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Factly Compilation

4th to 9th September, 2023

Factly Compilation for the Month of September (First Week) 2023

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1. Centre's DIKSHA e-education platform to offer AI help

Source: The post is based on the article **"Centre's DIKSHA e-education platform to offer AI help"** published in **The Hindu on 4th September 2023**

What is the News?

The National e-Governance Division (NeGD) of the Ministry of Electronics and Information Technology (MeitY) in India is planning to integrate Personalized Adaptive Learning (PAL) into its existing Digital Infrastructure for Knowledge Sharing (DIKSHA) platform.

What is Personalized Adaptive Learning(PAL)?

It is a software-based approach that will allow each student to have an individualized learning experience over the course of the curriculum based on their unique needs and abilities.

What is DIKSHA Platform?

DIKSHA is an initiative of the Ministry of Education for digital online education.

It provides quality e-content for school education in States/UTs and QR coded Energized Textbooks for all grades.

It also has embedded assistive technologies for learners with visual or hearing impairments.

Apart from this, DIKSHA also hosts 2.43 lakh contributions by 11,624 academics by way of teaching videos, explainers and practice questions.

How will integration of PAL with DIKSHA platform help?

The integration of PAL into DIKSHA is expected to revolutionize the platform by leveraging artificial intelligence (AI) to cater to the specific learning needs of students.

For example, if a student of Class 9 is learning the Pythagoras theorem and makes a calculation mistake, the AI learning system flags it and loops the student back to a basic video of how to make the calculation.

What are the challenges in integration of PAL with DIKSHA platform?

Building PAL is a massive exercise.Content from across subjects will have to be categorized and different chunks will have to be tagged.New content may also have to be created.

The initial focus of the government is likely to be on subjects like chemistry, mathematics, and physics for Classes 9 to 12.

Several states like Andhra Pradesh, Assam, and Haryana have experimented with PAL with the help of private players but are facing budget constraints.

2. Aarogya Maitri Cube: India Builds World's First Portable Hospital to Keep 200 Survivors Alive for 48 Hrs

Source: The post is based on the article **"Aarogya Maitri Cube: India Builds World's First Portable Hospital to Keep 200 Survivors Alive for 48 Hrs"** published in **News18 on 4th September 2023**

What is the News?

India has built the world's first disaster hospital that can be airlifted, packed in 72 cubes.It has been named as 'Aarogya Maitri Cube'.

What is Aarogya Maitri Cube?

Aarogya Maitri Cube is the world's first disaster hospital that can be airlifted.

It has been developed indigenously under the **Project BHISHM** (Bharat Health Initiative for Sahyog Hita and Maitri).

It has been developed as part of India's '**Aarogya Maitri' initiative** to provide essential medical supplies to friendly countries.

Key Features: Aarogya Maitri Cube is packed in 72 cubes.These cubes contain essential equipment and supplies, such as an operation theater, a mini-ICU, ventilators, blood test equipment, an X-ray machine, a cooking station, food, water, shelter, a power generator, and more.

– The special cage can hold 36 mini-cubes filled with supplies needed for 100 people to survive for two days.

– There are two of these cages, called master cubes, which can be joined to support 200 survivors.One of the major features of these cubes is their ability to handle various severe injuries, including bullet injuries, major bleeds etc.

3. G20 THINQ

Source: The post is based on the article **"G20 THINQ"** published in **PIB on 4th September 2023**

What is the News?

The Indian Navy has launched the second edition of The Indian Navy Quiz "G20 THINQ".

What is G20 THINQ?

G20 THINQ is a national and international quiz competition that brings together youth from different regions and geographies, and enables them to build lasting friendships in the spirit of 'Vasudaiva Kutumbakam' – world is one family.

Conducted by: Indian Navy under the aegis of the G20 Secretariat and in partnership with NWWA (Navy Welfare and Wellness Association) and will have two levels National and International.

Levels: The competition comprises two levels: the national round and the international round.

– The National Round of the G20 THINQ will see participation of school children studying in Classes IX to XII.

– The International Round will see the participation of teams from G20+9 nations, each team comprising two students.

Significance: G20 THINQ will serve as a remarkable finale to India's Presidency that witnessed many unique achievements of the G20 at the global level.

4. As UPI crosses 10 billion transactions-mark, a look at India's key foreign policy sell: Digital public infra

Source: The post is based on the article **"As UPI crosses 10 billion transactions-mark, a look at India's key foreign policy sell: Digital public infra"** published in **Indian Express on 4th September 2023**

What is the News?

Digital public infrastructure (DPI) has been a key part of the government's overall narrative about India throughout its G20 presidency.

During the G20 digital economy ministers' meeting in Bengaluru earlier this month, Prime Minister said that India is an "ideal testing lab" for solutions that can be replicated globally anywhere in the world.

What is Digital public infrastructure(DPI)?

Digital public infrastructure (DPI) refers to blocks or platforms such as digital identification, payment infrastructure and data exchange solutions that help countries deliver essential services to their people, empowering citizens and improving lives by enabling digital inclusion.

What is India's Digital public infrastructure (DPI)?

India's Digital public infrastructure (DPI) is known as **India Stack**.It is the name used to describe a collection of disparate technology products and frameworks.The components of this collection are owned and maintained by different agencies.

The overall architecture of India Stack has three key layers – identity, payments, and data management.

Digital Identity: It is centered around Aadhaar, India's national identity program.It can be used to remotely authenticate via two-factor or biometric authentication, receive digitally signed records such as driver's licenses, educational diplomas, and insurance policies, and sign documents or messages using a government-backed digital signature service.

Real-time fast payment system: UPI forms the second layer as it is designed to enable interoperability between money custodians, payment rails and front-end payment applications.The technology, which is in the custody of the National Payments Corporation of India (NPCI), has been licenced to several third-party private entities such as PhonePe, Google Pay and Paytm.

Data Management: It focuses on creating a new model for data governance.It operates as per a policy called the Data Empowerment and Protection Architecture (DEPA), which at its core has the institution of a consent management system — which will allow the sharing of the information — with a view to provide better financial, health and telecom-related products and services to individuals and firms.

How is India Stack part of India's Foreign Policy?

India has launched the Digital Public Infrastructure (DPI) partnership to enable countries, especially low and middle-income brackets, to learn from its experiences in harnessing technology to improve governance, and for social, economic, digital and sustainable development.

India also introduced the idea to form an alliance of countries called One Future Alliance which would allow like-minded nations to use technology to improve people's lives.

India signed MoUs with Armenia, Sierra Leone, and Suriname to share its successful digital solutions implemented at scale through the India Stack.

Draft Public Key Infrastructure(PKI) Mutual Recognition Framework has also been released by the Ministry of Electronics & IT, Government of India with an aim to take the lead on the subject of implementation and adoption of India's DPI beyond the country's borders

5. "Sunshine moment for India," says Union Minister as PSLV-XL launches India's first Solar Mission

Source: The post is based on the article **"Sunshine moment for India," says Union Minister as PSLV-XL launches India's first Solar Mission"** published i**n PIB on 4th September 2023**

What is the News?

Polar Satellite Launch Vehicle (PSLV-XL) has launched India's first Solar Mission, – Aditya L1 from Sriharikota Range.

What is Aditya L1?

Source: TOI

Aditya L1 is the first space-based Indian mission to study the Sun.

Placed at: It shall be placed in a halo orbit around the Lagrange point 1 (L1) of the Sun-Earth system, which is about 1.5 million km from the Earth.

– A satellite placed in the halo orbit around the L1 point has the major advantage of continuously viewing the Sun without any occultation/eclipses. This will provide a greater advantage of observing the solar activities and its effect on space weather in real time.

Payloads: The spacecraft carries seven payloads to observe the photosphere, chromosphere and the outermost layers of the Sun (the corona) using electromagnetic and particle and magnetic field detectors.

– Using the special vantage point L1, four payloads directly view the Sun.The remaining three payloads carry out in-situ studies of particles and fields at the Lagrange point L1, thus providing important scientific studies of the propagatory effect of solar dynamics in the interplanetary medium.

Significance: The Aditya L1 Mission is expected to provide the most crucial information to understand the problem of coronal heating, coronal mass ejection, pre-flare and flare activities and their characteristics, dynamics of space weather, propagation of particles and fields etc.

How will Aditya L1 be placed in the L1 orbit?

Initial Orbit: The spacecraft was initially placed in a Low Earth Orbit.

Elliptical Orbit: The orbit will then be adjusted to become more elliptical.

Exit from Earth's Gravitational Sphere of Influence (SOI): The spacecraft will be propelled towards the L1 point using onboard propulsion.As the spacecraft moves towards the Lagrange point, it will exit Earth's gravitational Sphere of Influence.

Cruise Phase: After leaving Earth's SOI, the cruise phase of the mission will commence.

Halo Orbit: Subsequently, the spacecraft will be injected into a large halo orbit around the Lagrange point (L1).

6. Minister of Fisheries, Animal Husbandry & Dairying lays the Foundation Stone for the establishment of Multi-Purpose Seaweed Park in Tamil Nadu

Source: The post is based on the article **"Minister of Fisheries, Animal Husbandry & Dairying lays the Foundation Stone for the establishment of Multi-Purpose Seaweed Park in Tamil Nadu"** published in **PIB on 4th September 2023**

What is the News?

On the third day of the Sagar Parikrama, the Minister of Fisheries, Animal Husbandry & Dairying laid the Foundation Stone for the establishment of a Multi-Purpose Seaweed Park in Tamil Nadu.

What is Seaweed?

Click Here to read

What is a Multi-Purpose Seaweed Park?

Established in: Tamil Nadu

Announced in: In the Union Budget 2021, the Finance Minister had announced the proposal to set up 'Multipurpose Seaweed Park in Tamil Nadu'.

Objectives: To promote seaweed cultivation for creation of employment opportunity for coastal fisher youth and fisher women.

– To develop value-added seaweed products by encouraging private sector/ entrepreneurs and supporting them in setting up seaweed processing units in the seaweed park.

– Development of seaweed seed bank in collaboration with research institutes, universities, private entrepreneurs and fisheries department

– Exploration of untapped seaweed potential in the coastal districts of Tamil Nadu through scientific and traditional seaweed farming and development of R&D centres for production of quality seaweed.

Key Features: The seaweed park will provide a single window support for the entrepreneurs, processors etc. to access information on schemes, licenses/approvals required, while also providing space to set up processing centres.

7. DPIIT holds review meeting for wider adoption of PM GatiShakti National Master Plan in States/UTs

Source: The post is based on the article **"DPIIT holds review meeting for wider adoption of PM GatiShakti National Master Plan in States/UTs"** published in **PIB on 3rd September 2023**

What is the News?

The Department for Promotion of Industry and Internal Trade (DPIIT) has conducted a review meeting with States and Union Territories to promote broader utilization of the PM GatiShakti National Master Plan (NMP).

What is the PM GatiShakti National Master Plan (NMP)?

Launched in: 2021

Aim: To break the inter-ministerial tangles and silos and foster cooperation and integration in the fasttrack implementation of projects.

Objectives: 1) smooth multimodal connectivity 2) enhanced prioritization and optimal usage of resources to create capacities on time and 3) resolution of issues like standardization, disjointed planning and clearances.

Targets:

– The national highway network will be extended to expand the limit of roadways and touch the 2 lakh-km mark.

– Making of around 200 new airports, heliports, and water aerodromes to support aviation.

– The limit of railways to move cargo will be expanded to around 1,600 tons by FY25.

– The transmission network for power will be extended to 454,200 circuit km for easy access.

– Increment renewable capacity to 225 GW by FY25 and complete around 17,000 km of gas pipelines.

What are the benefits of PM Gati Shakti?

– It lays out a centralized portal to unite the infrastructural initiatives of 16 central ministries and departments.

– Optimized Route Planning

– Enhanced visibility of intersections from forest, economic zones, archaeological sites etc.

– Enabling time and cost saving for planning and implementation of infrastructure projects, such as, use of digital surveys on NMP to streamline the preparation of Detailed Project Reports (DPR) with higher accuracy.

– It will create employment potential for a large number of individuals.

8. The northern plains of India is the most polluted region

Source: The post is based on the article **"The northern plains of India is the most polluted region"** published in **The Hindu on 4th September 2023**

What is the News?

The Air Quality Life Index 2021 has been released.

What is the Air Quality Life Index?

Released by: Energy Policy Institute at the University of Chicago (EPIC)

Purpose: It is a pollution index that quantifies the relationship between long-term exposure to particulate pollution and life expectancy.

What are the key findings of the Air Quality Life Index?

Pollution and Life expectancy: Pollution remains the foremost external threat to human health around the world.

– Its impact on life expectancy rivals that of smoking, surpassing alcohol use, unsafe water, and even exceeding car crash injuries.

– If the world were to permanently reduce fine particulate pollution (PM2.5) to meet the World Health Organization's (WHO) guideline, the average person would add 2.3 years onto their life expectancy.

South Asia: South Asia is home to the four most polluted countries in the world and nearly a quarter of the global population.

– Between 2013 to 2021, particulate pollution in South Asia surged by 9.7%, which is estimated to reduce life expectancy in the region by an additional six months.

Most polluted countries in the world: Bangladesh, India, Nepal, and Pakistan where 22.9% of the global population lives are the four most polluted countries in the world.

– In Bangladesh, people potentially lost an average of 6.8 years of life due to air pollution not meeting WHO guidelines.In contrast, the average person from the U.S. lost just 3.6 months.

China: China stands out due to its success in reducing pollution by a staggering 42.3% from 2013 to 2021 and extending the average life expectancy of its population by 2.2 years.This reduction can be attributed to the country's policy initiatives to combat pollution in 2014.

India: India is the second-most polluted country in the world in 2021.

– The average Indian resident is set to lose 5.3 years of life expectancy if WHO guidelines remain unmet.In contrast, cardiovascular diseases reduce the average Indian's life expectancy by about 4.5 years, while child and maternal malnutrition reduces it by 1.8 years.

– Delhi is the world's most polluted city. If the PM2.5 level in Delhi is reduced to meet the WHO guideline, a resident in Delhi could gain 11.9 years in life expectancy.

– Northern plains, which is home to over half a billion people and 38.9% of India's population, **is the most polluted region.**

– The northern plains include the States and Union Territories of Bihar, Chandigarh, Delhi, Haryana, Punjab, Uttar Pradesh, and West Bengal.

– In the northern plains, the average resident is set to lose about 8 years of life expectancy if pollution levels persist and policies do not succeed in reducing pollution to levels as prescribed by the WHO.

9. Thrissur rocks to the rhythm of Pulikkali

Source: The post is based on the article **"Thrissur rocks to the rhythm of Pulikkali"** published in **The Hindu on 3rd September 2023**

What is the News?

The traditional folk dance of Kerala 'Pulikkali' was performed on the occasion of Onam.

What is Pulikkali?

Pulikkali (Tiger Dance) is one of the folk art forms of Kerala.

The artists wear a tiger mask, paint their bodies like tigers and dance to the rhythm of traditional percussion instruments such as thakil, udukku and chenda.

It is performed on the fourth day of Onam festival.

It is believed to have originated two centuries ago as a street dance form and became part of Onam celebrations later.

It is said to have been introduced by the erstwhile ruler of Cochin, Maharaja Rama Varma Sakthan Thampuran.

The main theme of this folk art is tiger hunting with participants playing the role of tiger and hunter.

Usually, men and children perform this art form.For the first time, 3 women among a 51-member team participated in the Pulikali at Thrissur in 2016.

10. ASI's "Adopt a Heritage 2.0 programme" Indian Heritage app launched

Source: The post is based on the article **"ASI's "Adopt a Heritage 2.0 programme" Indian Heritage app launched "** published in **PIB on 4th September 2023**

What is the News?

The Archaeological Survey of India (ASI) has launched the "Adopt a Heritage 2.0" programme and Indian Heritage app.

What is Adopt a Heritage Programme?

Adopt a Heritage Programme was launched in 2017 under the Ministry of Tourism in collaboration with the ASI.

Under this programme, corporate stakeholders were invited to adopt from over 3,000 protected monuments spread across the country.

What is Adopt a Heritage 2.0 Programme?

'Adopt a Heritage 2.0', is the upgraded version of 'Adopt a Heritage' programme.

The programme encourages corporate stakeholders to utilize their Corporate Social Responsibility (CSR) funds to enhance facilities at historically-important monuments.

Changes made: It has incorporated a host of changes to the programme such as:

– Clearly defined the amenities sought for different monuments as per Ancient Monuments and Archaeological Sites and Remains Act (or AMASR Act), 1958.

– Freedom has been given to companies to either adopt a monument in whole and develop its tourism infrastructure, or provide a particular amenity such as drinking water facility or cleaning services for one or several sites.

Applying procedure for a monument: The stakeholders can apply for adopting a monument or specific amenities at a monument through a dedicated web portal

– The process for selection will be carried out after due-diligence and discussions with various stakeholders and assessing the economic and developmental opportunities at each monument.

– The term of the appointment will be for a period of five years initially, which may be further extended up to five years.

What is an Indian Heritage app?

Indian Heritage app will showcase the heritage monuments of India.The app will feature state-wise details of monuments along with photographs, list of public amenities available, geo-tagged location and feedback mechanism for citizens.

11. 'Gujarat Declaration' underlining outcome of the first WHO Traditional Medicine Global Summit 2023 released

Source: The post is based on the article **"Gujarat Declaration' underlining outcome of the first WHO Traditional Medicine Global Summit 2023 released"** published i**n PIB on 4th September 2023**

What is the News?

The first WHO Traditional Medicine Global Summit was held in Gandhinagar, Gujarat.

The World Health Organization (WHO) released the outcome document of the summit in form of "Gujarat Declaration'.

What is the first WHO Traditional Medicine Global Summit?

Click Here to read

What are the key points of the Gujarat Declarations?

Gujarat declaration reaffirmed global commitments towards indigenous knowledges, biodiversity and traditional, complementary and integrative medicine.

The key action points outlined in the declaration are:

Health and Well-being: Scale up evidence-based traditional, complementary, and integrative medicine (TCIM) for universal health coverage and Sustainable Development Goals.Use science and technology to validate TCIM's contribution to health and well-being.

Global Health Leadership: Expand multi-regional collaborations through the WHO Global Traditional Medicine Centre and Respect Indigenous Peoples' knowledge on health.

Research and Evidence: Mobilize research funding for TCIM and strengthen research capabilities.

Universal Health Coverage and Health Systems: Integrate TCIM into national health systems and adapt laws and policies for TCIM safety and accessibility.

Digital Health and AI: Develop digital health resources, including AI, for TCIM.

Biodiversity and Sustainability: Support UN biodiversity agreements and Indigenous Peoples' involvement.

Human Rights, Equity, and Ethics: Recognize and protect Indigenous Peoples' rights and knowledge.Incorporate ethical practices in TCIM.

12. The Pradhan Mantri Dakshata Aur Kushalata Sampanna Hitgrahi(PM-DAKSH) Yojana

Source: The post is based on the article **"The Pradhan Mantri Dakshata Aur Kushalata Sampanna Hitgrahi(PM-DAKSH) Yojana"** published in **PIB on 4th September 2023**

What is the News?

A total of over 1 lakh beneficiaries have been trained under PM-DAKSH since the last three years of its implementation from 2020-21 to 2022-23.

What is Pradhan Mantri Dakshata Aur Kushalata Sampanna Hitgrahi(PM-DAKSH) Yojana?

Launched in: 2020-21

Nodal Ministry: Ministry of Social Justice & Empowerment (MoSJ&E)

Type: Central Sector Scheme

Aim: To enhance competency level of the target groups to make them employable both in self-employment and wage-employment for their socio-economic development.

Target groups under this scheme are: SCs, OBCs, EBCs, DNTs, Safai Karamcharis including waste pickers etc.

Eligibility: The age criterion for the scheme is between 18-45 years.

– There is no income limit for SCs, SafaiKaramcharis including waste picker and DNT.

– The annual family income should be below Rs.3 lakh for OBCs and for EBCs (Economically Backward Classes), the annual family income should be below Rs.1 lakh.

Skilling Development under the scheme: There are four types of skill development training programmes under PM-DAKSH Yojana viz; (i) Up-skilling/Reskilling, (ii) Short Term Training Programmes, (iii) Long Term Training Programmes and (iv) Entrepreneurship Development Programme.

Benefits for Trainees: The Cost of the training to trainees is free of cost.

– The stipend under this scheme is Rs.1,500/- per month to SCs and Safai Karamcharis and Rs.1,000/- per month to OBCs/EBCs/DNTs for non-residential Short Term and Long Term training courses.

– The wage compensation of Rs.2500/- per candidate is given to SCs/OBCs/EBCs/DNTs candidates for Upskilling/Reskilling programme.

– Wage compensation Rs.500/- per candidate is given to Safai Karamcharis candidates for Upskilling programme.

13. Government proposes in SC tech panel to evaluate carrying capacity of 13 Himalayan States

Source: The post is based on the article **"Government proposes in SC tech panel to evaluate carrying capacity of 13 Himalayan States"** published in **The Hindu on 5th September 2023**

What is the News?

The Ministry of Environment and Forest and Climate Change suggested steps to assess the accurate carrying capacity of 13 Himalayan States.

What is Carrying Capacity?

The carrying capacity is the maximum population size that an ecosystem can sustain without getting degraded.

What are the suggestions given by the Central Government to assess the carrying capacity of 13 Himalayan States?

The Union government has urged the Supreme Court to issue directives to all 13 Himalayan states and Union territories for immediately assessing the carrying capacity of mountainous regions.

These 13 Himalayan states and UTs include Jammu and Kashmir, Ladakh, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Assam and West Bengal.

States could constitute committees headed by their respective Chief Secretaries to collect information on the load-carrying capacity of their hill stations, cities and eco-sensitive zones.

The Centre will then form a 13-member technical committee headed by the Director of the GB Pant National Institute of Himalayan Environment to evaluate the information collected by the States.

What is the National Mission for Sustaining the Himalayan Ecosystem (NMSHE)?

The National Mission for Sustaining the Himalayan Ecosystem (NMSHE) is one of the eight missions under the National Action Plan on Climate Change (NAPCC).

The mission is aimed at evolving management measures for sustaining and safeguarding the Himalayan glaciers and mountain ecosystem.

The measures include enhanced monitoring of the Himalayan ecosystem through establishment of the monitoring network, promoting community based management, human resource development and strengthening regional cooperation.

14. Toyota's flex-fuel prototype: How it will work, what advantages it offers

Source: The post is based on the article **"Toyota's flex-fuel prototype: How it will work, what advantages it offers"** published in **Indian Express on 5th September 2023**

What is the News?

The Union Road Transport Minister has launched the world's first-ever prototype of the BS-VI Stage-II Electrified Flex Fuel Vehicle.This vehicle has been developed by Toyota Kirloskar Motor.

The vehicle uses a mixture of fuel to drive the car.It includes ethanol, a biofuel produced from energy crops like sugarcane, maize and rice and an electric power.

What are Flex-Fuel vehicles?

A flexible-fuel vehicle (FFV) is an alternative fuel vehicle that has an internal combustion engine designed to run on more than one fuel.

An Electrified Flex Fuel Vehicle has both a flex fuel engine and an electric powertrain.This gives it the ability to provide dual benefit of higher ethanol use and much higher fuel efficiency.

How does Flex fuel vehicles work?

Most components in a flex fuel vehicle are the same as those in petrol-only cars.But some special ethanol-compatible components are required to adjust to the different chemical properties and energy content in ethanol/ methanol, such as modifications to the fuel pump and fuel injection system.

The Engine Control Module (ECM) is also calibrated to accommodate the higher oxygen content of ethanol.

What are the pros and cons of Flex Fuel vehicles?

Pros: The use of ethanol blending sharply lowers harmful pollutants such as carbon monoxide, sulphur, and carbon and nitrogen oxides.

– Blending will also help cut oil imports to fuel vehicles.

Cons: Flex-fuel cars typically take a 4-8% hit on fuel efficiency when using ethanol for motive power.

– In Flex Fuel cars, ethanol is sourced from crops such as sugarcane which are usually very water-intensive.

Note: According to a NITI Aayog report, in 2019-20, more than 90% of the ethanol produced in the country came from sugarcane, which is also a politically important crop in states such as Maharashtra and Uttar Pradesh.

– From the customer perspective, flex fuel vehicles may not seem feasible in India, since the cost of ownership and running cost are going to be very high compared with regular vehicles.

15. Union Education Minister launches 3-year partnership with Meta, Education to Entrepreneurship: Empowering a generation of students, educators and entrepreneurs

Source: The post is based on the article **"Union Education Minister launches 3-year partnership with Meta, Education to Entrepreneurship: Empowering a generation of students, educators and entrepreneurs"** published in **PIB on 4th September 2023**

What is the News?

The Union Minister of Education has launched 'Education to Entrepreneurship' partnership with Meta to empower India's youth.

What is an "Education to Entrepreneurship" Partnership?

Education to Entrepreneurship Initiative is a collaboration between the Ministry of Education, the Ministry of Skill Development & Entrepreneurship and Meta (formerly Facebook).

Aim: To bring digital skilling to the grassroots level.This will equip India's talent pool with futuristic technologies, fostering a new generation of problem solvers and entrepreneurs.

– For instance, the partnership will help in motivating young individuals to turn their educational groundwork into flourishing enterprises.

Duration of the Partnership: 3 Years

As part of this initiative, Meta in partnership with the National Institute for Entrepreneurship and Small Business Development (NIESBUD) will provide digital marketing skills training to 5 lakh entrepreneurs over the next three years.

– This training will be conducted in seven regional languages, benefiting both budding and existing entrepreneurs.

– To make this training accessible to a broad audience, Meta will utilize its platforms, including Facebook, WhatsApp, and Instagram.

16. How gene mapping almost all remaining kākāpō will help NZ's rare night parrot survive

Source: The post is based on the article **"How gene mapping almost all remaining kākāpō will help NZ's rare night parrot survive"** published in **Down To Earth on 3rd September 2023**

What is the News?

The genetic mapping of almost the entire kākāpō population has shed new light on specific traits that will help conservation biologists in their efforts to save the kākāpōs.

What is Kākāpō?

Source: Wikipedia

The Kākāpō is a species of parrot found only in New Zealand.

IUCN Status: Critically Endangered

Characteristics: They are the world's only flightless parrot, the world's heaviest parrot and also are nocturnal and herbivorous.

– It is also possibly one of the world's longest-living birds, with a reported lifespan of up to 100 years.

– They only breed every few years, triggered by the availability of certain forest foods such as the fruits of the native rimu tree.

– It is also the only parrot to have a polygynous lek breeding system (It is a mating system in which the male provides no parental care to its offspring).

Significance: Kākāpō was historically important to Māori, the indigenous people of New Zealand.

Population: Their population dropped as low as 51 during the 1990s.But thanks to the sustained efforts, the kākāpō population is now up to 247 birds

Threats: kākāpō suffer from diseases such as the fungal infection aspergillosis and many of their eggs are infertile.

17. Sherpa Track, Finance Track, and Engagement Groups: What are the G20 'workstreams'?

Source: The post is based on the article **"Sherpa Track, Finance Track, and Engagement Groups: What are the G20 'workstreams'?"** published in **Indian Express on 5th September 2023**

What is the News?

The 18th annual G20 Heads of State and Government Summit will take place at Bharat Mandapam, Pragati Maidan in New Delhi.

What is G20?

Click Here to read

What are the different tracks under G20?

The G20 works in three major tracks — two of them are official and one is unofficial.

The official tracks are the Finance Track and the Sherpa Track.The unofficial track includes engagement groups or civil society groups.

Finance Track:

The Finance Track is headed by the finance ministers and central bank governors.

It usually meets four times a year, with two meetings being held on the sidelines of the World Bank and International Monetary Fund (IMF) meetings.

It mainly focuses on fiscal and monetary policy issues such as the global economy, infrastructure, financial regulation, financial inclusion, international financial architecture, and international taxation.

Sherpa Track:

The Sherpa Track was established after the forum became a leaders' summit in 2008. It consists of representatives of heads of state.

It mainly focuses on socio-economic issues such as agriculture, anti-corruption, climate, digital economy, education, employment, energy, environment, health, tourism, trade and investment.

Each representative is known as a Sherpa — it is the metaphor from the mountaineering domain, where the Sherpa is supposed to do the heavy lifting or assist the mountaineer.There are 13 working groups within the Sherpa Track.

Engagement Groups:

The unofficial track comprises engagement or civil groups.These groups often draft recommendations to the G20 Leaders that contribute to the policy-making process.

The engagement groups are as follows: Business20, Civil20, Labour20, Parliament20, Science20, SAI20, Startup20, Think20, Urban20, Women20 and Youth20.

18. Ministry of Tourism in collaboration with the United Nations World Tourism Organization (UNWTO) unveiled the G20 Tourism and SDG Dashboard

Source: The post is based on the article **"Ministry of Tourism in collaboration with the United Nations World Tourism Organization (UNWTO) unveiled the G20 Tourism and SDG Dashboard"** published in **PIB on 6th September 2023**

What is the News?

The Ministry of Tourism in collaboration with the United Nations World Tourism Organization (UNWTO), unveiled the G20 Tourism and SDG Dashboard.

What is G20 Tourism and SDG Dashboard?

The G20 Tourism and SDG Dashboard serves as a comprehensive online public platform, amalgamating the collective knowledge of the G20 Tourism Working Group.

It showcases best practices, case studies and insights from G20 countries for achieving the Sustainable Development Goals.

What is the Goa Roadmap for Tourism?

UNWTO as the knowledge partner of India's G20 Presidency has developed the Goa Roadmap for Tourism as a Vehicle for Achieving the Sustainable Development Goals.

The Roadmap is built around the five priority areas of the Tourism Working Group under India's G20 Presidency: 1. Green Tourism; 2. Digitalization; 3. Skills; 4. Tourism micro-, small and medium-sized enterprises (MSMEs) and 5. Destination Management.

Tourism and the G20 economies:

The G20 economies represent around 85% of the global GDP, over 75% of the global trade and about two-thirds of the world population.

In 2022, the G20 welcomed 74% of international tourists and 73% of tourism exports worldwide. In 2019, pre COVID-19 pandemic the Tourism Direct GDP reached 3.7% of the G20 economies.

19. Centre signs MoU with Adobe to train children in classroom

Source: The post is based on the article **"Centre signs MoU with Adobe to train children in classroom"** published in **The Hindu on 6th September 2023**

What is the News?

The Union Ministry of Education has partnered with Adobe, a global software company, to promote creative expression in classrooms using Adobe Express.

What is Adobe Express?

Adobe Express is an AI-first, all-in-one, quick and easy content creation app with generative AI capabilities, that allows users to create content like posters, animated videos, web pages, PDFs and more.

What is the purpose of the partnership between the Union Ministry of Education and Adobe?

Aim: To provide training and certification in creativity and digital literacy to about 20 million students and five lakh teachers by 2027 using Adobe Express-based curriculum.

Under the programme, Adobe will provide schools across the country with free access to Adobe Express Premium and professional development of educators.

– Curriculum, training and certification based on Adobe Express tools and capabilities will be rolled out to empower students and educators with topics covering creativity, generative AI, design, animation, video and other emerging technologies.

– Educators will receive Adobe Creative Educators certification upon completion of training.

Significance: The initiative will help in empowering students with the tools and resources to develop future-ready skills on creativity, critical thinking, communication and collaboration, and empower educators with critical skills required to inspire creative classrooms.

20. TRAI releases recommendations on "Issues related to FM Radio Broadcasting"

Source: The post is based on the article **"TRAI releases recommendations on "Issues related to FM Radio Broadcasting"** published in **PIB on 6th September 2023**

What is the News?

The Telecom Regulatory Authority of India(TRAI) has released its recommendations on issues related to FM radio broadcasting including private FM Radio operators.

What are the recommendations given by TRAI to address issues related to FM radio broadcasting?

Firstly, extend the existing FM license period of 15 years by 3 years.

Secondly, private FM radio operators should be allowed to broadcast news and current affairs programs, limited to 10 minutes in each clock hour.

Thirdly, annual license fee of a FM radio channel should be de-linked from non-refundable one-time entry fee and the license fee should be calculated as 4% of the Gross Revenue (GR) of the FM radio channel during the respective financial year.

Fourthly, the Government may take appropriate measures to provide relief to the FM radio operators to address challenges posed due to COVID-19 pandemic.

Fifthly, functions or features pertaining to FM radio should remain enabled and activated on all mobile handsets having the necessary hardware.Built-in FM radio receivers in mobile handset must not be subjected to any form of disablement or deactivation.

Sixthly, a Standing Committee, headed by a senior officer of Joint Secretary or above level, to oversee and monitor the compliance by mobile phone manufacturers (or importers) may be established by the Ministry of Electronics and Information Technology(MeitY) .

Lastly, an online grievance redressal portal should be provided for submitting information or complaints of case of any non-compliance as regards enablement of FM radio functionality in such mobile handsets that have the necessary functionality for FM receivers.

21. FM flags threats to financial system from crypto, tax havens

Source: The post is based on the article **"FM flags threats to financial system from crypto, tax havens"** published in **The Hindu on 6th September 2023**

What is the News?

The Finance Minister has addressed the delegates at the Global Fintech Fest (GFF) 2023 being held in Mumbai.

What are the key highlights from the Finance Minister's address at the Global Fintech Fest (GFF) 2023?

Source: The Hindu

Global Financial Threats: Cryptocurrency, drug mafias, tax havens, and cyber threats are significant global financial threats.Collaboration is needed to address these challenges effectively.

Cryptocurrencies offer opportunities but they also pose threats.Hence, efforts are needed to regulate and address issues related to crypto assets.

Fintech Industry: Fintech industry in promoting financial inclusion and influencing India's financial landscape.Fintechs have played a substantial role in lending and reaching out to new customers.

– The Finance Minister urged fintech companies to invest heavily in cybersecurity measures, including advanced encryption, to protect user data and financial transactions. Security is crucial for building trust in the financial ecosystem.

Cross-Border Payments: India's priority, under its G20 presidency, includes enhancing cross-border payment arrangements, especially considering the volume of remittances to the country.

Unclaimed Deposits: According to RBI, balances in savings or current accounts which are not operated for ten years, or term deposits not claimed within ten years from the date of maturity are classified as unclaimed deposits.

– Banking system alone is estimated to hold over Rs 35,000 crore in unclaimed deposits.

– To facilitate the recovery of these unclaimed funds, the Reserve Bank of India (RBI) had recently launched UDGAM (Unclaimed Deposits – Gateway to Access information) central web portal.

22. Jal Jeevan Mission Achieves Milestone of 13 Crore Rural Households Tap Connections

Source: The post is based on the article "**Jal Jeevan Mission Achieves Milestone of 13 Crore Rural Households Tap Connections"** published in **PIB on 6th September 2023**

What is the News?

The Jal Jeevan Mission (JJM) has achieved another milestone of providing tap water connections to 13 Crore rural households.

What is the Jal Jeevan Mission (JJM)?

Click Here to read

What is the progress made under Jal Jeevan Mission (JJM)?

Jal Jeevan Mission (JJM) has achieved the milestone of providing tap water connections to 130 million rural households.

The rural tap connection coverage has increased from 32.3 million households at the start of the mission in 2019 to 130 million in just four years.

Currently, Goa, Telangana, Haryana, Gujarat, Punjab, Himachal Pradesh, Puducherry, Dadra and Nagar Haveli and Daman and Diu and Andaman and Nicobar Islands have reported 100% coverage.

Every second, one tap water connection is installed, thus changing the country's rural landscape.Since January 1,2023 around 87,500 tap connections have been provided every day.

Tap water supply has been provided to 915,000 (88.73%) schools, and 952,000 (84.69%) anganwadi centers in the country.

The mission has also successfully resolved the issue of Arsenic and Fluoride contamination in drinking water sources providing safe drinking water in affected habitations.

23. 'Green Hydrogen Pilots in India' Conference held in the run-up to G20 Summit

Source: The post is based on the article **"Green Hydrogen Pilots in India Conference held in the run-up to G20 Summit"** published in **PIB on 6th September 2023**

What is the News?

"Green Hydrogen Pilots in India" conference was held in New Delhi.

What is the Green Hydrogen Pilots in India conference?

Hosted by: NTPC Limited

Purpose: The conference showcased various Green Hydrogen Pilots being implemented by both public and private sector companies of India.

What are the key highlights from the conference?

India's commitment to green hydrogen sets it apart from countries using natural gas-based hydrogen with higher emissions.India aims to be an influential exporter and a leader in the green hydrogen approach.

India's carbon dioxide contribution is relatively low compared to its population, reflecting its dedication to environmental concerns.The shift toward green hydrogen aligns with the goals of energy independence and environmental responsibility.

India intends to become a refueling destination for green ships by providing affordable green hydrogen or green ammonia.Collaboration with the Ministry of Shipping is in progress.

The National Green Hydrogen Mission's pilot projects are the driving force behind innovation and experimentation.They target sectors traditionally reliant on fossil fuels.

The R&D roadmap for the National Green Hydrogen Mission is nearly finalized and will be released soon.It outlines research areas needed for green hydrogen development.

Public and private sectors are also implementing several pilot projects in green hydrogen, contributing to the growth of the green hydrogen ecosystem.

24. Scientists fabricated optically active flexible biodegradable polymer-nanocomposite films

Source: The post is based on the article **"Scientists fabricated optically active flexible biodegradable polymer-nanocomposite films"** published in **PIB on 6th September 2023**

What is the News?

Researchers have developed a biodegradable nanocomposite film for Flexible Optical Devices.

What are Polymers?

Click Here to read

What is the importance of Polymers?

Polymers have become important in our daily lives finding applications in various industries.

However, the demand for highly flexible and optically active polymers has led researchers to explore new materials and methodologies.

The nanomaterials are known to enhance the properties of the polymers keeping the inherent properties of the polymers intact.

Scientists have reported that polyvinyl alcohol (PVA) is one of the most widely studied synthetic biodegradable polymers having good film-forming and excellent mechanical properties.Its optical and mechanical properties can be tuned by incorporating suitable nanomaterials.

What have the researchers developed?

Researchers have developed an optically active biodegradable nanocomposite film with excellent mechanical properties.

This innovation could pave the way for the development of flexible displays and organic LEDs, revolutionizing the field of optical technology.

The biodegradable nature of the material also aligns with sustainability goals, making it a promising candidate for various future applications.

25. UPI QR Code-Central Bank Digital Currency interoperability: How does it work and how do customers benefit?

Source: The post is based on the article **"UPI QR Code-Central Bank Digital Currency interoperability: How does it work and how do customers benefit?"** published in **Indian Express on 6th September 2023**

What is the News?

Several banks are enabling the interoperability of Unified Payments Interface's (UPI) Quick Response (QR) code with their Central Bank Digital Currency(CBDC) or e₹ application.

What is Interoperability?

Interoperability is the technical compatibility that enables a payment system to be used in conjunction with other payment systems.

It allows system providers and participants in different systems to undertake, clear and settle payment transactions across systems without participating in multiple systems.

What is QR Code?

A QR code consists of black squares arranged in a square grid on a white background, which can be read by an imaging device such as a camera.QR contains information about the item to which it is attached.

QR code is an alternate contactless channel of payments.It allows merchants or businesses to accept payments from their customers directly into their bank accounts.

What is UPI QR code-CBDC interoperability?

Interoperability of UPI with the digital rupee means all UPI QR codes are compatible with CBDC apps.

Initially, when the pilot for the retail digital rupee was launched, the e₹-R users had to scan a specific QR code to undertake transactions.

However, with the interoperability of the two, payments can now be made using a single QR code.

How will this benefit customers and merchants?

The interoperability of UPI and CBDC will ensure seamless transactions between a customer and merchant without having the need to switch between multiple digital platforms.

It will allow a digital rupee user to make payments for their daily needs, such as groceries and medicines, by scanning any UPI QR codes at any merchant outlet.

Even merchants are not required to keep a separate QR code to accept the digital rupee payments.They can accept CBDC payments on their existing QR code.

How will interoperability help in increasing CBDC adoption?

Currently, UPI is a widely used payment method and the interoperability between it and the CBDC will propel the adoption of the digital rupee.

26. New Covid-19 variant may be 'reason to worry': What is known about 'Pirola' so far

Source: The post is based on the article **"New Covid-19 variant may be 'reason to worry': What is known about 'Pirola' so far"** published in **Indian Express on 6th September 2023**

What is the News?

An article published in the Yale Medicine Review has noted the rise of Covid-19 infections in multiple countries driven by a new Coronavirus variant called BA.2.86 which is informally being termed 'Pirola'.

What is Pirola?

Pirola is a newly designated highly mutating Omicron variant of Covid-19 virus.

It was first spotted in Denmark and has now spread to other countries like the US, Canada and Israel.

Pirola differs from previous variants of Omicron as it has more than 30 spike protein mutations.This gives it the capacity to be immune, evasive and highly transmissible.

It is currently in the WHO list of 'variants under monitoring'.

How do viruses mutate, exactly?

It is natural for all viruses to mutate over time and such changes are particularly common in viruses that have RNA as their genetic material as in the case of coronaviruses and influenza viruses.

Once a virus enters the human body, its genetic material — RNA or DNA — enters the cells and starts making copies of itself which can infect the other cells.Whenever an error occurs during this copying process, it triggers a mutation.

Occasionally, a mutation comes along when the genetic mistakes that are introduced while copying prove to be advantageous for the virus — these help the virus copy itself or enter human cells more easily.

Whenever a virus is widely circulating in a population, the more it spreads and replicates, its chances of mutating increases.

27. Biodiversity loss: 37,000 'alien species' introduced by human activities, says report

Source: The post is based on the article **"Biodiversity loss: 37,000 'alien species' introduced by human activities, says report"** published in **Indian Express on 6th September 2023**

What is the News?

Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) has released a publication titled "Assessment Report on Invasive Alien Species and their Control".

What are Invasive Alien species?

Source: IPBES

Invasive alien species are plants, animals, pathogens and other organisms that are non-native to an ecosystem, and which may cause economic or environmental harm or adversely affect human health.

In particular, they impact adversely upon biodiversity, including decline or elimination of native species – through competition, predation, or transmission of pathogens – and the disruption of local ecosystems and ecosystem functions.

What are the key findings of IPBES report on Invasive Alien species?

Number of Introduced Alien Species: There are 37,000 alien species introduced by human activities worldwide.

– Over 3,500 of these alien species pose significant global threats to nature, economy, food security, and human health.

Most widespread invasive alien species: The water hyacinth is the world's most widespread invasive alien species on land.

– Lantana, a flowering shrub and the black rat are the second and third most widespread globally. The brown rat and the house mouse are also widespread invasive alien species.

Not all alien invasive species have negative impacts: Not all alien species establish and spread with negative impacts on biodiversity, local ecosystems and species but a significant proportion do.

– About 6% of alien plants; 22% of alien invertebrates; 14% of alien vertebrates; and 11% of alien microbes known to be invasive pose major risks to nature and to people.

– Nearly 80% of the documented impacts of invasive species on nature's contribution to people are negative.

What is the impact of Invasive Alien species?

Impact on Biodiversity: Invasive alien species are a major driver of biodiversity loss, contributing to 60% of global plant and animal extinctions.

– They are one of the five major direct drivers of biodiversity loss globally alongside land and sea-use change, direct exploitation of organisms, climate change, and pollution.

Economic Impact: The annual costs of invasive alien species have at least quadrupled every decade since 1970, as global trade and human travel increased.In 2019, the global economic cost of invasive alien species exceeded $423 billion annually.

Impact on Food Supply: The reduction of food supply is the most common impact of alien invasive species.For example, the European shore crab impacting commercial shellfish beds in New England or the Caribbean false mussel damaging locally important fishery resources in Kerala, by wiping out native clams and oysters.

Spreads Diseases: Invasive alien species like Aedes albopictus and Aedes aegyptii spread diseases such as malaria, Zika and West Nile Fever.

Amplify impact of Climate Change: Invasive alien species can also amplify the impacts of climate change.For example, invasive alien plants, especially trees and grasses, can sometimes be highly flammable and promote more intense fires.

What has been the response of countries against Invasive Alien species?

Most countries (80%) have included targets related to managing invasive alien species in their national biodiversity plans.

However, only 17% specifically address the issue in national legislation.Nearly half of all countries (45%) do not invest in management of biological invasions.

Recently, countries have agreed to reduce the rate of introduction and establishment of invasive alien species by at least 50% by 2030 under **Target 6 of the Kunming-Montreal Global Biodiversity Framework.**

28. Cabinet approves the Scheme titled Viability Gap Funding for development of Battery Energy Storage Systems(BESS)

Source: The post is based on the article **"Cabinet approves the Scheme titled Viability Gap Funding for development of Battery Energy Storage Systems(BESS)"** published in **PIB on 6th September 2023**

What is the News?

The Union Cabinet approves the Scheme for Viability Gap Funding (VGF) for development of Battery Energy Storage Systems (BESS).

What are Battery Energy Storage Systems (BESS)?

Battery storage or battery energy storage systems (BESS) are devices that enable energy from renewables, like solar and wind, to be stored and then released when the power is needed most.

India needs to develop BESS for making round-the-clock renewable energy supply possible.

What is Viability Gap Funding(VGF)?

Viability Gap Finance means a grant to support projects that are economically justified but not financially viable.

Viability Gap Funding is provided as a grant one-time or deferred with the objective of making a project commercially viable.

What is the Scheme for Viability Gap Funding (VGF) for development of Battery Energy Storage Systems (BESS)?

Aim: To harness the potential of renewable energy sources such as solar and wind power with the aim to provide clean, reliable, and affordable electricity to the citizens.

Target: The scheme envisages development of 4,000 MWh of BESS projects by 2030-31.

Financial support: Up to 40% of the capital cost will be supported in the form of Viability Gap Funding (VGF).The entire viability gap funding (VGF) will be borne by the Central Government.

– The VGF shall be disbursed in 5 tranches linked with the various stages of implementation of BESS projects.

– To ensure that the benefits of the scheme reach the consumers, a minimum of 85% of the BESS project capacity will be made available to Distribution Companies (Discoms).

Significance: The scheme is in sync with India's ambition to meet its 50% of energy requirements through renewable energy and non-fossil energy sources by 2030 and also help reduce carbon emission.

– Note: Solar energy has increased from 2.6 GW in 2014 to 71 GW at present while wind energy has increased from 21 GW (in 2014) to 40 GW.

India is meeting its 25% of energy demand from renewable energy, including from large hydro plants.

29. "TDB-DST supports M/s Eco Recycling Limited's Innovative "Recycling on Wheels Smart ER" to address India's E-waste Challenge

Source: The post is based on the article **"TDB-DST supports M/s Eco Recycling Limited's Innovative "Recycling on Wheels Smart ER" to address India's E-waste Challenge"** published in **PIB on 6th September 2023**

What is the News?

Technology Development Board (TDB) is supporting M/s Eco Recycling Limited with ₹6 crores for their innovative e-waste management project called **'Recycling on Wheels Smart ER'** which has a total cost of ₹12 crores.

What is the "Recycling on Wheels Smart ER" Project?

Launched by: M/s Eco Recycling Limited.

Purpose: It is an innovative e-waste management project that focuses on improving e-waste management.

The project's workflow includes: 1) Pre-processing e-waste on a mobile facility 2) Scanning and serializing e-waste devices 3) Shredding the devices 4) Collecting shredded e-waste in secure bins and 5) Environmentally friendly disposal of the shredded e-waste.

Features of the project: The project serves Special Economic Zones (SEZs) and R&D centers filling a crucial gap in e-waste management in India.

– The project also offers skill development for informal sector workers and aligns with Extended Producer Responsibility (EPR) principles.

– In its second phase, the project aims to extract precious metals from the shredded waste, contributing to a circular economy.

Significance: The e-waste problem in India is a major concern with only 20% of the 3.2 million tonnes generated in 2019-20 being formally recycled.

– The project addresses this e-waste crisis in India while promoting environmental sustainability and improving livelihoods.

30. Indian Air Force and Drone Federation of India to co-host Bharat Drone Shakti 2023

Source: The post is based on the article **"Indian Air Force and Drone Federation of India to co-host Bharat Drone Shakti 2023"** published in **PIB on 6th September 2023**

What is the News?

Indian Air Force (IAF) is teaming up with the Drone Federation of India to co-host 'Bharat Drone Shakti 2023'.

What is Bharat Drone Shakti 2023?

Organized by: Indian Air Force (IAF) with the help of Drone Federation of India

Aim: To present the full potential of the Indian drone industry with an impressive lineup of over 50 live aerial demonstrations.

– These demonstrations will encompass a diverse range of drone applications, including survey drones, agriculture drones, fire suppression drones, tactical surveillance drones, drone swarms and counter-drone solutions.

Significance: Bharat Drone Shakti 2023 will give a fillip to India's commitment to becoming a global drone hub by 2030.

What is the Meher Baba Swarm Drone competition?

Launched in: 2018 by Indian Air Force(IAF)

Aim: To encourage the development of swarm drones for the utilization of varied domains, including response to disaster relief operations.

– **Note:** Swarm drones consist of a number of drones controlled from the same station which can be programmed using an algorithm to carry out various tasks, including surveillance.

31. Engagement with ASEAN is an important pillar of India's 'Act East' policy, says PM

Source: The post is based on the article **"Engagement with ASEAN is an important pillar of India's 'Act East' policy, says PM "** published in **The Hindu on 7th September 2023**

What is the News?

The Prime Minister has reached Indonesia to attend the 20th ASEAN-India summit and 18th East Asia Summit(EAS).

What is the ASEAN-India summit?

The ASEAN-India summit was started in 2002 in Cambodia.

The summit meetings hold high significance as they offer opportunities for leaders of participating countries to meet and gain from dialogue and interactions.

Since 2002, India has not missed a single ASEAN-India summit.

This year's summit is India Prime Minister's 9th Summit and the first one after the relations were elevated to the Comprehensive Strategic Partnership (CSP) level.

What is the East Asia Summit(EAS)?

The East Asia Summit (EAS) is the Indo-Pacific's premier forum for strategic dialogue.

It is the only leader-led forum at which all key Indo-Pacific partners meet to discuss political, security and economic challenges facing the region and has an important role to play in advancing closer regional cooperation.

The summit comprises eighteen participating countries including ten ASEAN Member States (Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam) and Australia, China, India, Japan, New Zealand, the Republic of Korea, the Russian Federation and the United States of America.

The first East Asia Summit (EAS) was held in Kuala Lumpur, Malaysia in 2005.

In 2023, the Chair of the East Asia Summit is the Republic of Indonesia who is also the current ASEAN Chair.

32. Conference on Transnational Grid Interconnections for One Sun, One World, One Grid held in New Delhi

Source: The post is based on the article "**Conference on Transnational Grid Interconnections for One Sun, One World, One Grid held in New Delhi"** published in **PIB on 6th September 2023**

What is the News?

The conference on "Transnational Grid Interconnections for One Sun, One World, One Grid (OSOWOG)" was held in New Delhi.

The conference was organized by Power Grid Corporation of India Limited (POWERGRID), a 'Maharatna' company under the Ministry of Power.

What is One Sun, One World, One Grid (OSOWOG) Initiative?

Origin: The idea for the One Sun One World One Grid (OSOWOG) initiative was put forth by the Prime Minister of India at the First Assembly of the ISA in 2018.

Launched in: It was jointly launched by the Prime Minister of India and Prime Minister of the United Kingdom during the 'Accelerating Innovation and Clean Technology Deployment' event at the World Leaders Summit held on 2 November 2021 during COP26.

Vision: The vision behind the OSOWOG initiative is the mantra that "the sun never sets".

Aim: To aid in developing a worldwide grid through which clean energy can be transmitted anywhere, anytime (use power at night in one part of the world from solar energy generated on the other side of the world where it is day time).

How will the OSOWOG Initiative be implemented?

OSOWOG is divided into three main phases:

In the first phase, the Indian grid would be connected to the grids of Middle East, South Asia and South-East Asia to develop a common grid. This grid would then be used to share solar energy as per need, in addition to other renewable energy sources.

The second phase would connect the functional first phase to the pool of renewable resources in Africa.

The third phase would look at achieving true global interconnection.The idea will be to integrate as many countries as possible to create a single power grid of renewable energy.This can then be accessed by all countries.

How will the OSOWOG Initiative help the world become more sustainable?

All participants in the initiative will focus on attracting effective investments in renewable energy sources by utilizing technology, finance and skill.When all stakeholders coordinate, it is expected to bring down project cost, lead to higher efficiencies and increased asset utilization for all involved.

The initiative may also have a spillover effect as the cost effective source of energy production could be used in other areas such as poverty alleviation, provision of drinking water, sanitation facilities and food security.

33. Union Minister launches the Malaviya Mission – Teachers Training Programme by University Grants Commission

Source: The post is based on the article **"Union Minister launches the Malaviya Mission – Teachers Training Programme by University Grants Commission"** published in **PIB on 6th September 2023**

What is the News?

The Union Minister for Education has launched the Malaviya Mission.

What is the Malaviya Mission?

Malaviya Mission is a Teachers Training Programme by the University Grants Commission.

Aim: To provide tailored training programmes for teachers and to improve the capacity building of faculty members in higher educational institutions.

– To improve the quality of teachers' training, build leadership skills in teachers and help realize the goals of National Education Policy (NEP).

Features: The mission will ensure continuous professional development and help in building capacities of 15 lakh teachers of HEIs through 111 Malaviya Mission centers (formerly known as Human Resource Development Centers (HRDCs))

– The capacity building under the Mission will be mapped to the credit framework to ensure career progression pathways for educators.

Themes: The themes identified for course curriculum for Capacity building of Faculty Members in HEIs include: Multidisciplinary Education, Indian Knowledge Systems (IKS), Academic Leadership, Research and Development, Skill Development, Student Diversity among others.

– The three main themes that were discussed during India's G20 Presidency: deployment of technology in the use of education, achieving sustainable development goals and women-led development are also to be incorporated in the Teachers Training Programmes.

34. Free dementia support line and online memory clinic launched in India

Source: The post is based on the article "**Free dementia support line and online memory clinic launched in India"** published in **The Hindu on 7th September 2023**

What is the News?

Dementia India Alliance (DIA), a non-profit, family carer-centered organization has launched a National Dementia Support Line and DemClinic.

What is DemClinic?

DemClinic will be the first national comprehensive expert-led cognitive assessment platform for the elderly.

The initiative is aimed at supporting families and persons with dementia through post-diagnostic care and support.

What is 'The Blue Button Movement'?

It will be organized by Dementia India Alliance (DIA) on September 21 to mark World Alzheimer's Day.

The blue button is a symbol of awareness and support for people affected by dementia.

This campaign will include the formation of a human chain symbolically resembling the blue button like a shield or a coat of arms, unifying and encouraging people to recognize the impact of dementia, empathize and take proactive steps to support patients.

What is Dementia?

Dementia is a term for several diseases that affect memory, thinking, and the ability to perform daily activities.

Dementia is caused by many different diseases or injuries that directly and indirectly damage the brain.Alzheimer disease is the most common form and may contribute to 60–70% of cases.

Currently more than 55 million people have dementia worldwide, over 60% of whom live in low- and middle-income countries. Every year, there are nearly 10 million new cases.

Dementia is currently the seventh leading cause of death and one of the major causes of disability and dependency among older people globally.

35. Explained | The global push to make ecocide a crime

Source: The post is based on the article **"Explained | The global push to make ecocide a crime"** published in **The Hindu on 7th September 2023**

What is the News?

Mexico is considering passing a law to make ecocide a crime.

What is Ecocide?

Ecocide is derived from Greek and Latin.It translates to 'killing one's home' or 'environment'.

Such 'killing' could include port expansion projects that destroy fragile marine life and local livelihoods; deforestation; illegal sand mining; polluting rivers with untreated sewage.

Legal Definition of ecocide: There is no accepted legal definition of ecocide, but a Stop Ecocide Foundation in 2021 prepared a definition of ecocide.

– It has defined Ecocide as the unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts.

Commonly cited examples of ecocide include: deforestation during the Vietnam War, the destruction of the environment during the Russian invasion of Ukraine, deforestation in Indonesia and the Amazon rainforest, oil pollution in the Niger Delta and the Chernobyl disaster.

The term 'ecocide' was popularized by Olof Palme when he accused the United States of ecocide at the 1972 UN Conference on the Human Environment.

Is ecocide covered under International Law?

At present, the Rome Statute of the International Criminal Court (ICC) deals with four atrocities: genocide, crimes against humanity, war crimes and the crime of aggression.

– The provision on war crimes is the only statute that can hold a perpetrator responsible for environmental damage albeit if it is intentionally caused and **during wartime situations.**

Why should ecocide be criminalized?

Over a third of the earth's animal and plant species could be extinct by 2050. Unprecedented heat waves have broken records worldwide. Changing rainfall schemes have disrupted flood and drought patterns.

Deforestation of the Amazon, deep-sea trawling or even the catastrophic 1984 Bhopal gas disaster could have been avoided with ecocide laws in place.

Ecocide laws could also double up as calls for justice for low- and middle-income countries disproportionately affected by climate change.

Which countries have criminalized ecocide?

Ecocide is a crime in 11 countries, with 27 other nations mulling laws around criminalizing environmental damage that is wilfully caused and harms humans, animals and plant species.

The European Parliament voted unanimously this year to enshrine ecocide in law.

What has been India's stance on ecocide?

Some Indian judgments have used the term 'ecocide' in passing, but the **concept hasn't fully materialized in law.**

– In Chandra CFS and Terminal Operators Pvt. Ltd. v. The Commissioner of Customs and Ors (2015), the Madras High Court noted: the prohibitory activities of ecocide have been continuing unbridledly by certain sections of people by removing the valuable and precious timbers.

– In an ongoing case, T.N. Godavarman Thirumulpad vs Union of India & Ors, the Supreme Court called attention to an "anthropogenic bias" and argued that "environmental justice could be achieved only if we drift away from the principle of anthropocentric to ecocentric".

Hence, there is a need for India to align the existing environmental legislations with the concept of ecocide.

One more critical challenge is to tackle problems of liability and compensation.For instance, the survivors of Bhopal gas tragedy are still fighting for compensation.

36. Global Biofuels Alliance may be a key G20 takeaway under India's presidency

Source: The post is based on the article **"Global Biofuels Alliance may be a key G20 takeaway under India's presidency"** published in T**OI on 8th September 2023**

What is the News?

The Prime Minister may launch the Global Biofuels Alliance during the upcoming G20 summit.

What is the Global Biofuels Alliance?

Global Biofuel Alliance (GBA) is backed by the US, Brazil and India which are the leading biofuel producers and consumers.

Aim: To facilitate cooperation and intensifying the use of sustainable biofuels, including in the transportation sector.

– It will place emphasis on strengthening markets, facilitating global biofuels trade, development of concrete policy lesson-sharing and provision of technical support for national biofuels programs worldwide.

Membership: The alliance will have a three-category membership structure bringing together member countries, partner organizations and industries.

What are Biofuels?

Biofuels are derived from a variety of biomass and considered a low-carbon, affordable and sustainable source of energy.

According to estimates from the International Energy Agency (IEA), global biofuel production would need to triple by 2030 to put the world's energy systems on track toward net zero emissions by 2050.

The Government of India is pushing biofuels such as ethanol blending of petrol and Compressed biogas (CBG) to reduce the economy's carbon footprint, dependence on imported oil and raise income of farmers.

India achieved 10% ethanol blending of petrol in June last year and has a target of 25% blending by 2025.

Under the 2018 SATAT Scheme, 5,000 CBG plants are to be built for an estimated annual production of 15 million tonnes of gas by next year.India currently has a total ethanol production capacity of 947 crore liters.

37. Indian Railways' Gati Shakti Vishwavidyalaya (GSV) Vadodara and Airbus sign Memorandum of Understanding (MoU) for aerospace teaching and research

Source: The post is based on the article **"Indian Railways' Gati Shakti Vishwavidyalaya (GSV) Vadodara and Airbus sign Memorandum of Understanding (MoU) for aerospace teaching and research"** published in **PIB on 8th September 2023**

What is the News?

Indian Railways Gati Shakti Vishwavidyalaya (GSV) Vadodara and Airbus have entered into collaboration to significantly strengthen the Indian aviation sector.

The partnership will enable co-development and co-delivery of sector-relevant skilling courses and programs for regular students and working professionals, joint research and industry experiences for faculty, internships and placements for students and scholarship programs.

It is expected that 15000 students are likely to be placed in Airbus India operations.

What is Gati Shakti Vishwavidyalaya(GSV)?

Gati Shakti Vishwavidyalaya(GSV) is a Central University established through an Act of Parliament in 2022.

It subsumes the previously-existing National Rail and Transportation Institute (NRTI).

Mandate: To create best in class manpower and talent for the entire transportation and logistics sectors.

Sponsored by: Ministry of Railways, Govt. of India.

Chancellor: Union Minister of Railways.

Located in: Vadodara, Gujarat.

Significance: GSV is a "first of its kind" university aiming to fulfill the mandate of the National Developmental Plans (PM Gati Shakti National Master Plan 2021 and National Logistics Policy 2022) across railways, shipping, ports, highways , roads, waterways and aviation etc.

What is Airbus?

Airbus is the world's largest manufacturer of commercial aircraft and a leading producer of helicopters, defence and space equipment.

Airbus and Tata had recently announced a partnership to design, innovate, make, manufacture and develop in India C295 aircraft facility at Vadodara (Gujarat).

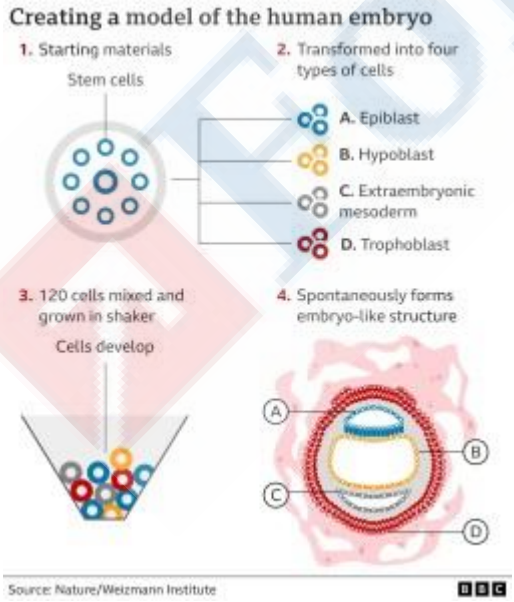
38. Without sperm or egg, how scientists grew whole model of human embryo

Source: The post is based on the article **"Without sperm or egg, how scientists grew whole model of human embryo"** published in **Indian Express on 8th September 2023**

What is the News?

Scientists have successfully grown a "human embryo" in the lab without using an egg or sperm.

How did scientists grow a human embryo in the lab without using an egg or sperm?



Source: BBC

Instead of a sperm and egg, the starting material was stem cells which were reprogrammed to gain the potential to become any type of tissue in the body.

Chemicals were then used to coax these stem cells into becoming four types of cell found in the earliest stages of the human embryo: 1) epiblast cells, which become the embryo proper (or foetus) 2) trophoblast cells, which become the placenta 3) hypoblast cells, which become the supportive yolk sac and 4) extraembryonic mesoderm cells.

A total of 120 of these stem cells were mixed in a precise ratio – and then, the scientists step back and watch.

About 1% of the mixture began the journey of spontaneously assembling themselves into a structure that resembles a human embryo.

The embryo models were allowed to grow and develop until they were comparable to an embryo 14 days after fertilization.In many countries, this is the legal cut-off for normal embryo research.

Why are embryo models and research important?

There is no way for scientists to ethically research the early stages of development of an embryo, as it is difficult to study it after it implants in the uterus.Scientists currently study these initial changes in various lab models or donated embryos.

This research is crucial because the initial days of embryo development is when the majority of miscarriages and birth defects occur.Studying these initial stages may help scientists understand genetic and inherited diseases better.

Moreover, the understanding of why some embryos develop normally, retain the proper genetic code and implant properly in the womb while others do not may also help in improving success rates of in vitro fertilization.

Can lab-grown embryos be used to get pregnant?

No.These models are meant to just study the early stages of development of a foetus.

It is generally accepted — and legally supported in most countries — that these embryo models will be destroyed after studying the first 14 days. Attempts to implant are not allowed.

Why is there a 14-day limit on embryo research?

The limit was first proposed by a committee in the UK in 1979 after the birth of the first test tube baby Louise Brown demonstrated that embryos could be kept alive in laboratories.

The 14-day period is equivalent to when embryos naturally finish implantation. It is also when cells start becoming an "individual", and breaking off into a twin is not possible.

39. Explained | What is a heat index and why is it important to measure?

Source: The post is based on the article **"Explained | What is a heat index and why is it important to measure?"** published in **The Hindu on 8th September 2023**

What is the News?

Recently, Iran recorded a scorching heat index of 70 degrees Celsius (°C) in the coastal part of the country, a metric at which survival of life is difficult.

What is the heat index?

Heat index, also known as apparent temperature, is a measure of how the temperature feels to humans.

Relative humidity is an important factor that determines heat index along with air temperature.

How is the Heat Index calculated?

The calculation of the heat index involves a complex formula developed by Dr. Robert Steadman in 1979.Dr. Steadman's formula considers a typical adult human of certain height and weight and incorporates the dew point.Dew Point is the temperature at which air cannot hold any more water vapour, and droplets of water begin to form.In his calculations, Dr. Steadman used 14 °C as the dew point in his calculations.

Some countries, like Canada, have their own indices to measure the heat index.

In 2024, India is scheduled to launch its own heat index to quantify the impact of heat on its population and generate impact-based heatwave alerts for specific locations.

Why is it important to measure the Heat Index?

Impact on Health: High humidity combined with high temperatures can lead to heat stress and heat-related illnesses.It's crucial to know when conditions are ripe for these health risks so that people can take precautions.

Safety: Heat index values help determine the level of caution needed during hot weather. It provides guidance on when it's safe to engage in physical activity outdoors and when it's potentially dangerous, preventing heat-related illnesses and even fatalities.

Climate Change: As temperatures rise due to climate change, we can expect more extreme heat conditions.Monitoring the heat index allows us to prepare, adapt, and implement strategies like early warnings, adjusted work schedules, and sustainable cooling solutions to cope with these extremes.

40. India showcases PM Gatishakti National Master Plan at Asian Development Bank's 2023 Regional Cooperation and Integration Conference

Source: The post is based on the article "**India showcases PM Gatishakti National Master Plan at Asian Development Bank's 2023 Regional Cooperation and Integration Conference "** published in **PIB on 7th September 2023**

What is the News?

India showcased PM Gatishakti National Master Plan at the '2023 Regional Cooperation and Integration Conference: Strengthening Regional Cooperation and Integration through Economic Corridor Development (ECD)'.

The conference was organized by Asian Development Bank (ADB) at Tbilisi, Georgia.

What is PM Gati Shakti?

Launched in: October 2021

Aims: 1) Establish synergies among different ministries during the planning stage itself **2)** Align timelines of various projects through efficient planning **3)** Promote standardization of the designs for efficient project approval and **4)** Enable standardized procedures by all the agencies to reduce project delays.

Click Here to read

What is PM Gati Shakti National Master Plan?

Source: PIB

PM Gati Shakti National Master Plan was developed by Bhaskaracharya National Institute for Space Applications and Geo-informatics(BISAG).

It is a technology backed infrastructure development platform with GIS based data layers of infrastructure, geographic features and demography, and various decision support systems.

The platform enables integrated planning, synchronized implementation, and project monitoring.

The platform aims at enhancing industrial productivity and helping the country achieve its green logistics and clean energy goals by enormously boosting the multi-modal connectivity across highways, railways, ports, airports, logistics infrastructure, mass urban transportation and inland waterways.

The NMP also has customized decision making and planning tools for functionalities of adding project/data; measure proximity; identification of Go/No Go Area; obtaining NOC from different departments, etc.

41. Prime Minister's participation in the 20th ASEAN-India Summit and the 18th East Asia Summit

Source: The post is based on the article **"Prime Minister's participation in the 20th ASEAN-India Summit and the 18th East Asia Summit"** published in **PIB on 8th September 2023**

What is the News?

The Prime Minister attended the 20th ASEAN-India Summit and the 18th East Asia Summit (EAS) in Jakarta,Indonesia.

What is the ASEAN-India Summit and East Asia Summit?

Click Here to read

What are the key highlights from the PM's address at the 20th ASEAN-India Summit?

The Prime Minister emphasized the importance of ASEAN centrality in the Indo-Pacific region and highlighted the alignment between India's Indo-Pacific Ocean's Initiative (IPOI) and ASEAN's Outlook on the Indo-Pacific (AOIP).

He presented a 12-point proposal to enhance cooperation between India and ASEAN covering various areas.The 12 point proposal includes:

1) Establishing a multi-modal connectivity and economic corridor linking South-East Asia, India, West Asia, and Europe.

2) Offering to share India's Digital Public Infrastructure Stack with ASEAN partners.

3) Announced the ASEAN-India fund for Digital Future, focusing on digital transformation and financial connectivity.

4) Renewing support for the Economic and Research Institute of ASEAN and East Asia (ERIA) as a knowledge partner.

5) Advocating for common issues faced by Global South countries in multilateral forums.

6) Inviting ASEAN countries to join the Global Centre for Traditional Medicine being established by WHO in India.

7) Offering to share India's experience in providing affordable and quality medicines through Jan-Aushadhi Kendras.

8) Emphasizing the collective fight against terrorism, terror financing and cyber-disinformation.

9) Inviting ASEAN countries to join the Coalition for Disaster Resilient Infrastructure.

10) Promoting cooperation in disaster management.

11) Enhancing cooperation on maritime safety, security, and domain awareness.

12) Collaborating on Mission LiFE.

42. A blanket ban on crypto hard to implement: Report

Source: The post is based on the article **"A blanket ban on crypto hard to implement: Report"** published in **Livemint on 8th September 2023**

What is the News?

The International Monetary Fund(IMF) and the Financial Stability Board (FSB) have released advanced policy and regulatory recommendations to identify and respond to macroeconomic and financial stability risks associated with crypto assets.

What are the risks presented by crypto-assets?

The report noted that crypto-assets pose risks to macroeconomic and financial stability as well as risks involving financial integrity, consumer and investor protection and market integrity.

In some instances, these risks are exacerbated by noncompliance with existing laws.

Can we completely ban crypto assets?

Source: Business Standard

Blanket bans that make all crypto-asset activities — trading and mining — illegal can be costly and technically demanding to enforce.

This is because blanket bans tend to increase the incentives for circumvention due to the inherent borderless nature of crypto-assets, resulting in potentially heightened financial integrity risks and creating inefficiencies.

Moreover, ban in one jurisdiction could also lead to activity migrating to other jurisdictions, creating spillover risks.

Hence, **instead of banning crypto assets we can take other measures such as:**

– Comprehensive policy and regulatory response for crypto-assets to address the risks of crypto-assets to macroeconomic and financial stability.

– Targeted restrictions such as crypto taxation to address risks.

– Monitor crypto's impact on the International Monetary System.

– To curb misuse of these assets, countries should implement the Financial Action Task Force (FATF) anti-money laundering and counter-terrorist financing standards that apply to virtual assets and virtual asset service providers.

43. Centre seeks public comments on Draft Guidelines for Prevention and Regulation of Dark Patterns

Source: The post is based on the article **"Centre seeks public comments on Draft Guidelines for Prevention and Regulation of Dark Patterns"** published in **PIB on 8th September 2023**

What is the News?

The Department of Consumer Affairs, Government of India has sought public comments on Draft Guidelines for Prevention and Regulation of Dark Patterns.

What are the Draft Guidelines for Prevention and Regulation of Dark Patterns?

Definition of Dark Patterns: Dark Patterns are deceptive design patterns using user interface or user experience interactions on any platform.

– These practices are designed to mislead or trick users to do something they originally did not intend or want to do.

– Dark patterns undermine consumer autonomy, decision-making and choice potentially constituting misleading advertising, unfair trade practices or violations of consumer rights.

Different Types of Dark Patterns:

False Urgency: It means falsely stating or implying the sense of urgency or scarcity so as to mislead a user into making an immediate purchase or take an immediate action, which may lead to a purchase.

Basket sneaking: It means inclusion of additional items such as products, services, payments to charity/donation at the time of checkout from a platform, without the consent of the user, such that the total amount payable by the user is more than the amount payable for the product(s) and/or service(s) chosen by the user.

Confirm shaming: It means using a phrase, video, audio or any other means to create a sense of fear or shame or ridicule or guilt in the mind of the user, so as to nudge the user to act in a certain way that results in the user purchasing a product or service from the platform or continuing a subscription of a service.

Forced action: It shall mean forcing a user into taking an action that would require the user to buy any additional good(s) or subscribe or sign up for an unrelated service, in order to buy or subscribe to the product/service originally intended by the user.

Subscription trap: It means the process of making cancellation of a paid subscription impossible or a complex and lengthy process including similar other practices.

Interface interference: It means a design element that manipulates the user interface in ways that (a) highlights certain specific information; and (b) obscures other relevant information relative to the other information; to misdirect a user from taking an action desired by her.

Bait and switch: It means the practice of advertising a particular outcome based on the user's action but deceptively serving an alternate outcome.

Drip pricing: It means a practice whereby-elements of prices are not revealed upfront or are revealed surreptitiously within the user experience; and/or other such practice.

Disguised advertisement: It means a practice of posing, masking advertisements as other types of content such as user generated content or new articles or false advertisements.

Nagging: It shall mean a dark pattern due to which users face an overload of requests, information, options, or interruptions; unrelated to the intended purchase of goods or services, which disrupts the intended transaction.

What are the challenges in enforcing these guidelines according to experts?

The real challenge lies in conclusively proving that certain practices indeed qualify as dark patterns.

Consider the 'false category,' for instance.How will a regulator determine if a hotel or platform claiming, 'only 2 rooms remaining – book now!' is genuinely providing accurate data, or misleading users due to a lack of context?.

44. G20 document prepared by World Bank lauds India's progress

Source: The post is based on the article **"G20 document prepared by World Bank lauds India's progress"** published in **PIB on 9th September 2023**

What is the News?

The G20 Global Partnership for Financial Inclusion document prepared by the World Bank has lauded the transformative impact of Digital Public Infrastructure (DPI) in India over the past decade under the Central Government.

What is Digital Public Infrastructure(DPI)?

Click Here to read

What did the World Bank document say about India's Digital Public Infrastructure(DPI)?

World Bank document discusses the significant achievements and impact of India's Digital Public Infrastructure (DPI) in various areas:

Financial Inclusion: India's DPI particularly the JAM (short for Jan Dhan-Aadhaar-Mobile) Trinity, has greatly improved financial inclusion, increasing the adult inclusion rate from 25% to over 80% in just six years.This progress would have taken decades without DPI.

Government to Person (G2P) Payments: India's digital G2P system, built on DPI, has facilitated the transfer of $361 billion directly to beneficiaries through various government schemes, resulting in significant savings.

UPI (Unified Payments Interface): UPI transactions in May 2023 alone exceeded 9.41 billion.For the fiscal year 2022–23, the total value of UPI transactions was nearly 50 percent of India's nominal GDP.

DPI Benefits for the Private Sector: DPI has increased efficiency for private organizations by reducing complexity, costs, and processing times.This has had positive effects on sectors such as SME lending, depreciation costs and fraud detection.

Lower KYC Compliance Costs: The India Stack has digitized and simplified KYC procedures, reducing banks' compliance costs from $0.12 to $0.06 and making it more profitable to serve lower-income clients.

Cross-Border Payments: The UPI-PayNow interlinking between India and Singapore, operationalized in February 2023, promotes faster, cheaper, and more transparent cross-border payments.

Account Aggregator (AA) Framework: India's AA Framework, regulated by RBI, enables individuals and enterprises to share data securely and with consent. There are 1.13 billion cumulative accounts enabled for data sharing.

Data Empowerment and Protection Architecture (DEPA): DEPA empowers individuals to control their data and share it across providers, fostering innovation and competition without heavy investments in client relationships.

45. RBI decides to discontinue I-CRR in a phased manner

Source: The post is based on the article **"RBI decides to discontinue I-CRR in a phased manner"** published in **The Hindu on 9th September 2023**

What is the News?

The Reserve Bank of India (RBI) has announced that it would **discontinue the incremental cash reserve ratio (I-CRR)** in a phased manner.

What is the Incremental cash reserve ratio (I-CRR)?

I-CRR is an additional cash balance which the RBI can ask banks to maintain over and above the Cash Reserve Ratio(CRR).

Note: Cash Reserve Ratio (CRR) is the minimum amount of the total deposits which banks have to maintain as cash reserves with the Reserve Bank of India.It is an essential tool to maintain the health of the banking system.Banks cannot use this amount for lending or for any investment purposes.

Why was Incremental cash reserve ratio (I-CRR) introduced?

The I-CRR was introduced on August 10, 2023 by RBI.

I-CRR was announced as a temporary measure to absorb excess liquidity from the banking system.

The level of surplus liquidity in the system surged because of the return of Rs 2,000 banknotes to the banking system.

RBI's surplus transfer to the government also led to increase in government spending and capital inflows.

Note: Last time, RBI imposed the I-CRR was in November 2016 to absorb a part of the surplus liquidity in the system following the demonetization of Rs 500 and Rs 1,000 banknotes on November 8, 2016.It was later discontinued from the fortnight beginning December 10, 2016.

46. Tribes India Pavilion at crafts bazaar at Bharat Mandapam Showcases wide range of tribal Art for G20 Leaders' Summit

Source: The post is based on the article "**Tribes India Pavilion at crafts bazaar at Bharat Mandapam Showcases wide range of tribal Art for G20 Leaders' Summit"** published in **PIB on 9th September 2023**

What is the News?

The Tribal Cooperative Marketing Development Federation of India Ltd (TRIFED), Ministry of Tribal Affairs is showcasing a wide range of traditional tribal art, artifacts, paintings and many more at the **'Tribes India'** pavilion.

The exhibition is being hosted at the Crafts Bazaar as part of the G-20 Leaders' Summit at Bharat Mandapam, New Delhi.

What are the tribal arts showcased at the Tribes India pavilion?

Pithora Art: It is a ritualistic painting characterized by animated figures and lavish use of color.

– These paintings are done by the Rathwa, Bhilala, Naik and Bhil tribes of Gujarat and Madhya Pradesh.

– The paintings speak of the social, cultural and mythological life and beliefs of the tribals.The painting are a medium of propitiation, thanksgiving and commemoration of

auspicious occasions.

– Padma Shri awardee Shri Paresh Rathwa is a renowned artist of Pithora art.

What are the other tribal arts displayed at the Tribes India pavilion?

Gond painting from Madhya Pradesh.

Saura painting by artisans from Odisha.

Angora and Pashmina shawls from the high altitudes of Leh-Ladakh and Himachal Pradesh.

The colorful jewellery by the **Konyak tribes of Nagaland** appeases the eye.

Maheshwari silk sarees from Madhya Pradesh: It is worn during religious functions and auspicious events.

Dhokra jewellery: It is carved out of molten metals, beads, colorful glass pieces, and wooden balls.Tribal artisans from West Bengal, Odisha, Chhattisgarh and Madhya Pradesh are the architects of these pieces of intrinsic art.

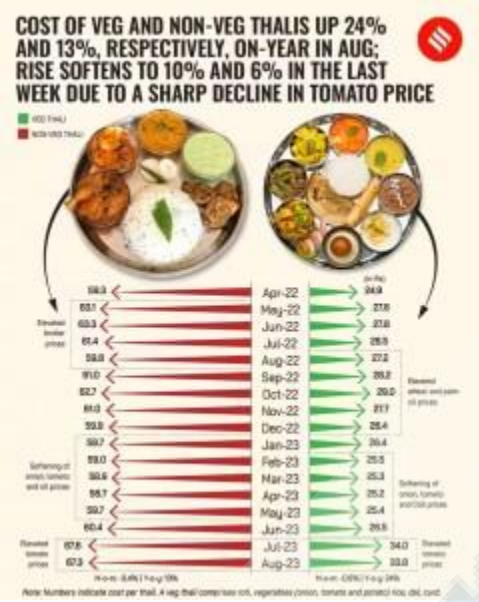
47. Thali economics: How food inflation is pinching vegetarian households more, why September promises some respite

Source: The post is based on the article **"Thali economics: How food inflation is pinching vegetarian households more, why September promises some respite"** published in **Indian Express on 9th September 2023**

What is the News?

According to a rating firm Crisil, the increase in food prices is affecting both vegetarian and non-vegetarian meals, with a significant 24.26% rise in vegetarian thali meal costs and a 12.54% increase in non-vegetarian thali meal costs.

What is a thali meal and how are its costs calculated?



Source: Indian Express

Thali is an Indian-style meal made up of a selection of various dishes – vegetarian and non-vegetarian – which are served on a platter.

A veg thali comprises roti, vegetables (onion, tomato, and potato), rice, dal, curd, and salad.For non-veg thali, the constituents remain the same but for dal, which is replaced by chicken.

According to Crisil, the average cost of preparing a thali at home is calculated based on input prices prevailing in north, south, east and west India.

The monthly change reflects the impact on the common man's expenditure.The data also reveals the ingredients (cereals, pulses, broilers, vegetables, spices, edible oil, cooking gas) driving changes in the cost of a thali.

What led to the rise in prices of Thali meals?

The rise in thali prices was primarily driven by the significant **increase in the price of tomatoes.**

– For instance, of the 24.26% increase in the cost of a vegetarian thali, 21% can be attributed solely to the 176% rise in tomato prices over the past year, going from Rs 37/kg to Rs 102/kg.

– Additionally, the prices of onions increased by 8%, chillies by 20%, and cumin by 158% from August 2022, contributing to a one percent increase in the cost of a vegetarian thali.

In the case of non-vegetarian thali, the cost increase was less pronounced because the price of broilers, which make up over 50% of the cost, rose only moderately by 1-3% during the year.

Will the Thali prices come down in the coming months

Thali prices are expected to decrease as the retail price of tomatoes has dropped to Rs 51/kg from July 2023.

Additionally, the cost of a LPG cylinder has been reduced.This is good news for consumers and should provide some relief.

48. Joint Statement from India and the United States

Source: The post is based on the article **"Joint Statement from India and the United States"** published in **PIB on 8th September 2023**

What is the News?

The Prime Minister of India and US President held a bilateral meeting on the sidelines of G20.

What are the key takeaways from the India and US President bilateral meeting?

Quad: Both countries reassured the significance of the Quad in supporting a free, open, inclusive, and resilient Indo-Pacific region.They looked forward to the next Quad Leaders' Summit, to be hosted by India in 2024.

UN Reform and Security Council: US President reaffirmed his support for a reformed UN Security Council with India as a permanent member.India's candidature for the UNSC non-permanent seat in 2028-29 was also welcomed by the US.

Technology Cooperation: Both leaders acknowledged the role of technology in their partnership and commended the India-US Initiative on Critical and Emerging Technology (iCET).

Space: ISRO and NASA have started discussions for a joint effort to the International Space Station in 2024.

– India and the United States also intend to increase coordination on planetary defense to protect planet Earth and space assets from the impact of asteroids and near-Earth objects.

Semiconductor Supply Chains: They recognized the importance of resilient semiconductor supply chains and welcomed investments from U.S. companies in India.

Telecommunications and Digital Inclusion: An MoU was signed between Bharat 6G Alliance and Next G Alliance to deepen cooperation in telecommunications. They also discussed digital inclusion.

Defence Collaboration: The leaders pledged to enhance cooperation in defence, including space and AI. Negotiations for manufacturing GE F-414 jet engines in India are underway.

– The leaders also commended the India-U.S. Defence Acceleration Ecosystem (INDUS-X) team for establishing a robust collaboration agenda to harness the innovative work of the U.S. and Indian defense sectors to address shared security challenges.

Quantum Technology: The United States reiterated its commitment to working together with India in the quantum domain both bilaterally and through the **Quantum Entanglement Exchange** (a platform to facilitate international quantum exchange opportunities).

India-U.S. Global Challenges Institute: The two leaders welcomed the signing of an MoU between Indian universities represented by the Council of Indian Institutes of Technology (IIT Council) and the Association of American Universities (AAU) to establish the India-U.S. Global Challenges Institute.

– This institute will bring together leading research and higher-education institutions from across our two nations, including beyond AAU and IIT membership, to advance new frontiers in science and technology.

WTO disputes: The leaders lauded the settlement of the seventh and last outstanding World Trade Organisation (WTO) dispute between India and the United States.This follows the unprecedented settlement of six outstanding bilateral trade disputes in the WTO in June 2023.

Innovation Handshake: The two leaders welcomed the development of an ambitious "Innovation Handshake" agenda within the India-US Commercial Dialogue.

– This initiative will encompass two anchor events—one in India and the other in the United States—where startups, private equity and venture capital firms, corporate investment departments, and government officials from both countries will collaborate to strengthen connections within their respective innovation ecosystems.

49. 21st VARUNA Naval Exercise between India and France begins

Source: The post is based on the article **"21st VARUNA Naval Exercise between India and France begins"** published in **PIB on 8th September 2023**

What is the News?

The 21st edition of Exercise Varuna (Varuna-23) between the Indian and French Navy was conducted in the Arabian Sea.

What is Exercise Varuna?

Type: Bilateral Naval Exercise

Countries Involved: India and France.

Started in: 1993.The exercise was named 'VARUNA' in 2001.

Aim: To provide an opportunity to learn from each other's best practices and procedures and to facilitate operational level interaction between the two Navies.

What are the other exercises between India and France?

Exercise Garuda: It is a bilateral exercise between the Indian and French Air Force.The first edition of the exercise was held in 2003.

Exercise SHAKTI: It is a biennial military exercise conducted between India and France.It was first conducted in the year 2011.

Exercise La Pérouse: It is a multilateral maritime exercise led by the French Navy. The Indian Navy participated in this exercise for the first time in 2021.

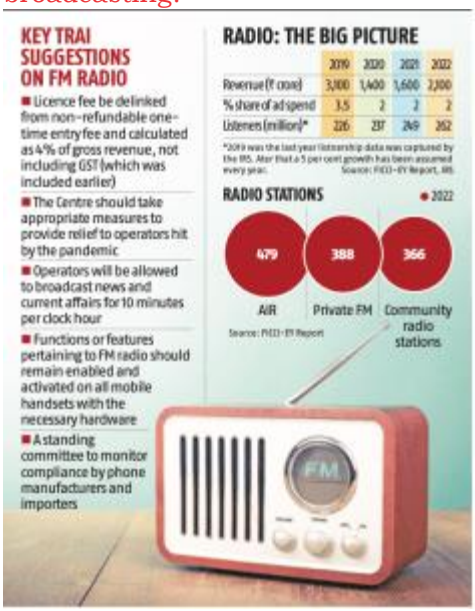
50. Trai's latest recommendations likely to help FM radio find lost signal

Source: The post is based on the article **"Trai's latest recommendations likely to help FM radio find lost signal"** published in **Business Standard on 9th September 2023**

What is the News?

The Telecom Regulatory Authority of India(TRAI) has released its recommendations on issues related to FM radio broadcasting including private FM Radio operators.

What are the recommendations given by TRAI to address issues related to FM radio broadcasting?



Source: Business Standard

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What are the expected benefits of TRAI recommendations on FM Radio?
Firstly, the FM Radio industry will be able to increase its revenue

Secondly, FM radio can become a great tool to bridge the information gap that exists in rural India.

– Many in rural India still rely on FM radio channels for their entertainment and information.

Thus, allowing private FM players to broadcast news can prove to be a game changer for the government and other companies in delivering news to their citizens or customers in all parts of the country.

Thirdly, this will help them to bring more programming variety to radio.

51. Centre notifies third phase of mandatory hallmarking from September 8, 2023

Source: The post is based on the article **"Centre notifies third phase of mandatory hallmarking from September 8, 2023"** published in **PIB on 9th September 2023**

What is the News?
The third phase of the mandatory hallmarking vide Hallmarking of Gold Jewellery and Gold Artefacts (Third Amendment) Order, 2023 comes into force from September 8, 2023.

The third phase will cover an additional 55 new districts under the mandatory hallmarking system.

What is Hallmarking?
Hallmarking is the accurate determination and official recording of the proportionate content of precious metal in precious metal articles.

Hallmarks are thus official marks used in many countries as a guarantee of purity or fineness of precious metal articles.

The principle objectives of the Hallmarking Scheme are to protect the public against adulteration and to obligate manufacturers to maintain legal standards of fineness.

In India, at present two precious metals namely gold and silver have been brought under the purview of Hallmarking.

What is the Hallmarking scheme?

Under the Hallmarking scheme of Bureau of Indian Standards(BIS), Jewellers are registered for selling hallmarked jewellery and recognised testing and hallmarking centers.

Aim: To protect consumers against victimization due to irregular gold or silver quality, develop India as a leading gold market center in the World and develop export competitiveness.

Mandatory Hallmarking of Gold Jewellery:

Mandatory Hallmarking of Gold Jewellery has come into force from June,2021.

In the first phase, mandatory hallmarking was implemented in 256 districts of the country with effect from 23 June 2021 and in the second phase additional 32 districts were covered.

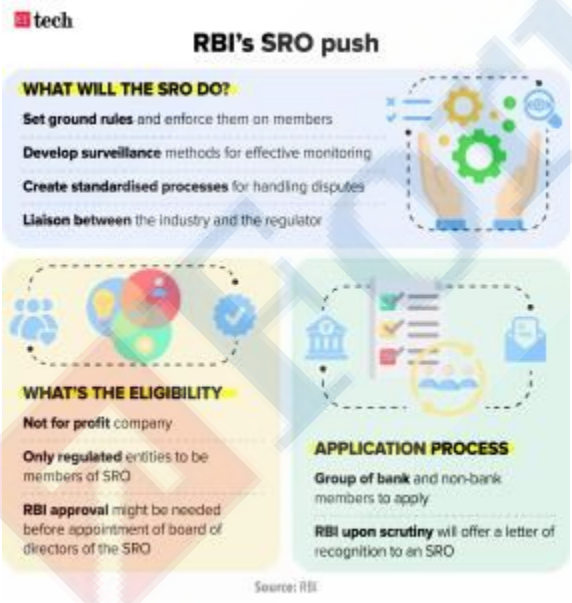
52. Why the RBI has proposed setting-up a Self Regulatory Organisation for fintechs

Source: The post is based on the article **"Why the RBI has proposed setting-up a Self Regulatory Organisation for fintechs"** published in **Indian Express on 8th September 2023**

What is the News?

The Reserve Bank of India(RBI) Governor has called upon fintech entities to establish Self-Regulatory Organizations (SROs).

What are Self-Regulatory Organizations (SROs)?



Source: Economic Times

SRO is a non-governmental organization that sets and enforces rules and standards relating to the conduct of entities in the industry (members) with the aim of protecting the customer and promoting ethics, equality and professionalism.

SROs typically collaborate with all stakeholders in framing rules and regulations.

Their self-regulatory processes are administered through impartial mechanisms such that members operate in a disciplined environment and accept penal actions by the SRO.

Regulations by SRO supplement but do not replace applicable laws or regulations.

What is the need for an SRO?

Firstly, SROs could play a pivotal role in the fintech industry by promoting responsible practices and maintaining ethical standards.

– There have been many instances where a few fintech players were involved in unethical practices such as charging exorbitant higher interest rates and harassment of borrowers for recovering loans.

Secondly, by proactively addressing issues like market integrity, conduct, data privacy, cybersecurity, and risk management, SROs can help build trust among consumers, investors and regulators.

What are the functions of SRO?

Communication: Acting as a link between members and regulatory bodies like the RBI.

Standards: Setting industry benchmarks and promoting professional behavior.

Training: Providing training and awareness programs for members.

Dispute Resolution: Establishing a uniform grievance resolution framework.

What are the advantages of SRO?

Expertise: SROs are experts in their industries, providing valuable knowledge and insights to their members.

Ethical Standards: They enforce ethical standards among their members, fostering trust in the industry.

Oversight: SROs act as watchdogs, preventing unprofessional practices.

53. 'Bharat: Mother of Democracy' portal launched at G20 exhibition

Source: The post is based on the article **"Bharat: Mother of Democracy' portal launched at G20 exhibition"** published in **New Indian Express on 9th September 2023**

What is the News?

On the eve of the G20 leadership summit, the Ministry of Culture has launched a 'Bharat: The Mother of Democracy' Portal.

What is 'Bharat: The Mother of Democracy' Portal?

Source: PIB

Bharat: The Mother of Democracy portal offers content that delves into India's democratic legacy spanning an astonishing 7,000 years.

Sections: The portal is divided into five sections and 22 sub-sections starting from Sindhu-Saraswati Civilisation (6000- 2000 BCE), Mahajanapada and Gantantra (7-8 BCE), Vijaynagar Empire (14-16 century) and Mughal emperor Akbar reign (1556-1605) to Constitution of India (1947) and Elections in Modern India (1952 onwards).

Languages: The content on the portal is available in 16 languages including German, French, Spanish, Arabic, Portuguese, Italian, Turkish, and Russian besides English and Hindi.

Content developed by: The content for the portal has been curated by the Indira Gandhi National Centre for the Arts (IGNCA), which is a center for research, academic pursuit and dissemination in the field of the arts under the Ministry of Culture.