakthrough drug not only addresses the critical healthcare needs of sickle cell disease patients in India but also aligns with national efforts to combat this genetic disorder effectively.