



# SROTHAS

*A Monthly Magazine for UPSC Civil Service Examination*

**CURRENT  
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# 1. POLITY AND GOVERNANCE

## 1. YUVA SANGAM Portal

- Ministry of Development of North Eastern Region
- Launched at: Indira Gandhi National Centre for the Arts (IGNCA), New Delhi
- Yuva Sangam is an initiative of Prime Minister to build close ties between the youth of North East Region and rest of India under the spirit of Ek Bharat Shreshtha Bharat

## 2. NORTH-EASTERN COUNCIL (NEC)

- 50 years completed
- Established in 1972 as nodal agency for economic and social development of North Eastern Region (NER).
- Works under administrative control of Ministry of Development of NER.
- 8 pillars for North east development, viz. Peace, Power, Tourism, 5G connectivity, Culture, Natural farming, Sports, Potential.

## 3. PHONE TAPPING

- Phone tapping refers to monitoring of internet-based communications and phones by a third party by secret means.
- Both, Central and State Governments have a right to tap phones.
- Indian Telegraphic Act, 1885 regulates it.
- Orders could be issued only by Secretary,

Union Ministry of Home Affairs or his State Counterpart in writing; only then can the tapping begin.

## 4. Right to be forgotten

- Refers to the ability of an individual to limit, delink, delete or correct the disclosure of personal information on the Internet that is misleading, embarrassing or irrelevant
- Distinct from the right to privacy because right to privacy comprises of information that is not publicly known whereas right to be forgotten involves removing information that was publicly known at a certain time and not allowing third party to access the information.
- Right to privacy includes the right to be forgotten and the right to be left alone. (SC JUDGEMENT)
- In India, there is no law that specifically provides for RTBF.

## 5. Government amended Aadhaar rules.

- supporting documents may be updated –at least **once** by Aadhaar holders on completion of 10 years from enrolment date.
- The process of updating documents is not mandatory.

## 6. Central Identities Data Repository (CIDR)

- **Authenticate and authorize individuals and organizations** for access to government services and information.
- Supports the **issuance of electronic identity cards** and the management of identity information.
  - ñ Central database that stores and manages identity information for individuals and organizations.
- Contains
  - all Aadhaar numbers issued to Aadhaar holders
  - corresponding demographic and biometric information of such individuals etc.

## 7. Digital India Land Records Modernization Programme (DILRMP)

- Implemented by Ministry of Rural Development.
- Central sector scheme launched in 2016.
- 3 major components: Computerization of land record; Survey/re survey; Computerization of Registration

## 8. Resignation of an IAS officer

- Submitted to Chief secretary of state in case of an officer serving in state.
- Submitted to Secretary of concerned Ministry or Department in case of an officer who is on central deputation.
- Only after recommendation of concerned cadre/state is received, the competent authority consider the officer's resignation.

- Competent authorities are
  - Minister of State at the Department of Personnel & Training (DoPT) in respect of IAS; Minister for Home Affairs in respect of IPS; Minister for Environment, Forest and Climate Change in respect of Forest Service.

## 9. National Standards for Civil Service Training Institutions

- Ministry of Personnel, Public Grievances & Pensions.
- Developed at Capacity Building Commission (CBC) headquarters.
- India became the first country in world to come out with a unique model to create standards for civil service training institutions.

## 10. Capacity Building Commission

- created as a part of Mission Karmayogi for civil servants.
- Comprises of experts in related fields and global professionals.
- Help in preparing and monitoring annual capacity building plans as well as audit human resources present in the government.

## 11. Police Commissionerate System

- Districts would be declared as metropolitan cities as per rules of Code of Criminal Procedure (CrPC) before implementing



PCS.

- Commissioner of Police (CP) is head of a unified police command structure

## 12. Dual Command System

- District Magistrate (DM) and Superintendent of Police (SP) share powers and responsibilities in a district.
- Make police more accountable to DM.

## 13. Worldwide Governance Indicators (WGI)

- By World Bank; Aggregates the opinions of corporate, citizen, and experts survey respondents from both developed and developing nations on the quality of governance.
- 6 dimensions: Voice and Accountability; Political Stability and Absence of Violence; Government Effectiveness; Regulatory Quality; Rule of Law; Control of Corruption

## 14. Nationale - Governance Service Delivery Assessment

- conducted by Department of Administrative Reforms and Public Grievances
- Assess depth and effectiveness of e-Governance service delivery.

## 15. Census Towns

- Three conditions to define Census Towns are; Population of 4,000 and more; Population density of at least 400

persons per square kilometer; Male non-farm workforce of more than 75 percent.

## 16. Personality rights (PR)

- right of a person to protect his/her personality under Right to privacy or property.
- Rights of famous personalities and celebrities whose name, voice, signature or any other personality trait has commercial value and can mobilise and influence the public at large.

## 17. E-Government Survey 2022

- UN Department of Economic and Social Affairs.
- It assesses the digital government landscape across all 193 Member States
- India ranked 105 in the E-Government Development Index

## 18. Rule of Law Index

- published by World Justice Project (WJP)
- In 2022, India was ranked 77th out of 140 countries.

## 19. Social Hostilities Index (SHI)

- By Pew Research Centre; India tops the index
- Measures acts of religious hostility by private individuals, organizations or groups.



## 2. ECONOMICS

### 1. Vostro account

- An account that domestic banks hold for foreign banks in the **former's** domestic currency.

### 2. Nostro Account

- An account held by a bank in another bank.
- Allows the customers to deposit money in the bank's account in another bank.
- Used if a bank has no branches in a foreign country.

### 3. Soft-landing

- When a central bank is successful in slowing down the economy without bringing about a recession
- When the actions of the central bank bring about a recession it is called a hard-landing.

### 4. Landlord Port model

- PPP model in which the publicly governed port authority acts as a regulatory body and as a landlord, while private companies carry out port operations-mainly cargo-handling activities.

### 5. Surety bond

- Unique type of insurance because it involves a three-party agreement regulated by IRDAI.
- The three parties in a surety agreement are a principal who needs to sell the bond, an obligee who requires the bond, and a surety company that sells the bond.
- The obligee, usually a government entity, requires the principal, typically a business owner or contractor, to obtain a surety bond as a guarantee against future work performance.

### 6. Financial Services Institutions Bureau (FSIB)

- One chairperson and two members.
- Chairperson of FSIB is to be nominated by the Central Government.
- Single entity constituted for making recommendations for appointments of Wholtime Directors and Non-Executive Directors in public sector banks (PSBs), public sector insurers (PSIs) and financial institutions (FIs) including selection of General Managers and Directors in non-life PSIs.

- Establishment of FSIB brings an end to the Banks Board Bureau (BBB)

## 7. Open Network for Digital Commerce (ONDC)

- Freely accessible government-backed platform that aims to democratise e-commerce by moving it from a platform-centric model to an open network for buying and selling of goods and services.
- Buyer registered in one E-Commerce platform can purchase from seller of another E-Commerce site.
- Not-for-profit organisation that will offer a network to enable local digital commerce stores across industries to be discovered and engaged by any network enabled applications.
- All existing digital commerce applications and platforms can voluntarily choose to adopt and be a part of the ONDC network.

## 8. Neobanks

- Financial institutions that give customers a cheaper alternative to traditional banks.
- **These firms don't have a bank licence of their own but rely on bank partners to offer licensed services. (RBI doesn't allow banks to be 100% digital yet.)**
- RazorpayX, Jupiter, Niyu, Open, etc are the examples of top Neobanks of India.
- Kind of digital bank without any branches.

## 9. Urea

- India is the top country by urea import in the world.
- The Centre pays subsidy on urea to

fertiliser manufacturers on the basis of cost of production at each plant and the units are required to sell the fertiliser at the government-set Maximum Retail Price (MRP).

- Department of Fertilizers (DoF) has made it mandatory for all the domestic producers to produce 100% urea as Neem Coated Urea (NCU).

## 10. Bharat Bill payment system

- Bharat Bill payment system is a Reserve Bank of India (RBI) conceptualised system driven by National Payments Corporation of India (NPCI).
- one-stop bill payment solution for all recurring payments with 200+ Billers in the categories Viz. Electricity, Gas, Water, Telecom, DTH, Loan Repayments, Insurance, FASTag Recharge, Cable etc. across India.
- payment both in cash and online
- accessible to NRIs

## 11. Active mutual funds

- fund managers actively manage funds
- Passive Funds; don't trade stocks actively, called index funds; mimic performance of benchmark indices; expense of managing lesser.

## 12. Optionally Convertible Debentures

- Allow issuer to raise capital and pay interest to investor
- Right to convert the debt to equities of issuing company

- Low coupon rate than standard debt
- Non convertible debenture cannot be convertible to equity; higher interest rate

### 13. e-RUPI

- one-time contactless, cashless voucher-based mode of payment that helps users redeem the voucher without a card, digital payments app, or internet banking access.
- e-RUPI should not be confused with Digital Currency which the Reserve Bank of India is contemplating. Instead e-RUPI is a person specific, even purpose specific digital voucher.
- By the National Payments Corporation of India (NPCI).

### 14. Non-Performing Assets

As per RBI guidelines NPA is a loan or advance where

- Interest and/or installment of principal remain overdue for a period of more than 90 days in respect of a term loan
- The installment of the principal or interest thereon remains overdue for two crop seasons for short duration crops.
- The installment of principal or interest thereon remains overdue for one crop season for long duration crops.

### 15. Bharatiya Reserve Bank Note Mudran Private Limited

- Established by Reserve Bank of India (RBI) as its wholly owned subsidiary on 3rd February 1995.
- Registered as a Private Limited Company under the Companies Act 1956.

- Role of BRBNMPL is to augment the production of bank notes in India to enable the RBI to bridge the gap between the supply and demand for bank notes in the country.

### 16. Term repos

- Interest rate on the Term repos is determined through auction and hence is usually higher than the Repo rate.
- Repo is available from Monday to Friday. But in the case of term repo, the facility is available for commercial banks only when the RBI notifies it, and it is usually available twice in a week.

### 17. Tax Information Network

- Initiative of the Income Tax Department of India (ITD) to modernize the current system of collecting, processing, monitoring and accounting for direct taxes using information technology.
- TIN is divided into three subsystems:
  - Electronic Return Acceptance and Consolidation System (ERACS)
  - Online Tax Accounting System (OLTAS)
  - Central PAN Ledger Generation System (CPLGS)

### 18. Securities Appellate Tribunal

- SAT is a statutory body established under the provisions of the Securities and Exchange Board of India Act, 1992.
- Constituted to protect the interest of entities that feel aggrieved by SEBI's decision.

- SAT consists of a Presiding Officer and two other Members. It has the same powers as vested in a civil court.
- If any person feels aggrieved by SAT's decision or order can appeal to the Supreme Court.

## 19. Venture Capital Fund

- Venture Funds is a form of private equity and a type of financing that investors provide to startup companies and small businesses that are believed to have long term growth potential.

## 20. Liquidity Coverage Ratio (LCR)

- It is the minimum required high-quality liquid assets (HQLA) that the banks must hold to allow them to survive a liquidity stress for 30 days.
- It was introduced under Basel III to improve a bank's short-term resilience to liquidity shocks.
- RBI has declared that the entire SLR - eligible assets held by the Banks can be considered as HQLAs for meeting LCR requirements.

## 21. Periodic Labour Force Survey 2020-21

- It shows that the unemployment rate fell to 4.2% in 2020-21, compared with 4.8% in 2019-20.
- The rural areas recorded an unemployment rate of 3.3% and urban areas recorded an unemployment rate of 6.7%.
- Labour Force Participation Rate (LFPR) increased from 40.1% in the previous year

to 41.6% during 2020-21.

- Worker Population Ratio (WPR) increased from 38.2% of the previous year to 39.8%.
- The migration rate is 28.9%. The migration rate among women was 48% and 47.8% in rural and urban areas, respectively.

## 22. Fintech

- They cannot accept demand deposits.
- Peer to peer lending.
- Regulated by RBI.

## 23. Cost Inflation Index

- Used to ascertain long term capital gain or losses on which an individual is liable to pay taxes.
- Notified by Income tax dept for a financial year.

## Extra Points

### Economic Capital Framework

- by RBI; Determine the appropriate level of risk provisions and distribution of profits between the RBI and Union Government.

### Healthy economy

- Bonds receive a higher yield on longer-term bonds than short-term bonds.

### Inverted Bond yield curve

- Yield of longer tenure bond less than yield for shortertenurebond.
- Yield inversion typically sign of recession.

### Non-developmental expenditure

- Expenditures made for administrative service, defence service,
- Debt servicing;Subsidies;Cost of tax collection
- Cost of an audit;Printing of notes
- Internal law and order;Pension to retired govt. employees

### Sinking fund

- Set up for repaying debt.

### Gross Fixed Capital Formation

- Value of acquisitions of new or existing fixed assets by the business sector, governments and "pure" households (excluding their unincorporated enterprises)
- Higher rate of growth of Capital Formation-higher productive capacity of economy
- GFCF in India has not steadily increased in the last 5 years.

### waterfall mechanism

- Under Insolvency and Bankruptcy Code
- Outlines the order of priority for repayment to creditors in the event of a liquidation

### Open Market Sales Scheme

- Selling of food grains by Government/Government agencies at predetermined prices in the open market from time to time to enhance the supply of grains especially during the lean season and thereby to moderate the general open market prices especially in the deficit regions.
- FCI releases wheat and rice under it

### Malhotra Committee report

- IRDA was constituted as an autonomous body to regulate and develop the insurance industry

### Working Group on Rural Banks (Narsimhan Committee)

- RRB were established in 1975

### Veblen Goods

- Increase in price encourages people to buy more of it.
- Designer jewellery, pricey watches, and luxury cars

### Participatory Note

- A derivative instrument issued in foreign jurisdictions against Indian securities—the Indian security instrument may be equity, debt, derivatives or may even be an index.
- Issued by a registered foreign institutional investor (FII) to an overseas investor

who wishes to invest in Indian stock markets without registering with SEBI

- Regulated by SEBI.
- Also known as Overseas Derivative Instruments
- Indian regulators cannot ban the issue of PNs. However, they can regulated, as SEBI

### National Common Mobility Card (NCMC)

- Pay for their metro/bus travel, toll taxes, parking charges, retail shopping and even withdraw money.

### Core Investment Companies (CICs)

- NBFC with asset size of 100 crore and above and are registered with rbi
- Main business is acquisition of shares and securities  
CICs which are allowed to accept public funds, hold not less than 90% of their net assets in the form of investment in equity shares, preference shares, bonds, debentures, debt or loans in group companies.
- CICs having asset size of below Rs 100 crore are exempted from registration and regulation from the RBI, except if they wish to make overseas investments in the financial sector.

### Current Account

- Payable on demand through cheques.
- Unlimited withdrawals allowed.
- No minimum balance requirements.
- Overdraft facility available

### Fiduciary money

- The money which is accepted as a medium of exchange because of the trust of the payer and the payee.
- Example: Cheques

### Fiduciary money

- Founded on 1875 was Asia's first stock exchange.
- BSE joined the United Nations Sustainable Stock Exchange initiative in 2012.
- Government recognized it officially as per the Securities Contracts Regulation Act in August 1957.

### Indigenous bankers

- Individuals or private firms who receive deposits and give loans and thereby operate as banks
- IBs accept deposits as well as lend money.
- Lending operations are completely unsupervised and unregulated

### Deposit Insurance and Credit Guarantee Corporation (DICGC)

- A wholly owned subsidiary of Reserve Bank of India.

- Covers all commercial and co-operative banks, except in Meghalaya, Chandigarh, Lakshadweep and Dadra and Nagar Haveli.
- only primary cooperative societies are not insured by the DICGC.

### Rights Offering

- Group of rights offered to existing shareholders to purchase additional stock shares, known as subscription warrants, in proportion to their existing holdings.

### Brown Label ATMs (BLAs) are

- Owned by third party (a non-banking firm).
- The concerned banks only handle part of the process that is 'cash handling' and 'back-end server' connectivity.
- They carry 'logo' of the bank which outsources their service

### Agricultural Census

- Conducted every five years
- Collection of data on the structure of operational holdings by different size classes and social groups.
- Central Sector Scheme (100% financial assistance)
- By the Ministry of Agriculture & Farmers' Welfare.
- First Agricultural Census 1970-71

### Agricultural Census

- economically justified but fall short of financial viability.
- provided to infrastructure projects that are to be undertaken through Public-Private Partnerships.
- administered by the Ministry of Finance
- maximum of 20% of the total project cost up to 30 percent

### Viability Gap Funding

- unsecured money market instrument issued in the form of a promissory note.
- Corporates, primary dealers (PDs), and the all-India financial institutions (FIs) can issue
- maturities between a minimum of 7 days and a maximum of up to one year

### National Financial Reporting Authority (NFRA)

- Under section 132 (1) of the Companies Act 2013
- Can undertake investigation related to enlisted public companies along with insurance companies and banking companies.
- The CAG of India is responsible for auditing accounts of NFRA.
- Recommend accounting and auditing policies and standards to be adopted by companies for approval by the Central Government

### Agriculture Infrastructure Fund

- Central Sector Scheme
- Medium and long term debt financing facility for investment in viable projects for

post-harvest management Infrastructure and community farming assets

- Ten years from Fiscal year 2020 to 2029.

### Depository

- Is a place where financial securities are held in dematerialised (DEMAT) i.e. in electronic form.
- Depository Participant (DP) intermediaries between the depository and the investors.
- Depositories Act, 1996.
- Only two depositories in India
  - National Securities Depository Limited (NSDL)(national stock Exchange)
  - Central Depository Services Limited (CDSL)(bse)
- SEBI is responsible for the registration, regulation, and inspection of the depository.

### Zero coupon bonds

- Non-interest bearing, non-transferable special GOI securities
- Maturity of 10-15 years and issued specifically to Punjab & Sind Bank.
- Issued by the Central government specifically to a particular institution.

### Unemployment trap

- Is a situation when unemployment allowances/benefits discourage the unemployed to go to work.

### Different Trade Agreements

- PTA – Preferential trade agreement
  - gives preferential access to certain

products from the participating countries.

- FTA – Free trade agreement
  - Trade bloc whose member countries have signed a free-trade agreement (FTA), which eliminates tariffs, import quotas, and preferences on most (if not all) goods and services traded between them.
- Customs Union
  - Agreement among countries to have free trade among themselves and to adopt common external barriers against any other country.
- Common Market
  - Type of custom union where there are common policies on product regulation, and free movement of goods and services, capital and labour.
- Economic Union
  - Type of trade bloc which is composed of a common market with a customs union.
  - Participant countries have both common policies on product regulation, freedom of movement of goods, services and the factors of production (capital and labour) and a common external trade policy.
- Economic and monetary union
  - When an economic union involves unifying currency it becomes an economic and monetary union

### Economic Territory

- Territorial waters and air space.
- Embassies, consulates, military bases, etc





located abroad.

- Ships, aircrafts etc, operated by the residents between two or more countries

### RESERVE DEPOSIT RATIO

- Proportion of the total deposits commercial banks keep as reserves.
- Vault cash in banks and deposits of commercial banks with RBI.
- Includes the SLR and CRR.

### CENTRAL BANK DIGITAL CURRENCY (CBDC)

- Digital currency backed by the Central bank of a country
- Legal tender and accepted for the payment of various transactions within a country.
- Central Bank can enable the usage of CBDC for certain selected users
- Works on blockchain technology and hence details of every transaction- amount, accounts involved, purpose etc. is recorded.
- Chinese Central Bank Currency Electronic Payment (DCEP)"
- Tunisia (e-DINAR); Ecuador (Sistema); Venezuela (Petro); Sweden (e-krona)

### Carbon Imperialism

- Modern day type of imperialism wherein the 1st world nations are trying to enforce their views about energy-consumption upon the 3rd nations with hidden agenda to; To sell their nuclear fuel and technology; To portray the third world in bad light for using coal power and thereby reducing their own culpability for global warming.

### Asian Development Bank

- ADB now has 68 members, 49 from within Asia.
- bank admits the members of the United Nations Economic and Social Commission for Asia and the Pacific and non-regional developed countries.
- Official United Nations Observer.
- Votes are distributed in proportion with **members'** capital subscriptions. (United States (each with 15.6% of total shares), the People's Republic of China (6.4%), India (6.3%), and Australia (5.8%).

## 3. ENVIRONMENT AND ECOLOGY

### 1. Ethylene Glycol

- Colourless and odourless alcoholic
- Mostly used as an automotive antifreeze and as a raw material
- Used as adulterants that are sometimes illegally used as solvents in liquid drugs.

### 2. Climate club

- G7; For Nations who wants to take decisive climate actions and combat global warming
- Open for countries who will follow 2015 paris agreement.

### 3. Eco-sensitive Zones (ESZ)

- Notified around protected areas, National Parks and Wildlife Sanctuaries
- land within 10 km of above can be notified by Central govt.
- Permitted activities like ongoing agriculture or horticulture, organic farming water harvesting etc
- According to EPA 1986 ESZ notified by MOEFCC.

### 4. Partners in the blue pacific (PBP)

- 5 nation informal mechanism to support Pacific islands and to boost economic ties in the region.
- By USA and Aus, NZ, Japan, UK

Will elevate Pacific regionalism and forge stronger ties with the Pacific Islands Forum (PIF).

### 5. National Board for Wildlife (NBWL)

- It is a Statutory Organization constituted under the Wildlife Protection Act, 1972.
- Its role is advisory in nature and advises the Central Government on framing policies and measures for conservation of wildlife in the country.
- No alteration of boundaries in national parks and wildlife sanctuaries can be done without approval of the NBWL.

### 6. Carbon Border Tax

- Duty on imports based on the amount of carbon emissions resulting from the production of the product.
- The proposal is part of the European Commission's European Green Deal that endeavors to make Europe the first climate-neutral continent by 2050
- A national carbon tax is a fee that government imposes on any company within the country that burns fossil fuels.

### 7. UN Ocean in Lisbon 2022

- IUU Fishing Action Alliance Pledge

- US, Canada and UK launched Illegal, unreported and unregulated (IUU) Alliance

## 8. Environmental DNA (e-DNA)

- Environmental DNA or eDNA is DNA that is collected from a variety of environmental samples such as soil, seawater, snow or air rather than directly sampled from an individual organism.
- Example sources of eDNA include faeces, mucus, gametes, shed skin, carcasses and hair.
- Airborne e-DNA could help understand the composition of animal communities and detect the spread of non-native species.

## 9. ASIAN WATERBIRD CENSUS (AWC)

- AWC (started in 1987) is part of the International Waterbird census coordinated by Wetland International
- In India, AWC is coordinated by the Bombay Natural History Society (BNHS) (founded in 1883, an NGO) and Wetland International (NGO).
- AWC supports the conservation of wetlands and waterbirds worldwide.

## 10. Natural Gas Hydrates

- Crystalline form of methane and water, and exist in shallow sediments of outer continental margins. They are envisaged as a viable major energy resource for future.
- Promising sites of gas hydrates have

been identified and surveyed in the **Krishna & Godavari (KG)** and the Mahanadi basins

- Known as flammable ice, methane hydrates are molecules of gas contained in an ice matrix found in permafrost regions of the arctic and on the seafloor at continental margins below 500 meters of depth.

## 11. Project BOLD

- Bamboo Oasis on Lands in Drought (BOLD)
- To scientifically harness the environmental benefits and economic potential of bamboo cultivation to protect the environment and strengthen the rural economy through various village industries.

## 12. World Forestry Congress

- It is held every six years.
- The Congress has been providing a forum for inclusive discussion on the key challenges and way forward for the forestry sector.
- Theme for 2022: Building a Green, Healthy and Resilient.
- This year's event, hosted by the Republic of Korea and co-organized with FAO, was the second congress held in Asia.

## 13. Anti-smog gun

- Anti-smog gun is a device that spews fine nebulised water droplets into the atmosphere so that the smallest dust and

polluted particles are absorbed

- It is designed in such a way that it converts the water into a fine spray with droplets size of 50-100 microns by passing it through high-pressure propellers.

## 14. Petcoke

- Petroleum Coke is a substance obtained as a product from the oil refining process.
- It is a direct replacement of coal as a fuel but has higher calorific value and causes huge emission of sulphur dioxide and other pollutants.
- Abundantly used in India in several manufacturing industries such as cement, steel and textile and refineries
  - as it is significantly cheaper than coal
  - has high calorific value and
  - easier to transport and store.

## 15. Water Hyacinth

- Invasive weed, floating aquatic plant
- Aquatic weed common in water-bodies across South Asia, including India.
- Not an indigenous species but was introduced to India during the British colonial rule as an ornamental aquatic plant from South America.
- Plant produces beautiful purple flowers that have high aesthetic value.
- Has been used as a bio-fertiliser in some organic agriculture practices.
- Plant is a good phytoremediation species, as it has the ability to trap and remove

toxic metabolites and harmful heavy metals from water.

## 16. Cheetah

- Cheetah is a large cat native to Africa and central Iran. It is the fastest land animal.
- Cheetahs are the only big cat that cannot roar.
- variety of habitats such as savannahs arid mountain ranges in the Sahara and hilly desert terrain in Iran.
- Cheetahs can be seen in groups, as well as hunting in groups.

## 17. Commission for Air Quality Management (CAQM)

- The former Environmental Pollution Prevention and Control Authority (EPCA) was dissolved to make room for the Commission.
- Under Metropolitan and Surrounding Areas Air Quality Management Commission Act 2021.
- Will replace bodies such as Central and State Pollution Control Boards in Delhi, Punjab, Haryana, UP and Rajasthan.

## 18. Living Lands Charter

- The member states of the Commonwealth have agreed to voluntarily bequeath their "living land" to future generations in accordance with the UN's 10-year strategy for ecosystem restoration.
- Announced following the 2022 Commonwealth Heads of Government meeting (CHOGM) in Kigali, Rwanda.
- Non-binding.

- Supports member states to effectively fulfill their obligations under the three Conventions of Rio de Janeiro: the United Nations Convention on Biological Diversity, the United Nations Convention to Combat Desertification (UNCCD), and the United Nations Framework Convention on Climate Change.

## 19. UN Ocean Conference 2022

- ↑ The conference was co-hosted by the Governments of Kenya and Portugal.
- ↑ Minister of Earth Sciences led the Indian delegation
- ↑ Aligned to SDG (Sustainable Development Goals) 14 'life below water'
- ↑ Blue Deal: includes global trade, investment and innovation to create a sustainable and resilient ocean economy.

## 20. Scavenging

- When snow travels in the atmosphere it binds itself to airborne particles and pollutants which are then deposited on Earth's surface.

## 21. Zooxanthellate corals

- Photosynthetic algae zooxanthellae live in their tissues
- Algae produce oxygen and help coral to remove wastes
- Zooxanthellae supply coral with glucose aminoacids which are products of photosynthesis
- Restricted to shallow waters

## 22. Azooxanthellate corals

- Group of hard corals that don't contain zooxanthellae.
- Derive nourishment from planktons.
- Seen in deep sea and shallow waters.
- First time discovered them in Indian

## Extra Points

### Taiga (boreal forest)

- Biome of vegetation composed primarily of cone-bearing needle leaved
- Soils are podzols, gray soils that are thin, acidic, and poor in nutrients.
- Lower productivity than tropical or temperate forests

### Biomagnification to occur, the pollutant must be

- Long lived; mobile; soluble in fats.

### Pyrolysis

- Thermal conversion of organic matter using a catalyst in the absence of oxygen or near absence
- Reversible process; 350°C – 600°

### Coal Gasification

- Converts biomass into a combustible gas called producer gas (syngas)
- Products are heat and combustible

gas;800°C -1200°C.

- By-products include coke, coal tar, sulfur, ammonia and fly ash
- **India's** first coal gasification based fertiliser plant to be set up in Talcher, Odisha.

### Syngas

- Carbon monoxide+carbon dioxide+hydrogen
- Applications such as- production of electricity, fuel for IC engines,making plastics, cement

### Dioxin and furan

- Chlorinated aromatic compounds having tremendoustoxic effects
- Persistent Organic Pollutants

### Uses of algae

- Carbon dioxide fixation;Purification of wastewater;Food supplements;Biofuel production

### Pradhan Mantri JI-VAN Yojana

- Providing financial support to Integrated Bioethanol Projects.
- JI-VAN (Jaiv Indhan - Vatavaran Anukool fasal awashesh Nivaran)

### Food Safety Mitra (FSM)scheme

- Auditing hygiene at different institutions such as schools, colleges and corporate campuses.
- Support small and medium scale food businesses to comply with the food safety

laws

- FSMs would undergo training and certification by FSSAI to do their work and get paid by food businesses for their services.

### Microbial fuel cell (MFC)

- Bio-electrochemical device that harnesses the power of respiring microbes to convert organic substrates directly into electrical energy
- Use microbes, such as bacteria, as the catalysts

### Permafrost

- Perennially frozen soil that has been below 0 C for at least two years.
- Condition where top layer upto depth of 20-40 cm is completely frozen.
- 15% of the land area of the globe.

### GEMINI system

- Union Minister of Earth Sciences
- By Indian National Centre for Ocean Information Services(INCOIS) and Airports Authority of India (AAI)
- **Gagan Enabled Mariner's Instrument for Navigation and Information** satellite-based communication system
- Alert deep-sea fishermen of upcoming disasters.
- Low cost device having a box-shaped receiver that has an antenna and inbuilt batterythat can last threeto four days.
- Based on GAGAN (GPS Aided Geo Augmented Navigation) satellite system developed by ISRO and AAI
- GAGAN satellite system consists of three

geosynchronous satellites namely the

- GSAT -8;GSAT -10;GSAT -15

### Bioindicators

- Lichens, birds and bacteria;Used to monitor the health of the environment
- Examples of bioindicators : lichens , tubifex , insect larvae , frog , algal blooms

### Stratification

- Vertical distribution of different species occupying different levels

### 'Not All Animals Migrate by Choice' Campaign

- UN Environment India and Wildlife Crime Control Bureau (WCCB) of India has launched

### Ecotypes

- Species having a wide range of distribution which evolve genetically adapted local populations.
- Differ from each other on the basis of morphological and physiological characters.
- Different ecotypes of a species are inter-fertile.

### Plant's ozone-forming potential

- Ability to release the VOCs into the atmosphere.

### Planetary boundaries

- Thresholds below which humanity can

continue to develop for generations to come.

### geothermal

- United States-world's largest producer
- Largest geothermal development in the world is The Geysers north of San Francisco in California.
- Geothermal energy is always available, 365 days a year
- Concern is the release of hydrogen sulfide,
- Another concern is the disposal of some geothermal fluids, which may contain low levels of toxic materials

### Climate feedbacks

- Processes that can either amplify or diminish the effects of climate forces
- Feedback that increases an initial warming is called "positive feedback."
- Albedo effect-example-positive climate feedback.

### Soil Steaming

- Method of soil sterilization.
- Destroying the action of diseases causing organism that are present in the soil without causing harm to other plants.

### Biodilution

- Decrease in concentration of a pollutant with an increase in trophic level.

## 4. SCIENCE AND TECHNOLOGY

### 1. Airglow

- The glow produced by atoms and molecules in the atmosphere is called airglow.
- The distinct colours of airglow are the result of atoms and molecules releasing particular amounts of energy (quanta) in the form of light.
- Sodium atoms make up a minuscule fraction of our atmosphere, but they make up a big part of airglow.

### 2. Duchenne Muscular Dystrophy

- It is the most common and fatal type of muscular dystrophy marked by progressive muscle degeneration and weakness due to alterations of a protein called  $\alpha$ -dystrophin that helps keep muscle cells intact.
- Patients (usually children) have reduced bone density and an increased risk of developing fractures.
- The current therapeutic options available to treat DMD are minimal and highly expensive treatment and are mostly imported from abroad.

### 3. Vikram-S

- Space technology startup Skyroot Aerospace is set to make history by sending India's first privately developed rocket Vikram-S into space between 12th and 16th November, 2022 under the Prarambh Mission.

- The Vikram-S rocket is a single-stage sub-orbital launch vehicle which would carry three customer payloads.
- Sub-orbital flight are those vehicles which are travelling slower than the orbital velocity – meaning it is fast enough to reach outer space but not fast enough to stay in an orbit around the Earth.

### 4. Dhara Mustard Hybrid (DMH -11)

- It is an indigenously developed transgenic mustard. It is a genetically modified variant of Herbicide Tolerant (HT) mustard.
- It contains two alien genes (barnase and barstar) isolated from a soil bacterium called Bacillus amyloliquefaciens that enable breeding of high-yielding commercial mustard hybrids.
- It has been developed by the Centre for Genetic Manipulation of Crop Plants (CGMCP) at Delhi University.

### 5. NASA's Artemis Program

- NASA's Artemis mission is touted as the next generation of lunar exploration, and is named after the twin sister of Apollo from Greek mythology.
- It is the first in a series of increasingly complex missions that will enable human exploration to the Moon and Mars.



- With the Artemis programme, NASA aims to land humans on the moon by 2024, and it also plans to land the first woman and first person of colour on the moon.

## 6. Hallucinating chatbots

- AI chatbots are trained to have human-like conversations using a process known as natural language processing (NLP).
- With NLP, they can interpret human language as it is written, which enables them to operate more or less on their own.
- Hallucination in AI chatbots is when a machine provides convincing but completely made-up answers (untrue facts).

## 7. Lumpy Skin Disease

- Caused by infection with the Lumpy Skin Disease Virus (LSDV) in cattle or water buffalo.
- Mortality rate is less than 10%; Cant affect humans
- Spread between animals through the bite of vectors, such as mosquitoes and flies.
- Goat pox vaccine and sheep pox virus vaccines for LSD.
- Goat pox, sheep pox and LSD belong to the same capripoxvirus genus.

## 8. Captive Non-Public Networks (CNPNS)

- These networks are typically set up by an enterprise or organisation like factories for their private use and are not accessible

to the general public.

- They can play a key role in developing industries by providing secure, ultra-reliable, low latency and high throughput communication using advanced technologies.

## 9. Mini Proteins

- These mini proteins are helical, hairpin-shaped peptides, each capable of pairing up with another of its kind, forming what is known as a dimer.
- Small size, stable, can block virus entry, thermostable

## 10. Cosmic Cannibalism

- White dwarf star is disturbing an entire planetary system by sucking debris from both its inner and outer reaches.

## 11. LaMDA

- Language Model for Dialogue Application by google
- Can engage in a free-flowing way about a seemingly endless number of topics
- LaMDA 2.0; will possibly take an idea and generate imaginative and relevant descriptions, can stay on a particular topic even if a user strays off-topic

## 12. Type 1 diabetes

- Rarer than type 2—only 2% of all hospital cases of diabetes in the country.
- Pancreas completely stops producing insulin; attacks and destroys insulin producing beta cells.
- Diagnosed in children and

adolescents; much more severe than type 2.

- Type 2 diabetes; accounts for over 90% of all diabetes cases in the country; insulin production either goes down or the cells become resistant to the insulin.

### 13. Gravitational lensing

- The phenomenon of gravitational lensing occurs when a huge amount of matter, such as a massive galaxy, cluster of galaxies or a black hole, creates a gravitational field that distorts and magnifies the light from objects behind it.
- based on **Einstein's** theory of general relativity (Mass bend light).
- The gravitational field of a massive object causes light rays passing close to that object to be bent and refocused somewhere else.
- The more massive the object, the stronger its gravitational field and hence the greater the bending of light rays
- In effect, gravitational lenses act like natural cosmic telescopes.

### 14. LIQUID NANO UREA

- **Country's first liquid nano urea plant** in Kalol, Gujarat.
- Produced by Indian Farmers Fertiliser Cooperative Ltd (IFFCO)
- Liquid nano urea, which contains 4% nitrogen by volume
- Efficiency of liquid nano urea can be 85-90%, compared to 25% for conventional urea.

- Liquid nano urea is sprayed directly on the leaves and gets absorbed by the plant stomata.
- A shelf life of a year

### 15. Plant Based Meat

- Refers to products that bio-mimic or replicate meat, seafood, eggs, and milk derived from animals — by looking, smelling, and tasting like them.
- Even the proteins and other solids-not-fat ingredients are sourced from plants.
- It is made with vegetarian or vegan ingredients such as soy, wheat gluten, pea protein or mycoprotein.

### 16. Winter Diesel

- A special fuel introduced by Indian Oil Corporation Limited specifically for high mountain and low temperature areas such as Ladakh where conventional diesel fuel may fail.
- It can be used in temperatures as low as -30°C

### 17. Sodium Ion Batteries (SIBs)

- It is cheaper to produce than lithium because the raw materials needed to make it are plentiful.
- It is energy intensive, non-flammable and performs well at low temperatures.
- Less susceptible to thermal runaway, a condition that can cause a fire in a Li-ion battery.

## 18. Optical fibre

- It works on the principle of total internal reflection (TIR)
- Fiber provides more bandwidth and has standardized performance up to 10 Gbps
- Roughly 99.7% of the signal reaches the router in most cases.

## 19. LUX-ZEPLIN (LZ)

- This experiment is used to detect dark matter in the universe.
- XENONnT experiment and the PANDAX -4T experiment also does the same.

## 20. Non Fungible Tokens

- Everything from drawings, photos, videos, GIFs, music, in-game items, selfies, and even a tweet can be turned into an NFT, which can then be traded online using cryptocurrency.
- If anyone converts its digital asset to an NFT, he/she will get proof of ownership, powered by Blockchain.
- Some of the NFT marketplaces are OpenSea.io, Rarible, Foundation.
- This will be only viewable to the individual who bought the NFT.
- NFTs are non-fungible, which means the value of one NFT is not equal to another.

## 21. Metaverse

- Metaverse is an extension of our real world into the digital realm
- Combination of multiple elements of technology, including virtual reality, augmented reality, blockchain and video

## 22. Virtual Private Network

- Encrypt internet traffic and disguise the user's online identity.
- This makes it more difficult for third parties to track activities online and steal data.
- VPN connection does **not protect one's** computer from outside intrusion. They protect one's IP and encrypt one's internet history.
- Reduced internet speed is a limitation of VPN.
- It is not illegal in India.

## 23. 5Gi

- 5G Radio Interface Technology
- Locally designed telecommunication network that has been designed by IIT Hyderabad, IIT Madras and the Centre of Excellence in Wireless Technology.
- Will be an alternative to the global 5G standards.
- Offers more range at a lower frequency, which is the opposite of 5G.

## 24. Chimeric antigen receptor (CAR) T-cell therapy

- Used in cancer treatment.
- Unlike chemotherapy or immunotherapy which involve taking drugs, CAR T-cell therapies use a patient's own cells. They are modified in the laboratory to activate T-cells and target tumor cells.

## Extra Points

### Danuri

- South Korea launched the 1st lunar orbiter
- launched by the SpaceX Falcon 9

### Exo-moon

- natural satellite that orbits an exoplanet or other non-stellar extrasolar body.
- Signals from exo-moons are too weak to detect, mainly because of their extremely small size

### Project Gullify.

- Street View feature in 10 Indian cities by google

### Fiberisation.

- process of connecting radio towers with each other via optical fibre cables.
- At present, in India, only 33% of the towers are fiberized.

### Qimingxing-50

- China's large unmanned aerial vehicle
- high-altitude, long-endurance (HALE) UAV, also known as the Morning Star.
- country's 1st major unmanned aerial vehicle that is all-electric and solely powered by solar energy.

- fly at altitudes of more than 20 km above the Earth's surface where there is stable airflow with no clouds

### Minutemen III

- USA; land-based intercontinental ballistic missile (ICBM) having range of more than 10000km.

### Atomic Clock

- an error of only 1 second in up to 100 million years
- atomic oscillations have a much higher frequency and are much more stable.

### Long Range Radio (LoRa)

- wireless modulation technique in the physical layer, allowing long-range communication using chirp spread spectrum.
- encodes information on radio waves using chirp pulses-similar to the way dolphins and bats communicate.
- uses dedicated radios

### VSHORADS

- Very Short-Range Air Defense System MISSILE
- a Man Portable Air Defense System (MANPAD).
- MANPAD are short-range, lightweight and portable surface -to-air missiles that can be fired by individuals or small group

### Kuafu-1

- China launched its first space based solar observatory

- will provide insights into how the Sun's magnetic field causes coronal mass ejections (CMEs)

### Cyber-Knife System

- non-invasive alternative to surgery for the treatment of both cancerous and non-cancerous tumours anywhere in the body.
- delivering beams of high-dose radiation to tumours

### Dirty Bomb

- a bomb that contains radioactive material, such as uranium, which is scattered through the air when its conventional explosive detonates.
- does not create city-flattening atomic explosion but are designed to spread toxic waste.
- uses radioactive materials from hospitals, nuclear power stations or research laboratories.
- This makes them much cheaper and quicker to make than nuclear weapons.

### 5G

- 5G networks are deployed mainly on two modes: standalone and non-standalone.
- Standalone mode
  - 5G network operates with **dedicated equipment, and runs parallel to the existing 4G network.**
  - provides **access to full 5G capabilities and new network functionalities** such as slicing that provides greater flexibility to operators to efficiently use their spectrum holdings.
- Non-standalone mode
  - The 5G network is **supported by the**

### **4Gcore infrastructure.**

- is **built on existing infrastructure**
- essentially 5G airwaves transmitted through 4G networks

### EMIT Mission

- NASA's Earth Surface Mineral Dust Source Investigation
- crucial capability, detecting the presence of methane.

### Coronal Holes

- long-lasting sources for high-speed solar wind streams
- dark areas in solar corona
- cooler, less dense regions

### Long March 5B rocket

- (China); 1st Chinese launch vehicle designed from the ground up to focus on non-hypergolic liquid rocket propellants.
- specially designed to carry the Tiangong space station modules.
- maximum payload capacities of the base variant are 25,000 kilograms to Low Earth

### White dwarfs

- **stars that have burned up all of the hydrogen; fusion slows, gravity causes the star to collapse in on itself into white dwarfs.**
- very high density; a **white dwarf cools** until it becomes a black dwarf, which emits no energy.
- **not all white dwarfs cool** and transform into black dwarfs
- Those **white dwarfs which have enough mass**

reach a level called the **Chandrasekhar Limit**.

- At this point the pressure at its center becomes so great that the star will detonate in a **thermonuclear supernova**

### Polluted white dwarf stars

- white dwarf stars that have recently consumed a planet or asteroid that was orbiting around them.

### Bluebugging

- technique hackers employ to worm their way easily into a device when its Bluetooth is on discovery mode.
- use it to access calls, read and send text messages, steal sensitive information stored on the device, and even divert calls to their own numbers, among other things.

### EOS-6

- Oceansat-3
- Ocean Color Monitor; Sea Surface Temperature Monitor; Ku-Band scatterometer; ARGOS

### Photonic Crystals

- optical nanostructures in which the refractive index changes periodically.

### Tzield

- drug to delay the onset of type 1 diabetes.

### Polygraph Test

- based on the assumption that physiological responses that are triggered when a person is lying are different from what they would be otherwise.

- does not involve injecting drugs; Instruments are attached to the suspect, and indicators such as blood pressure, pulse, respiration, change in sweat gland activity, blood flow, etc.

### Measles

- respiratory infection caused by the measles virus.
- transmitted via droplets from the nose, mouth or throat of infected persons.
- MMR (Mumps, Measles, and Rubella) is a vaccine that protects against 3 diseases:

### Xenotransplantation

- live cells, tissues, or organs from a nonhuman animal source transplanted

### Oral rehydration solution (ORS)

- oral powder containing mixture of glucose, sodium chloride, potassium chloride, and sodium citrate.

### Gene Drive

- type of genetic engineering technique that modifies genes so that they don't follow the typical rules of heredity.

### Wolbachia

- extremely common bacteria that occur naturally in 50% of insect species,
- lives inside insect cells & are passed from one generation to next through an insect's eggs.
- Wolbachia is not usually found in the *Aedes aegypti* mosquito.

### *single-crystalline scandium nitride (ScN).*

- It can emit, detect, and modulate infrared light with high efficiency making it useful for solar and thermal energy harvesting and for optical communication devices.

### *Ocean Thermal Energy Conversion plant*

- National Institute of Ocean Technology is establishing it in Kavaratti, the capital of Lakshadweep.
- producing energy by harnessing the temperature differences between ocean surface waters and deep ocean waters.

### *Myanmar/Malaysia-India-Singapore Transit (MIST) Submarine Cable System*

- 8,100 km-long undersea transnational fibre optic cable system, to connect India with Myanmar, Thailand, Malaysia and Singapore.
- provide secure, reliable, robust and affordable telecom facilities in Asia.

### *National Automated Fingerprint Identification System (NAFIS)*

- country-wide, centralised and searchable database of crime - and criminal - related fingerprints.
- conceptualized and managed by the National Crime Records Bureau (NCRB)
- assigns a unique 10-digit National Fingerprint Number (NFN) to each person arrested for a crime; unique ID will be used for the person's lifetime

# 5. International Organisations and other Groupings

## 1. Reskilling Revolution Initiative (RRI)

- by World Economic Forum (WEF)
- Launched at 50 th annual meeting of WEF in January, 2020.
- Aim: To provide 1 billion people with better education, skills and economic opportunity by 2030.
- It is a coalition of 50 CEOs, 25 ministers and 350 organisations.

## 2. Indo-Pacific Economic Framework (IPEF)

- India has joined the Indo-Pacific Economic Framework (IPEF) at the QUAD (Quadrilateral Security Dialogue) **leaders'** summit in Tokyo, Japan 2022
- 13 nations
- 4 pillars
  - trade
  - supply chains
  - clean energy
  - decarbonization and infrastructure and tax and anti corruption

## 3. Global Collaboration Village

- by WEF
- harness the power of metaverse to grow and diversify participation in global public interest

## 4. I2U2

- India, Israel, the United Arab Emirates (UAE) & the United States (US)
- Proposed areas of discussions of the summit: food security crisis and other areas of cooperation.
- Also known as West Asia Quad.

## 5. UN-Energy Plan of Action towards 2025

- by United Nations
- Accelerate the large-scale action and support needed for clean, affordable energy for all.
- Sets out a framework for collective action by nearly 30 UN and international **organization's** (comprising UN -Energy)
- It also seeks-
  - 100% increase in renewables capacity globally
  - no new coal power plants in the pipeline after 2021
  - 30 million jobs in renewable energy and energy efficiency
  - doubling annual clean energy investment globally

## 6. Gulf Cooperation Council

- Established in: 1981; Headquarters: Riyadh, Saudi Arabia
- Six Members: United Arab Emirates



(UAE), Saudi Arabia, Qatar, Oman, Kuwait and Bahrain.

## 7. BBIN

- Bangladesh, Bhutan, India, Nepal (BBIN)
- A subregional architecture of countries in Eastern South Asia, a subregion of South Asia.
- To formulate, implement and review quadrilateral agreements across areas such as water resources management, connectivity of power, transport, and infrastructure.

### Extra Points

#### State of the Ocean Report (StOR) 2022

- UNESCO
- for keeping the world up-to-date on the current state of the ocean.

#### Stockholm+50

- held in Stockholm, Sweden
- commemorate the 50 years since the 1972 United Nations (UN) Conference on the Human Environment (also known as the Stockholm Conference).
- event focused on the Earth's triple planetary crisis – climate, nature, and pollution

#### International solar alliance

- eligibility of becoming members of International Solar Alliance
  - All countries can join now.
- United Nations General Assembly (UNGA)

has granted Observer Status to the International Solar Alliance (ISA).

- One Sun One World One Grid (OSOWOG)
  - Facilitating global cooperation, building a global ecosystem of interconnected renewable energy resources (mainly solar energy) that can be seamlessly shared.
  - Vision behind the OSOWOG is **'The Sun Never Sets'** and is a constant at some geographical location, globally, at any given point of time.
  - Under the technical assistance program of the World Bank.

#### UNCCD Conference of Parties (COP15)

- In Cote d'Ivoire (Western Africa)
- Theme: **'Land.Life. Legacy: From scarcity to prosperity'**.
- Global Land Outlook (GLO), the UNCCD flagship publication
- Restoring 1 Billion Hectares (Ha) of Degraded Land by 2030.'
- Establish an Intergovernmental Working Group on Drought for 2022-2024.

#### United Nations-Economic and Social Commission for Asia and the Pacific (UNESCAP)

- session commemorated the 75<sup>th</sup> anniversary of ESCAP's establishment.
- HQ Bangkok, Thailand.
- regional development arm of the United Nations for the Asia-Pacific region.
- 53 Member States and 9 Associate Members from Asia-Pacific Region

including India.

### Leadership group for industry Transition (LeadIT)

- Launched in 2019 by the Government of India and Sweden with the help from World Economic Forum (WEF) at the UN Climate Action Summit.
- Objective:
  - It gathers countries and companies that are committed to action to achieve the Paris Agreement.
  - Aiming to achieve net-zero carbon emissions by 2050.
- Japan and South Africa, the latest members of the initiative. This extends the total membership of LeadIT to 37 (18 countries and 19 companies).

### 30X30 Target

- Launched by: High Ambition Coalition for Nature and People.
- Target: to promote an international agreement to protect at least 30% of the world's land and ocean by 2030.

### 3High Ambition Coalition for Nature and People (HAC)

- Initiated at the -One Planet Summit in Paris, France in January 2021.
- India joined the coalition in October 2021.

### Clean Seas Campaign

- biggest & most powerful global coalition to end marine plastic pollution
- Launch Year: 2017
- by UNEP
- Aim: to help curb the flow of marine litter and plastic waste entering lakes, waterways, and oceans.

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### Global Collaboration Village

- by WEF
- Harness the power of metaverse to grow and diversify participation in

global public interest

### Gulf Cooperation Council

- Established in: 1981; Headquarters: Riyadh, Saudi Arabia
- Six Members: United Arab Emirates (UAE), Saudi Arabia, Qatar, Oman, Kuwait and Bahrain.

### Tree cities of world program

- FAO AND Arbor day foundation
- Recognize cities and towns committed to safeguard urban forests and trees
- Hyderabad and Mumbai recognized this time

### Arctic Council

- high-level intergovernmental forum for Arctic cooperation that was set up with the twin-mandate of: environmental protection; sustainable development.
- Ottawa Declaration made it in 1996; Comprises 8 member states, permanent participants and observers.
- Canada, Denmark, Finland, Russia, United States of America, Iceland, Norway, Sweden are member states.
- India became an Observer nation in 2013.
- Decision by consensus of members
- explicitly excludes military security.

### International Telecommunication Union

- Allocates global radio spectrum and

satellite orbits, develops the technical standards that ensure networks and technologies

- India got elected as a member of ITU Council for another 4-year term-from 2019 to 2022
- Established on 17 May 1865 as the International Telegraph Union, thus it is the oldest UN agency.

### Global Innovation Partnership

- India and UK
- Support Indian innovators to scale up their innovations in third countries thereby helping them explore new markets and become self-sustainable.
- GIP will also develop an open and inclusive e-market place (E-BAAZAR) for cross border innovation transfer

### Shanghai Cooperation Organisation

- estb in 2001; HQ -beijing
- India will host a meeting of the Heads of Government for the first time in 2020
- 42% world population; 22% land area; 20% gdp
- 9 member states
  - India( joined in 2017), Kazakhstan, China, the Kyrgyz Pakistan( joined in 2017), the Russian Federation Tajikistan, Uzbekistan, Iran (2021)
  - Regional Anti-Terrorist Structure (RATS) Established to combat terrorism, separatism and extremism.
  - The official working language of the SCO Secretariat is Russian and Chinese.

## Association of Southeast Asian Nations (ASEAN)

- Regional grouping that promotes economic, political, and security cooperation. by (Bangkok Declaration)-1967
- HQ -JAKARTA  
INDONESIA;THEME 2022-ASEAN ACT(ADDRESS CHALLENGES TOGETHER)
- India's 4th largest trading partner;ASEAN declares 2022 as year of ASEAN YOUTH
- Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.
- Chairmanship rotates annually, based on the alphabetical order of the English names of Member States.
- 2022 is being celebrated as ASEAN -India Friendship Year as the summit also marked 30th anniversary of India-ASEAN dialogue.

## QUAD

- Informal strategic dialogue between India, USA, Japan and Australia with a shared objective to ensure and support a —free, open and prosperous Indo-Pacific region.
- First mooted by Japanese Prime Minister Shinzo Abe in 2007
- Formed in 2017

# 6. PLACES IN NEWS

## 1. Kalasa-Banduri Canal

- The project will divert water from two tributaries of the **Mahadayi River** (Mandovi River) - **Kalasa and Banduri** to the Malaprabha river.
- Karnataka



## 2. Croatia

- Croatia switched to the euro and entered Europe's passport-free zone



## 3. Guyana

- The country is bordered by; The Atlantic Ocean in the North. Brazil in the South and Southwest. Venezuela in the West. Suriname in the East.



## 4. Solomon Islands

- Solomon Islands is a nation in Melanesia, east of Papua New Guinea, comprising more than 990 islands.



## 7. Schemes in news

### 1. Agri Udaan– Food & Agribusiness Accelerator 4.0

- India's first Food & Agribusiness accelerator organized by a-IDEA, Technology Business Incubator of NAARM (by ICAR -NAARM and IIM -A's incubator centres)
- supported by NABARD
- Launch Year: 2021
- Ministry of Agriculture and Farmers Welfare
- catalyzing scale-up stage Food and Agribusiness startups through rigorous mentoring, industry networking and investor pitching.

### 2. Swadesh Darshan Yojana

- Total 76 Projects have been sanctioned under the Swadesh Darshan Scheme.
- Launch year 2014-15
- Ministry of tourism
- Central sector scheme (100% funding by centre)
- To develop theme based tourist circuits
- 15 thematic circuits have been identified
- Circuits developed on the basis of
  - high tourist value
  - competitiveness
  - sustainability
- Swadesh Darshan 2.0
  - Launch -2022
  - Attain atmanirbhar bharaat by attaining India's full potential as tourism destination with mantra of

*vocal for local*

- Central sector scheme

### 3. Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY)

- Launch year 2020
- Nodal Ministry is the Ministry of Finance.
- Implemented by Dept of food and public distribution
- Providing each person who is covered under the NFSA (National Food Security Act 2013) with an additional 5 kg grains (wheat or rice) for free, in addition to the 5 kg of subsidized food grain already provided through the Public Distribution System (PDS).
- Families belonging to the Below Poverty Line - Antyodaya Anna Yojana (AAY) and Priority Households (PHH) categories will be eligible for the scheme
- PHH are to be identified by State Governments/Union Territory
- Covers 80 crores ration card holders
- Cost of distribution by central govt

### 4. Pradhan Mantri Gram Sadak Yojana (PMGSY)

- Provide good all-weather road connectivity to unconnected villages
- To the eligible unconnected Habitations in the rural areas with a population of 500 persons and above in Plain areas.
- Launch Year: 2000
- Ministry of Rural Development

- World Bank supports
- Managed by the National Rural Roads Development Agency (NRRDA )
- Unit for this Programme is a Habitation and not a Revenue village or a Panchayat.
  - Habitation is a cluster of population, living in an area, the location of which does not change over time.
- Cover only the rural areas
- Only single road Connectivity to be provided.
- Phase 3(2019-20 to 2024-25)
  - involves consolidation of Through Routes and Major Rural Links connecting habitations to Gramin Agricultural Markets (GrAMs), Higher Secondary Schools and Hospitals.
  - 60:40 between the Centre and states.
  - 90:10 NE states

## 5. Ayushman Bharat Digital Mission

- Launch Year: 2020
- Recently (Sep 2021), Prime Minister of India has announced the nationwide rollout of the Ayushman Bharat Digital Mission with a budget of Rs.1,600 crore for 5 years.
- Provide a digital health ID to people which will contain their health records
- Come under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana.
- Core building blocks
  - health ID
  - DigiDoctor
  - Health Facility Registry
- Every Indian will get a Health ID card that will store all medical details of the person including prescriptions, treatment,

diagnostic reports and discharge summaries.

- Health ID is a randomly generated 14 digit number
- voluntary and free of cost.
- individual has the option of either deactivating his/her ID temporarily or permanently deleting the ID
- Currently, ABDM is being implemented in a pilot phase in six union territories.
- Citizens will be able to give their doctors and health providers one-time access to this data during visits to the hospital for consultation
- Implementing Agency: National Health Authority
- eSanjeevani telemedicine service of Ministry of Health and Family Welfare (MoHFW) has been integrated with this.

## 8. MISCELLANEOUS

### 1. Sammakka Saralamma Jatara

- Biggest tribal festival in India and 2nd largest fair after Kumbh Mela.
- Four-day biennial festival in Telengana.

### 2. Kashi Tamil Sangamam

- Initiative by Government of India as a part of –Azadi ka Amrit Mahotsavll and to uphold the Spirit of Ek Bharat Sreshtha Bharat .
- Celebrates many aspects of the historical and civilisational connection between **India's** North and South.
- Organized by the Ministry of Education

### 3. Aymanam

- Model Responsible Tourism (RT) village in Kottayam (Kerela), where about 80% of the work – including accommodation, food and community tours, is being managed by women

### 4. Bhoota Kola

- It is an annual ritual performance where local spirits or deities are worshipped.
- This performer is both feared and respected in the community and is **believed to give answers to people's** problems, on behalf of god.

- There are several = **Bhootas'** who are worshipped in the Tulu-speaking belt of Dakshina Kannada, Uttara Kannada and Udupi districts.

### 5. Asia-Pacific Institute for Broadcasting Development (AIBD):

- It was established in 1977 under the auspices of UNESCO.
- It is a regional intergovernmental organization servicing countries of the United Nations Economic and Social Commission for Asia and the Pacific (UN -ESCAP) in the field of electronic media
- The AIBD currently has 26 countries as full members represented by 43 organizations, and 52 affiliate members.

### 6. Narcotest

- In a **\_narco'** or narcoanalysis test, a drug called sodium pentothal ( a sedative) is injected into the body of the accused, which induces subconsciousness so that the subject is mentally incapable of inventing falsehood and so will tell the truth when asked a question.
- However, the evidence gathered using this test is inadmissible in a court of law.
- Its result cannot be considered to be a –confessionll (SC in Selvi case, 2010). Also, its result is not 100% accurate.



## 7. G 20 -2023 Logo

- The logo features earth juxtaposed with the lotus, theme —  
–Vasudhaiva Kutumba-kamll or  
–One Earth One Family One Futurell
- The symbol of the lotus in the G20 logo is a representation of hope in this time.
- No matter how adverse the circumstances, the lotus still blooms likewise if the world is in a deep crisis, we can still progress and make the world a better place.

## 9. Bharat (BH) Series Registration Mark

- It is a new system of registration of vehicles designed to reduce the red tape.
- Vehicles bearing the BH registration mark will not require to be re-registered in a new state once it relocates
- Anyone who is a government/PSU employee, state or Centre is eligible.
- In private sector, an employee of a company that has offices in at least four states/UTs is eligible on voluntary basis

## 10. Etikoppaka toys

- The art of making traditional wooden Etikoppaka toys is more than 400 years old in present day Andhra Pradesh.
- Also known as turned wood Lacquer craft they are made of wood and painted with natural dyes.
- The wood used is from the Ankudi **Karra**<sup>†</sup> (Wrightia tinctoria) tree which is soft.

