



August 2020

M A G A Z I N E

www.onlyias.com

**Special: Quick
revision
(True/False)**

Table of Contents

ECONOMY

1. AIM iCREST.....	5
2. Bharat Airfiber.....	5
3. Meghnaghat Combined-Cycle Power plant....	5
4. Khadi Agarbatti Atma Nirbhar Mission.....	6
5. Pokkali Rice: Kerala.....	6
6. Business confidence index.....	7
7. K. V. KAMATH COMMITTEE.....	7
8. Sub-Mission on Agricultural Mechanization (SMAM)	8
9. Submarine optical fibre cable project.....	8
10. NIP Online Dashboard.....	9
11. Student Entrepreneurship Programme.....	10
12. Krishi Megh.....	10
13. Transparent Taxation – Honoring the Honest.....	11
14. Business Responsibility Reporting (BRR).....	11
15. Price Monitoring and Resource Unit.....	12
16. Positive Pay mechanism.....	12
17. Center for Biopharma Analysis.....	13
18. Pan-India entity for retail payments.....	13
19. Trifood Project.....	14
20. Supply Chain Resilience Initiative	15
21. Ethanol Blended Petrol programme.....	15
22. Participatory Notes.....	16
23. Prime Minister Employment Generation Program.....	16
24. Atal Bimit Vyakti Kalyan Yojana.....	17
25. National Strategy for Financial Education (NSFE)	17
26. LABOUR BUREAU.....	18
27. Export Preparedness Index 2020.....	18
28. Contingency Fund (CF) of the central bank..	19
29. Chunauti Contest.....	20
30. NATIONAL LAND MANAGEMENT CORPORATION.....	20
31. MODEL CONCESSION AGREEMENT FOR BOT MODEL.....	21
32. BUNDLING SCHEME FOR ROUND-THE-CLOCK (RTC) POWER SUPPLY.....	22
33. UNIFIED GAS PRICE SYSTEM.....	23

Environment

1. Alliance to End Plastic Waste.....	24
2. Smog towers.....	24
3. DHOLE.....	24
4. Report on lead poisoning by UNICEF.....	25
5. INDIAN LEOPARD.....	25
6. Aarhus Convention.....	26
7. Hoolock Gibbons.....	26
8. Source - Sink Dynamics & Tiger Population..	27
9. TRAFFIC study on leopards.....	28
10. International Solar Alliance (ISA).....	28
11. BEEG (Bio -compost Enriched Eco-friendly Globule)	29
12. Butterflies Species of Matheran.....	29
13. Surakhsya Portal.....	30
14. PAPUM RESERVE FOREST (RF)	31
15. World Biofuel Day.....	31
16. One Sun, One World, One Grid (OSOWOG) initiative.....	32
17. Collaring of Fishing Cats.....	33
18. Project Dolphin and Project Lion.....	34
19. Air Unique-quality Monitoring (AUM) system.....	34
20. Microplastics.....	35
21. African Cheetahs.....	35
22. Kudremukh National Park.....	36
23. Common Evening Brown.....	36
24. Dragonfly Festival.....	37
25. Harit Path Mobile App.....	38
26. Indian Gaur (Bison)	38
27. Mahseer.....	39
28. Association of Renewable Energy Agencies of States (AREAS)	39
29. SUSTAINABLE OCEAN ECONOMY FOR 2050 REPORT.....	40
30. DRAFT ENVIRONMENT IMPACT ASSESSMENT (EIA), 2020.....	40

Science and Technology

1. Perseverance- NASA's mission to Mars.....	42
2. AJO-Neo.....	42
3. Yellow Fever.....	43
4. SpaceX Crew Dragon.....	43

5. Pyrolysis.....	43
6. Ammonium Nitrate.....	44
7. Severe Fever with Thrombocytopenia Syndrome (SFTS)	44
8. SpaceX's SN5 Starship prototype.....	45
9. Plasmodium Vivax Malaria	46
10. Swachh Bharat Mission Academy.....	46
11. Sputnik V.....	46
12. Dwarf Planet Ceres.....	47
13. Raman.....	47
14. Mega labs.....	48
15. Helium Enhanced Cool Stars.....	48
16. Sarabhai Crater.....	49
17. Collaborative Robotics Innovation Hub.....	49
18. Swadeshi Microprocessor Challenge.....	49
19. Digital Quality of Life Index 2020.....	50
20. Science and Technology Indicators (STI).....	50
21. Brown Dwarfs.....	51
22. Flavonoids.....	51
23. Gaofen-9 05 Satellite.....	52
24. Magnetic Hyperthermia-Mediated Cancer Therapy (MHCT)	52
25. AstroSat.....	52
26. Glanders.....	53
27. Asteroid 2018VP1.....	53
28. Polio.....	54
29. Wolbachia Bacterium.....	54

Geography

1. Kutch Mainland Fault (KMF)	56
2. Galapagos Islands.....	56
3. Agatti Island.....	57
4. Aravali Range.....	57
5. Beirut.....	58
6. Zimbabwe.....	58
7. Mullaperiyar Dam.....	58
8. Sunspots.....	59
9. MOUNT SINABUNG.....	59
10. Milne ice shelf.....	60
11. Boreal Summer Intra-Seasonal Oscillation (BSISO)	60
12. Addu Atoll	61
13. Greater Male Connectivity Project.....	62
14. Seagrass.....	62
15. Death Valley.....	63
16. Bhadbhut Project.....	63
17. Mali.....	64
18. Teesta River.....	64

19. India's Longest River Ropeway in Assam.....	65
20. Fujiwhara Effect.....	65
21. Biochar.....	66
22. Mansar Lake Rejuvenation Project.....	66
23. Sudan.....	67
24. Kavaratti.....	67

Polity

1. Whip.....	69
2. Contempt of Court.....	69
3. Comptroller and Auditor General.....	70
4. 6th Schedule status.....	70
5. Fifth World Conference of Speakers of Parliament.....	71
6. Appointment of Election Commissioners.....	72

International Relations

1. International Covenant on Civil and Political Rights (ICCPR)	73
2. India-EU S&T Cooperation.....	73
3. HIGH IMPACT COMMUNITY DEVELOPMENT PROJECTS.....	74
4. India-UN Development Partnership Fund (India-UN Fund)	74
5. United Nations Human Rights Council.....	75
6. Indus Water Treaty.....	75
7. CARICOM Community.....	76
8. Israel – UAE Deal.....	76
9. International Labour Organization (ILO) Convention 182.....	77
10. ASEAN-India Network of Think Tanks.....	78
11. NDC Transport Initiative for Asia.....	78
12. UN World Tourism Organisation.....	79
13. UK's 'Eat Out to Help Out' scheme.....	79
14. BRICS Innovation Base.....	80
15. World Urdu Conference.....	80
16. Amnesty International.....	81

Society

1. World Day Against Trafficking in Persons.....	82
2. Higher Education Financing Agency.....	82
3. Parivar Pehchan Patra (PPP)	83
4. E-Sanjeevani Tele-Medicine Platform.....	83
5. Supreme Court verdict on Hindu women's inheritance rights.....	84

6. International Youth Day 2020.....	84
7. National Overseas Scholarship Scheme.....	85
8. Empowering Tribal, Transforming India.....	85
9. National Digital Health Mission.....	86
10. Fit India Youth Club.....	86
11. ARIIA 2020 Rankings.....	87
12. National Recruitment Agency (NRA)	88
13. Namath Basai Programme.....	88
14. National Council for Transgender Persons....	89
15. IAPPD.....	89
16. National Food Security Act, 2013.....	90
17. Pradhan Mantri Rashtriya Bal Puraskar.....	90
18. Kiran Helpline.....	91
19. Remote Learning Reachability report.....	91

Security

1. 1947 Tripartite Agreement on Gurkha soldiers.....	93
2. Exercise Kavkaz 2020.....	93
3. OPV Sarthak.....	94
4. Naval Innovation and Indigenisation Organisation.....	94
5. Arrow 2.....	94
6. SRIJAN Portal.....	95
7. National Institute of Social Defence.....	95
8. INS Viraat.....	95
9. V. RAMAGOPAL RAO COMMITTEE.....	96

Culture

1. Lepcha People.....	97
2. Natesa, a rare sandstone idol.....	97
3. Time Capsules.....	98
4. Bal Gangadhar Tilak.....	98
5. Thenzawl Golf Resort Project.....	99
6. Brus or Reang.....	99
7. Abanindranath Tagore.....	100
8. Lingaraj Temple.....	101
9. Prakash Pura Utsav.....	101
10. Nuakhai Juhar.....	102

11. Behrupiya.....	102
12. Bondas.....	103
13. Warli Painting.....	103
14. Edakkal Caves.....	104
15. PULIKKALI.....	104
16. Mahatma Ayyankali.....	104

Miscellaneous

1. Subhash Chandra Bose Aapda Prabandhan Puraskar.....	106
2. National Transit Pass System (NTPS)	106
3. Barakah Nuclear Energy Plant.....	106
4. COVID19BWMAPP.....	107
5. SAHAKAR COOPTUBE NCDC INDIA.....	107
6. Ebrahim Alkazi.....	108
7. Tsunami Ready.....	108
8. Kisan Rail.....	109
9. Vidyarthi Vigyan Manthan.....	109
10. Loya Jirga.....	109
11. Food System Vision Prize 2020.....	110
12. National Handloom Day.....	110
13. Rashtriya Swachhata Kendra.....	111
14. FARMS-app.....	111
15. Swasthya Portal.....	111
16. Pavitrapati and Aushada tara.....	112
17. Innovation Challenge Fund In India.....	112
18. TIFAC.....	112
19. DHANWANTARI RATH.....	113
20. Ninja UAVs.....	113
21. Millennium Alliance.....	114
22. Swachh Survekshan 2020.....	114
23. MY IAF.....	115
24. Chora Museum.....	115
25. SUPER APP.....	115
26. PRERAK DAUUR SAMMAN.....	116
27. STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD (SOFI)	117
28. SAHIYAS.....	117
29. MoES KNOWLEDGE RESOURCE CENTER NETWORK (KRCNET)	117
30. TEEN AGE POLICE (TAP)	117

Economy

1. AIM iCREST

Why in News?

- Atal Innovation Mission (AIM) has launched 'AIM-iCREST' in partnership with Bill & Melinda Gates Foundation and Wadhvani Foundation.

About AIM iCREST

- AIM's iCREST stands for **Incubator Capabilities enhancement program for a Robust Ecosystem** focused on creating high performing Startups.
- Purpose → It has been designed to **enable the incubation ecosystem** and to **support the growth of AIM's established incubators across India.**
- Significance → This is a **first of its kind initiative** for **advancing innovation at scale in India** to encourage and enable holistic progress in the incubator ecosystem across the country,

Also Remember

- Business incubators → These are institutions that **support entrepreneurs** in developing their businesses especially in **initial stages.**
- Atal innovation mission (AIM) → It was **set up by NITI Aayog in 2016 to promote a culture of innovation and entrepreneurship** by creating institutions and programs that enhance innovation in schools, colleges, and entrepreneurs in general.

2. Bharat Airfiber

Why in News?

- The Union Ministry of Communications has inaugurated "Bharat Air Fibre Services" at Akola in Maharashtra.

About

- The Bharat Air Fibre services are **introduced by BSNL** as **part of Digital India** initiatives by the GoI.
- Aim → It aims to provide **Wireless Connectivity in the range of 20 KMs** from the BSNL Locations.
- Features → It provides internet connectivity upto **100 Mbps speed.**
- It is **completely wireless** and offers broadband up to **10Mbps up to a distance of 5 Kms.**
- These services are special and different from other operators as BSNL is providing **unlimited free voice calling.**
- Benefits → Customers at **remote places** also will be benefitted as BSNL comes with the **cheapest services** with the support of Telecom Infrastructure Partners (**TIPs**).

3. Meghnaghat Combined-Cycle Power plant

Why in News?

- Recently, Asian Development Bank (ADB) has signed a \$ 200 million financing deal with the Reliance Bangladesh LNG and Power Limited (RBLPL).

About

- Aim → The deal aims to build and operate a **718-megawatt** combined-cycle gas-fired power plant in Bangladesh.
- Location → The plant is proposed to be located on land allotted by Bangladesh Power Development Board (BPDB), **in Meghnaghat, Narayanganj District near Dhaka.**
- Combined-cycle power plant →
 - A combined-cycle power plant is a relatively **more efficient way of producing electricity.**
 - It uses both a **gas and a steam turbine together** to produce up to **50 % more electricity** from the same fuel than a traditional simple-cycle plant.
 - It will **reduce** the **share of environmentally harmful** and **expensive fuels** like coal and oil.

4. Khadi Agarbatti Atma Nirbhar Mission

Why in News?

- Union Minister for MSME has approved a program proposed by Khadi and Village Industries Commission(KVIC) named “Khadi Agarbatti Atma Nirbhar Mission”.

About Mission

- Aim → It aims at **creating employment** for unemployed and migrant workers in different parts of the country while **increasing domestic Agarbatti production** substantially.
- Mode → The scheme has been designed based on the **Public Private Partnership (PPP) mode.**
- Features →
- Under this, KVIC will provide **Automatic Agarbatti making machines** and **powder mixing machines** to the artisans through the private Agarbatti manufacturers who will sign the agreement as business partners.
- Further, KVIC will provide a **25% subsidy** on the **cost of the machines** and will recover the remaining 75% of the cost from the artisans in installments every month.
- The **business partner** will provide the **raw material** to the artisans for **making Agarbatti** and will **pay them wages** on a job work basis.

5. Pokkali Rice: Kerala

Why in News?

- Farmers in West Bengal are experimenting with the pokkali variety of rice to tide over a crisis-like situation created by severe seawater incursion into paddy fields in the Sundarbans (owing to Cyclone Amphan).

About Pokkali Rice

- The pokkali variety of rice is known for its **saltwater resistance** and **flourishes** in the rice paddies of **coastal Kerala districts.**
- The uniqueness of the rice has brought it the **Geographical Indication (GI) tag** and is the subject of **continuing research.**
- The organically-grown Pokkali is famed for its **peculiar taste** and **its high protein content.**
- Pokkali has medicinal properties and its **higher value of antioxidants** and **low carbohydrate content** makes it preferable to those on a **low sugar diet.**
- Other GI Tag Registered Varieties from Kerala → **Kaipad, Wayanad Jeerakasala, Wayanad Gandhakasala, Palakkadan Matta and Navara.**

6. Business confidence index

Why in News?

- National Council of Applied Economic Research (NCAER) has released Business Confidence Index (BCI).

About

- What is it? → It **tracks the business sentiments** of around **600 Indian companies** to compute the composite index.
- Key Point →
 - It stood at 46.4 in the **first quarter of 2020-21**, a **drop of 40.1 %** from its level of 77.4 in the previous quarter.
 - It **fell 62 %** in the **June 2020 quarter** on a year-on-year basis.
 - This is the **lowest** that the **BCI has ever fallen** in the **history of 113 Rounds** of the NCAER **Business Expectations Survey (BES)**.

👉 NCAER

- What is it? → The National Council of Applied Economic Research is a **Delhi based think tank** that was **established in 1956**.
- Formation → The **TATA Foundation** and **other premier organizations came together** to form the think tank with the support of Government of India.
- Aim → The aim of the body is to give **support to both government** and **private sector** economic researches.
- Since 1991, the council is **tracking the business confidence** in the country on a quarterly basis.
- The NCAER survey elicits responses from firms **across six cities** to **assess business sentiments** in the **four regions of India** →
 - Delhi-NCR represents the north;
 - Mumbai and Pune, the west.
 - Kolkata the east.
 - Bengaluru and Chennai represent the south.

7. K. V. KAMATH COMMITTEE

Why in News?

- Recently RBI set up an expert committee under K V Kamath to suggest financial parameters for resolution of covid-19 related stressed assets.

About K. V. KAMATH COMMITTEE

- The committee will submit its recommendations to the RBI, which will notify them along with modifications, if any, **in 30 days**.
- Resolution Framework for **Covid-19-related Stress envisages** to make recommendations on the required **financial parameters** to be **factored in into the resolution plans**, with **sector-specific benchmark**.
- Assets of the banking system **comprises of loans given and investment** (in bonds) **made by banks**.

- **Quality of the asset indicates** how much of the loans taken by the borrowers are repaid in the form of interests and principal.

Important Terms

- Stressed assets → **NPAs + Restructured loans + Written off assets**
- NPA → means interest or principal is **not repaid by the borrower during a specified time period** ('overdue' for a period of 90 days.)
 - **Bad assets** are further **classified into substandard asset, doubtful asset, and loss assets** depending upon how long a loan remains as an NPA.
- Restructured loans → Assets which got an **extended repayment period, reduced interest rate**, converting a part of the loan into equity, providing additional financing, or some combination of these measures.
 - Hence, under restructuring a bad loan is **modified as a new loan**.
- Written off Assets → Those the bank or lender **doesn't count the money borrower** owes to it.
 - The financial statement of the bank will indicate that the **written off loans are compensated through some other way**.

8. Sub-Mission on Agricultural Mechanization (SMAM)

Why in News?

- Recently union government has released Rs. 553 crore to states under the scheme to promote mechanization in the agriculture sector.

About SMAM

- What is it? → The Sub-Mission on Agricultural Mechanization (**SMAM**) was launched in **April 2014** to have **inclusive growth of farm mechanization to boost productivity**.
- Aim → It aims to promote the usage of farm mechanization and **increase the ratio of farm power to cultivable unit area up to 2 kW/ha**.
- Under the scheme Individual farmers are also **provided subsidy** for procurement of machinery.
- Objectives:
 - **Increasing the reach of farm mechanization** to small and marginal farmers and to the regions where availability of farm power is low;
 - Promoting '**Custom Hiring Centres**' to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership;
 - Creating **hubs for hi-tech & high value farm equipments**;
 - Creating **awareness** among stakeholders through demonstration and capacity building activities;
 - Ensuring **performance testing and certification** at designated testing centers located all over the country.

9. Submarine optical fibre cable project

Why in News?

- Prime Minister has launched the submarine optical fibre cable project in Andaman and Nicobar Islands.

About Project

- What is it? → It is a **2,300 kilometre undersea cable** that provides better connectivity **from Chennai to Port Blair** and **seven other Islands** — Swaraj Dweep (Havelock), Long Island, Rangat, Hutbay (Little Andaman), Kamorta, Car Nicobar and Campbell Bay (Great Nicobar).
- Funding → The connectivity project was **funded by the Centre** through the **Universal Service Obligation Fund (USOF)** under the **Ministry of Communications**.
- Implementation → It was executed by **Bharat Sanchar Nigam Limited (BSNL)** and **Telecommunications Consultants India Limited (TCIL)** was the technical consultant.
- Significance → It will **improve internet connectivity** in the Andaman and Nicobar islands enabling its citizens to use net banking, e-commerce, online education and telemedicine facilities.

👉 Universal Service Obligation Fund (USOF)

- It was **set up in 2002** and was given **statutory status** under the Indian Telegraph (Amendment) Act, 2003.
- Objective → **Enabling rural Indians to achieve their fullest potential** and participate productively in the development of the nation by virtue of being effectively connected through a **reliable and ubiquitous telecommunications network**.

10. NIP Online Dashboard

Why in News?

- Recently, the Finance Minister inaugurated the National Infrastructure Pipeline (NIP) Online Dashboard.

About NIP Online Dashboard

- What is it? → It is a **one-stop solution for all stakeholders** looking for information on infrastructure projects in India.
- The dashboard is being **hosted on the India Investment Grid (IIG)**.

👉 India Investment Grid

- What is it? → It is an **interactive and dynamic online platform** that showcases **updated and real-time investment opportunities** in the country.
- Developed by → It is an initiative of Department for Promotion of Industry & Internal Trade (**DPIIT**) **Ministry of Commerce and Invest India**, the **National Investment Promotion and Facilitation Agency**.
- It **allows investors to search a pan-India database** for investment opportunities across sectors; Track the progress of preferred projects and indicate interest and Directly communicate with project promoters.

👉 National Infrastructure Pipeline (NIP)

- NIP is a first-of-its-kind initiative to provide **world-class infrastructure** across the country and improve the quality of life for all citizens.
- Objective → It will **improve project preparation, attract investments** (both domestic & foreign) into infrastructure, and will be crucial for attaining the target of becoming a **\$5 trillion economy by FY 2025**.
- Coverage → Covers both **economic and social infrastructure projects**.

- Task Force → The task force chaired by Secretary Atanu Chakraborty, Department of Economic Affairs, Ministry of Finance has projected infrastructure **investment of ₹111 lakh crore during FY 2020-25.**

11. Student Entrepreneurship Programme (SEP)

Why in News?

- Atal Innovation Mission (AIM), NITI Aayog, in collaboration with Dell Technologies has launched Student Entrepreneurship Programme 2.0 (SEP 2.0) for young innovators of Atal Tinkering Labs (ATLs).

About SEPI

- Aim → It aims to serve as a **catalyst** and help **accelerate the entrepreneurial journey** of the **young innovators** in creating a new innovative India.
- SEP 1.0 was launched in **January 2019.**

📌 About SEP 2.0

- It will allow student innovators to **work closely with Dell volunteers.**
- They will receive **mentor support; prototyping and testing support; end-user feedback;** intellectual property registration, processes, manufacturing support as well as the launch support of the product in the market.

12. Krishi Megh

Why in News?

- The Union Agriculture Minister has launched the Krishi Megh (National Agricultural Research and Education System – Cloud Infrastructure and Services).

About

- What is it? → It is a **data recovery centre setup** to **protect the data** of the Indian Council of Agricultural Research (**ICAR**).
- Aim → It aims to **meet the services and infrastructure needs of Digital Agriculture** of National Agricultural Research and Education System (NARES).
- Location → The centre has been set up at **National Academy of Agricultural Research Management** (NAARM), **Hyderabad.**
- The existing Data Centre (**ICAR-DC**) built during 2012 shall be **strengthened** with **cloud computing infrastructure.**
- It would deploy mission critical applications such as **e-Office, ICAR-ERP, Education Portal, KVK Portal and mobile apps, etc.**
- Significance → It is a step forward towards **digital agriculture of New India.**

📌 National Agricultural Research & Education System

- NARES is a Government of **India-World Bank funded project**, designed for **strengthening the national agricultural education system** in the country.
- The overall objective of the project is to provide **more relevant and high-quality education** to the **agricultural university students** that is in tune with the New Education Policy - 2020.

👉 Indian Council of Agricultural Research

- It is an **autonomous organisation** under the Department of Agricultural Research and Education (**DARE**), **Ministry of Agriculture and Farmers Welfare**.
- Union Minister of Agriculture** serves as its **president**.

13. Transparent Taxation – Honoring the Honest

Why in News?

- Prime Minister has launched the platform called “Transparent Taxation – Honoring the Honest”.

About

- Aim → To **bring transparency** in income tax systems and empower taxpayers.
- Features → The main features of the platform are **faceless assessment**, **faceless appeal** and **taxpayer charter**.

👉 Faceless Assessment

- It aims to **eliminate the interface** between the taxpayer and the income tax department.
- There will be **no need for the taxpayer to visit** the **income tax office** or the officer.
- The selection of a taxpayer is possible through systems using **analytics and Artificial Intelligence**.
- The system **abolishes territorial jurisdiction**. A taxpayer may belong to a particular city but the **assessment order**, **review** and the **finalisation** will **take place in different cities**.

👉 Faceless Appeal

- Under the system, appeals will be **randomly allotted to any officer** in the country. The identity of the officer deciding the appeal will remain unknown.
- The taxpayer will also not be required to visit the income tax office or the officer and the **appellate decision will be team-based and reviewed**.

👉 Taxpayer Charter

- This **outlines** the **rights and responsibilities** of **both tax officers and taxpayers**.

14. Business Responsibility Reporting (BRR)

Why in News?

- Ministry of Corporate Affairs (MCA) has released a report of the Committee on Business Responsibility Reporting (BRR) under the chairmanship of Gyaneshwar Kumar Singh.

About BRR

- It is a disclosure of **adoption of responsible business practices** by a listed company to all its stakeholders.
- Business Responsibility Reporting is **applicable to all types of companies** including manufacturing, services etc.

👉 Key recommendations

- A new reporting framework called the '**Business Responsibility and Sustainability Report (BRSR)**' has been recommended to better reflect the intent and scope of reporting on **non-financial parameters**.
- The BRSR would be **integrated with the MCA 21 portal**.
- The information captured **through BRSR filings** should be used to develop a **Business Responsibility-Sustainability Index** for companies.
- The top 1000 listed companies are to undertake this **reporting mandatorily**.
- The reporting requirement may be **extended by MCA to unlisted companies** above specified thresholds of turnover and/or paid-up capital.

15. Price Monitoring and Resource Unit (PMRU)

Why in News?

- A Price Monitoring and Resource Unit (PMRU) has been set up in Karnataka under the aegis of National Pharmaceutical Pricing Authority (NPPA), Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers.

About PMRU

- What is it? → It is a **registered society** which functions under the direct control and supervision of State Drug Controllers.
- Functions →
 - To **assist NPPA in monitoring prices of drugs**, ensuring availability of drugs and raising consumer awareness.
 - To act as **collaborating partners of NPPA with information gathering mechanisms** at the grass-roots level.
 - To **render necessary technical assistance** to both the NPPA and the respective State Drug Controllers of States/ Union Territories.
- Composition → The **Board of Governors** of PMRU includes the representatives from Central Government and State Government concerned and other stakeholders.
- NPPA under its Central Sector Scheme "**Consumer Awareness, Publicity and Price Monitoring (CAPPM)**" has set up PMRUs in **12 States/ UTs**. The expenses of the PMRUs are borne by NPPA under the Scheme.

👉 NPPA

- It is an **independent body** set up in **1997** under the **Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers**.
- Mandate → To **fix/revise controlled bulk drugs prices** and formulations, enforce prices and availability of medicines under the Drug (Price Control) order, 2013.

16. Positive Pay mechanism

Why in News?

- Reserve Bank of India(RBI) has introduced a Positive Pay mechanism to make cheque payments safer and reduce instances of frauds.

About Positive Pay mechanism

- What is it? → It is a **fraud detection tool adopted by banks** to protect customers against forged, altered or counterfeit cheques.
- How does it work? → It **cross verifies all details of the cheque issued** before funds are encashed by the beneficiary.
- In case of a **mismatch**, the cheque is **sent back to the issuer for examination**.
- It ensures that **every high-value cheque valued at Rs 50,000 and above** is crossed checked with details provided by the issuing party or the individual.
- Significance → By following such a system, a **bank knows of a cheque being drawn by the customer even before it is deposited** by the beneficiary into his/her account.
- Instances of usage → Private sector lender **ICICI Bank adopted this feature in 2016** for all cheques, irrespective of the amount, via its iMobile application.

17. Center for Biopharma Analysis

Why in News?

- Recently, the Secretary of the Department of Biotechnology (DBT) inaugurated the Pune-based Center for Biopharma Analysis (CBA).

About CBA

- What is it? → This centre is supported by the **National Biopharma Mission** of the Department of Biotechnology, DBT, and Biotechnology Industry Research Assistance Council, BIRAC.
- Functions → It will **provide high-quality analytical services to biopharmaceutical developers** and manufacturers and create long lasting value for bio-entrepreneurs and industry.
- Benefits → It is expected to **play a pivotal role in supporting biopharma innovations** from academic and government research labs, start-ups and many Indian companies.
- It will have a great **impact over suggestions on studies** needed for regulatory approvals. This can help speed up the development process

Also Remember

- **National Biopharma Mission (NBM)**
 - It is an **industry-academia collaborative mission** for accelerating biopharmaceutical development in the country.
 - Launched Year → It was launched in 2017 at a total cost of Rs 1500 crore and is **50% co-funded by World Bank loan**.
 - Implementation → **Biotechnology Industry Research Assistance Council** (BIRAC).

18. Pan-India entity for retail payments

Why in News?

- RBI releases framework for pan-India entity for retail payments. To create an alternative umbrella organisation for retail payments to prevent the monopoly of NPCI.

About New umbrella entity(NUE)

- What is it? → It shall be a **company incorporated under the Companies Act, 2013** and may be a '**for-profit**' or **Non-profit company** as decided by it.
- Paid up capital → The entity will have minimum paid-up capital of **Rs 500 crore** with no single promoter group holding over 40% investment in the capital.
- Functions →
 - It can set up, manage and operate new payments systems in the retail space comprising **ATMs, white label PoS, Aadhaar-based payments and remittance services.**
 - It will **manage clearing and settlement systems** for participating banks and non-banks and also monitor developments in the retail payment system both in India and abroad.
 - It will **frame necessary rules** and the **related processes** to ensure that the system is safe and sound and that payments are exchanged efficiently.
- Corporate Governance → The entity has to follow corporate governance norms set by the RBI, the central bank retains the **right to approve the appointment of directors** and **nominate a member on the entities' board.**

NPCI

- It is an **umbrella organisation** for operating retail payments and settlement systems in India.
- It is an **initiative of Reserve Bank of India (RBI) and Indian Banks Association (IBA)** under the provisions of the Payment and Settlement Systems Act, 2007.
- It has been incorporated as a **Not for Profit Company** under the provisions of Section 25 of Companies Act 1956 (now Section 8 of Companies Act 2013).

19. Trifood Project

Why in News?

- Union Tribal Affairs Minister has e-launched the tertiary processing centers of 'Trifood Project'.

About

- What is it? → It is an initiative of the **Ministry of Tribal Affairs** in association with the **Ministry of Food Processing (MoFPI)**.
- Aim → To enhance the income of tribals through **better utilization of and value addition to the Minor Forest Produce(MFP)** collected by the tribal forest gatherers.
- Implementation → It is being implemented by **Tribal Cooperative Marketing Development Federation of India(TRIFED)**.
- To achieve this, as a start, **two Minor Forest Produce (MFP) processing units** will be set up in the following locations.
 - **Raigad Unit**, Maharashtra that will be used for value addition to Mahua, Amla, custard apple and Jamun and will produce Mahua drink, amla juice, candy, Jamun juice and custard apple pulp.
 - **Jagdalpur multi-commodity processing centre**, Chhattisgarh will be used for the processing of commodities like Mahua, Amla, honey, cashew, tamarind, ginger, garlic and other fruits and vegetables.

Also Remember

Minor Forest Produce (MFP)

- The Scheduled Tribes and Other Traditional Forest Dwellers Act, 2006 defines minor forest produce as **all non-timber forest produce of plant origin**.
- MFP → Includes **bamboo, brushwood, stumps, canes, cocoon, honey, waxes, Lac, tendu leaves, medicinal plants, roots among others**.

TRIFED

- It was established in **1987** to provide a good price to the products made or collected from the forest by the tribal people.
- Parent Organization → **Ministry of Tribal affairs**.

20. Supply Chain Resilience Initiative (SCRI)

Why in News?

- India, Japan and Australia have begun discussions on launching a trilateral Supply Chain Resilience Initiative (SCRI) to reduce the dependency on China.

About

- Objective → The objective of the initiative is to **attract FDI** with a vision of **creating an economic powerhouse** and **strengthening the relationship among partner countries**.
- Significance → The initiative is a **direct response to companies** that are **concerned about Chinese political behaviour** and disruption to the supply chain.

21. Ethanol Blended Petrol programme

Why in News?

- The government has set targets of 10% bioethanol blending of petrol by 2022 and to raise it to 20% by 2030 under the Ethanol Blended Programme (EBP).

About EBP

- Background → It was launched in **2003** by the **Ministry of Petroleum & Natural Gas** (MoP&NG).
- Aim → To **achieve blending of Ethanol with Petrol** with a view to reduce pollution, conserve foreign exchange and increase value addition in the sugar industry enabling them to clear cane price arrears of farmers.
- Implementation → The Government is implementing the programme through **Oil Marketing Companies** (OMCs).

Also Remember

- **1G and 2G Bioethanol**
 - **1G** bioethanol plants **utilise sugarcane juice and molasses**, by products in the production of sugar as raw material while **2G** plants **utilise surplus biomass and agricultural waste** to produce bioethanol.
- **Pradhan Mantri JI-VAN (Jaiv Indhan- Vatavaran Anukool fasal awashesh Nivaran) Yojana:**

- It was launched in **2019** to **provide financial support to Integrated Bioethanol Projects** using lignocellulosic biomass and other renewable feedstock.

22. Participatory Notes

Why in News?

- Investments through Participatory Notes (P-notes) in the domestic capital market soared to Rs 63,288 crore till July-end, making it the fourth consecutive monthly rise.

About P-notes

- What is it? → P-notes are issued by **registered foreign portfolio investors (FPIs)** **to overseas investors** who wish to be part of the Indian stock market without registering themselves directly with SEBI.
- P-Notes are **Offshore Derivative Investments** (ODIs) with equity shares or debt securities as underlying assets.
- They **provide liquidity to the investors** as they can transfer the ownership by endorsement and delivery.
- While the FIIs have to **report all such investments each quarter to SEBI**, they need not disclose the identity of the actual investors.
- Concern → The primary reason why P-Notes are **worrying** is because of the **anonymous nature of the instrument** as these investors could be beyond the reach of Indian regulators.

23. Prime Minister Employment Generation Program

Why in News?

- The approval of projects under the Prime Minister's Employment Generation Program (PMEGP) increased 44% during the first five months (April - August) of the financial year 2020-21.

About PMEGP

- Funding → **Central sector scheme**.
- Administered by → the **Ministry of Micro, Small and Medium Enterprises** (MoMSME).
- Launched in → **2008-09**.
- It is a **credit-linked subsidy scheme** which **promotes self-employment** through setting up of **micro-enterprises**, where **subsidy up to 35%** is provided by the Government through Ministry of MSME for loans up to ₹25 lakhs in manufacturing and ₹10 lakhs in the service sector.
- Implementation →
 - **National Level**- Khadi and Village Industries Commission (**KVIC**) as the nodal agency.
 - **State Level**- **State KVIC Directorates**, State Khadi and Village Industries Boards (KVIBs), District Industries Centres (**DICs**) and **banks**.
- Eligibility →
 - Any individual **above 18 years of age**, **Self Help Groups**, **Institutions registered** under Societies Registration Act 1860, Production Co-operative Societies and Charitable Trusts are eligible.
 - **Existing Units** and the units that have **already availed** Government Subsidy under any other scheme of Government of India or State Government are **not eligible**.
 - **Only new projects** are considered for sanction under PMEGP.

24. Atal Bimit Vyakti Kalyan Yojana

Why in News?

- Relaxation in eligibility criteria and enhancement in the payment of unemployment benefits under the Atal Bimit Vyakti Kalyan Yojana of ESIC.

About

- It was launched in **2018** by **Employees State Insurance(ESI) Corporation**.
- Aim → To **provide financial support** to those who lost their jobs or rendered jobless for whatsoever reasons due to changing employment patterns.
- Coverage → The scheme is for **Insured Persons(IP)** covered under the **Employees State Insurance Act, 1948**.

What are the latest changes?

- Eligibility criteria for availing the relief has been relaxed, as under:
- The **payment of relief** has been **enhanced to 50% of average of wages** from earlier 25% of average wages payable upto maximum 90 days of unemployment.
- Instead of the relief becoming **payable 90 days after unemployment**, it shall become due for payment after 30 days.
- The Insured Person can **submit the claim directly to ESIC Branch Office** instead of the claim being forwarded by the last employer and the payment shall be made directly in the bank account of IP.
- The Insured Person should have been **insurable employment for a minimum period of 2 years before his/her unemployment** and should have contributed for **not less than 78 days** in the contribution period immediately preceding to unemployment.

ESIC

- It is a **Statutory and Administrative body** under the **Ministry of Labour and Employment**.
- It administers **ESIC Act, 1948**.

25. National Strategy for Financial Education (NSFE)

Why in News?

- RBI has released the National Strategy for Financial Education (NSFE): 2020-2025 document for creating a financially aware and empowered India.

About NSFE

- Aim → It aims to **strengthen the ecosystem for various modes of digital financial services** in all Tier-II to Tier VI centers to create the necessary infrastructure to move towards a **less-cash society by March 2022**.
- Prepared by → the **National Centre for Financial Education (NCFE)**, under the aegis of the Technical Group on Financial Inclusion and Financial Literacy (**TGFIFL**).
- It is the **second NSFE**, the first one being released in 2013.
- NCFE is a Section 8 (**Not for Profit**) **Company** under the Companies Act, 2013 **promoted by RBI, SEBI, IRDAI and PFRDA**.

👉 It has recommended a '5 C' approach for dissemination of financial education in the country:

- **Content** → Financial Literacy content for various sections of population.
- **Capacity** → Develop the capacity and 'Code of Conduct' for financial education providers.
- **Community** → Evolve community led approaches for disseminating financial literacy in a sustainable manner.
- **Communication** → Use technology, media and innovative ways of communication for dissemination of financial education messages.
- **Collaboration** → Streamline efforts of other stakeholders for financial literacy.

👉 **TGFIFL**

- Technical Group on Financial Inclusion and Financial Literacy (TGFIFL) was set up in **November 2011 by the FSDC**.
- It is responsible for periodic monitoring and implementation of NSFE **under the oversight** of **Financial Stability and Development Council** (FSDC).

26. LABOUR BUREAU

Why in News?

- The official logo of Labour Bureau, an attached office of Ministry of Labour and Employment, was launched by Minister for Labour.

About LABOUR BUREAU

- What is it? → Labour Bureau, an attached office under **Ministry of Labour and Employment**, was set up on **1st October 1946**.
- The Labour Bureau is an **Apex National Level organization** in the **field of labour statistics** which performs significant functions such as Labour Intelligence, Research, Monitoring/evaluation & training.
- It is a **data-based organization** dealing with data related to workers and work.
- Labour Bureau has two main wings stationed in Shimla and Chandigarh.
- The logo also represents the **three goals** that the Labour Bureau strives to achieve in producing quality data i.e. **Accuracy, Validity and Reliability**.
- Objective → Conducting **Family Budget Enquiries** and compiling **Cost of Living Index** Numbers for important centres in the country on a uniform basis. `

27. Export Preparedness Index 2020

Why in News?

- NITI Aayog in partnership with the Institute of Competitiveness has released the Export Preparedness Index (EPI) 2020.

About EPI

- It is the first report which **examines export preparedness** and **performance of Indian states and intends** to identify challenges and opportunities; **enhance the effectiveness of government policies** and encourage a facilitative regulatory framework.

- Parameters → The index ranked states on the basis of 4 pillars a) **Policy** b) **Business Ecosystem** c) **Export Ecosystem** and d) **Export Performance**.
- Sub-pillars → The index took into consideration the 11 sub-pillars: **Export Promotion Policy; Institutional Framework; Business Environment; Infrastructure; Transport Connectivity; Access to Finance; Export Infrastructure; Trade Support; R&D Infrastructure; Export Diversification; and Growth Orientation**.

📌 Key Takeaways:

- Overall States → **Gujarat** has **topped the index** followed by **Maharashtra and Tamil Nadu**. The other States that have made it to the top 10 include Rajasthan, Odisha, Telangana, Haryana, Chhattisgarh, Karnataka and Kerala.
- Coastal States → Gujarat emerged as the top-performing state followed by Maharashtra and Tamil Nadu.
- Landlocked States → **Rajasthan** has performed the **best followed by Telangana and Haryana**.
- Himalayan states → **Uttarakhand** is the highest followed by **Tripura** and **Himachal Pradesh**.
- Union Territories → **Delhi** has performed the best **followed by Goa** and **Chandigarh**.

28. Contingency Fund (CF) of the central bank

Why in News?

- The Reserve Bank of India (RBI) has retained a whopping amount of Rs 73,615 crore within the RBI by transferring it to the Contingency Fund (CF) of the central bank.

About

- This is a specific provision meant for **meeting unexpected** and **unforeseen contingencies** including →
 - Depreciation in the value of securities,
 - Risks arising out of monetary/exchange rate policy operations,
 - Systemic risks and any risk arising on account of the special responsibilities enjoined upon the Reserve Bank.
- Under what provisions does the central government receive money from the RBI? →
 - As per **Section 47 of the RBI Act**, profits or **surplus of the RBI are to be transferred to the government**, after making various contingency provisions, public policy mandate of the RBI, including financial stability considerations.
 - The RBI's transfer this year is as per the **economic capital framework** (ECF) adopted by the **RBI board last year**.

Also Remember

- Currency and Gold Revaluation Account (CGRA)** → It is **maintained by the Reserve Bank** to take **care of currency risk, interest rate risk and movement in gold prices**.
 - CGRA provides a **buffer against exchange rate/ gold price fluctuations**. It can come under pressure if there is an appreciation of the rupee vis-à-vis major currencies or a fall in the price of gold.
- Investment Revaluation Account Foreign Securities (IRA-FS)** → The **unrealized gains or losses on revaluation in foreign dated securities** are recorded in the IRA-FS account.

- **Investment Revaluation Account-Rupee Securities (IRA-RS)** → The unrealized gains or losses on revaluation is accounted for in Investment Revaluation Account-Rupee Securities (IRA-RS).

29. Chunauti Contest

Why in News?

- Union Ministry for Electronics and Information Technology has launched “Chunauti”- Next Generation Startup Challenge Contest.

About

- Aim → It aims to further boost startups and software products with special focus on Tier-II towns in the country.
- The contest will identify around three hundred startups working in specified areas and providing them seed funds of up to 25 lakh rupees and other facilities.
- The areas identified potential under the scheme are →
 - Edu Tech,
 - Agri Tech
 - Fintech solutions for masses,
 - Supply Chain and Logistic management,
 - Infrastructure,
 - Medical Healthcare as well as jobs and skilling.
- Cost → The government has allocated a budget of over 95 crore rupees over a period of three years for this programme.

📌 Also Remember

- **Software Technology Parks of India (STPI):**
 - It is an Autonomous Society.
 - Established in → 1991.
 - Parent Organization → Ministry of Electronics and Information Technology (MeitY).
 - Purpose → To encourage, promote and boost the Software Exports from India.

30. NATIONAL LAND MANAGEMENT CORPORATION

Why in News?

- The government is planning to set up a National Land Management Corporation (NLMC) to facilitate monetizing state-owned surplus land assets in a systematic and specialised way.

About

- Earlier, government panel on boosting infrastructure investment had recommended setting up a National Land Management Corporation which will => act as a facilitator for land monetisation and an asset manager for surplus lands owned by government of India and Central Public Sector Enterprises.
- ‘Surplus’ land or property are those that are not needed or are not appropriate for provision of public service for which the agency owning the property is responsible.

- NLMC would pursue land lease or concessions as a primary mode of commercial exploitation, including option of sale of land.

Key Responsibilities of NLMC would be:

- Development/co-development of land belonging to Central government ministries or CPSEs etc.
- Maintaining an inventory of public land.
- Developing model concession agreements for land developments.
- Raising money from the market backed by land assets.
- Legal management of litigation/encumbrances relating to land.
- Resettlement and rehabilitation/eviction of occupiers.
- Functions related to change of land usage and revenue management.

31. MODEL CONCESSION AGREEMENT FOR BOT MODEL

Why in News?

- Recently, an inter-ministerial group (IMG) has approved changes to the model concession agreement (MCA) used for building privately-funded highways on the Build-Operate and Transfer (BOT) toll model.

Background

- BOT toll model **accounted for almost 96% of NHAI's** all project awards **in 2011-12**, which **came down almost to zero in the last two fiscals**, due to various issues in existing MCA for BOT (Toll) projects.
- This has forced NHAI to **shift to Engineering Procurement and Construction (EPC)** and **Hybrid Annuity Model (HAM)**.
- However, overdependence on EPC and HAM is adversely impacting the finances NHAI. Thus, new changes in BOT model were proposed to attract private investors.

Key features and expected benefits of modified MCA

- **Revised revenue assessment**: Under the clause, in every five years during the concession period, the revenue potential of a project will be re-assessed, against every 10 years now. Therefore, if need be, the concession could will be extended early in the tenure of the contract, adding to certainty of cash flows.
- **Land acquisition**: The work order for building highway projects will be issued only when 90 per cent of the land is acquired and this will form a part of the condition precedent. Delays in land acquisition and approvals have led to significant delays in project completion and have been the prime reason for significant cost overruns.
- **Dispute resolution board (DRB)**: It provides for setting up a dispute resolution board which will act as a continuous dispute resolution mechanism and provides for timely redressal within 90 days. This is a welcome step, as arbitration processes have been dragged for years, leading to significant lock-up of developers' funds.

Types of investment models:

- **Build Operate and Transfer (BOT) Toll model**: Under this model, a road developer constructs the road and he is allowed to recover his investment through toll collection.
 - **There is no government payment** to the developer as he earns his money invested from tolls.
- **BOT Annuity Model**: A developer builds a highway, operates it for a specified duration and transfers it back to the government.

- **The government starts payment to the developer** after the launch of commercial operation of the project.
- **Engineering, Procurement and Construction (EPC) Model:**
 - Under this model, the **cost is completely borne by the government**. Government invites bids for **engineering knowledge from the private players**.
 - Procurement of raw material and construction costs are met by the government.
 - The **private sector's participation is minimum** and is limited to the provision of engineering expertise
- **Hybrid Annuity Model (HAM)**
 - HAM is a **mix of BOT Annuity and EPC models**.
 - As per the design, the **government will contribute to 40%** of the project cost in the first five years through annual payments (annuity).
 - The remaining payment will be made on the basis of the assets created and the performance of the developer.

32. BUNDLING SCHEME FOR ROUND-THE-CLOCK (RTC) POWER SUPPLY

Why in News?

- Recently, Ministry of power issued guidelines for supply of RTC power to distributors through a Bundling Scheme, which is first of its kind scheme in world.

About Bundling scheme

- It is a **plan to sell renewable energy (RE) and thermal power in a bundle** so that end users can get uninterrupted supply of power.
- First phase of National Solar Mission provided for such a scheme to facilitate **grid connected solar power**.
- It will provide RTC power to DISCOMs from RE sources complemented/balanced with coal based thermal power.
- Scheme will facilitate renewable capacity addition and fulfillment of **Renewable Purchase Obligation (RPO)** requirement of DISCOMs.
- It will enable **procurement of power at competitive prices** in consumer interest, **improve bankability** of projects and ensure reasonable returns to the investors.
- Scheme will provide a framework for an Intermediary Procurer as an Aggregator/Trader for the inter-state/ intra-state, long-term, sale-purchase of power.

As per the guidelines:

- Power generators have to **ensure at least 85% availability both annually and during peak hours**.
- Bidders will have to supply **at least 51% of the power from renewable sources**. Bidders can club smaller thermal projects to tie-up with their renewable projects.
- RE component can include **solar and non-solar sources such as wind, hydro**, or any combination of the same.
- Bidder will have to pay a **penalty equivalent to 25% of the shortfall** in energy terms.

About Renewable purchase obligation (RPO):

- **RPO is a mechanism** by which the **obligated entities** are **obliged to purchase certain percentage of electricity from Renewable Energy sources**, as a percentage of the total consumption of electricity.
- Obligated Entities include **Discoms, Open Access Consumers and Captive power producers**.
- RPOs are categorized as **Solar and Non-Solar RPO**.
- RPOs are provided under **Electricity Act 2003** and the **National Tariff Policy 2006**.

33. UNIFIED GAS PRICE SYSTEM

Why in News?

- Government is planning to cut down the cost of transportation of natural gas by setting a fixed tariff for the transportation of natural gas for longer distances to boost gas consumption.

Background

- Currently, **tariffs for pipeline usage** are **divided into zones of 300km**, with the tariff increasing for zones further away from the point where gas is injected.
- Thus, these tariffs increase the cost for buyers of gas further away from the point of injection of natural gas. All of India's imported natural gas arrives at terminals on the west coast leading to costs for buyers increasing, the further east they are located.
- The government is proposing a unified price system with one price for those transporting gas nearby **within 300 km** and one price for those transporting gas **beyond 300km**.
- Also, **Petroleum and Natural Gas Regulatory Board (PNGRB)** has published a discussion paper on moving from a system where buyers of gas are charged for every pipeline, to a single charge across a pipeline network.

Steps taken for better pricing:

- **Gas price pooling, 2015**: Under the plan, price of cheaper domestic gas will be averaged or pooled with cost of expensive imported LNG to create a uniform rate for fertilizer plants.
- **Indian Gas Exchange (IGX)** launched recently, as a digital trading platform that will allow buyers and sellers of natural gas to trade both in the spot market and in the forward market for imported natural gas across three hubs —Dahej and Hazira in Gujarat, and Kakinada in Andhra Pradesh.
- **Hydrocarbon Exploration Licensing Policy**: All gas production from new discoveries can be sold at market-based prices, though it remains subject to a price ceiling.
- **Not under GST**: As gas prices are not under GST, it has led to varying tax rates on natural gas production and related value chain, such as pipelines and retailing in different states.

Environment

1. Alliance to End Plastic Waste

Why in News?

- Alliance to End Plastic Waste has planned to invest between USD 70 million to 100 million in India over the next five years to reduce plastic waste.

About

- Formation → It was **founded in 2019** as an **international non-profit organisation** based in Singapore.
- Purpose → It works with government, environmental and economic development NGOs and communities around the world to **address the challenge to end plastic waste** in the environment.
- Focus Areas → The alliance focuses on solutions in four strategic areas: **infrastructure, innovation, education & engagement and the clean up.**
- Members → As of July 2020, alliance has nearly **50 member companies** and **supporters** representing global companies and organisations across the plastic value chain.
- Currently, 'Alliance to End Plastic Waste' is working on the Project Aviral which aims to reduce plastic waste in the Ganga River.

2. Smog towers

Why in News?

- In January this year, the Supreme Court has directed that two smog towers should be installed in the capital by April on a pilot project basis considering a proposal by the IIT-Bombay.

About

- Smog towers are structures designed to **work as large-scale air purifiers.**
- They are usually **fitted with multiple layers of air filters**, which clean the air of pollutants as it passes through them.
- The purifier's exhaust fans are expected to **remove up to 80 per cent** of the **PM 2.5** and **PM10 pollutants** in the air in the vicinity.
- The filters installed in the tower will use **carbon nanofibres** as a major component and will be **fitted along its peripheries.**
- The tower will focus on **reducing particulate matter load.**
- The project is collaboration between the Indian Institute of Technology (IIT) **Bombay, IIT-Delhi and the University of Minnesota.**
- The **Central Pollution Control Board** (CPCB) will also be involved with the project.

3. DHOLE

Why in News?

- A study has pointed out that Karnataka, Maharashtra and Madhya Pradesh rank high in the conservation of the endangered dhole, in India.

About Dhole

- Geographical Distribution → The Dholes is a canid native to **Central, South and Southeast Asia**.
- Other names for the species include **Asiatic wild dog, Indian wild dog, whistling dog, red dog, and mountain wolf**.
- The dole is a **highly social animal**, living in large clans without rigid dominance hierarchies and containing multiple breeding females.
- Conservation Status →
 - **Endangered** – IUCN
 - **Schedule II** of wildlife act
 - CITES – **Appendix II**
- Threats → **Depletion of prey base, Habitat loss and transformation**, Persecution of Dholes stems mainly from retaliatory killings due to livestock predation, **Competition with other species** like Tigers and Leopards for prey.

4. Report on lead poisoning by UNICEF

Why in News

- United Nations Children’s Fund (UNICEF) and non-profit Pure Earth has released a report titled “The Toxic Truth: Children’s exposure to lead pollution”.

Key findings

- Lead poisoning is affecting children on a “**massive and previously unknown scale**”.
- **Around 1 in 3 children – up to 800 million globally** – have blood lead levels at, or above, 5 micrograms per decilitre (µg/dL), the amount at which action is required.
- Nearly **half of these children live in South Asia**.

👉 Lead

- What is it? → It is a **naturally occurring element** found in small amounts in the **earth’s crust**. While it has some beneficial uses, it can be **toxic to humans and animals** causing health effects.
- Uses → Lead has been used in a wide variety of products **found in and around our homes**, including paint, ceramics, pipes and plumbing materials, gasoline, batteries, ammunition and cosmetics.
- How lead affects children? → Lead is a **potent neurotoxin** that causes irreparable harm to children’s brains.
- WHO has identified lead as **1 of 10 chemicals of major public health concern**.
- Global Alliance to Eliminate Lead Paint → It is a cooperative initiative jointly led by the **World Health Organization** and the **United Nations Environment Programme** to prevent children’s exposure to lead from paints containing lead and to minimize occupational exposures to lead paint.

5. INDIAN LEOPARD

Why in News?

- As part of its global tiger census, the Wildlife Institute of India (WII) is set to release a dedicated report on leopard sightings by the month-end.

About

- The Indian leopard is one of the **big cats** occurring on the **Indian subcontinent**, apart from the Asiatic lion, Bengal tiger, snow leopard and clouded leopard.
- Scientific Name → **Panthera pardus**.
- Common Name → Indian leopard or Common leopard.
- Habitat → In India, the leopard is found in **all forest types**, from tropical rainforests to temperate deciduous and alpine coniferous forests. It is also found in **dry scrubs and grasslands**, the only **exception being desert** and the **mangroves of Sundarbans**.
- Status →
 - Listed on a par with Tigers under **Schedule 1** of the Wildlife Protection Act (WPA), 1972.
 - Listed in **Appendix I** of CITES.
 - Listed as **Vulnerable** on the IUCN Red List.
- Conservation Issues → The biggest threats facing the common leopard in India are increasing conflict with humans, poaching for illegal trade in body parts and loss of habitat.
- Census → The last formal census on India's leopards was **conducted in 2014** which estimated the cat's population at **between 12,000 and 14,000**. They also estimated 8,000 leopards in the vicinity of tiger habitat.

6. Aarhus Convention

Why in News?

- The Aarhus Convention was in news with regarding to Draft EIA notification.

About

- The Aarhus Convention, 1998, which stipulates that **environmental rights and human rights are linked**.
- It states that the **present generation owes an obligation to future generations**.
- It establishes that **sustainable development** can be achieved only through the involvement of all stakeholders.
- It **links government accountability and environmental protection**.
- It focuses on **interactions between the public and public authorities** in a democratic context.
- It establishes a **number of rights of the public, individuals and their associations with regard to the environment**.
- The **UNECE Convention on Access** to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, usually known as the **Aarhus Convention**, was signed on 25 June 1998 in the **Danish city of Aarhus**.
- It entered into force on 30 October 2001.
- As of March 2014, it has **47 parties—46 states** and the **European Union**.
- All of the ratifying states are in Europe and Central Asia

7. Hoolock Gibbons

Why in News?

- Hoolock Gibbons threatened with extinction in two Manipur districts.

About

- The hoolock gibbons are **three primate species of genus Hoolock** in the gibbon family.
- The primate is native to **eastern Bangladesh, Northeast India and Southwest China**.
- Northeastern India is home to two ape species: **eastern** and **western hoolock gibbons**.
- Western hoolock gibbon →
 - It inhabits in **all the states of the north-east, restricted between the south of the Brahmaputra river and east of the Dibang river**. And outside India, it is found in eastern Bangladesh and north-west Myanmar.
 - IUCN Redlist: **Endangered**
- Eastern hoolock gibbon →
 - It inhabits specific pockets of **Arunachal Pradesh and Assam** in India, and in southern China and north-east Myanmar outside India.
 - IUCN Redlist: **Vulnerable**
- In India, both the species are listed on **Schedule 1 of the Indian (Wildlife) Protection Act 1972**.
- Gibbons are **diurnal** (active during the day) and **arboreal** (live on trees).
- Diet → consists mainly of **fruits, insects and leaves**.
- They live together in **monogamous pairs**.
- Threats (applicable to both) → **Deforestation for timber, forest fires and hunting**.

8. Source - Sink Dynamics & Tiger Population

Why in News?

- The tiger survey has highlighted that the tiger population in the source-sink is in the ratio of 60:40.

About

- What is it? → Source–sink dynamics is a **theoretical model** used by ecologists to describe **how variation in habitat quality may affect the population growth or decline of organisms**.
- In this model, organisms **occupy two patches of habitat**.
- **Source**, is a **high-quality habitat** that on average allows the population to increase.
- **Sink**, is **very low-quality habitat** that, on its own, would not be able to support a population.
- However, if the **excess of individuals produced** in the **source frequently moves to the sink**, the sink population can persist indefinitely.
- The tiger survey has highlighted that the tiger population in the **source-sink is in the ratio of 60:40**.
- **33%** of the tiger population in India **lives outside its source** i.e, tiger reserves.
- 17/50 tiger reserves in India are going to achieve its maximum capacity to hold the tiger populations.
- Tiger survey suggested that there is a need to **create buffer areas** around the habitat zones of tigers where **guided land-use and faster conservation interventions** can help reduce human-tiger conflict.

👉 Ecological Trap

- Ecological trap theory **describes the reasons why organisms may actually prefer sink patches** over source patches.
- The concept stems from the idea that organisms that are **actively selecting habitat must rely on environmental cues** to help them identify high-quality habitat.

- If either the habitat quality or the cue changes so that **one does not reliably indicate** the other, organisms may be **lured into poor-quality habitat**.
- It thought to occur when the **attractiveness of a habitat increases disproportionately** in relation to its value for survival and reproduction.
- The result is **preference of falsely attractive habitat** and a general avoidance of high-quality but less-attractive habitats.

9. TRAFFIC study on leopards

Why in News?

- TRAFFIC India has released a paper titled “SPOTTED’ in Illegal Wildlife Trade: A Peek into Ongoing Poaching and Illegal Trade of Leopards in India’.

Key Takeaways

- Of the total of **747 leopard deaths** between 2015-2019 in India, 596 were linked to illegal wildlife trade and activities related to poaching.
- The **highest numbers of poaching** incidents were reported from the States of **Uttarakhand and Maharashtra**.
- Among all the derivatives found in illegal wildlife trade, **skin remained the most in-demand product**, accounting for **69% of all seizures**, while derivatives like **claws, teeth and bones were also traded**.

👉 TRAFFIC

- What is it? → It is the leading **non-governmental organisation(NGO)** working globally on the trade of wild animals and plants in the context of both biodiversity and sustainable development.
- Founded in → It was founded in **1976** as a **strategic alliance** of the **World Wide Fund for Nature** (WWF) and the **International Union for the Conservation of Nature** (IUCN).
- Location → **Cambridge, UK**

10. International Solar Alliance (ISA)

Why in News?

- An amendment made in the International Solar Alliance (ISA) agreement has allowed all 192 member countries of the United Nations to join the Alliance.

About ISA

- What is it? → It is a **multilateral forum** jointly launched **by India and France** on the side-lines of the 21st Conference of Parties (COP 21) to the United Nations Framework Convention on Climate Change in 2015.
- Aim → To work **for efficient exploitation of solar energy** to reduce dependence on fossil fuels.
- Objectives →
 - To collectively **address key common challenges** to scale up solar energy applications in line with their needs
 - To **mobilize investments** of more than USD 1000 billion by 2030;
 - To bring about a **major decrease in the cost** of solar energy

- To **scale up applications of solar technologies** in member countries and facilitate collaborative research and development (R&D).
- Members → Till now, **87 countries have signed** the Framework Agreement of the ISA and of these 67 have deposited their instruments of ratification.
- Headquarters → **Gurugram, India.**

11. BEEG (Bio -compost Enriched Eco-friendly Globule)

Why in News?

- Saiga Antelope in Kazakhstan has experienced its largest mass calving in recent years.

About

- What is it? → These are **seed balls** consisting of **indigenous variety of seeds, compost and clay.**
- There is **no need for digging pits** for planting saplings.
- These seed balls are to be thrown at aimed places and they will **germinate** when **come into contact with water.**
- Significance → BEEG is **enriched** with the **right ingredients and seeds to germinate early** and are the best way to **utilise monsoon and plant as many trees** as possible without risking lives by social gathering during Covid 19.

12. Butterflies Species of Matheran

Why in News?

- Recently, Scientists from the Bombay Natural History Society published a research paper on the forgotten butterflies of Matheran in the community peer-reviewed 'Biodiversity Data Journal'.

About

- Scientists found **140 rare species** of butterflies, including **77 new ones in Matheran** after a long gap of 125 years.
- The **last time** butterflies have **codified in this eco-sensitive zone** was in **1894**, when a researcher identified 78 species.
- Key Points →
 - The maximum diversity (**125**) of butterflies was **recorded during winter**, while the **least (80) during monsoon.**
 - **Biostatistical techniques** were used by the team. The team used a **barcode system** to denote seasons and the activities of the butterflies.
 - This system will help biologists studying butterflies present such data **concisely and effectively.**
- Significance → A long-term study of butterflies will surely help the **scientific community to understand and conserve the health of the ecosystem.**

📌 Matheran

- Matheran means "**forest on the forehead**" (of the mountains) is an **eco-sensitive region**, declared by the **Ministry of Environment, Forest and Climate Change.**

- It is one of the **smallest hill stations of India** and is part of the **Mumbai** Metropolitan Region along the Western Ghats.

Eco-Sensitive Region

- What is it? → It is the area which has been **notified by the Ministry of Environment, Forests and Climate Change** (MoEFCC), as **areas around** the Wildlife Sanctuaries, National Parks and Protected Areas as **requiring more protection** due to their **fragility**.
- Purpose →
 - To manage and regulate the activities around these areas with the intention of creating some kinds of **'shock absorbers'**
 - To provide a **transition zone** between the highly protected and relatively less protected areas.
 - To give effect to Section 3(2)(v) of the Environment Protection Act, 1986 which **restricts the operation of industries or processes** to be carried out in certain areas or to maintain **certain safeguards to operate industries**.

Bombay Natural History Society (BNHS)

- What is it? → BNHS is one of the **largest non-governmental organisations in India** engaged in conservation and biodiversity research.
- Founded on → **15 September 1883**
- Headquartered at → **Hornbill House, Mumbai**.
- It **supports many research efforts** through grants and publishes the Journal of the Bombay Natural History Society.
- Status → Department of Science and Technology has designated it as a **'Scientific and Industrial Research Organisation'**.

13. Surakhsya Portal

Why in News?

- Union Environment Minister has launched the Surakhsya Portal on World Elephant Day.

About Index

- What is it? → It is the **National Portal on human elephant conflict**.
- It is for collection of **real time information** & also for **managing the conflicts on a real time basis**.

Also Remember

- World Elephant Day → It is observed on **August 12** to create awareness of the urgent plight of African and Asian elephants and to share the knowledge and positive **solutions for the better care and management of captive and wild elephants**.
- Conservation Status → The **African elephants** are listed as **Vulnerable** and **Asian elephants** as **Endangered** on the IUCN Red List of threatened species.

- Project Elephant (PE) → It was launched by the Government of India in **1992** as a **Centrally Sponsored Scheme** to a) protect elephants, their habitat & corridors b) address issues of man-animal conflict and c) Welfare of captive elephants.

14. PAPUM RESERVE FOREST (RF)

Why in News?

- A study has flagged a high rate of deforestation in Papum Reserve Forest (RF), a major hornbill habitat in Arunachal Pradesh.

About PAPUM RESERVE FOREST (RF)

- Papum Reserve Forest (RF) is an **Important Bird and Biodiversity Areas** (IBAs) in **Arunachal Pradesh**.
- It is located **between two IBAs**, **Itanagar Wildlife Sanctuary** to the east and **Pakke Wildlife Sanctuary** to the west.
- Papum Reserve Forest forms part of the **Eastern Himalayas Endemic Bird Area**. A large part of the site is covered by **Sub-tropical Dry Evergreen** and **Semi-evergreen Forests**, while the higher areas are under Subtropical Broadleaf Hill Forest cover.
- Papum RF is a **nesting habitat of three species** of the large, colourful fruit-eating hornbills: **Great, Wreathed and Oriental Pied**.

15. World Biofuel Day

Why in News?

- A webinar on the occasion of the World Biofuel day was organized by the Ministry of Petroleum and Natural Gas with the theme “Biofuels towards Atmanirbhar Bharat”.

About World Biofuel Day

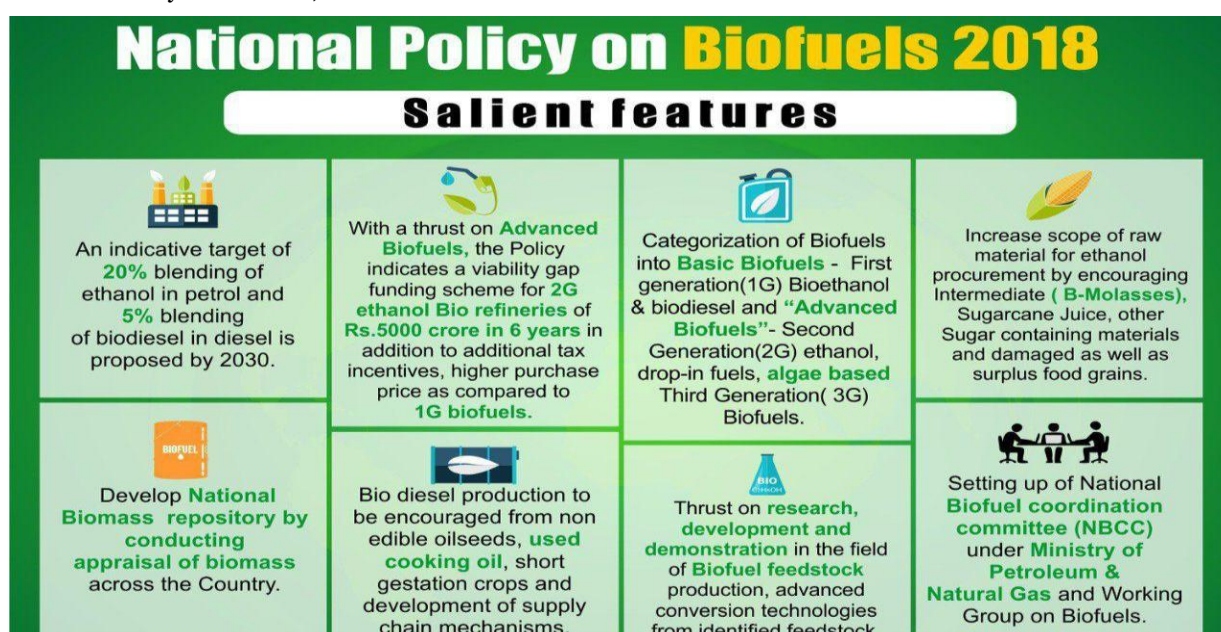
- Aim → It is observed every year on **10th August** to **create awareness** about the importance of **non-fossil fuels** as an **alternative** to conventional fossil fuels.
- Celebrated by → the **Ministry of Petroleum and Natural Gas** since 2015.

About Biofuel

- These are **liquid/ solid** or **gaseous fuels produced from biomass resources**. They are used **in place of**, or **in addition to**, diesel, petrol or other fossil fuels for transport, stationary, portable and other applications.
- Classification of Biofuels →
 1. First generation biofuels → It refers to the fuels that have been **derived from** sources like **starch, sugar, animal fats and vegetable oil**.
 2. Second generation biofuels → These are produced from **non-food crops**, such as **cellulosic biofuels** and **waste biomass** (stalks of wheat and corn, and wood). Examples include advanced biofuels like **biohydrogen, biomethanol**.
 3. Third generation biofuels → These are produced from specially **engineered energy crops** such as **algae**.
 4. Fourth-Generation Biofuels → It uses **genetically modified (GM) algae** to enhance biofuel production.

📌 Initiatives launched for Promoting Biofuels

- Pradhan Mantri JI-VAN Yojana
 - Launched in → **2019**
 - By → the **Ministry of Petroleum & Natural Gas**
 - Objective → to provide **financial support to Integrated Bio-Ethanol Projects** using lignocellulosic biomass & other renewable feedstock.
- Sustainable Alternative towards Affordable Transportation (SATAT) scheme
 - Launched in → **2018**
 - By → the **Ministry of Petroleum & Natural Gas**
 - Objective → to promote **Compressed Biogas as an alternative**, green transport fuel by establishing 5000 Compressed Biogas (CBG) plants across the country by **2023**.
- National Policy on Biofuels, 2018 →



16. One Sun, One World, One Grid (OSOWOG) initiative

Why in News?

- The Union Ministry of New and Renewable Energy (MNRE) has put calls for proposals to the One Sun, One World, One Grid (OSOWOG) initiative on hold till further notice.

About OSOWOG initiative

- OSOWOG initiative was **proposed by India** to set up a **framework for facilitating global cooperation** which aims at building a global ecosystem of **interconnected renewable energy resources** that can be easily shared.
- Parent Body → The Union **Ministry of New and Renewable Energy** (MNRE).
- Objective → To build global consensus about **sharing solar resources among more than 140 countries** of West Asia and South-East Asia.
- The vision is "**The Sun Never Sets**" and is a constant at some geographical location, globally, at any given point of time.

- This grid shall be **interconnected with the African power pools** also at the later stage.
- It has been taken up under the **technical assistance program** of the **World Bank**.
- With India at the center, the solar spectrum can be divided into two broad zones →
 - **Far East** – include countries like Myanmar, Vietnam, Thailand, Lao, and Cambodia.
 - **Far West** covering the Middle East and the African region.
- The OSOWOG would have three phases →
 1. In the first phase, **Middle East, South Asia** and **Southeast Asia** would be **interconnected**.
 2. In the second phase, **solar and other renewable energy resources rich regions** would be **interconnected**.
 3. The third phase– **global interconnection** of the power transmission grid.
- Potential and benefits of the initiative → India would generate **40% of power from non-fossil fuels by 2030** and has called for connecting solar energy supply across borders giving the mantra of '**One World One Sun One Grid**'.

17. Collaring of Fishing Cats

Why in News?

- Efforts are being made to begin the country's maiden exercise of collaring 10 fishing cats in the Coringa Wildlife Sanctuary, situated in Andhra Pradesh.

About Fishing Cats

- Scientific Name → **Prionailurus viverrinus**.
- Description → It is **twice the size of a house cat**.
- The fishing cat is **nocturnal** (active at night) and apart from fish also preys on frogs, crustaceans, snakes, birds, and scavenges on carcasses of larger animals.
- Habitat → In India, fishing cats are mainly found in the **mangrove forests of the Sundarbans**, on the **foothills of the Himalayas along the Ganga and Brahmaputra river valleys** and in the **Western Ghats**.
- Protection Status →
 - IUCN Red List: **Vulnerable**.
 - CITES: **Appendix II**
 - Indian Wildlife Protection Act, 1972: **Schedule I**
- Threats → **Shrimp farming** is a growing threat to mangrove habitats of the Fishing Cats.

📍 Coringa Wildlife Sanctuary

- Location → It is a wildlife sanctuary and estuary situated in **Andhra Pradesh**.
- Flora → It has **extensive mangrove** and **dry deciduous tropical forest**. It is the **second largest stretch** of mangrove forests in India.
- Fauna → It is home to the **critically endangered white-backed vulture and the long-billed vulture**.
- Its main wildlife attractions are **Golden Jackal, Sea turtle, Fishing cat, Estuarine Crocodile, Small Blue Kingfisher, Cattle Egret**.
- **Hope Island** and **Sacramento Island** located in the mangrove region are two important **nesting sites** for the **endangered Olive Ridley turtles**.

Do you know?

- The Andhra Pradesh government has begun the process to get UNESCO world heritage status for Godavari Mangroves at Coringa Wildlife Sanctuary.

18. Project Dolphin and Project Lion**Why in News?**

- Prime minister has announced the launch of Project Dolphin and Project Lion to protect these species in their natural habitat in a holistic manner.

About Project Dolphin

- The project is aimed at the conservation of the Gangetic Dolphins – **both riverine as well as the oceanic dolphins** in India.
- The project will conserve dolphins in aquatic habitat **using modern technology** especially in **anti-poaching activities**.

👉 Gangetic river dolphin

- It is India's national aquatic animal found in parts of the **Ganges, Meghna and Brahmaputra river systems in India, Nepal and Bangladesh**.
- IUCN Red List → **Endangered**
- Wildlife (Protection) Act, 1972 → **Schedule I**
- CITES → **Appendix I**.

👉 Project Lion

- The project is aimed at conservation of India's Asiatic Lions. It will focus on **habitat development, engaging technologies in lion management and addressing the issues of disease in lions**.

👉 Asiatic Lion

- They are confined to **Gir National Park** and its **surrounding environments** in Gujarat's Saurashtra district.
- IUCN Status → **Endangered**
- Wildlife (Protection) Act, 1972 → **Schedule-I**
- CITES → **Appendix I**

19. Air Unique-quality Monitoring(AUM) system**Why in News?**

- Recently, the Department of Science & Technology has revealed the Air Unique-quality Monitoring (AUM) Photonic System.

About AUM System

- What is it? → AUM is an **indigenous photonic system** for real-time remote monitoring of air quality parameters.

- Developed by → **Clean Air Research Initiative (DST)**, Gayatri Vidya Parishad-Scientific and Industrial Research Centre (**GVP-SIRC**) & **GVP College of Engineering, Visakhapatnam**.
- Features → It is an innovative application of the principles of **laser backscattering, statistical mechanics, optoelectronics, artificial intelligence, machine/deep learning, and Internet of Things**.
- It can **identify, classify, and quantify various pollutants** simultaneously (of orders of less than one part per billion) and meteorological parameters.
- It is **portable, compact, low powered and economical**, works on plug and play system, requires no setting uptime, and no additional civil infrastructure for housing.
- It provides **information on all gases and meteorological parameters** simultaneously.
- It is a **non-intrusive remote, real-time monitoring system** with very high sensitivities and accuracies.
- It is capable of monitoring in **both spatial and temporal domains**, with very high sampling frequencies.
- Significance → It can **boost the nation's efforts towards self-reliance in high-end technologies**.

📌 **Clean Air Research Initiative**

- It was launched in **2009** by the **Department of Science and Technology**.
- Aim → To **develop national research competence** to drive down the cost of clean energy through pre-competitive translational research, oriented research led disruptive innovations & human and institutional capacity development.

20. Microplastics

Why in News?

- A study published in Nature Communications has estimated the amount of microplastic pollution in the Atlantic Ocean and put it at 11.6-21.1 million tonnes.

About Microplastics

- What is this? → These are **plastic debris smaller than 5mm in length** or about the size of a sesame seed.
- Sources: They can be divided into two main categories according to their source → **Primary and Secondary microplastics**.
- Primary microplastics →
 - Directly released in the environment as **small particles**
 - Main sources: **laundering of synthetic clothes, abrasion of tyres through driving**, intentionally added microplastics in **personal care products** for example microbeads in facial scrubs.
- Secondary microplastics →
 - Originate from degradation of larger plastic objects such as **plastic bags, bottles or fishing nets**.
- Effects of Microplastics →
 - Microplastics found in the sea can be **ingested by marine animals**. The plastic then accumulates and can end up **in humans through the food chain**.
 - Consumption of plastic by humans is harmful since **several chemicals** that are used to produce plastics can be **carcinogenic**.

21. African Cheetahs

Why in News?

- Recently three African hunting cheetahs from South Africa has been introduced in Mysore zoo.

About

- The Mysuru zoo managed to get a male and two females from a **cheetah conservation centre in South Africa** under an **animal exchange programme**.
- The **Mysuru zoo** is the **second zoo** after Hyderabad zoo to have African cheetahs.

👉 African Cheetahs

- Around **6,500-7,000 African cheetahs** present in the wild.
- Characteristics → They are **bigger in size** as compared to Asiatic Cheetah.
- Conservation Status →
 - CITES status - **Appendix-I** of the List. This List comprises of migratory species that have been assessed as being in danger of extinction throughout all or a significant portion of their range.
 - IUCN status – **Vulnerable**.

22. Kudremukh National Park

Why in News?

- Recently, the Karnataka administration has said that declaring areas within 1 km from the border of Kudremukh National Park as Eco Sensitive Zone (ESZ) will not affect the life of residents inside the identified areas.

About Kudremukh National Park

- Location → **Karnataka**.
- History → It began its existence as a Reserved Forest in the year of **1916**, and was declared as a **National Park in the year of 1987**.
- Rivers → Three important rivers i.e. the **Tunga**, the **Bhadra** and the **Nethravathi** are said to have their origin in the park.
- Fauna → There are highly dense forests rich in varieties of wild life like as **tiger, leopard, wild dog, Malabar giant squirrel, common langur, sloth bear, gaur, sambar, spotted deer, barking deer and the sloth bear**.
- Ranges → The Park is divided into four ranges i.e. **Kudremukh, Kerekatte, Kalasa and Shimoga**.
- The **Kadambi Waterfalls** lies in the Kudremukh National Park.

23. Common Evening Brown

Why in News?

- Recently, Coimbatore-based Darshan M Trivedi enters the India Book of Records for photographing a single butterfly i.e. Common Evening Brown, in 67 variations.

About Common Evening Brown

- It is a common species of butterfly known as '**Melanitis Leda**'.
- Distribution → It is found in **Africa, South Asia and South-east Asia** extending to parts of Australia.

- It is only **active at dusk and dawn** and **prefers to dwell on the thicket floor**.
- It feeds on **rotting fruits and tree sap**.

24. Dragonfly Festival

Why in News?

- The first-ever State Dragonfly Festival, also known as Thumbimahotsavam 2020 will be organized in Kerala jointly by the World Wide Fund for Nature (WWF)-India State unit and Society for Odonate Studies (SOS).

About

- What is it? → It is a **part of a national dragonfly festival** being **organised by the WWF India, Bombay Natural History Society & Indian Dragonfly Society**.
- It is organised in association with the **National Biodiversity Board, UNEP, UNDP and IUCN** – Centre for Environment Conservation
- It aims at **building awareness** about the **importance of dragonflies** and damselflies and the need to conserve them
- The festival will consist of **training resource persons, webinars, and competitions**.
- Mascot: '**Pantalu**' is the official mascot of the festival.

👉 World Wide Fund for Nature:

- It is an international **non-governmental organization**.
- Founded in → **1961**
- Headquarter → **Gland** (Switzerland).
- Aim → **wilderness preservation** & the **reduction of human impact** on the environment.
 - Reports & programmes:
 - Living Planet Report
 - Earth hour
 - Debt-for-nature swaps

👉 Society for Odonate Studies (SOS)

- SOS is a **non-political, non-profit organization** formed to impart knowledge to the public on the insect order of **Odonata** (which comprises dragonflies and damselflies) and to conduct scientific studies, with the objective of conservation of the species and their habitats.

👉 Dragonfly

- What is it? → It is an **aerial predator insect** most commonly found near **freshwater habitats** throughout most of the world.
- Significance → Dragonflies act as important **bio-indicators** of the ecological health of an area.
- Bioindicators → These are **living organisms** such as **plants, plankton, animals and microbes** which are **used to assess the health of the natural ecosystem** in the environment.
- Examples of Bioindicators →
 - **Lichens** are powerful Bioindicators of air quality.

- **Algae blooms** are often used to indicate large increases of nitrates and phosphates in lakes and rivers among others.

25. Harit Path Mobile App

Why in News?

- Recently, the National Highways Authority of India (NHAI) has developed a mobile App, 'Harit Path' to facilitate creation of Green Highways across the country.

About

- Aim → The App will help to **monitor location, growth, species details, maintenance activities, targets and achievements** for each and every plant.
- Monitoring → **Photographs** along with data of the plants captured using Harit Path App shall be **uploaded every 3 months**.
- Accountability → **Highway contractors** shall be **accountable** for proper upkeep and maintenance of the plantation and liable to replace the missing/dead plants.
- Payment → Performance and growth of the plants shall be **linked to the payment to the contractors** for this work.

📌 Also Remember

- **Harit Bharat Sankalp**
 - It is a **nation-wide plantation drive by NHAI** with the aim to promote environment protection and sustainability. Under this initiative, NHAI has planted **over 25 lakh plants in 25 days** along the **stretches of the National Highways**.
- **National Highways Authority of India (NHAI)**
 - It was constituted under **National Highways Authority of India Act, 1988**. It is a **nodal agency** of the **Ministry of Road Transport and Highways**.
 - Purpose → It is responsible for the **development, maintenance and management of National Highways** entrusted to it and for matters connected or incidental there.

26. Indian Gaur (Bison)

Why in News?

- Recently, the forest officials in north Bengal have arrested a person for killing a bison (Indian Gaur) near Gorumara National Park.

About Indian Gaur (Bison)

- Location → **Native to South and Southeast Asia**
 - In India, they are found in **Nagarhole, Bandipur, Masinagudi National Parks and BR Hills**.
- Conservation Status →
 - **Vulnerable** in IUCN Red List.
 - Included in the **Schedule I** of the Wild Life Protection Act, 1972.
- Important Facts →
 - It is the **tallest species of wild cattle** found in India and **largest extant bovine**.

- Recently, the **first population estimation exercise** of the Indian Gaur (Bison) was carried out in the **Nilgiris Forest Division, Tamil Nadu**.
- Recently, the **conservation breeding of Gaur** was **started at Mysuru zoo** under the conservation breeding programme of the Central Zoo Authority (CZA).
- Threats → **Food Scarcity, Poaching, Habitat Loss, Human-Animal Conflict**.

📌 Gorumara National Park

- Location → It is situated at the **foothills of Eastern Himalaya in Terai region in West Bengal**.
- River → **Jaldhaka, a tributary of Brahmaputra River**, flows beside the Gorumara National Park.
- Timeline → Gorumara was **declared a reserve forest in 1895**, a **wildlife sanctuary in 1949** and a **national park in 1994**.
- It is famous for its **vast population of one-horned rhinoceros**.
- The **Chapramari Wildlife Sanctuary** is located on the **northern side** of Gorumara National Park.

27. Mahseer

Why in News?

- Recently, a team of researchers from the Department of Zoology, Andhra University have sighted and fished out a rare fish 'Mahseer' from the upper part of Sileru river.

About Mahseer

- It is a rare fish having its scientific name as '**Tor**'.
- IUCN List → '**Endangered**'.
- Distribution → It is normally found in the **Himalayan region** in the rivers running through the **cooler climes of Himachal Pradesh, Uttarakhand, Nepal and Bhutan**.
- **Golden Mahseer** is a species of a rare Mahseer fish which is found in the **Himalayan region**, where the **temperature around year does not exceed 20° Celsius**.
- In the **Godavari River** there are about **135 recorded fish species** and the **Grey Mahseer is one of them**.

📌 Sileru River

- It rises as the **Machkund River** in the **Eastern Ghats in northeastern Andhra Pradesh** and flows northward into Jalaput Reservoir on the border with Odisha.
- The Sileru River **empties into the Sabari River** at the **tri-junction boundary** point of Andhra Pradesh, Chhattisgarh and Odisha.
- The **Balimela Reservoir** is on the River Sileru which is situated in the Maikangiri District of Odisha.

28. Association of Renewable Energy Agencies of States (AREAS)

Why in News?

- Recently union government has launched a website for Association of Renewable Energy Agencies of States (AREAS).

About AREAS

- AREAS provides State Nodal Agencies (SNAs) for Renewable Energy (RE) to **interact and learn from each other's experiences** and **also share their best practices** and knowledge regarding technologies and schemes/programmes.
- Members → The **Union Minister for New & Renewable Energy** (NRE) is the Patron of the Association.
- **Secretary of MNRE** is the **ex-officio President** of the Association.
- **All SNAs** are **members of the Association**.
- Formation → AREAS is **registered under Society Registration Act, 1860**.

29. SUSTAINABLE OCEAN ECONOMY FOR 2050 REPORT

Why in News?

- A High-Level Panel for a sustainable Ocean Economy commissioned this report to examine the global net benefit of implementing sustainable, ocean-based interventions over a 30-year period (2020-2050).

Key Highlights of report

- Ability of the ocean to sustain livelihoods and prosperity is eroded by climate change, overfishing, pollution and a loss of biodiversity and coastal ecosystems.
- Report provides **benefit-cost ratio over a 30 year period** (2020-2050) by focusing on **four ocean-based policy interventions**:
 - Conserving and restoring **mangrove habitats**.
 - Scaling up **offshore wind production**.
 - **Decarbonising the international shipping sector**.
 - Increasing the production of **sustainably sourced oceanbased proteins**.
- Sustainable ocean-based investments will yield benefits at least five times greater than the costs, with minimum net returns of \$8.2 trillion over 30 years.
- It can deliver on three dimensions:
 - Protect**: reduce greenhouse gas (GHG) emissions while safeguarding biodiversity
 - Produce**: contribute to sustainably powering and feeding a planet of 9.7 billion people in 2050
 - Prosper**: create better jobs and support more equitable economic growth, household income and well-being.

About High Level panel for Sustainable Economy (Ocean Panel):

- It aims to **provide pragmatic solutions across policy**, governance, technology and finance, and ultimately develop an action agenda for transitioning to a sustainable ocean economy.
- **India is not a member**.
- It is supported by the **UN Secretary-General's Special Envoy for the Ocean**.
- It was **established in 2018** and has been working with government, business, financial institutions, the science community and civil society.

30. DRAFT ENVIRONMENT IMPACT ASSESSMENT (EIA), 2020

Why in News?

- Ministry of Environment, Forest and Climate Change (MoEF&CC) has published the draft Environment Impact Assessment (EIA) Notification 2020, which replaces the existing EIA Notification, 2006 brought under the Environment (Protection) Act (EPA), 1986.

Background

- India legislated an umbrella Act for environmental protection in 1986 i.e. the EPA after being **signatory to the Stockholm Declaration (1972)** on Environment and Bhopal gas leak disaster in 1984.
- Under the Act, the country notified its first EIA norms in 1994 setting in place a **legal framework for regulating activities that access, utilise, and affect (pollute) natural resources**. Every development project has been required to go through the EIA process (under Section 3 of the EPA) for obtaining prior environmental clearance ever since.
- The 1994 EIA notification was replaced with a modified draft in 2006.
- The government redrafted it again in 2020 to incorporate the amendments and relevant court orders issued since 2006, and to make the EIA “process more transparent and expedient.”



What is EIA?

- Environmental Impact Assessment or EIA is the process or **study which predicts the effect of a proposed industrial/infrastructural project on the environment**.
- Prevents the proposed activity/project from being approved without proper oversight or taking adverse consequences into account.
- compares various alternatives for a project and seeks to identify the one which represents the best combination of economic and environmental costs and benefits.

Science and Technology

1. Perseverance- NASA's mission to Mars

Why in News?

- National Aeronautics and Space Administration (NASA) has launched its Mars 2020 Perseverance rover aboard a United Launch Alliance Atlas V.

About

- What is it? → It is a **part of NASA's Mars Exploration Program**, a long-term effort of robotic exploration of the Red Planet.
- Landing site → **Jezero crater**.
- Perseverance is loaded with **seven instruments** chosen to help it achieve its mission objectives.
- Objectives →
 - Explore a geologically diverse landing site
 - Assess ancient habitability
 - Seek signs of ancient life, particularly in special rocks known to preserve signs of life over time
 - Gather rock and soil samples that could be returned to Earth by a future NASA mission
 - Demonstrate technology for future robotic and human exploration.
- The launch took place from **Cape Canaveral Air Force Station in Florida**.
- This is the third launch to Mars this month, following the **UAE's Hope** and **China's Tianwen-1 spacecraft**.

2. AJO-Neo

Why in News?

- Recently, researchers from the S.N. Bose National Centre For Basic Sciences (SNBNCBS), Kolkata have developed a device called "AJO-Neo " to measure neonatal bilirubin level.

About

- AJO-Neo → is a **non-contact** and **non-invasive spectrometry-based technique** for measurement of **neonatal bilirubin level** without limitations of other available bilirubin meters.
- Bilirubin → is a **yellowish substance in the blood**. It forms after red blood cells break down, and it **travels through liver, gallbladder, and digestive tract before being excreted**.
- It is a **necessary process** in the **body's clearance of waste products** that arise from the destruction of aged or abnormal red blood cells.
- Significance → The screening of bilirubin level in new-borns is **necessary to reduce incidents of a type of brain damage** called **kernicterus** that can result from high levels of bilirubin in a baby's blood.
- Kernicterus leads to **Neuro-psychiatry problems in neonates**.
- SNBNCBS → is an **autonomous research Institute** under the Department of Science and Technology (DST), Government of India.

3. Yellow Fever

Why in News?

- According to a study by the World Health Organization (WHO), the burden of yellow fever is projected to shift to Central and East Africa from West Africa by 2050.

About

- It is an **acute viral haemorrhagic disease** transmitted by infected mosquitoes. The yellow in the name refers to the **jaundice** that affects some patients.
- Symptoms → **Fever, headache, jaundice, muscle pain, nausea, vomiting and fatigue.**
- A small proportion of patients who contract the virus develop **severe symptoms** and approximately half of those die **within 7 to 10 days**.
- Endemic → The virus is **endemic in tropical areas** of Africa and Central and South America.
- Prevention → Yellow fever is prevented by an **extremely effective vaccine** which is **safe and affordable**.
- Eliminate yellow fever epidemics (EYE) 2017-2026 → It has been developed by a **coalition of partners** (Gavi, UNICEF and WHO) that **aims at ending yellow fever epidemics by 2026**.

4. SpaceX Crew Dragon

Why in News?

- The SpaceX Crew Dragon spacecraft with astronauts Bob Behnken and Doug Hurley onboard splashed down in the Gulf of Mexico on Sunday, Aug. 2, 2020.

About SpaceX Crew Dragon

- What is it? → Crew Dragon is a **part of the Dragon 2**, a class of **reusable spacecraft** developed and manufactured by American aerospace manufacturer **SpaceX**.
- It is the **fifth class** of US spacecraft to take human beings into orbit, after the **Mercury, Gemini, Apollo and Space Shuttle programs**.
- The rocket, named **Falcon 9**, which carried the spaceship into the orbit, was also **built by SpaceX**.
- It is done under the **Demo-2 Mission of NASA and SpaceX**.
- In particular, SpaceX was given **funding through NASA's Commercial Crew Program**, which started in 2010 to foster **public-private partnerships** for space exploration.
- Importance of the mission →
 - It was the **first time** that astronauts **used a spaceship built and launched by a private company**, and the event is being widely seen as the beginning of a new era in space exploration.
 - The rocket, named **Falcon 9**, which carried the spaceship into the orbit, was also **built by SpaceX**.

5. Pyrolysis

Why in News?

- Plastic from used personal protective equipment (PPE) can be transformed into renewable liquid fuels using chemical a process called pyrolysis, says a new study.

About Pyrolysis

- Pyrolysis is a thermochemical treatment, which **can be applied to any organic (carbon-based) product**.
- In this treatment, material is exposed to high temperature, and in the absence of oxygen goes through chemical and physical separation into different molecules.
- The decomposition takes place thanks to the limited thermal stability of chemical bonds of materials, which allows them to be disintegrated by using the heat. The word is coined from the Greek-derived elements pyro “**fire**” and lysis “**separating**”.
- It is considered as the **first step** in the **processes of gasification or combustion**.
- Applications → Aspirational applications of pyrolysis would **convert biomass into syngas and biochar, waste plastics back into usable oil, or waste into safely disposable substances**.

6. Ammonium Nitrate

Why in News?

- The catastrophic explosion at Beirut port in Lebanon was caused by over 2,700 tonnes of ammonium nitrate kept in storage for over six years.

About Ammonium Nitrate

- What is it? → It is a **white, crystalline chemical** which is **soluble in water**.
- Where is it used? → Ammonium nitrate (NH_4NO_3) is one of the **world's most widely used fertilizers** and is also used as one of the main components in mining explosives.
- It is produced as **small porous pellets**, or ‘prills’.
- Ammonium nitrate as an explosive →
 - Ammonium nitrate does **not burn on its own**, instead it **acts as a source of oxygen** that can accelerate the combustion (burning) of other materials.
 - Ammonium nitrate prills provide a **much more concentrated supply of oxygen** than the air around us.
 - This is why it is **effective in mining explosives**, where it's mixed with oil and other fuels.
 - At **high enough temperatures**, however, ammonium nitrate can **violently decompose on its own**.
 - This process creates gases including **nitrogen oxides and water vapour**.
 - It is this **rapid release of gases** that **causes an explosion**.



👉 Nitrogen di-oxide

- What is it? → Nitrogen dioxide (NO_2) is a **red, bad-smelling gas**.
- An ammonium nitrate explosion produces **massive amounts of nitrogen oxides**.
- Health effects → Nitrogen oxides are **commonly present in urban air pollution**, and can **irritate the respiratory system**.
- Elevated levels of these pollutants are **particularly concerning** for people with **respiratory conditions**.

7. Severe Fever with Thrombocytopenia Syndrome (SFTS)

Why in News?

- A new infectious disease called Severe Fever with Thrombocytopenia Syndrome (SFTS) caused by a tick-borne virus has killed seven people and infected 60 others in China.

About SFTS

- Severe fever with thrombocytopenia syndrome virus (SFTSV) belongs to the **Bunyavirus family** and is **transmitted to humans through tick bites**.
- Origin → The virus was **first identified** by a team of researchers in China in 2009.
- Symptoms → **High fever, chills, loss of appetite, gastrointestinal symptoms, neurological abnormalities, thrombocytopenia** (extremely low levels of platelets), **leukocytopenia** (low levels of white blood cells) so on.
- Risk Factor → The risk factors observed in more serious cases include **multi-organ failure, hemorrhagic manifestation** and the appearance of **central nervous system (CNS) symptoms**.
- Treatment → While a vaccine to treat the disease is **yet to be successfully developed**, the antiviral drug **Ribavirin** is known to be effective in treating the illness.
- Concerns → Due to current case fatality rate of **between 16 and 30%**, the virus has been **listed among the top 10 priority diseases** Blueprint by the World Health Organisation (**WHO**).

8. SpaceX's SN5 Starship prototype

Why in News?

- Recently, SpaceX's full-scale SN5 Starship prototype successfully flew to an altitude of over 500 feet for a little less than 60 seconds.

About SN5 Starship prototype

- It is a **stainless-steel test vehicle** which is a part of the Starship spacecraft
- It is powered by a **single Raptor engine**.

👉 Starship

- Starship is a **spacecraft** and **super-heavy booster rocket**.
- It acts as a **reusable transportation system for crew and cargo** to the Earth's orbit, Moon and Mars.
- SpaceX has described Starship as "**the world's most powerful launch vehicle**" with an ability to **carry over 100 metric tonnes** to the Earth's orbit.
- Starship has been **under development since 2012** which is a part of Space X's central mission to make interplanetary travel accessible and affordable. The company is working on building a fleet of reusable launch vehicles.
- SpaceX is planning its first cargo mission to the **red planet by 2022 and by 2024**.
- Benefits → Starship can deliver satellites **at lower marginal costs** than SpaceX's Falcon vehicles and can also **make interplanetary travel accessible and affordable**.

9. Plasmodium Vivax Malaria

Why in News?

- Recently, an international team has developed a system to breed the parasite Plasmodium vivax in the lab and then infect cultured human liver cells with it.

About

- What is it? → Plasmodium vivax is a **protozoal parasite** and a **human pathogen**.
- This parasite is the **most frequent** and **widely distributed cause of recurring malaria**.
- The parasite can **remain in the liver in a dormant stage** and **relapse later**.
- It can be **difficult to detect** P. vivax, since it usually circulates at low levels in the blood.
- 4 countries account for more than **80% of estimated cases** of P. vivax cases (**Ethiopia, India, Indonesia, and Pakistan**).
- Certain malaria-endemic countries have even abandoned chloroquine for P. vivax treatment but fortunately **chloroquine is still effective in India**.
- The currently used **anti-relapse drug, Primaquine**, has many undesirable side-effects, especially in patients with a genetic defect called.

10. Swachh Bharat Mission Academy

Why in News?

- Ministry of Jal Shakti has launched the Swachh Bharat Mission Academy during the week long “GandagiMuktBharat” Campaign.

About

- What is it? → Swachh Bharat Mission Academy is a **phone-based academy** having IVR based **free mobile online learning course**.
- Features → The training course contains a **60 minutes module** spanning various topics under **ODF-S** and **Solid Waste Management**.
- The SBM Academy course has **four chapters**, each with **four audio lessons** and a **multiple-choice quiz** at the end of the chapter. At present the course is **available only in Hindi**.
- Significance → It will significantly **boost the capacity building** efforts in **training of Swachhagrahis** as well as PRIs members, community-based organizations, NGOs, SHGs and others who are associated with phase 2 of SBM(G).

11. Sputnik V

Why in News?

- Russian has launched the world's first coronavirus vaccine named ‘Sputnik V’.

About

- Developed by → **Gamaleya Research Institute** and the **Russian defence ministry**.

- How does it work? → The vaccine is based on the DNA of a SARS-CoV-2 type adenovirus, a common cold virus.
- The vaccine uses the weakened virus to deliver small parts of a pathogen and stimulate an immune response.
- Currently, WHO and Russian health authorities are discussing the process for possible WHO prequalification for its newly approved COVID-19 vaccine.
- The vaccine is named Sputnik V, a reference to the first orbital satellite, which was launched by the Soviet Union in 1957 and set off the global space race.

12. Dwarf Planet Ceres

Why in News?

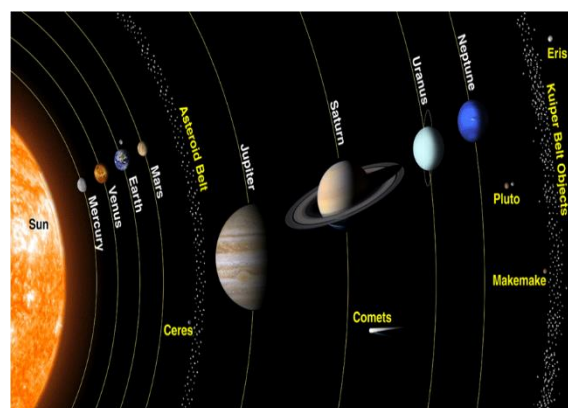
- Scientist have recently found that it is said to have salty water underground, by observing the cracks created to form a crater.

About

- This crater is said to have formed by an impact approximately 22 million years ago.
- The scientists have given Ceres the status of an “ocean world” as it has a big reservoir of salty water underneath its frigid surface.
- This has led to an increased interest of scientists that the dwarf planet maybe habitable or has the potential to be.

👉 Ceres

- Ceres is a dwarf planet and it is the largest celestial object in the asteroid belt between Mars and Jupiter.
- It has a diameter of about 950 km, which is more than one-fourth of Earth's moon.
- It has 92 km wide crater named Occator located in Ceres' northern hemisphere.



13. Raman

Why in News?

- Aerospace startup Skyroot Aerospace has successfully test fired an upper-stage rocket engine recently.

About

- It was developed by the Skyroot firm that is headquartered at Hyderabad.
- The 3-D printed rocket engine was named as Raman, after Nobel laureate CV Raman.
- It is India's first 100% 3D-printed bi-propellant liquid rocket engine injector.
- It has fewer moving parts and weighs less than half of conventional rocket engines with a similar capacity.

- The engine is capable of **multiple restarts**, enabling the launch vehicle to **insert various satellites into multiple orbits in a single mission**.
- The company has **designed in-house software** for launch vehicle guidance, **navigation**, and **control functions**, and is testing onboard its avionics modules.

14. Mega labs

Why in News?

- The Council of Scientific and Industrial Research (CSIR) is working on developing “mega labs” to ramp up testing for COVID-19 as well as improve the accuracy rate.

About Mega labs

- What is it? → These labs will use **Next Generation Sequencing machines** (NGS) which are normally used for sequencing human genomes to **sequence 1,500 to 3,000 viral genomes** at a go to detect the SARS-CoV-2 virus.
- Benefits → These genome sequencing machines can substantially detect the possible presence of the virus **even in several instances**.

Also Remember

- Genome sequencing → It means determining the **order of the four chemical building blocks** called “**bases**” that make up the DNA molecule.
- Next Generation Sequencing (NGS) → It allows **parallel Genome sequencing** resulting in the generation of **giga bases of data** in a short amount of time. This has **reduced the cost per genome significantly**, making genomic data more accessible to individual researchers.
- Comparison with RT-PCR Test → The **NGS machines** can detect the presence of the virus **even in several instances** where the traditional **RT-PCR** (reverse transcription polymerase chain reaction) **tests fail**.
 - This is because the RT-PCR test identifies the SARS-CoV-2 virus by exploring **only specific sections** whereas the **genome method can read a bigger chunk of virus genome**.

15. Helium Enhanced Cool Stars

Why in News?

- Indian Institute of Astrophysics (IIA) an autonomous institute of DST, have discover He-enhanced cool bright stars among the metal-rich parts of Omega Centauri globular cluster.

About

- This is the first time He-abundance has been found in **Omega Centauri**.
- **Globular clusters** are the stellar systems with millions of stars formed from the **same gaseous cloud**.
- Omega Centauri → is the **brightest** and **the largest globular cluster** in our Milky Way Galaxy.
- Usually, the stars formed will be **homogeneous in their chemical composition** of **elemental abundances**.
- But, there are **clusters** which **deviate from this norm**.
- The different stars of Omega Centauri do **not show the same metal content**, a parameter that indicates its age, but a large range in it.

- The study provides a **very important clue** for the **origin of the He-enhanced population** establishing that these are the second generation of stars formed from the **metal-rich** and **He-enhanced material** from the first generation of stars.

16. Sarabhai Crater

Why in News?

- The Indian Space Research Organization (ISRO) has named a crater captured by Chandrayaan 2 Orbiter after Vikram Sarabhai.

About Sarabhai Crater

- "Sarabhai" Crater is named after **Dr Vikram Sarabhai**.
- To the 300km east of this crater lie the landing sites of **American Apollo 17** and **Soviet-launched Luna 21 missions**.
- The Crater has a **depth** of around **1.7 Kms** taken from its raised rim and the slope of Crater walls is in between 25 to 35 degree.
- These findings will help the Space Scientists to **understand further the process on the lunar region filled with lava**.

17. Collaborative Robotics Innovation Hub

Why in News?

- Recently, the Department of Science & Technology has sanctioned ₹170 crores to Indian Institute of Technology Delhi to develop a technology innovation hub on Collaborative Robotics (Cobotics).

About

- What is it? → The hub will be established to cover **four verticals** i.e. **medical robotics, agriculture and disaster management, defence, and smart manufacturing**.
- The Technology Innovation Hub on Cobotics at IIT Delhi is known as '**I-Hub Foundation for Cobotics (IHFC)**'.
- The IHFC will **perform research** in the area of **Collaborative Robotics** i.e. **Cobotics** as well as proactively translate the outcomes into products for the benefit of the humanity.
- The focus of the hub will be the **technologies** where **robots should be able to work together with humans** for maximising the benefit of human intelligence with robots' precision and ability to work tirelessly.

18. Swadeshi Microprocessor Challenge

Why in News?

- Union Minister of Communications and Electronics & Information Technology has launched "Swadeshi Microprocessor Challenge- Innovate Solutions for #Atma Nirbhar Bharat".

About Swadeshi Microprocessor Challenge

- What is it? → It aims to **invite innovators, startups and students** to **use microprocessors to develop various technology products**.
- Features → **IIT Madras** and Center for Development of Advanced Computing (**CDAC**) have developed two microprocessors named **Shakti and Vega** respectively under the **Microprocessor Development Programme** of the **Ministry of Electronics and IT** (MeitY).
- These microprocessors could be **used by innovators, startups and students** to **develop various technology products**.
- Funding → Financial support to the tune of **Rs. 4.30 Crore** at **various stages of the Challenge** for **developing the hardware prototype** and **incubating** a start-up is being offered.

👉 Microprocessor

- It is an **integrated circuit (IC)** that contains a **few millions of transistors** (semiconductor-based electronic devices) fused on a semiconductor chip.
- It is just a **few millimetres in dimension** and is **used in almost every electronic device** from microwave and washing machine in homes to advanced supercomputers of a space station.

19. Digital Quality of Life Index 2020

Why in News?

- Digital Quality of Life Index 2020 was released recently.

About Index

- Prepared by → **Surfshark**, a virtual private network (VPN) provider based in the British Virgin Islands.
- Parameters → It seeks to rank countries on **internet affordability and quality**, and **electronic infrastructure, security and government**. All parameters have equal weightage.

👉 Performance

- Top 3 → Scandinavian countries **Denmark and Sweden topped the index**, with **Canada** rounding up the top three.
- India Position → Of 85 countries, India ranked **9th on the internet affordability indicator**, and **15th on e-government**.
- Overall, India is **ranked 57th**.

20. Science and Technology Indicators (STI)

Why in News?

- Science and Technology Indicators (STI), 2018, a periodic compendium of the state of scientific research in India was recently released.

About

- Prepared by → National Science and Technology Management Information System (**NSTMIS**), a division of Department of Science and Technology (**DST**).

- It is based on data provided by a **range of scientific establishments** across the country.

👉 Findings

- India's **private sector research companies** appear to employ a **larger proportion of women in core research and development activities** as compared to government-funded major scientific agencies.
- The **large drop** in the number of women between the doctoral and professional stages may be due to:
- Social pressure on women** to have a family and sacrifice professional career.
- Patriarchal attitudes** in hiring practices.

21. Brown Dwarfs

Why in News?

- Recently, Citizen Scientists and NOIR Lab facilities discovered almost 100 nearby cool Brown Dwarfs.

About Brown Dwarfs

- What is it? → Brown dwarf are an **astronomical object** that is **intermediate between a planet and a star**.
- Property → They are usually have a **mass less than 0.075 that of the Sun**, or roughly 75 times that of Jupiter.
- They are **outside the solar system**, they give off little light and energy and they are challenging to locate.
- Brown dwarfs are also called **failed stars**, because their **masses are heavier than planets but lighter than stars**.
- Due to their small masses, they are **unable to sustain fusion** of their hydrogen to produce energy.
- It is believed that some of the more massive brown dwarfs **fuse deuterium or lithium** and **glow faintly**.

22. Flavonoids

Why in News?

- Recently, scientists from Agharkar Research Institute (ARI), found the first synthetic route for producing flavonoids molecules related to the treatment of tuberculosis and chikungunya.

About

- Significance of the Research → It will **ensure their availability at all seasons** without the dependence on natural timings of the plantations.
- It is for the **first time** that scientists have been **able to synthesize** the **flavonoid molecules** such as **rugosa flavonoids, podocare flavone and isoflavone** in a lab.
- These three molecules have **so far been isolated from plants only** and are found to **inhibit tuberculosis and chikungunya**.

👉 Flavonoids

- Flavonoids are **part of the polyphenol class** of **phytonutrients** (plant chemicals) found in almost **all fruits and vegetables**.
- Along with carotenoids (organic pigments), they are **responsible for the vivid colours** in fruits and vegetables.

- Polyphenols have historically been **used in Chinese** and **Ayurvedic medicine** and are associated with **skin protection**, **brain function**, **blood sugar** and **blood pressure regulation**.
- These are **powerful antioxidants** with **anti-inflammatory** and **immune system benefits** as well.
- A diet rich in flavonoids can **protect from diseases** related to heart, liver, kidney, brain and other infectious diseases.

23. Gaofen-9 05 Satellite

Why in News?

- Recently, China had successfully launched the Gaofen-9 05 Satellite.

About

- What is it? → It is a **new optical remote-sensing satellite** carried by Long March-2D carrier rocket.
- It was launched from the **Jiuquan Satellite Launch Center** along with another satellite named Tiantuo-5.

24. Magnetic Hyperthermia-Mediated Cancer Therapy (MHCT)

Why in News?

- Scientists from Institute of Nano Science & Technology (INST) are making efforts to make magnetic hyperthermia-mediated cancer therapy as desired therapy for inoperable tumours.

About MHCT

- What is it? → It is a **non-invasive cancer treatment**.
- Technique → It involves the **delivery and localisation of magnetic materials** within the targeted tumour site followed by subsequent application of an **alternating magnetic field**(AMF) thereby **generating heat** at the tumour site.
- Applications → It can **efficiently act against deep-seated inaccessible solid tumours** like **glioblastoma** and is **highly thermo-sensitive** towards normal cells with minimal toxicity against healthy counterparts.
- INST is an **autonomous institute** of Department of Science and Technology (DST).

25. AstroSat

Why in News?

- Inter-University Centre for Astronomy and Astrophysics (IUCAA) has said that AstroSat has detected an extreme ultraviolet (UV) light from a galaxy called AUDFs01 which is 9.3 billion light-years away from Earth.

About

- It is **India's first dedicated multi wavelength space observatory** launched on a PSLV-XL in 2015.
- Aim → The mission aims for a **detailed understanding of our universe**. One of the unique features of the mission is that it enables the simultaneous multi-wavelength observations of various astronomical objects with a single satellite.
- Objectives → The scientific objectives of the mission are:

- To **understand high energy processes in binary star systems** containing neutron stars and black holes
- Estimate **magnetic fields of neutron stars**
- **Study star birth regions** and high energy processes in star systems lying beyond our galaxy
- **Detect new briefly bright X-ray sources** in the sky
- Perform a **limited deep field survey** of the Universe in the Ultraviolet region.

26. Glanders

Why in News?

- The Delhi High Court has asked municipal bodies to take steps to prevent spread of glanders disease in animals.

About Glanders

- It is an **infectious disease** that is caused by the **bacterium Burkholderia mallei**. It is primarily a disease **affecting horses**, but it also affects donkeys, mules, goats, dogs and cats.
- Symptoms → **Fever with chills and sweating, Muscle aches, Chest pain, Muscle tightness, Headache, Nasal discharge** among others.
- Transmission →
 - The bacteria that cause glanders are **transmitted to humans through contact with tissues or body fluids** of infected animals.
 - It may also be **inhaled via infected aerosols** or **dust contaminated** by infected animals. Sporadic cases have been documented in **veterinarians, horse caretakers, and laboratorians**.
- Prevention → Presently, there is **no vaccine available** for glanders. In countries where glanders is endemic in animals, prevention of the disease in humans involves identification and elimination of the infection in the animal population.

27. Asteroid 2018VP1

Why in News?

- According to the Center for Near Objects Studies at NASA's Jet Propulsion Laboratory, an asteroid named 2018VP1 that is on a collision course with Earth could come very close to the planet.

About

- The asteroid is **expected to collide the planet earth** on a day before the US will vote in its presidential elections, hence dubbed as the '**Election Day Asteroid**'.
- Discovered- The asteroid was first discovered at the **Palomar Observatory in California's San Diego** County two years ago.
- Asteroid 2018VP1 is **very small** (approx. 6.5 feet) and **poses no threat to Earth**.
- According to NASA, it currently has a **0.41% chance of entering our planet's atmosphere**, but if it did, it would **disintegrate** due to its extremely small size.

What is Asteroid?

- Apart from the stars, planets and satellites, there are **numerous tiny bodies** which also move around the sun. These bodies are called **asteroids**. They are found **between the orbits of Mars and Jupiter**.
- Asteroids are **left over from the formation of our solar system**. Our solar system began about 4.6 billion years ago when a **big cloud of gas and dust collapsed**.

28. Polio

Why in News?

- Africa Regional Certification Commission, an independent body has declared Africa free from wild polio.

About Polio

- It is a highly infectious disease **caused by a virus**. It **invades the nervous system** and can cause total paralysis in a matter of hours.
- Transmission → The virus is **transmitted by person-to-person** spread mainly through the **faecal-oral route** or by a common vehicle (for example contaminated water or food) and multiplies in the intestine.
- Symptoms → **Fatigue, headache, vomiting, stiffness of the neck and pain in the limbs**.
- People at Risk → Polio mainly **affects children under 5 years of age**.
- Prevention → There is **no cure for polio**, it can **only be prevented**. **Polio vaccine**, given multiple times, can protect a child for life.
- Is Polio Eradicated? → **Two out of three strains** of wild poliovirus have been **eradicated worldwide**. Africa has also been declared free of the last remaining strain of wild poliovirus. The disease is now **only found in Afghanistan and Pakistan**.

Global Polio Eradication Initiative (GPEI):

- It is a **public-private partnership** led by national governments with **five partners** – WHO, Rotary International, US Centers for Disease Control and Prevention (CDC), United Nations Children’s Fund (UNICEF), Bill & Melinda Gates Foundation and Gavi, **the vaccine alliance**.
- Its goal is to **eradicate polio worldwide**.

29. Wolbachia Bacterium

Why in News?

- A study has suggested that the “Wolbachia method” could be used to significantly reduce the spread of dengue.

About

- What is it? → They are **safe, natural bacteria** present in up to 60% of insect species including some mosquitoes.
- They are **safe for humans, animals** and the **environment**.
- However, it is **not usually found** in the **Aedes aegypti mosquito** (responsible for transmitting viruses such as Zika, dengue and chikungunya).
- How does it work? → The method involves **introducing Wolbachia into populations of Aedes aegypti**. When the Wolbachia-infected mosquitoes breed with their wild counterparts, the percentage of mosquitoes carrying the bacterium grows.

- It is **not fully understood** why the Wolbachia bacterium interferes with the transmission of dengue. One theory is that the **bacterium prevents dengue viruses** from **replicating in mosquito cells**.

Geography

1. Kutch Mainland Fault (KMF)

Why in News?

- A recent study has suggested that the Kutch Mainland Fault (KMF), which has been dormant for the last 1,000-odd years, has been accumulating stress within and could trigger an earthquake.

About KMF

- The Kutch Mainland Fault (KMF) is the major east-west trending fault.
- The fault line extends for over 150 km from Lakhpat to Bhachau.
- The fragile crust of Kutch holds four major active faults which frequently liberate energy in the form of earthquakes.
- The devastating January 26, 2001 earthquake had occurred from the South Wagad fault system.
- The study also gives evidence that there were four major earthquakes on KMF between 5600 and 1000 BP (before present), a time scale used by geologists to define events that happened before the origin of radiocarbon dating technology in the 1950s.

2. Galapagos Islands

Why in News?

- Ecuador is on alert due to the appearance of Chinese fishing boats off its Galapagos Islands.

About

- It is an archipelago of volcanic islands distributed on either side of the equator in the Pacific Ocean. It is administratively a province of Ecuador.
- Formation → The islands were formed at the meeting point of three tectonic plates—the Nazca, Cocos, and Pacific and are situated at the crossroads of three major Pacific currents.
- World Heritage Site → In 1978, the Galapagos islands was designated as a UNESCO World Heritage site.
- Significance → The islands are known for their large number of endemic species such as land iguana, giant tortoise that were studied by Charles Darwin which contributed to the inception of Darwin's theory of evolution.
- Chinese fishing ships are frequent in Ecuador's waters during august month of the year as the cold Humboldt Current brings in nutrients that lead to a high congregation of hammerhead sharks.



👉 Humboldt Current

- The Humboldt Current, also called the Peru Current, is a cold, low-salinity ocean current that flows north along the western coast of South America.

- The Humboldt Current is a **highly productive ecosystem**.
- It accounts for roughly **18-20% of the total worldwide marine fish catch**.

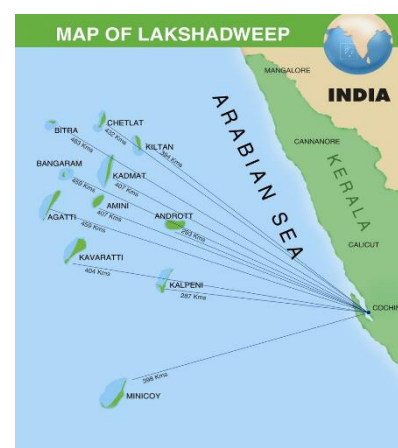
3. Agatti Island

Why in News?

- Recently, the southern bench of the National Green Tribunal (NGT) has granted an interim stay on felling of coconut trees on Agatti Island in Lakshadweep.

About

- Location → It is in the **UT of Lakshadweep**.
- It is at a **distance of 459 km** (248 nautical miles) **from Kochi** and is located to the **west of Kavaratti Island**.
- The lagoon area of this island is **habitat of coral growth and multicolored coral fishes** in the lagoons.
- Economy → **Fishing** is the most **important industry** which is perhaps the only island besides Minicoy getting surplus fish.
- Next to fishing, **coir** (coconut fibre) and **copra** (dried meat or kernel of the coconut) are the main industries.
- Issue →
- The tree-felling is also **violating** the Union Territory's (UT) **Integrated Island Management Plan (IIMP)**.
- IIMP was formulated on the basis of a report submitted by the Supreme Court-appointed Expert Committee, headed by **Justice R.V. Raveendran**.
- It includes **holistic island development plans** prepared by the National Centre for Sustainable Coastal Management (NCSCM) for **implementation by coastal States/ UTs**.



4. Aravali Range

Why in News?

- On the eve Raksha Bandhan, using leaf vines, women and children tied symbolic rakhi to the trees and took an oath to protect the Aravali forests.

About

- They are aligned in **north-east to south-west direction**. They run between Delhi and Palanpur in Gujarat.
- The highest peak is **Guru Shikharat** 1,722 metres (5,650 ft).
- They are one of the **oldest fold mountains of the world** and the **oldest in India**.
- According to some geographers, one **Branch of the Aravalis extends to the Lakshadweep Archipelago** through the Gulf of Khambhat and the other into Andhra Pradesh and Karnataka.



- At the south-west extremity the range rises to over 1,000 m. Here **Mt. Abu** (1,158 m), a **small hilly block**, is separated from the main range by the valley of the Banas.
- **Pipli Ghat, Dewair and Desuri passes** allow movement by roads and railways.
- The Aravalli Range joins two of the ancient earth's crust segments that make up the greater Indian craton—**Aravalli Craton and Bundelkand Craton**.
- Rivers → Three major rivers and their tributaries flow from the Aravalli, namely **Banas and Sahibi rivers** which are tributaries of Yamuna, as well as **Luni River** which flows into the Rann of Kutch.
- The Great Green Wall of Aravalli → It is a **1,600 km long and 5 km wide** green ecological corridor along Aravalli range from **Gujarat to Delhi**.
- To be implemented on a concept similar to the **Great Green Wall of Sahara in Africa**, it will act as a buffer against pollution.

5. Beirut

Why in News?

- A huge explosion recently devastated the port area of the capital Beirut. The blast was caused by 2,750 tonnes of ammonium nitrate stored unsafely in a warehouse.

About

- What is it? → It is the **capital and largest city of Lebanon**.
- Location → Located on a **peninsula** at the midpoint of **Lebanon's Mediterranean coast**, Beirut is an important regional seaport.



6. Zimbabwe

Why in News?

- Recently, the US has imposed sanctions on an ally of Zimbabwe's president.

About

- It is a **landlocked country of southern Africa**.
- It shares border with the **Republic of South Africa, Botswana, Zambia, and Mozambique**.



7. Mullaperiyar Dam

Why in News?

- The rising water levels in the Mullaperiyar Dam due to heavy rains and issuance of the first warning has triggered panic among people living downstream.

About

- It is located on the **confluence of the Mullayar and the Periyar rivers in Kerala**, and is operated and maintained by Tamil Nadu.
- The dam is **in the state of Kerala** but it was given on **lease to the Tamil Nadu** on 29th October, 1886 for 999 years.
- Tamil Nadu** was permitted to **generate power** from the dam, through an agreement in 1970.



8. Sunspots

Why in News?

- A massive Sunspot group, AR2770 was observed using images of the Sun's surface from NASA's Solar Dynamics Observatory (SDO).

About Sunspots

- What is it? → It is an area on the Sun that appears **dark** on the surface and is **relatively cooler than surrounding parts**.
- Why are sunspots relatively cool: It's because they form at areas where **magnetic fields are particularly strong**.
- These magnetic fields are so strong that they **keep some of the heat within the Sun** from reaching the surface.
- Significance → These spots are the **visible markers of the Sun's magnetic field** which forms a blanket that protects the solar system from harmful cosmic radiation.
- Solar Cycle → It is the cycle that the Sun's magnetic field goes through approximately **every 11 years**. The greatest number of sunspots in any given solar cycle is designated as **solar maximum**. The lowest number is **solar minimum**.
- Solar Flares → The magnetic field lines near sunspots often **tangle, cross, and reorganize**. This can cause a **sudden explosion of energy** called a solar flare.
 - Solar flares release a **lot of radiation into space**. If a solar flare is very intense, the radiation it releases can **interfere with our radio communications** here on Earth.
- Coronal Mass Ejection (CME) → These are **huge bubbles of radiation and particles from the Sun**. They explode into space at very high speed when the Sun's magnetic field lines suddenly reorganize.

9. MOUNT SINABUNG

Why in News?

- The Mount Sinabung of Indonesia has erupted again releasing a huge column of ash.

About

- It is located in the **North Sumatra Island of Indonesia**. The volcano was dormant for 400 years and erupted recently in the year 2010 and in 2014.
- Mt Sinabung is **among more than 120 active volcanoes** in Indonesia which is prone to seismic upheaval due to its location on the Pacific “**Ring of Fire**”.

Ring of Fire

- Ring of Fire also referred to as the **Circum-Pacific Belt**, is a path along the Pacific Ocean **characterized by active volcanoes and frequent earthquakes**.
- It traces boundaries between several tectonic plates—including the **Pacific, Juan de Fuca, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates**.



10. Milne ice shelf

Why in News?

- The last fully intact ice shelf in the Canadian Arctic named Milne Ice Shelf has collapsed losing more than 40% of its area.

About

- It is a **fragment of the former Ellesmere Ice Shelf** which is located in Nunavut, Canada.
- It is the second largest ice shelf in the Arctic Ocean and is situated on the **north-west coast of Ellesmere Island**.



11. Boreal Summer Intra-Seasonal Oscillation (BSISO)

Why in News?

- Researchers at the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad have reportedly found a way to better forecast the Boreal Summer Intra-Seasonal Oscillation (BSISO).

About BSISO

- What is it? → BSISO is a **movement of convection** (heat) from the **Indian Ocean to the western Pacific Ocean** roughly every 10-50 days during the monsoon (June-September).
- The BSISO of the **Asian summer monsoon** (ASM) is one of the most prominent sources of **short-term climate variability** in the global monsoon system.

📌 Recent Finding

- They found that waves induced by active phases of BSISO are **nearly 0.5 meters higher** than those which occur during other phases of BSISO.
- The active phase (between June and August) **enhances monsoon winds** and hence the **surface waves**.
- Some other phases **induce high wave activity** in the **north Indian Ocean** and the **Arabian Sea**
- **Compared with** the related **Madden-Julian Oscillation (MJO)** it is more **complex in nature**, with prominent northward propagation and variability extending much further from the equator.
- **Wave forecast advisories** based on the BSISO would be **more useful** for **efficient coastal and marine management**.

📌 Madden Julian Oscillation (MJO)

- What is it? → MJO is an **oceanic-atmospheric phenomenon** which **affects weather activities** across the globe. It brings **major fluctuation** in tropical weather on weekly to monthly timescales.
- It can be defined as an **eastward moving 'pulse' of clouds, rainfall, winds and pressure** near the equator that typically **recurs every 30 to 60 days**.
- It's a **traversing phenomenon** and is most **prominent over the Indian and Pacific Oceans**.
- The MJO consists of **two parts or phases** →
 - **Enhanced rainfall (or convective) phase** - winds at the surface converge, and the air is pushed up throughout the atmosphere.
 - Such rising air motion in the atmosphere tends to increase condensation and rainfall.
 - **Suppressed rainfall phase** - winds converge at the top of the atmosphere, forcing air to sink and, later, to diverge at the surface.
 - As air sinks from high altitudes, it warms and dries, which suppresses rainfall.
- The **Indian Ocean Dipole (IOD)**, **El Nino** and **MJO** are **all oceanic and atmospheric phenomena**, which affect weather on a large scale.
- **IOD** only pertains to the **Indian Ocean**, but the other two affect weather on a global scale-up to the mid-latitudes.
- **IOD and El Nino remain over their respective positions**, while MJO is a traversing phenomenon.

12. Addu Atoll

Why in News?

- India and Maldives signed a contract for development of five eco-tourism zones in Addu atoll of the island nation.

About Addu Atoll

- These **eco-tourism zones** are part of grant projects being implemented under the **High-Impact Community Development project (HICDP) scheme** which involves a total grant assistance of **5 million US dollars** to the Maldives.
- Addu Atoll also known as **Seenu Atoll**, is the **southernmost atoll of the Maldives**.



📌 Atoll

- An atoll is a **ring-shaped coral reef** that surrounds a body of water called a **lagoon**.

13. Greater Male Connectivity Project

Why in News?

- India has announced a slew of connectivity measures for the Maldives in an effort to help Maldives deal with the economic impact of the COVID-19 pandemic.

About Greater Male Connectivity Project

- It is a **6.7-kilometre bridge project** connecting Male with Gulhifalhu Port and Thilafushi industrial zone that will help revitalise and transform Maldivian economy.
- India will provide a **\$400 million Line of Credit** and \$100 million grant for the project.

📌 Cargo Ferry Service

- A **regular cargo ferry service** between India and Maldives will be started to boost trade and commerce.

📌 Air Travel Bubble

- India is starting an air connectivity "**bubble**" for travel **with Maldives to sustain** and **promote the people-to-people ties** between the two countries.

📌 Submarine Cable

- It is a **communication cable** laid on the sea bed **between land-based stations** to carry telecommunication signals across stretches of ocean and sea. India will lay down a submarine cable for telecom connectivity in Maldives.



14. Seagrass

Why in News?

- The UN environmental programme has released a report warning that fishing trawlers, seaweed farming and tourism off the coast of Kenya is threatening the survival of seagrasses.

About

- What is it? → These are **flowering marine plants** that have adapted to survive in marine conditions.
- Where are they found? → They are mostly **found in shallow sandy bottom habitats** and can form **dense extensive meadows**. There are about **72 seagrass species** distributed across the world's temperate and tropical oceans.
- Benefits →

- They are known as the “**lungs of the sea**” because one square meter of seagrass can generate 10 liters of oxygen every day through photosynthesis.
- Seagrasses can **trap sediments to absorb nutrients** and give us **clear waters**.
- They are a **source of food, shelter and nursery areas** for many organisms, including commercially important fish.
- They are also important **carbon sinks capable** of trapping carbon from the atmosphere 40 times faster than tropical rainforests and storing it for hundreds of years.
- Threats → a) **Climate change** b) **Global warming** c) **Erosion and Sediment discharge** d) **Overfishing** e) **Pollution among others**.



15. Death Valley

Why in News?

- Death Valley has registered a temperature of 54.4 degrees Celsius or 129.9 degrees Fahrenheit which could be the hottest temperature ever recorded on Earth.

About Death Valley

- What is it? → It is a **desert valley in Eastern California, US** in the northern Mojave Desert bordering the **Great Basin Desert**.
- It is one of the **hottest places on Earth** along with deserts in the Middle East and the Sahara.



16. Bhadbhut Project

Why in News?

- Recently, the Gujarat government awarded the contract for a barrage project to a joint venture of Dilip Buildcon Ltd and Hindustan Construction Company Ltd.

About Bhadbhut Project

- Location → It is located across the **river Narmada**, 5 km from Bhadbhut village and 25 km from the mouth of the river, where it **flows into the Gulf of Khambhat**.
- The project is **part of the larger Kalpasar Project**, which entails the construction of a **30-km dam** across the **Gulf of Khambhat** between Bharuch and Bhavnagar districts.
- Objectives →



- The barrage will **stop most of the excess water** flowing out of the Sardar Sarovar Dam from reaching the sea and thus create a “**sweet water lake**” of 600 mcm (million cubic metres) on the river.
- To **prevent salinity ingress**.
- Concern → The project has **faced protests** from **local fishermen** for its likely **impact on fishing patterns**, notably of **hilsa fish**.

Hilsa Fish

- The Hilsa is a species of fish related to the herring, in the **family Clupeidae**.
- IUCN status → **Least Concerned**
- It is a **very popular** and **sought-after food fish** in the Indian Subcontinent.
- Though it's a **saltwater fish**, it migrates to sweet waters.
- It is the **national fish of Bangladesh** and **state symbol in the Indian states of West Bengal and Tripura**.

17. Mali

Why in News?

- It was recently in news because its President has announced his resignation amid a military coup.

About

- Mali is a **landlocked country** in West Africa.
- It **borders Niger to the east, Ivory Coast to the south, Senegal to the west**.
- Most of it lies in the **southern Sahara Desert**.



18. Teesta River

Why in News?

- Recently, there were reports that Bangladesh is discussing an almost \$1 billion loan from China for a comprehensive management and restoration project on the Teesta River.

About Teesta River

- It is a **tributary of the Brahmaputra** (known as Jamuna in Bangladesh), **flowing through India and Bangladesh**.
- Origin → It originates at **TsoLamo** and flows through the Indian states of **Sikkim** and **West Bengal through Bangladesh and enters the Bay of Bengal**.
- Drainage → It covers nearly the **entire floodplains of Sikkim** while draining 2,800 sq km of Bangladesh. For **West Bengal**, it is the **lifeline of half-a-dozen districts in North Bengal**.



- Tributary → Rangeet River.
- Dispute →
 - The dispute over Teesta is the most contentious issue between India and Bangladesh.
 - However, Teesta river water sharing agreement has not been signed due to opposition from West Bengal (River is a State subject and is notable in this context).

19. India's Longest River Ropeway in Assam

Why in News?

- Recently, India's longest river ropeway over Brahmaputra River was inaugurated in Assam.

About

- It is **1.8-kilometre** long ropeway service connecting Guwahati and North Guwahati.
- It has been operated from Kachari Ghat in Guwahati to Dol Govinda temple in North Guwahati.
- It would reduce the travel time between Guwahati and North Guwahati as well as boost the tourism sector.
- It would provide opportunities to see the landscapes of Guwahati city, mighty Brahmaputra River and the Umananda Temple on Peacock island among others.
- It is one of the most advanced & longest river crossing Aerial Tramway systems in India.
- It uses a "twin-track, single-haul, bi-cable double reversible jig back" system.

👉 About Brahmaputra River

- Origin → Its source is the Chemayungdung Glacier, which covers the slopes of the Himalayas southeast of Lake Mapam in southwestern Tibet.
- It passes through the Tibet Autonomous Region of China, the Indian states of Arunachal Pradesh & Assam, and Bangladesh.
- In Arunachal Pradesh, it is known as Dihang (or Siang) River.
- Tributaries →
 - Left-bank tributaries are → Dibang River, Lohit River, Dhansiri River and Kolong River.
 - Right-bank tributaries are → Kameng River, Manas River, Beki River, Raidak River, Jaldhaka River, Teesta River and Subansiri River.

20. Fujiwhara Effect

Why in News?

- Recently, Two tropical storms named Marco and Laura forming in the western Atlantic Ocean at nearly the same time are likely to impact the Gulf of Mexico sparking concerns of the rare Fujiwhara effect.

About

- What is it? → is a phenomenon that occurs when two nearby cyclonic vortices move around each other and close the distance between the circulations of their corresponding low-pressure areas.
- Origin → It is named after Sakuhei Fujiwhara, a Japanese meteorologist who first described the effect in 1921.

- What happens in the Fujiwhara Effect? → According to the US National Oceanic and Atmospheric Administration (NOAA), one of three things happen when the storms come near each other.
 - If one hurricane is a lot stronger than the other, the **smaller one will orbit it** and eventually come **crashing into its vortex to be absorbed.**
 - If the two storms are close to the same size, they can gravitate toward each other until they **reach a common point** where they **either merge** or **they spin each other** around for a while before they spin off in different directions.
 - The third possibility is that the two systems **come together** to **form a large storm** instead of two smaller ones.

21. Biochar

Why in News?

- A recent research in Ghana, an African nation proved biochar application could help promote cowpea growth and crop yield in the country as well as fight climate change impact on soil.

About

- Biochar is **charcoal** used as a **soil amendment for both carbon sequestration and soil health benefits.**
- Biochar technically defined as the **solid material** obtained from the **thermochemical conversion of biomass** in an **oxygen-limited environment.**
- Like **most charcoal**, **biochar** is made from biomass via pyrolysis (decomposition brought about by high temperatures).
- Biochar may increase the following
 - Soil fertility of acidic soils (low pH soils),
 - Agricultural productivity,
 - Protection against some foliar and soil-borne diseases.
 - Soil's water-holding capacity,
 - Nutrient supply and retention.



22. Mansar Lake Rejuvenation Project

Why in News?

- The Union Minister initiated the Mansar Lake Rejuvenation Project by holding a high-level meeting to discuss the DPR (Detailed Project Report).

About

- It is a comprehensive plan for **development and upgradation of Mansar Lake** and surrounding areas.
- Aim → To holistically develop the **sacred Lake of Manser** as the **second biggest tourist destination in Jammu region** and also to preserve the lake, its ecology and heritage.

Mansar Lake

- It is **situated 62 km from Jammu**.
- It is a lake **fringed by forest-covered hills**.
- Surinsar-Mansar Lakes were designated as **Ramsar Convention in November 2005**.

23. Sudan

Why in News?

- The U.S. and Sudan near pact to compensate american terrorism victims. The deal could pave the way for Sudan's removal from the U.S. State Sponsors of Terrorism list.

About

- Location → Sudan is located in **northeastern Africa**, **bordered by Libya, Chad, Central African Republic, Ethiopia** and bordering the Red Sea.
- The **Nile River** flows through Sudan.



24. Kavaratti

Why in News?

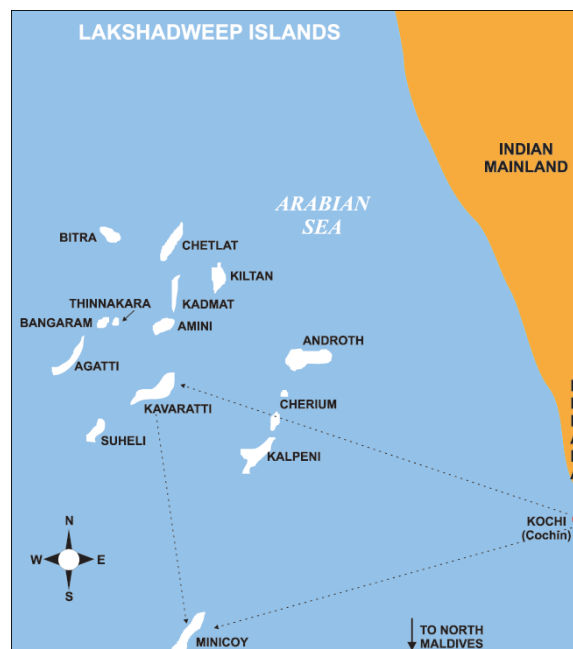
- The Lakshadweep Administration had embarked on the Pilot project on Biological Control of Rodents(Rats) by Using Barn Owls (Tyto alba) in Kavaratti Island.

About Kavaratti

- It is the **capital of the Union Territory of Lakshadweep**.
- The Kavaratti island is at a **distance of 404 km from Kochi, Kerala** and is located between Agatti Island on the west and Androth Island on the east.
- Kavaratti has been selected as **one of the hundred Indian cities** to be developed as a **smart city** under Prime Minister's flagship **Smart Cities Mission**.

Also Remember

- **Barn Owl:**
 - The common barn-owl (Tyto alba) belongs to the **family of owls, Tytonidae**.
 - It is one of the **most widespread** owls in **Indian Subcontinent**.
 - IUCN → Listed as **'least concern'**.



- Significance → The Barn Owls mostly **hunt small mammals** especially rodents (hence it's called as **farmer's friend**).

Polity

1. Whip

Why in News?

- Congress chief whip in the Rajasthan Legislative Assembly has moved the Supreme Court against a State High Court direction to the Speaker to maintain status quo in the disqualification proceedings initiated against ousted MLAs under the anti-defection law.

About Whip

- What is it? → A whip is an official of a political party who acts as the party's 'enforcer' inside the legislative assembly or house of parliament.
- Parties appoint a senior member from among their House contingents to issue whips — this member is called a **Chief Whip**, and he/she is assisted by additional Whips.
- India inherited the concept of the whip from the **British parliamentary system**.
- Role of whips → They try to ensure that their fellow political party legislators attend voting sessions and vote according to their party's official policy.
- What happens if a whip is disobeyed? → A legislator may face disqualification proceedings if she/he disobeys the whip of the party unless the number of lawmakers defying the whip is 2/3rds of the party's strength in the house. Disqualification is decided by the Speaker of the house.
- Limitations of whip → There are some cases such as **Presidential elections** where whips cannot direct a Member of Parliament (MP) or Member of Legislative Assembly (MLA) to vote in a particular fashion.

2. Contempt of Court

Why in News?

- Last week, the Supreme Court of India suo motu registered a case of contempt against lawyer Prashant Bhushan.

About Contempt of Court

- What is it? → Contempt of court is a concept that seeks to protect judicial institutions from motivated attacks and unwarranted criticism, and as a legal mechanism to punish those who lower its authority.
- It is one of the restrictions on freedom of speech and expression under Indian Constitution.
- **Article 129** of the Constitution conferred on the **Supreme Court** the power to punish contempt of itself.
- **Article 215** conferred a corresponding power on the **High Courts**.
- Punishment → The punishment for contempt of court is simple imprisonment for a term up to six months and/or a fine of up to Rs. 2,000.
- Civil contempt → is committed when someone willfully disobeys a court order, or willfully breaches an undertaking given to court.
- Criminal contempt → consists of three forms:
 1. Words, signs and actions that "scandalize" or "lower" the authority of any court.
 2. Prejudices or interferes with any judicial proceeding.
 3. Interferes with or obstructs the administration of justice.

- Exceptions → **Fair and accurate reporting** of judicial proceedings and fair criticism on the **merits** of a judicial order after a case is heard and disposed of will **not amount to contempt of court**.
- The **Contempt of Courts Act, 1971** was **amended in 2006** to introduce **truth** as a valid defence against a charge of contempt, if it was in public interest and was invoked in a bona fide manner.

3. Comptroller and Auditor General (CAG)

Why in News?

- Former Jammu & Kashmir Governor Girish Chandra Murmu has been appointed the next Comptroller and Auditor General (CAG) of India.

About CAG

- What is it? → It is a **constitutional body** established under **Article 148** of the Constitution of India.
- Purpose → CAG **audits all receipts and expenditure of the Government of India** and the **state** governments, including those of bodies and authorities substantially financed by the government.
- Appointment → CAG is **appointed by the President of India** following a recommendation by the Prime Minister.
- Tenure → **6 yrs or up to 65 yrs of age** (whichever is earlier).
- Removal → CAG can be **removed by the President only** in accordance with the procedure mentioned in the Constitution that is the **manner same as removal of a Supreme Court Judge**.
- Salary → The administrative expenses of the office of the Comptroller and Auditor-General including all salaries, allowances and pensions payable to or in respect of persons serving in that office shall be **charged upon the Consolidated Fund of India**.
- Further Office → The CAG shall **not be eligible for further office** either under the Government of India or under the Government of any State after he has ceased to hold his office.

4. 6th Schedule status

Why in News?

- The political groups of Arunachal Pradesh are calling for bringing the entire Arunachal Pradesh under the ambit of the Sixth Schedule or Article 371 (A) of the Constitution.

About 6th Schedule

- It consists of provisions for the administration of tribal areas in **Assam, Meghalaya, Tripura and Mizoram**, according to **Article 244** of the Indian Constitution.
- It was passed by the constituent Assembly in **1949**.
- The schedule also seeks to **safeguard** the **rights of tribal populations** through the formation of **Autonomous District Councils** (ADC).

👉 Autonomous Districts

- These are **administrative bodies** constituted in accordance to **Sixth Schedule**, Article 244 (2) & Article 275(1) of the Indian Constitution.

- There are **10 autonomous districts** – three in Assam, Meghalaya and Mizoram and one in Tripura.
- Composition → Each autonomous district has a district council consisting of **30 members**, of whom four are **nominated by the governor** and the **remaining 26 are elected on the basis of adult franchise**.
- Term → The **elected members** hold office for a term of **five years** (unless the council is dissolved earlier) and **nominated members hold office during the pleasure of the governor**.
- Regional Council → Each autonomous region also has a **separate regional council**.
- Powers →
 - Can **constitute village courts** within their jurisdiction to hear trial of cases involving the tribes
 - Governors of states that fall under the Sixth Schedule **specify the jurisdiction of high courts** for each of these cases.
 - Empowered to make **legislative laws on matters** like land, forests, fisheries, social security, entertainment, public health, etc. with **due approval from the governor**
 - Acts passed by Parliament and state legislatures may or may not be levied in these regions **unless the President and the governor gives approval**.

📌 Also Remember

- Article 371-A
 - **Parliament cannot legislate** in the matter relating to religious/social practices of Nagas, Naga customary law, and procedure, transfer of land & resources **unless the state Assembly decides to do so**.
- Fifth Schedule
 - It deals with the **administration** and **control of Scheduled Areas** as well as of Scheduled Tribes residing in any State **other than the States of Assam, Meghalaya, Tripura and Mizoram**.

5. Fifth World Conference of Speakers of Parliament

Why in News?

- Lok Sabha Speaker has attended the inaugural ceremony of the Fifth World Conference of Speakers of Parliament(5WCSP).

About the Conference

- Organized by → The Conference is being **organized jointly by** the **Inter-Parliamentary Union(IPU)** and the **Parliament of Austria** with the support of the United Nations(UN).
- Aim → To **strengthen multilateralism** and **international cooperation** in order to rebuild a better world.
- Theme → “Parliamentary leadership for more effective multilateralism that delivers peace and sustainable development for the people and planet”.

📌 Inter-Parliamentary Union (IPU):

- It was established in **1889** as a global organization of national parliaments.
- Aim → To **promote parliamentary dialogue** world-wide and works for peace and cooperation among the people.
- Significance → IPU has **permanent observer status at the United Nations General Assembly**.
- Headquarters → **Geneva, Switzerland**.

6. Appointment of Election Commissioners

Why in News?

- Former finance secretary Rajiv Kumar appointed as Election Commissioner.

About

- Article **324 to 329 of the constitution** deals with powers, function, tenure, eligibility, etc of the commission and the member.
- Composition →
 - Consist of the **Chief Election Commissioner** and a such number of **other election commissioners**, if any, as the president may from time to time fix.
 - The appointment of the chief election commissioner and other election commissioners shall be **made by the president**.
 - When any other election commissioner is so appointed the **chief election commissioner** shall act as the **chairman of the election commission**.
 - The president may also **appoint after consultation with the election commission** such **regional commissioners** as he may consider necessary to assist the election commission.
 - The conditions of service and tenure of office of the election commissioners and the regional commissioners shall be such as the **President may by rule determine**.
- Tenure → **6 years** or till they attain the **age of 65 years**, whichever is earlier.
- CEC vs ECs →
 - Chief Election Commissioner powers are **equal to the other election commissioners**
 - All the matters in the commission are **decided by the majority** amongst its members.
 - The Chief Election Commissioner and the two other election commissioners **receive equal salary, allowances and other benefits**.
- Removal →
 - They can **resign anytime** or can **also be removed** before the **expiry of their term**.
 - The Chief Election Commissioner can be removed from his office in the same manner and on **same grounds as a judge of the Supreme Court**.

IR

1. International Covenant on Civil and Political Rights (ICCPR)

Why in News?

- As authorities worldwide grapple with demonstrations over issues like political rights and racial justice, a UN committee has reaffirmed that protesting peacefully, online or in person, is a fundamental human right.

About

- Background → The independent experts on the Human Rights Committee published a fresh interpretation of the right of peaceful assembly.
- The committee is tasked with monitoring how countries implement the International Covenant on Civil and Political Rights (ICCPR), which under Article 21 guarantees the right to peaceful assembly.

📁 About ICCPR

- What is it? → It is a multilateral treaty adopted by the United Nations General Assembly (UNGA).
- Monitored by → the United Nations Human Rights Committee.
- Provision → The covenant commits its parties to respect the civil and political rights of individuals, including the right to life, freedom of religion, freedom of speech, freedom of assembly, electoral rights and rights to due process and a fair trial.
- The ICCPR is part of the International Bill of Human Rights, along with the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the Universal Declaration of Human Rights (UDHR).
- It became effective in 1976.
- There are currently 74 signatories and 168 parties to the ICCPR. India ratified the ICCPR in 1968 but is yet to enact the legislation for the same.
- Some of the rights protected under the ICCPR include →
 - Article 6 – Right to life; Article 12 – Freedom of movement and choice of residence for lawful residents; Article 18 – Right to freedom of thought, conscience and religion; Article 19 – Right to hold opinions without interference; Article 26 – Equality before the law and among others.

2. India-EU S&T Cooperation

Why in News?

- India and European Union (EU) have renewed its Agreement on Scientific and Technological Cooperation for the next five years (2020-2025).

About

- Background → The Agreement was initially signed in 2001 and renewed two times in 2007 and 2015.
- Focused Area → The cooperation has been focused on water, green transport, e-mobility, clean energy, bio-economy, health, and ICT.
- Significance → The new agreement will expand the cooperation in scientific and technological research for economic and social benefit.

- In the **last 5 years** India-EU Research Technology Development Projects has **addressed societal challenges** such as affordable healthcare, water, energy, food & nutrition has been stepped up.

3. HIGH IMPACT COMMUNITY DEVELOPMENT PROJECTS

Why in News?

- India and Maldives signed a contract for setting up 'Neighbourhood Fish Processing Plants' at two of the islands in the neighbouring country.

About HICDPs

- HICDPs constitute an important dimension of the **dynamic development partnership** between **India and the Maldives**.
- Under HICDP, India and Maldives have committed to **execute projects** under a **total grant of USD 5.5 million**.
- These projects are **driven by the needs of communities** on the islands.
- They will be implemented by **City and Local Councils**.
- It will **enhance** the **capacities of locally-elected representatives** and **support the decentralization efforts** of the Government of Maldives.
- These **fish-processing plants** are the **first** in a series of High Impact Community Development projects.

4. India-UN Development Partnership Fund (India-UN Fund)

Why in News?

- India has contributed over USD 15.46 million to the India-UN Development Partnership Fund.

About

- Formation → It was established in **2017** as a **dedicated facility** within the **United Nations Fund for South-South Cooperation**.
- Supported by → It is **supported by the Government of India**, managed by the United Nations Office for South-South Cooperation (**UNOSSC**) and **implemented in collaboration with the United Nations system**.
- Purpose → It supports **Southern-owned and led, demand-driven, and transformational sustainable development projects** across the developing world.
- Implementation → **United Nations agencies** implement these projects in close collaboration with governments of partner countries.

Also Remember

- UNOSSC → It was **established in 1974** and **hosted by UNDP** to promote, coordinate and **support South-South and triangular cooperation** globally and within the United Nations system.
- South-South cooperation → It refers to the **exchange of expertise** between actors (governments, organizations and individuals) in developing countries.

- Triangular cooperation → It refers to **development partners, countries, and international organizations** providing **financial or technical support** to facilitate development activities between 2 developing countries.

5. United Nations Human Rights Council

Why in News?

- Recently, the U.S. Secretary of State urged UN members not to support Cuba's bid to join the Human Rights Council.

About UN Human Rights Council

- It is an **inter-governmental body** within the United Nations system which was **created in 2006** to replace the Commission on Human Rights.
- Headquartered → **Geneva**.
- Members → It is made up of **47 member states** chosen by direct and secret ballot.
- It is responsible for the **promotion and protection of all human rights around the globe**.
- It has the ability to **discuss all thematic human rights issues** and **situations** that require its attention throughout the year.
- Seats → The seats are **distributed geographically** and are awarded for a **period of three years**. Members are **not eligible** for immediate **reelection** after serving two consecutive terms.

👉 Reasons for opposing Cuba

- U.S. Secretary of State has described **Cuba's sale of medical services**, which is the main source of foreign exchange for Cuba, as a **form of human trafficking**.
- **Havana's** main source of foreign exchange comes as a **form of human trafficking**.

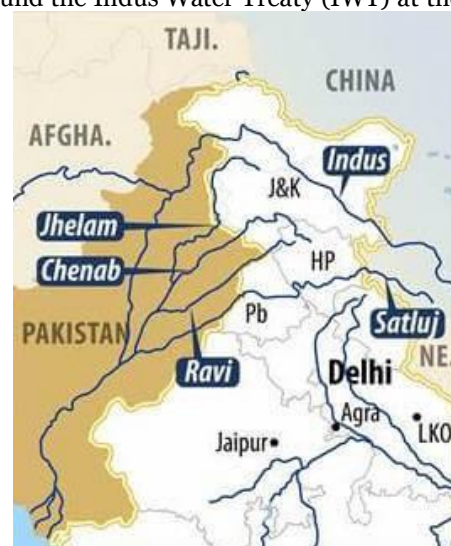
6. Indus Water Treaty

Why in News?

- India has refused a request by Pakistan to hold a meeting on issues around the Indus Water Treaty (IWT) at the Attari checkpoint near the India-Pakistan border.

About IWT

- What is it? → It is a **Water-Distribution Treaty**, signed in Karachi on **1960**, between **India** (Pm Jawaharlal Nehru) and **Pakistan** (President Ayub Khan), **brokered by the World Bank**.
- Provisions → Under the treaty, **India has control** over water flowing in the **eastern rivers**– **Beas, Ravi and Sutlej were allocated to India for exclusive use**.
- While, the waters of **Western rivers - Indus, Jhelum, and Chenab were allocated to Pakistan except** for specified **domestic, non-**



consumptive and agricultural use permitted to India as provided in the Treaty.

- Water commissioners → As per the treaty, the **water commissioners of Pakistan and India** are required to **meet twice a year** and arrange **technical visits to projects' sites** and critical river head works.
- Both the sides **share details of the water flow** and the **quantum of water** being used under the treaty.
- The treaty sets out a **mechanism for cooperation and information exchange** between the two countries regarding their use of the rivers.

📌 Indian Dams in Indus River System

- To utilize the waters of the **Eastern rivers** which have been allocated to India for exclusive use, India has **constructed following dams**:
 - Bhakra Dam on Satluj,
 - Pong and Pandoh Dam on Beas and
 - Thein (Ranjit Sagar) on Ravi.
 - Beas-Sutlej Link,
 - Madhopur-Beas Link,
 - Indira Gandhi Nahar Project etc,
- These dams have helped India utilize nearly entire share (**95 %**) of **waters of Eastern Rivers**.

7. CARICOM Community

Why in News?

- India has extended USD 1 million assistance to Caribbean Community (CARICOM) Countries.

About

- Formation → It was formed in **1973** as a **grouping of twenty countries**: fifteen Member States and five Associate Members.
- Objective → To **promote economic integration and cooperation among its members**, to ensure that the benefits of integration are equitably shared, and to coordinate foreign policy.
- Members → **Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad & Tobago.**
- Headquarters → **Georgetown, Guyana.**
- Significance → CARICOM is an **official United Nations Observer.**



8. Israel – UAE Deal

Why in News?

- Recently, Israel-UAE have arrived at an important peace agreement that has the potential to change the geopolitics of West Asia and beyond.

About Deal

- Under the deal the **UAE will establish diplomatic relations with Israel** in return for President Binyamin Netanyahu committing to give up a **stated plan to annex the West Bank**.
- The **UAE** becomes the **first Gulf Arab country** and **third Arab nation** to **recognize Israel** after Egypt (in 1979) and Jordan (1994).
- This deal would dramatically bring **all Sunni nations in the region in an anti-Iran alliance with Israel**.

👉 West Bank



- It is a **landlocked territory** near the Mediterranean coast of Western Asia, **bordered by Jordan to the east** and by the **Green Line separating it and Israel on the south, west and north**.
- The West Bank also contains a significant section of the **western Dead Sea shore**.

9. International Labour Organization (ILO) Convention 182

Why in News?

- Recently, the International Labour Organization (ILO) Convention 182 has been universally ratified when the Kingdom of Tonga outlawed the worst forms of child labour.

About Convention 182

- What is it? → The Convention 182 was adopted in the **1999** annual international labour conference which **prohibits the sexual exploitation of children, trafficking, deployment in armed conflict and other conditions that compromise their overall well-being**.
- The Convention **complements the ILO's efforts under the 1973 Minimum Age Convention** to prevent the employment of children below a lower age threshold.
- It calls for the **prohibition and elimination of the worst forms of child labour**, including slavery, forced labour and trafficking.
- It **prohibits** the use of **children in armed conflict, prostitution, pornography and illicit activities** such as drug trafficking, and in hazardous work.
- India Position → India has signalled its legal commitment to the elimination of child labour with its **2017 ratification of Convention 182** and the instrument prescribing the minimum age of work for children.

👉 International Labour Organization

- The ILO is the **United Nations agency** for the world of work. It is also a **member of the United Nations Development Group** (UNDP).

- Mandate → It sets **international labour standards**, **promotes rights at work** and **encourages decent employment opportunities**, the enhancement of social protection and the strengthening of dialogue on work-related issues.
- HQ → **Geneva, Switzerland**.
- Parent organization → **Economic and Social Council of the United Nations**.
- Structure → It is the only tripartite U.N. agency, that brings together governments, employers and workers' representatives of **187-member States**.
- India and ILO →
- India is one of the **founding members** of ILO.
- India has **ratified 47 out of 189 ILO conventions** during the century. Out of eight core conventions India has ratified six and two conventions (**C-138** and **C-182**), which were **related to child labour** have been ratified by the present government.

10. ASEAN-India Network of Think Tanks

Why in News?

- Recently, the Ministry of External Affairs in partnership with the Foreign Ministry of Thailand has organized the 6th Round Table of ASEAN-India Network of Think Tanks (AINTT).

About

- It was **established at** the **7th ASEAN-India Summit** in Thailand in 2009.
- Purpose → It comprises **think tanks, policy makers, scholars, media and business representatives** to provide policy inputs to Governments on future direction of cooperation.
- 6th Round Table of AINTT → It was **organized by the Ministry of External Affairs** in partnership with the Foreign Ministry of Thailand.
- Theme → **ASEAN-India: Strengthening Partnership in the Post COVID Era**.

👉 ASEAN

- It is a regional grouping which was **established in 1967** with the signing of the **Bangkok Declaration**.
- Members → **Indonesia, Thailand, Singapore, Malaysia, The Philippines, Vietnam, Myanmar, Cambodia, Brunei, and Laos**.
- Headquarters → **Jakarta, Indonesia**.

11. NDC Transport Initiative for Asia (NDC-TIA)

Why in News?

- NITI Aayog will virtually launch the India Component of the Nationally Determined Contributions(NDC)–Transport Initiative for Asia (TIA).

About

- The initiative aims to **promote a comprehensive approach to decarbonize transport** in India, Vietnam and China over the **period 2020-24**.

- Supported by → It is supported by the **International Climate Initiative** (IKI) of the German Ministry for the Environment and **Nature Conservation and Nuclear Safety**(BMU).
- Implementation → It is implemented by seven organisations namely: Deutsche Gesellschaft für Internationale Zusammenarbeit(**GIZ**) , International Council on Clean Transportation(**ICCT**), World Resources Institute(**WRI**), International Transport Forum(**ITF**),Agora Verkehrswende (**AGORA**), Partnership on Sustainable, Low Carbon Transport(**SLoCaT**) and Foundation and Renewable Energy Policy Network for the 21st Century(**REN21**).
- Indian Component → The India Component is **implemented by six consortium organisations** all **except SLoCaT**. On behalf of the Government of India, **NITI Aayog** will be the **implementing partner**.
 - NDC-TIA India Component will focus on **establishing a multi-stakeholder dialogue platform** for decarbonizing transport in India.

Also Remember

- Intended Nationally Determined Contributions (INDC) → The **Paris Agreement(2015)** requires all Parties to **put forward their best efforts to address climate change** through INDC's and to strengthen these efforts in the years ahead.
- India's intended Nationally Determined Contributions (INDCs) under Paris Agreement →
 - reduce the emissions intensity of its GDP by **33% to 35% by 2030 from 2005 level**,
 - increase total cumulative electricity generation from fossil free energy sources to **40% by 2030**,
 - Create an additional **carbon sink of 2.5 to 3 billion tons** through additional forest and tree cover.

12. UN World Tourism Organisation

Why in News?

- Recently, the UN World Tourism Organisation has provided that that global tourism sector has lost USD 320 billion from January through May which is three times what was lost during the year 2009 at the height of the last global financial crisis.

About UN World Tourism Organisation

- It is the United Nations agency **responsible for the promotion of responsible, sustainable and universally accessible tourism**.
- Established in → **1974**.
- Headquarters → **Madrid, Spain**.
- Purpose → It **promotes tourism as a driver of economic growth, inclusive development and environmental sustainability** and offers leadership and support to the sector in advancing knowledge and tourism policies worldwide.
- It encourages the implementation of the **Global Code of Ethics for Tourism**, to maximize tourism's socio-economic contribution while minimizing its possible negative impacts.
- It releases the **World Tourism Barometer annually**.

13. UK's 'Eat Out to Help Out' scheme

Why in News?

- The EOHO Scheme is an economic recovery measure by the UK government to support hospitality businesses as they reopen after the COVID-19 lockdown in the country.

About

- How it work? → Under the EOHO Scheme, the government would **subsidise meals** (food and non-alcoholic drinks only) **at restaurants by 50 per cent**, from Monday to Wednesday every week, all through August.
- The discount is capped at **GBP 10 per head** and does not apply to take-away or event catering.
- There is **no minimum spend** and **no limit on the number of times customers** can avail the offer, since the whole point of the scheme is to encourage a return to dining in restaurants.
- Cost → EOHO scheme would **cost GBP 500 million**.

14. BRICS Innovation Base

Why in News?

- Recently, the Industry Ministers of BRICS countries attended a video meeting and China is actively considering establishing a BRICS innovation base to strengthen practical cooperation with the five-member bloc.

About

- BRICS innovation base will **focus more on digital transformation**, especially in **5G, Artificial Intelligence and the digital economy** in the post-COVID-19 era.
- The meeting adopted a **joint statement on cooperation** in new industries among BRICS (Brazil, Russia, India, China and South Africa) countries.
- China urged the BRICS countries to **strengthen their cooperation on digital transformation**, especially in 5G, AI, the digital economy and others to promote the digital transformation of enterprises and their innovation capabilities, and to **promote sustainable economic and social development**.

15. World Urdu Conference

Why in News?

- Recently, the Union Minister of Education addressed the inaugural session of World Urdu Conference.

About World Urdu Conference

- Organised by → the **National Council for Promotion of Urdu Language** (NCPUL).
- The Conference is held to **honour the Urdu writers and literators** with awards and honours in the name of important personalities of Urdu like Amir Khusrow, Mirza Ghalib, Agha Hashar, Ram Babu Saxena and Daya Shankar Naseem.
- Objective → The objective of the conference is to **encourage Urdu writers for literary and creative services by the Urdu Council**.

National Council for Promotion of Urdu Language

- NCPUL has become the **biggest Urdu networking hub in the world**.
- NCPUL is an **autonomous body** under the **Ministry of Education**.

- It was set up in **1996** in order to **promote, develop and propagate Urdu language**.
- NCPUL has also been assigned the **responsibility of promotion of Arabic and Persian**.

16. Amnesty International

Why in News?

- Amnesty International (AI) India has demanded an independent investigation into all allegations of human rights violations by the police during the north-east Delhi riots.

About

- What is it? → Amnesty International (AI) is an **international Non-Governmental Organisation** (NGO) founded in **London** (UK) in **1961**.
- Purpose → It seeks to **publicise violations by governments and other entities of rights** recognized in the Universal Declaration of Human Rights (1948), especially **freedom of speech and of conscience** and the **right against torture**.
- In **1977**, it was awarded the **Nobel Prize for Peace**.
- AI India is a part of the global human rights movement spearheaded by Amnesty International. It has its **registered office in Bangalore** (Karnataka).

Society

1. World Day Against Trafficking in Persons

Why in News?

- World Day Against Trafficking in Persons is being observed on July 30.

About

- The day was observed for the **first time in 2013** by the United Nations General Assembly.
- Aim → To **raise awareness about the condition of victims of human trafficking** and to promote and protect their rights.
- Theme → It focuses on **first responders to human trafficking**.
- Commonwealth Human Rights Initiative (CHRI) and Walk Free (an international anti-slavery organisation) has released a report titled "**Eradicating Modern Slavery**".

📌 Additional Information

- Commonwealth Human Rights Initiative (CHRI) → It is an **independent, non-profit, non-partisan, international non-governmental organisation** working in the area of human rights.
- It is **headquartered in New Delhi**.
- Blue Heart Campaign → It is an **international anti-trafficking program** started by the United Nations Office on Drugs and Crime (**UNODC**).

2. Higher Education Financing Agency (HEFA)

Why in News?

- Jawaharlal Nehru University(JNU) has secured a financial assistance of Rs 455 crore from the Higher Education Funding Agency(HEFA) for construction of new academic buildings, hostels and research centres.

About HEFA

- Formation → It was **formed in 2017** as a **joint venture** of the **Canara Bank** and **Ministry of Human Resource Development** (now renamed as Ministry of Education).
- It is registered under Section 8 [**Not-for-profit**] under the Companies Act 2013 as a **Union Govt company** and as **Non-deposit taking NBFC with RBI**.
- Aim → To enable India's premier educational institutions **to excel and reach the top in global rankings** by financing building **world class infrastructure** including R&D Infrastructure.
- Approach → It provides **timely finance at a competitive interest rate** for capital assets creation in India's educational institutions and supplements it with grants by **channelizing CSR funds** from the corporate and donations from others.
- Eligibility → **All the Centrally Funded Educational Institutions in Higher Education, School Education and Medical Education sectors** are eligible to avail of loans through HEFA.

3. Parivar Pehchan Patra (PPP)

Why in News?

- Haryana Chief Minister has launched a unique identity card called Parivar Pehchan Patra (PPP).

About Parivar Pehchan Patra

- What is it? → It is an **8-digit unique identification number** meant **for each family** to enable **smooth and automatic delivery of several citizen-centric services** launched by the state government from time to time.
- How is PPP different from the Aadhaar card? → Aadhaar represents an individual as a unit while PPP represents a family as a unit.
- Is it mandatory? → PPP is **mandatory for families availing benefits** under government schemes. It is also **mandatory for government employees** to **apply for PPP failing** which their salaries may also be withheld.
- Benefits of PPP → It will be easier for the state government to **maintain a complete database of all families** as most government schemes are structured around the family and not around an individual.
- The PPP will have the name of the head of the family, besides the names, age, income, mobile number of each and every member of the family.
- In case of an unmarried girl in the family, her name will be struck off from the PPP after she gets married and it will subsequently be added to the PPP of her husband's family.

4. E-Sanjeevani Tele-Medicine Platform

Why in News?

- 1.5 lakh teleconsultations were recently completed on the “eSanjeevani” and “eSanjeevani OPD” tele-medicine.

About

- What is it? → E-Sanjeevani is a **platform-independent, browser-based application** facilitating both **doctor-to-doctor** and **patient-to-doctor** tele-consultations.
- Aim → It aims to make healthcare services equitable by **bridging the digital divide** that exists in **both rural areas and isolated communities**.
- The application is based on **invite-system** which **restricts it to the actual beneficiaries of the application**.
- It has a **user-friendly interface** which facilitates both **tech-savvy** and **novice doctors/users** in the rural and urban environment to access the application.
- Types of telemedicine services → This eSanjeevani platform has enabled two types of telemedicine services viz. **Doctor-to-Doctor** (eSanjeevani) and **Patient-to-Doctor** (eSanjeevani OPD) **Tele-consultations**.
- Implementation → The former is being implemented **under the Ayushman Bharat Health and Wellness Centre (AB-HWCs) programme**.
- Services included →
 - The telemedicine platform hosts **speciality OPDs** which include:
 - Gynaecology, Psychiatry, Dermatology, ENT, Ophthalmology, antiretroviral therapy (ART) for the AIDS/HIV patients, Non-Communicable Disease (NCD)** etc

5. Supreme Court verdict on Hindu women's inheritance rights

Why in News?

- Supreme Court has expanded on a Hindu woman's right to be a joint legal heir and inherit ancestral property on terms equal to male heirs.

About

- The Court ruled that a Hindu woman's right to be a joint heir to the ancestral property is **by birth** and **does not depend on whether her father was alive or not** when the law was enacted in 2005.
- The Hindu Succession (Amendment) Act, 2005 gave Hindu women the **right to be coparceners** or **joint legal heirs** in the **same way a male heir does**.

The Hindu Succession (Amendment) Act, 2005:

- It gave Hindu women the **right to be coparceners or joint legal heirs in the same way a male heir does**.
- The amended act made a daughter of a coparcener also a coparcener by birth "**in her own right in the same manner as the son**".
- The law also gave the daughter the same rights and liabilities "**in the coparcenary property as she would have had if she had been a son**".
- Applicability of the law → It applies to **ancestral property** and to **intestate succession in personal property** — where succession happens as per law and not through a will.

6. International Youth Day 2020

Why in News?

- International Youth Day is being observed on 12 August, 2020.

About

- It was **designated by the United Nations**(UN) in the year 1999. The first IYD was observed in 2000 and has been observed annually ever since.
- Aim → To **raise awareness regarding the cultural and legal issue** concerning youth.
- Theme → **Youth Engagement for Global Action**.

Also Remember

- #31DaysOfYOUth
 - What is it? → It is a **social media campaign by the UN** to **celebrate young people** throughout the month of August to help spread the word and strike up a conversation surrounding youth engagement for global action.
- Youth and COVID-19: Impacts on jobs, education, rights and mental well-being report
 - Published by → **International Labour Organization**(ILO).
 - Finding → According to the report, COVID-19 may push **half the world's youth into anxiety, depression**.
- World Programme of Action for Youth (WPAY)

- It was adopted by the United Nations General Assembly in **1995**.
- Objective → To provide a **policy framework and practical guidelines** for national action and international support to **improve the situation of young people** around the world.
- World Youth Report: Youth Social Entrepreneurship and the 2030 Agenda
 - Released by → the **United Nations Department of Economic and Social Affairs**(UNDESA).
 - Aim → To contribute to the **understanding of how youth social entrepreneurship can both support youth development** and help accelerate the implementation of the SDGs.

7. National Overseas Scholarship Scheme

Why in News?

- Recently changes has been made to the Scheme.

About National Overseas Scholarship Scheme

- National Overseas Scholarship is a **Central Sector Scheme** under the Ministry of Social Justice and Empowerment.
- Aim → It aims to **facilitate the low income students obtain Master degree or Ph.D courses** by studying abroad to improve their social and economic status.
- Beneficiaries are selected from the following social groups →
 - Scheduled Castes,
 - Denotified Nomadic and Semi-Nomadic Tribes,
 - Landless Agricultural Labourers
 - Traditional Artisans category
- In each Selection Year, **100 fresh awards**, subject to availability of funds, will be given under the Scheme.
- **30%** of the awards for each year shall be earmarked **for women candidates**.
- However, in case, **adequate women candidates are not available** as per the stipulations of the scheme, then the unutilized slots will be **utilized by selecting suitable male candidates**.

Following changes has been made to the Scheme

- Annual Family Income limit for National Overseas Scholarship Scheme for Scheduled Castes students w.e.f. selection year **2020-21** has been **increased from Rs 6 lakh to Rs 8 lakh per annum**.
- Students securing admission in **higher ranking institutions internationally** will be given **preference**.
- The minimum qualifying marks have been **increased from 55% to 60%**.
- **Maintenance Allowance** has been **linked with progress of the awardee**.
- Police verification has been done away and **self-declaration** has been **introduced**.
- **Bachelors Level courses** in any discipline are **not covered** under the Scheme.

8. Empowering Tribal, Transforming India

Why in News?

- “Empowering Tribal, Transforming India” is an online performance Dashboard launched by M/o Tribal Affairs.

About

- Developed by → **Centre of Excellence of Data Analytics** (CEDA), organization under National Informatics Centre (NIC).
- Performance Dashboard is an **interactive and dynamic online platform** that showcases updated & real-time details of 11 schemes / initiatives of the Ministry for achieving Sustainable Developmental Goals.
- Highlights of the dash board are →
 - It **captures performance of 5 Scholarship Schemes of Ministry** wherein every year about 30 lakh underprivileged ST beneficiaries reap benefit to the tune of INR 2500 crores.
 - It also displays the details of functional schools under **Eklavya Model Residential Schools (EMRS) scheme**.
 - It maps **district wise NGO details, funds given to NGO** and beneficiaries' details.
- Ministry of Tribal Affairs has recently got **66th SKOCH Gold Award** for "**Empowerment of Tribal through IT enabled Scholarship Schemes**" under the guidance of DBT Mission.

9. National Digital Health Mission (NDHM)

Why in News?

- The Prime Minister has launched the National Digital Health Mission (NDHM) on the eve of Independence Day.

About NDHM

- What is it? → It is a **voluntary healthcare programme** that aims to **reduce the gap among stakeholders** such as doctors, hospitals and other healthcare providers by **bringing them together** and **connecting them** in an integrated digital health infrastructure.
- Components → The mission comprises six key building blocks or digital systems namely **HealthID, DigiDoctor, Health Facility Registry, Personal Health Records, e-Pharmacy & telemedicine**.
- Health Id → It is a **14-digit serial number** which will be generated for each individual. The Id will be a **repository** of **all health-related information** of a person such as medical tests, previous prescriptions, diagnosis, treatments and all historical health records.
- Implementation → The **National Health Authority** (NHA) would design, build, roll-out and implement the mission.
- Coverage → The scheme would first be **tested in the Union Territories** of Chandigarh, Ladakh, Dadra and Nagar Haveli and Daman and Diu, Puducherry, Andaman & Nicobar Islands and Lakshadweep.

📁 National Health Authority (NHA):

- It is the **apex body responsible for implementing Ayushman Bharat Pradhan Mantri Jan Arogya Yojana** (AB-PMJAY).
- It is governed by a **Governing Board** chaired by the Union Minister for Health and Family Welfare.

10. Fit India Youth Club

Why in News?

- Union Minister of Youth and Sports has launched a nation-wide initiative of Fit India Youth Clubs.

About Fit India Youth Club

- What is it? → It is a **part of the Fit India Movement** that aims to harness the power of youth to **create mass awareness** about the **importance of fitness**.
- Strategy → Under the initiative, **volunteers of Nehru Yuva Kendra Sangathan** and **other youth organizations** will come **together to register** as **Fit India Youth Clubs** in every block in the country.
- Each member of the club will then **motivate people from the community** and **in schools** to take up fitness activities.
- Fit India Movement → It was launched in **2019** by the Ministry of Youth Affairs and Sports to encourage people to **inculcate physical activity** and **sports in their everyday lives**.

11. ARIIA 2020 Rankings

Why in News?

- Vice President of India has released the Atal Rankings of Institutions on Innovation Achievements (ARIIA), 2020.

About ARIIA 2020 Rankings

- What is it? → It is an initiative of the **Ministry of Education**, Government of India.
- Aim → To **systematically rank all major educational institutions and universities** on indicators related to promotion of Innovation and Entrepreneurship Development amongst their students and faculties.
- **Major Indicators for ranking are →**
 1. Programs and Activities on IPR, Innovation, Start-up and Entrepreneurship
 2. Pre-Incubation & Incubation Infrastructure & Facilities to Support I&E
 3. Annual Budget Spent on Promoting and Supporting I&E Activities
 4. Courses on Innovation, IPR and Entrepreneurship Development
 5. Intellectual Property (IP), Technology Transfer and Commercialization
 6. Successful Innovation and Start-ups & Funding Innovation & start-ups.
- Rank Categorisation- **Two Broad Categories →**
 - Rank Categorization – Two Broad Categories

A. Publicly Funded Institutions	B. Private or Self-Financed Institutions
Sub Categories:	Sub Categories:
i. Institute of National Importance, Central Universities & CFTIs	i. Private or Self-Financed Universities.
ii. State University & Deemed Universities (Government & Government Aided)	ii. Private or Self-Financed College/Institutes.
iii. Government and Government / Aided College/Institutes	

- A 6th sub- category for higher educational institutions for women has been introduced this year to encourage women and bringing gender parity in the areas of innovation and entrepreneurship

Key Takeaways

Top College/University	Category
IIT Madras	Institutes of National Importance, Central Universities, and Centrally Funded Technical Institutes
Institute of Chemical Technology, Mumbai	Government and Government Aided Universities
College of Engineering, Pune	Government and Government Aided Colleges
Kalinga Institute of Industrial Technology, Bhubaneswar	Private or Self-Financed Universities
S R Engineering College, Warangal	Private or Self-Financed Colleges
Avinashilingam Institute for Home Science and Higher Education for Women	special category for higher educational institutions for women

12. National Recruitment Agency (NRA)

Why in News?

- The Union Cabinet has approved setting up of National Recruitment Agency, an independent body to conduct examination for government jobs.

About NRA

- It will be a **multi-agency body** which will conduct the **Common Eligibility Test (CET)** to screen/shortlist candidates for the **Group B and C (non-technical) posts**.
- Sectors → The NRA will **initially conduct** the CET for three sectors- Selection Commission (**SSC**), Railway Recruitment Boards (**RRBs**) and Institute of Banking Service Personnel (**IBPS**).
- Composition →
 - It will be headed by a **Chairman of the rank of the Secretary** to the Government of India.
 - It will have **representatives** of the Ministry of Railways, Ministry of Finance/Department of Financial Services, the SSC, RRB & IBPS.
- How? →
 - The CET will be **held twice a year**.
 - The test will be conducted for **three levels: graduate, higher secondary** (12th pass) and the **matriculate** (10th pass) candidates.
 - However, the present recruitment agencies– **IBPS, RRB and SCC** – will **remain in place**.
 - Based on the screening done at the CET score level, final selection for recruitment shall be made through **separate specialised Tiers (II, III, etc.) of examination** which shall be **conducted by the respective recruitment agencies**.
- Other details →
 - The CET score of a candidate shall be **valid for a period of three years** from the date of declaration of the result.
 - Examination centres** would be set up in **every district** of the country.
 - While there will be **no restriction on the number of attempts**, it will be subject to the **upper age limit**.
 - The examinations will be conducted in **12 languages**.

13. Namath Basai Programme

Why in News?

- Namath Basai, the State government's unique programme of teaching tribal children in their mother tongue, has become a runaway hit in Kerala's tribal districts.

About

- Implemented by → the **Samagra Shiksha Kerala (SSK)**.
- It has succeeded in **retaining hundreds of tribal children in their online classes** by making them feel at home with the language of instruction.

- The SSK has **distributed some 50 laptops** exclusively for Namath Basai. **Pre-recorded classes** are offered through a YouTube channel.

14. National Council for Transgender Persons

Why in News?

- The Ministry of Social Justice and Empowerment has constituted the National Council for Transgender Persons.

About

- It has been a requirement under the **Transgender Persons (Protection of Rights) Act, 2019**.
- Aim → To **formulate policies, programmes, legislation and projects** regarding members of the community for achieving equality and full participation by them.
- Functions →
 - **Advising the Central government** on the formulation of policies, programmes, legislation and projects with respect to transgender persons.
 - **Monitoring and evaluating** the impact of policies and programmes designed for achieving equality and full participation of transgender persons.
 - **Reviewing and coordinating** the activities of all the departments.
 - **Redressing grievances** of transgender persons.
 - Performing such **other functions** as prescribed by the Centre.
- Composition →
 - Chairperson -- Union Minister of the **Ministry of Social Justice and Empowerment**.
 - Members -- The council will have **joint secretary-level members** from the **ministries of health, home, minority affairs, education, rural development, labour and law**.
 - In addition, there will be a member from the **department of pensions, Niti Aayog, National Human Rights Commission and National Commission for Women**.
 - States -- Representatives **from five states** or **Union Territories** on a **rotational basis** will be members of the commission.
 - Community -- **Five members of the community** and **five experts, from non-governmental organisations** have also been named to the commission. The tenure of the community members and experts shall be **three years**.

15. IAPPD

Why in News?

- Vice President has released two reports; 'Status of Sex Ratio at Birth in India' and 'Elderly Population in India: Status and Support Systems', brought out by the Indian Association of Parliamentarians for Population and Development (IAPPD).

About IAPPD

- What is it? → It is a **national level Non-Governmental organization** (NGO) established in the year **1978**.

- Purpose → To **moderate the pace of population growth** for a smoother course of development so as to ensure an overall improvement in the quality of life of the people and maintain a proper balance between population and development.
- Composition →
 - It has a **Board of Trustees** comprising the Chairman, Executive Secretary, Treasurer and Members look after the smooth running and functioning of the IAPPD.
 - **Standing Committee**: It has a standing committee consisting of 37 Members of Parliament (MPs), Ex. MPs and Legislators belonging to different political parties of India.

16. National Food Security Act, 2013

Why in News?

- The Department of Food & Public Distribution has issued directions to States/UTs to include all eligible disabled persons under the National Food Security (NFS) Act 2013.

About NFSA 2013

- Aim → It aims to **provide food and nutritional security** by ensuring access to an adequate quantity of quality food at affordable prices.
- Coverage → It covers upto **75% of the rural population** and **upto 50% of the urban population** for receiving foodgrains under Targeted Public Distribution System (TPDS).
- Categories → Identification of beneficiaries under the Act is under two categories- households covered under **Antyodaya Anna Yojana** (AAY) and **Priority Households** (PHH) within the coverage determined for the State/UT.
- Foodgrains Entitlement → **5 kg per person** for PHH category and **35 kg per household for AAY households**.
- Prices → **Rs 1/2/3 per kg** for **nutri-cereals/wheat/rice** respectively.
- Nutritional Support to women and children → Children in the age group of **6 months to 14 years and pregnant women** and **lactating mothers** will be entitled to meals as per prescribed nutritional norms under Integrated Child Development Services (**ICDS**) and Mid-Day Meal (**MDM**) schemes.
- Maternity Benefit → **Pregnant women** and **lactating mothers** will also be entitled to **receive maternity benefit of not less than Rs. 6,000**.
- Women Empowerment → **Eldest woman of the household of age 18 years or above** to be the head of the household for the purpose of issuing ration cards.
- Grievance Redressal Mechanism → **Grievance redressal mechanism** at the **District** and **State levels**

17. Pradhan Mantri Rashtriya Bal Puraskar

Why in News?

- Ministry of Women and Child Development has invited nominations for the Pradhan Mantri Rashtriya Bal Puraskar-2021.

About

- The award was instituted in **1996**. It was earlier known as National Child Award for Exceptional Achievement.
- Aim → To give **recognition to children** with exceptional abilities and outstanding achievements in the **fields of innovation, scholastic achievements, bravery, social service, arts & culture and sports**.

Also Remember

- **Bal Kalyan Puraskar:**
 - It was instituted in **1979** and was earlier known as National Child Welfare Awards.
 - Aim → To give recognition to those who have made **outstanding contributions** in the **fields of Child Development, Child Protection and Child Welfare**.
 - Categories → The award is given in **two categories – Individual and Institution**. Three awards are given in each of these two categories along with **cash prizes**.

18.Kiran Helpline

Why in News?

- The Ministry of Social Justice & Empowerment has postponed the launch of “KIRAN” Helpline.

About

- What is it? → It is **Toll-Free Mental Health Rehabilitation helpline** 1800-599-0019, developed by Social Justice and Empowerment Ministry.
- Aim → It aims at providing **support for early screening, first-aid, psychological support, distress management, mental wellbeing**, preventing deviant behavior and psychological crisis management.
- The helpline will offer support in **13 languages** for any individual, family, NGOs, DPOs, parent associations, professional associations, rehabilitation institutes, hospitals or anyone in need of support across the country.
- The helpline will have a capacity of **handling 300 clients per hour**.
- The helpline will be **coordinated by the**
 - National Institute for the Empowerment of Persons with Multiple Disabilities (**NIEPMD, Chennai**)
 - National Institute of Mental Health Rehabilitation (**NIMHR, Sehore**).

19.Remote Learning Reachability report

Why in News?

- United Nations Children’s Fund (UNICEF) has released a report titled “Remote Learning Reachability report”.

About Report

- Purpose → The report **outlines the limitations to remote learning** and exposes deep inequalities in access.

Key Takeaways

- At least a **third of the world’s schoolchildren** which **works to around 463 million** could **not access remote learning** since schools have been shut down because of Covid-19.
- In India, at least **1.5 million schools** are **closed** because of the pandemic, which is **affecting 286 million students** from pre-primary to secondary levels of which 49% are girls.

Also Remember

- **Reimagine Campaign**

- It is a global campaign **launched by UNICEF** to **prevent the COVID-19 pandemic** from becoming a lasting crisis for children especially the most vulnerable children such as those affected by poverty, exclusion or family violence.

- **UNICEF**

- It is a United Nations agency responsible for **providing humanitarian and developmental aid to children worldwide.**
- Origin → It is the successor of the International Children's Emergency Fund (ICEF) created in **1946**.
- Headquarters → **New York City, US.**

Security

1. 1947 Tripartite Agreement on Gurkha soldiers

Why in News?

- Recently, Foreign Minister of Nepal said that the 1947 agreement among India, Nepal and the United Kingdom that deals with the military service of Gorkha soldiers has become redundant.

About Tripartite Agreement

- Following the Anglo-Nepalese War of 1814-16, the British decided to recruit Gorkha soldiers in 1815.
- After India's Independence in 1947, the question of allotting the 10 regiments of Gorkha soldiers was settled by the Britain-India-Nepal Tripartite Agreement.
- The agreement divided the Gorkha Regiments of the british Empire between India and the United Kingdom.
- It also assured that the Gorkha soldiers of Nepal while serving in the british military will draw perks and privileges equivalent to their counterparts.

👉 Gorkhas in the British Army

- Currently, the Gorkhas comprise up to 3% of the British Army, and in 2015 completed 200 years of service there.
- Regarded as fierce and loyal, the Gorkhas are held in high esteem in the British Army. They are enlisted not only in the infantry, but also in the engineering corps and as logisticians.
- Their signature weapon, the khukri, famous for the inwardly curved shape of its blade and its legendary utility, forms part of the Gorkha regimental insignia in Britain as well as in India.
- Queen Elizabeth II of Britain is guarded by two personal Gurkha officers.

2. Exercise Kavkaz 2020

Why in News?

- India will take part in the exercise, Indian contingent includes 150 Army personnel and a smaller number of personnel from the Navy and Air Force.

About Exercise Kavkaz 2020

- What is it? → Kavkaz 2020, also referred to as Caucasus-2020 is a multilateral strategic command-post exercise, that is about to be held in Russia.
- The invitation for participation to Kavkaz 2020, has been extended to at least 18 countries including China, Iran, Pakistan and Turkey apart from other Central Asian Republics part of the SCO.
- The exercise is aimed at assessing the ability of the armed forces to ensure military security in Russia's southwest, where serious terrorist threats persist and preparing for the strategic command-staff drills.

3. OPV Sarthak

Why in News?

- Recently, an Offshore Patrol Vessel (OPV) for the Indian Coast Guard (ICG) was launched and named as Indian Coast Guard Ship 'Sarthak'.

About OPV Sarthak

- Developed by → It is an offshore Patrol Vessel (**OPVs**) designed and built indigenously by Goa Shipyard Limited.
- Features → The Ship is fitted with **state-of-the-art Navigation and Communication equipment, sensor and machinery**.
- It is designed to embark and carry a **twin-engine helicopter, four high speed boats and one inflatable boat** for swift boarding and Search & Rescue operations.
- It is also capable of carrying **limited pollution response equipment** to undertake oil spill pollution response at sea.
- Use → The ship will be deployed extensively for **Exclusive Economic Zone (EEZ) surveillance, Coastal Security and other duties** as enshrined in the Coast Guard charter of duties, to safeguard the maritime interests of the Nation.

4. Naval Innovation and Indigenisation Organisation

Why in News?

- Union Defence Minister has launched the Naval Innovation and Indigenisation Organisation (NIIO).

About NIIO

- What is it? → It is a **three-tiered organisation** that aims to **help end-users interact with academia and industry** towards fostering innovation and indigenisation for self-reliance in defence.
- Three Tier Structure →
 - Naval Technology Acceleration Council(N-TAC)**: It will bring together the twin aspects of innovation and indigenisation and provide apex level directives.
 - Working group**: It will work under the N-TAC to implement the projects.
 - Technology Development Acceleration Cell(TDAC)** It has been created for induction of emerging disruptive technology in an accelerated time frame.
- A compendium of Indian Navy's Indigenisation perspective plans titled '**SWAVLAMBAN**' was also released by the Defence Minister.

5. Arrow 2

Why in News?

- Israel has successfully tested the Arrow 2 missile.

About Arrow 2

- What is it? → It is an **advanced missile defence system** developed jointly by the **U.S and Israel** for defence against both short and mid-range rockets fired from Gaza and Lebanon as well as Iran's long-range missiles.

📌 Additional Information

- Iron Dome → It is a **mobile all-weather air defence system** developed by Israel to intercept and destroy short-range rockets and artillery shells fired from short distances.

6. SRIJAN Portal

Why in News?

- Union Defence minister has launched Department of Defence Production portal named SRIJAN.

About SRIJAN Portal

- What is it? → It is an online portal that aims to **promote indigenisation of defence items production** by providing **information about defence equipment and items** that are being **imported** so that the Indian industry can design, develop and manufacture them domestically as per its capability.

📌 Also Remember

- **Innovations for Defence Excellence (iDEX)**
 - It was **launched in 2018** to create an ecosystem to **foster innovation and technology development** in Defence and Aerospace by engaging Industries including MSMEs, start-ups among others.
 - Implementation → It is being implemented by **Defence Innovation Organisation**(DIO).

7. National Institute of Social Defence (NISD)

Why in News?

- Union Minister for Social Justice & Empowerment, e-inaugurated the new building of National Institute of Social Defence (NISD).

About NISD

- What is it? → NISD is the **nodal training and research institute** in the **field of social defence**.
- Three main divisions →
 1. National Centre for Drug Abuse Prevention (**NCDAP**),
 2. **Old Age Care Division** and
 3. **Social Defence**.
- Objectives → It focuses on **human resource development** for drug abuse prevention, the welfare of senior citizens and transgenders, beggary prevention, and other social defence issues.
 - It provides **inputs for the social defence programmes** to the Government of India.
 - It also **conducts training and research in the field**, apart from ensuring the implementation of various programmes under the National Action Plan for Drug Demand Reduction and National Action Plan for Senior Citizens.

8. INS Viraat

Why in News?

- Decommissioned aircraft carrier INS Viraat is set to be scrapped at a ship breaking yard at Alang in Gujarat soon.

About INS Viraat

- INS Viraat holds the **Guinness World Record** for being the **longest serving warship** of the world.
- Viraat, a Centaur class aircraft carrier **weighing 27,800 tonnes**, served in the British Navy as HMS Hermes for **25 years from November 1959 to April 1984**.
- It was **commissioned** into the Indian Navy in **May 1987** after refurbishment and had operated **Harrier fighter jets**.
- It was **decommissioned from in March 2017**, and the Navy had been **incurring expenditure since** then on its upkeep, such as the provision of **electricity and water, and repairs**.
- In 2018, the **Maharashtra Cabinet approved** a proposal to **convert the carrier into a museum** and hospitality centre on a PPP basis and had invited bids. But there were no takers.

9. V. RAMAGOPAL RAO COMMITTEE

Why in News?

- With a focus on indigenous development of futuristic technologies, a five-member expert committee has been constituted to review the charter of duties for all laboratories of the Defence Research and Development Organisation (DRDO).

About

- The terms of reference are → to study and **review the charter of duties of all the labs of the DRDO**, to **redefine the charter of duties of the labs** on the current and futuristic defence and battlefield scenario, and to **minimise the overlap of technologies** amongst the labs.
- The committee has to submit its report **within 45 days**.

Culture

1. Lepcha People

Why in News?

- Prime Minister Narendra Modi has condoled the passing away of Folk musician and Padma Shri awardee Sonam Tshering Lepcha who passed away at Kalimpong recently due to old age ailments.

About

- Lepchas are also called **Rong**.
- Lepchas are **Mongoloid tribe**.
- Geographical Distribution → They are found in **India, Nepal and Bhutan**.
- In India, they reside in the states of **Meghalaya, Arunachal Pradesh, Bhutan, Sikkim and West Bengal** (Darjeeling).
- Language → Their language is an **admixture of Nepalese and Sikkimese languages**, which is very familiar with **Indo-Chinese language**.
- The Lepchā are **primarily monogamous** and have **large patrilineal clans**.
- Occupation → Traditionally hunters and gatherers, but now also engage in **farming and cattle breeding**.
- Religion → Originally, Lepchas practised **nature worship**, but in due course, have **embraced Buddhism**.

2. Natesa, a rare sandstone idol

Why in News?

- A rare late ninth century stone statue of Lord Shiva, which was stolen from a temple in Rajasthan and smuggled to the UK, will be returned to the Archaeological Survey of India (ASI).

About

- Natesa, a **rare sandstone idol** which was smuggled to return to India after 22 years.
- The idol **depicts Shiva** in the 9th century **Pratihara style of Rajasthan**
- It was originally from the **Ghateswara Temple, Baroli, Rajasthan**
- A **beautiful depiction of Nandi** is shown behind the right leg of the Natesa icon.

📍 Pratihara empire

- The Gurjara-Pratiharas, also known as the Pratihara Empire, ruled much of **Northern India** from the **mid-7th to the 11th century**.
- They were **instrumental in containing Arab armies** moving east of the Indus River.
- **Nagabhata I defeated the Arab army** under Junaid and Tamin during the Caliphate campaigns in India.
- Architecture →
 - Gurjara-Pratihara are known for their **sculptures, carved panels** and **open pavilion style temples**.
 - The greatest development of their style of temple building was at **Khajuraho**, now a **UNESCO World Heritage Site**.



3. Time Capsules

Why in News?

- Ahead of the laying of the foundation stone for a temple, claims and denials have emerged about plans to put in a time capsule, or 'Kaal Patra'.

About Time Capsules

- What is it? → It is a **container of any size or shape**, which **accommodates documents, photos and artefacts typical** of the current era and is buried underground, **for future generations to unearth**.
- The time capsule requires **special engineering** so that the **contents don't decay**, even if pulled out after a century.
- Material → such as **aluminium and stainless steel** are used for the encasing, and documents are often reproduced on acid-free paper.
- History → While the term "**time capsule**" was **coined** in the **20th century**, among the earliest examples of one dates back to 1777, found by historians inside the **statue of Jesus Christ in Spain** during its **restoration**.

📌 International Time Capsule Society

- The International Time Capsule Society (ITCS), **based in the US** and formed in **1990**, is **now defunct** but continues estimating the number of time capsules in the world.
- As per its database, there are "**10,000-15,000 times capsules worldwide**".

📌 Time Capsules In India

- Outside the Red Fort → This was placed underground in **1972** by the then Prime Minister **Indira Gandhi**, was dug out by the subsequent government in 1977. It raised a **controversy** as it was said to **glorify Gandhi Nehru family** in Indian History.
- At IIT Kanpur Campus → This time capsule was buried on 6th March, 2010 containing **details on IIT Kanpur in the form of documents, photographs, and films**.
- At The Alexandra Girls' English Institution, Mumbai → It was set up in the **19th century** and is scheduled to be opened in 2062. It **contains information on the school**.
- At Jalandhar's Lovely Public University → It was buried in **January 2019** and **contains 100 items** that represent **modern-day technology** in India.

4. Bal Gangadhar Tilak

Why in News?

- Prime minister has paid tribute to the freedom fighter and educationist Bal Gangadhar Tilak on his 100 death anniversary.

About

- He was an **Indian nationalist, teacher and an independence activist**. He was also conferred with the title of **Lokmanya**.

- As Educationist → He founded the **Deccan Education Society in 1884** along with his associate Gopal Ganesh Agarkar and others to create a **new system of education** that taught young Indians nationalist ideas through an emphasis on Indian culture.
- The Society also established the **Fergusson College in 1885** for post-secondary studies.
- Indian National Congress (INC) → Tilak joined the Indian National Congress **in 1890**. He **opposed moderate attitude**. He along with Lala Lajpat Rai and Bipin Chandra Pal was part of the **Lal-Bal-Pal** trio of leaders with extremist outlooks.
- Home Rule League → Tilak helped found the **All India Home Rule League** in 1916–18 with G. S. Khaparde and Annie Besant.
- Tilak's Home Rule League worked in **Maharashtra, Central Provinces and Karnataka and Berar region**. Besant's League was active in the rest of India.
- Newspapers → **Kesari** (Marathi) and **Mahratta** (English)
- Books → **Shrimadh Bhagvad Gita Rahasya** and **Arctic Home of the Vedas**.
- Significance →
 - The declaration of Tilak "**Swaraj is my birthright, and I shall have it**" served as an inspiration for future revolutionaries during India's struggle for freedom.
 - A book '**Indian Unrest**' written by Valentine Chirol, an English journalist stated Tilak the '**father of Indian unrest**'.

5. Thenzawl Golf Resort Project

Why in News?

- Union Minister for Culture & Tourism has inaugurated the "Thenzawl Golf Resort" Project at Aizawl, Mizoram.

About Project

- What is it? → The Project is sanctioned under the **Integrated Development of New Eco-Tourism** under Swadesh Darshan- **North East Circuit**.
- Designed by → **Graham Cooke and Associates**, one of top-ranked Canada based Golf Course architectural firm.
- Features → It is designed to have facilities of **international standards**.
- Advantages → The competitive advantage of Thenzawl Golf Course is that it will **provide quality golfing experience** and **international facilities at a fair price**.

👉 Swadesh Darshan Scheme

- It is a **Central Sector Scheme**.
- It was launched in **2014-15** for integrated development of **theme-based tourist circuits** in the country.
- Under the scheme, the **Ministry of Tourism** provides **Central Financial Assistance** (CFA) to State Governments/Union Territory Administrations for infrastructure development of circuits.

6. Brus or Reang

Why in News?

- The organisations representing the Bru community have rejected the sites proposed by the non-Brus in Tripura for their resettlement.

About Brus or Reang

- It is a community indigenous to **Northeast India** living mostly in **Tripura, Mizoram and Assam**. In Tripura, they are recognised as a **Particularly Vulnerable Tribal Group**.
- Language → They speak the Reang dialect of Bru language which is of **Tibeto Burmese origin** and is locally referred to as **Kau Bru**.
- Dance and Festival → The **Hojagiri folk dance** of the Reang sub tribe is well known all over the world. The most popular festival of reang tribes is **Buisu**.
- Conflict → In **Mizoram**, the Bru community have been **targeted by the groups** that do **not consider them indigenous to the state**. Hence, Brus fled from Mizoram and were accommodated in **relief camps in Tripura**.
- Agreement → In **January 2020**, the Centre, governments of **Tripura** and Mizoram and **representatives of Bru tribe** has **signed an agreement** to settle the Bru refugees in Tripura.

7. Abanindranath Tagore

Why in News?

- National Gallery of Modern Art has decided organize the virtual tour titled “The Great Maestro: Abanindranath Tagore”, to commemorate his 150th Birth Anniversary.

About

- Abanindranath Tagore, the nephew of Rabindranath Tagore, was one of the most prominent artists of Bengal school of art in India.
- He was the first major **supporter of swadeshi values** in **Indian art**.
- Contribution →
- Bengal School of Art:
 - He first created the ‘**Indian Society of Oriental Art**’ and later went on to establish **Bengal school of art**.
 - He believed that **Indian art** and **its art forms** gave **importance to spirituality** as **opposed to the West** which stressed on **materialism**, thus rejecting it.
 - His idea of **modernizing Mughal and Rajput paintings** eventually gave rise to modern Indian painting, which took birth at his **Bengal school of art**.
 - Most of his works revolved around **Hindu philosophy**.
 - In his later works, Abanindranath started **integrating Chinese and Japanese calligraphic traditions** into his style.
- Famous paintings are → **Bharat Mata**, **The Passing of Shah Jahan** (1900), **My Mother** (1912–13), **Fairyland illustration** (1913), **Journey’s End** (circa 1913).
- Literature →
- Abanindranath is also regarded as a **proficient and accomplished writer**.
- Most of his literary works were meant for children. Some of his books like ‘**BudoAngla**’, ‘**KhirerPutul**’ and ‘**Rajkahini**’ are best examples of **Bengali children’s literature**.

- William Rothenstein helped Rabindranath Tagore to publish his work 'Gitanjali' in English.
- Arabian Nights series was one of his notable works.

National Gallery of Modern Art

- NGMA was established in 1954, at the Jaipur House, New Delhi.
- It is run and administered as a subordinate office to the Ministry of Culture, Government of India.
- One of its objectives is to acquire and preserve works of modern art from the 1850s onward.

8. Lingaraj Temple

Why in News?

- The Odisha government has announced to give a facelift to the 11th century Lingaraj Temple, akin to its pre-350-year structural status.

About Temple

- Lingaraja Temple is a temple dedicated to Shiva and is one of the oldest temples in Bhubaneswar, Odisha.
- It represents the quintessence of the Kalinga Architecture and culminating the medieval stages of the architectural tradition at Bhubaneswar.
- The temple is believed to be built by the kings from the Somavamsi dynasty, with later additions from the Ganga rulers.
- It is built in the Deula style that has four components namely, vimana (structure containing the sanctum), jagamohana (assembly hall), natamandira (festival hall) and bhoga-mandapa (hall of offerings), each increasing in the height to its predecessor.
- Bhubaneswar is called the Ekamra Kshetra as the deity of Lingaraja was originally under a mango tree (Ekamra) as noted in Ekamra Purana, a 13th-century Sanskrit treatise.
- The temple has images of Vishnu, possibly because of the rising prominence of Jagannath sect emanating from the Ganga rulers who built the Jagannath Temple in Puri in the 12th century.

9. Prakash Purab Utsav

Why in News?

- Prime Minister Narendra Modi greeted people on the Prakash Purab Utsav of the holy book Guru Granth Sahib.

About

- The first Prakash Purab Utsav marked the installation of Guru Granth Sahib in Harmandir Sahib, also known as the Golden temple, in 1604.
- Guru Granth Sahib is the central religious scripture of Sikhs. It is regarded by Sikhs as the final, sovereign and eternal living Guru following the lineage of the ten human gurus of the religion.
- The Adi Granth, its first rendition, was compiled by the fifth Guru, Guru Arjan (1563–1606).
- Guru Gobind Singh, the tenth Sikh Guru, did not add any of his own hymns; however, he added all 115 hymns of Guru Tegh Bahadur, the ninth Sikh Guru, to the Adi Granth and affirmed the text as his successor. This second rendition became known as Guru Granth Sahib and is sometimes also referred to as Adi Granth.

- The Guru Granth Sahib is written in the **Gurmukhi script**, in various languages, including **Lahnda, Braj Bhasha, Kauravi, Sanskrit, Sindhi, and Persian**.

10. Nuakhai Juhar

Why in News?

- The Prime Minister has greeted the people on the auspicious occasion of Nuakhai Juhar.

About

- What is it? → It is the **agricultural festival celebrated in Odisha, Chhattisgarh and areas of neighbouring states** to welcome the new crop of the season. It is also called **Nuakhai Parab or Nuakahi Bhetghat**.
- What does Nuakhai mean? → Nuakhai is a combination of two words that signifies eating of **new rice** as '**nua**' **means new** and '**khai**' **means eat**.
- Features → During the festival, people **worship food grain** and **prepare special meals**. Farmers offer the first produce from their lands to Goddess Samaleswari, the famous '**Mother Goddess**' of **Sambalpur district of Odisha**.

11. Behrupiya

Why in News?

- The Covid-19 pandemic has impacted the livelihood of several folk artistes including 'Behrupiyas'.

About

- The word behrupiya is a derivative of the Sanskrit word bahu (**many**) and roop (**form**).
- They are impersonators mostly known to **perform in villages and markets all over India**.
- Where is it performed? → It is performed in Indian States like **Rajasthan, West Bengal, Maharashtra and Gujarat** as also some neighbouring countries like **Nepal and Bangladesh**.
- Significance →
- Arthashastra** makes a mention of religious processions in the Mauryan times where **artistes dressed as gods** and were **taken out in tableaux all around the kingdom**.
- Due to their expertise with disguise and impersonation, behrupiya were **recruited as spies by medieval Indian kings**.
- Behrupiyas are also said to have **helped freedom fighters** during the struggle for Independence.

👉 Other Traditional Theatre Artforms:

- Bhand Pather** → Kashmir.
- Bhavai** → Gujarat.
- Maach** → Madhya Pradesh.
- Bhaona** → Assam.
- Dashavatar** → Konkan and Goa regions.
- Krishnattam** → Kerala.

- **Mudiyettu** → Kerala
- **Koodiyattam** → Kerala
- **Yakshagaana** → Karnataka
- **Therukoothu** → Tamil Nadu

12. Bondas

Why in News?

- The COVID-19 pandemic has reached the Bondas, a PVTGs community residing in the hill ranges of Malkangiri district in Odisha.

About

- Bondas are one of the 13 **Particularly Vulnerable Tribal Groups** (PVTGs) found in **Odisha**.
- They are a **scheduled tribe** of India and are also known as the Remo (meaning “people” in the Bonda language).
- The tribe is one of the **oldest** and **most primitive in mainland India**; their culture has changed little for more than a thousand years.
- Their isolation and known aggressiveness continue to **preserve their culture** despite the **pressures of an expanding Indian population**.

13. Warli Painting

Why in News?

- With a view to promote Indian folk art, National Fertilizers Limited (NFL) a PSU under the Department of Fertilizers has displayed Maharashtra’s famous Warli painting on the outer walls of its Corporate Office in Noida.

About Warli Painting

- Location → **Maharashtra** is known for its Warli folk paintings.
- History → Its roots may be traced to as early as the **10th century A.D.**
- They bear a resemblance to those created in the **Rock Shelters of Bhimbetka**.
- Features →
 - **Scenes portraying hunting, fishing and farming, festivals and dances, trees and animals** are used to surround the central theme of the painting.
 - **Women** are mainly **engaged in the creation** of these paintings.
 - A very basic graphic vocabulary like a **circle**, a **triangle** and a **square** are **used in these** rudimentary wall paintings which are monosyllabic in nature.
- Material used →
 - A **mixture of rice paste, gum and water is used** as paint by the warlis. A **bamboo stick** is used as the brush.
 - Warli artists use their **clay huts as the backdrop for their paintings**, similar to how ancient people used cave walls as their canvases.
- Popular artists → **Jivya Soma Mashe**, has played a great role in making the Warli paintings more popular.

👉 Who are Warlis?

- The Warlis or Varlis are an **indigenous tribe or Adivasis**, living in Mountainous as well as coastal areas of **Maharashtra-Gujarat border** and **surrounding areas**.
- They speak an unwritten Varli language which **belong to the southern zone** of the **Indo-Aryan languages**.

14. Edakkal Caves

Why in News?

- Recently government has constituted a nine-member expert committee to conduct a detailed study on the present state of the Edakkal caves.

About Edakkal Caves

- Location → The Edakkal Caves are located on the **Ambukuthi Hills** (a part of the Western Ghats) on the **Mysore Plateau, in Wayanad district of Kerala**. It is located 1,200m above the sea level.
- It has engravings from the **late Neolithic period**, the only evidence for the **existence of true Neolithic Culture in Kerala**.
- Some of the carvings in the caves date back to **6000 BC** and hence, even sound can impact them.
- The neolithic petroglyphs on the cave walls **still await protection** from illegal constructions, mining, and urbanisation.
- Authorities had been **looking to get** the caves labelled as **UNESCO World Heritage Site** to help conserve the site.

15. PULIKKALI

Why in News?

- Pulikkali, a colourful part of Onam celebrations in Thrissur, will be an online-only affair this year due to COVID-19.

About

- Pulikkali is a **recreational folk art** from the state of **Kerala**. The folk art is mainly practiced in **Thrissur district of Kerala**.
- It is performed **by trained artists** to entertain people on the **occasion of Onam**, an annual harvest festival, celebrated **mainly in Kerala**.
- On the fourth day of **Onam celebrations** (Nalaam Onam), performers painted like tigers and hunters in **bright yellow, red, and black dance** to the beats of instruments like **Udukku** and **Thakil**.
- Literal meaning of Pulikkali is the **'play of the tigers'** hence the performance revolve around the **theme of tiger hunting**.
- Pulikkali was introduced in Thrissur by **Shakthan Tampuran two centuries ago**.

16. Mahatma Ayyankali

Why in News?

- PM remembers Mahatma Ayyankali on his 157th Birth Anniversary- 28th August.

About Mahatma Ayyankali

- Born on **August 28th, 1863** in a small village in the **princely state of Travancore**.
- The caste discrimination he faced as a child turned him into a **leader of an anti-caste movement** and who later fought for basic rights including **access to public spaces and entry to schools**.
- His contributions to Dalit developments →
 - Ayyankali in **1893 rode an ox-cart challenging the 'ban' on untouchables from accessing public roads** by caste-Hindus.
 - He also led a rally to assert the rights of '**untouchables**' at Balaramapuram. The walk Ayyankali took came to be known as '**walk for freedom**' and the consequent riots as '**Chaliyar riots**'.
 - Ayyankali efforts **influenced many changes that improved social wellbeing of those people**, who are today referred to as Dalits.
 - Ayyankali became a stated protestor for **Pulayar rights**. Because of the protests led through Ayyankali, in 1907 **a decree turned into issued to confess students from the untouchable network to government schools**.
 - Inspired by **Sree Narayana Guru, a social reformer from Ezhava caste**, Ayyankali started **Sadhu Jana Paripalana Sangham** (association for the protection of the poor) which later raised funds to start their own schools.

Miscellaneous

1. Subhash Chandra Bose Aapda Prabandhan Puraskar

Why in News?

- The Government of India has invited nominations for the 'Subhash Chandra Bose Aapda Prabandhan Puraskar'.

About

- Field Recognised → To recognise the excellent work done by the **individuals** and **institutions** in the **field of disaster management**.
- Administered By → **National Disaster Management Authority** (NDMA - created by the Ministry of Home Affairs under the Disaster Management Act, 2005).
- Award →
 - The awards are announced on the **birth anniversary of Netaji Subhash Chandra Bose** on 23rd January every year.
 - In addition to a **certificate**, these awards carry a **cash award of Rs. 51 lakhs** for an **Institution** and **Rs. 5 lakhs for an Individual**.
- Eligibility →
 - Only Indian nationals** and **Indian institutions** can apply for the award.
 - The nominated individual or institution should have **worked in any area of disaster management** like Prevention, Mitigation, Preparedness, Rescue, Response, Relief, Rehabilitation, Research, Innovation or early warning in India.

2. National Transit Pass System (NTPS)

Why in News?

- Union Environment Ministry launched the National Transit Pass System (NTPS).

About

- What is it? → It is an **online system for issuing transit permits for timber, bamboo and other forest produce**.
- Through mobile application **e-pass** will be issued for transit of forest produce.
- Benefits → NTPS will bring **ease of business** and expedite issuance of transit permits for timber, bamboo and other minor forest produce **without physically going to forest offices**.
- Coverage → The pilot project will be **functional in Madhya Pradesh** and **Telangana** for now.
- The system will be **operational in all states by November 2020**, to enhance seamless movement of forest produce.
- Transit of timber, bamboo and other forest produce is **governed by various state specific acts and rules**.

3. Barakah Nuclear Energy Plant

Why in News?

- UAE becomes first country in Arab World to produce nuclear energy.

About

- It is the **United Arab Emirates's first nuclear power station** and the first commercial nuclear power station in the Arab World.
- The Nuclear plant has **achieved criticality** and has successfully started towards **power production**.
- Criticality → It is a term that signifies the **initiation of a controlled** but **sustained nuclear fission reaction**.

4. COVID19BWMAPP

Why in News?

- The Supreme Court has made it mandatory for all municipal corporations and state pollution control boards to use the 'COVID19BWM APP' for tracking biomedical waste daily.

About

- What is it? → It is an application launched by the **Central Pollution Control Board** (CPCB) to **track biomedical waste**.
- Feature → It allows a **generator of waste** (urban local body in the case of home and hospital); the **picker of the waste** (transport of the ULB) and the **waste treatment operator to feed in data** so that COVID-19 biomedical waste can be **tracked and monitored**.

👉 Also Remember

- Biomedical Waste → It comprises **human & animal anatomical waste**, **treatment apparatus** like needles, syringes and other materials used in health care facilities in the process of treatment and research.
- CPCB →
- It is a **statutory organisation** constituted in **1974** under the **Water (Prevention and Control of Pollution) Act, 1974**.
- Further, CPCB was entrusted with the powers and functions under the **Air (Prevention and Control of Pollution) Act, 1981**.
- It also provides **technical services to the Ministry of Environment and Forests** of the provisions of the Environment (Protection) Act, 1986.

5. SAHAKAR COOPTUBE NCDC INDIA

Why in News?

- Recently, the Union Minister of Agriculture & Farmers' Welfare launched the two initiatives of the National Cooperative Development Corporation (NCDC) - Sahakar Cooptube NCDC Channel and Guidance Videos on 'Formation and Registration of A Cooperative'.

About

- What is it? → It is a **YouTube channel** launched by National Cooperative Development Corporation (NCDC) to **encourage farmers and the youth to take benefit of cooperatives**.

- The guidance videos in **different languages** covering **18 states** would also strengthen and deepen the major initiatives of our government to **promote and form 10,000 farmer-producer organisations** (FPOs).

Also Remember

- NCDC → It is an apex statutory institution established by an Act of Parliament in **1963** under the **Ministry of Agriculture & Farmers Welfare**.
- Yuva Sahakar scheme → It is implemented by **NCDC** to encourage young entrepreneurs into **start-ups in the cooperative sector** by providing them cheaper loans.
- Sahakar Mitra Scheme → It is an **Internship Program** by **NCDC** to provide **short term training** to **professional graduates** to get experience in areas of functioning of NCDC and related aspects of cooperatives.

6. Ebrahim Alkazi

Why in News?

- Recently Ebrahim Alkazi, the longest-serving director of the National School of Drama passed away.

About

- Ebrahim Alkazi is remembered as the **father of Indian theatre**.
- He **revolutionized Indian theatre**.
- He was the first person to **bring regional language plays to NSD**.
- He was the first recipient of **Roopwadh Pratishtan's the Tanvir Award** (2004) for lifetime contribution to the theatre.
- He received the **Padma Shri**, **Padma Bhushan** and **Padma Vibhushan**.
- He received **Sangeet Natak Akademi Fellowship** for lifetime contribution to theatre.

7. Tsunami Ready

Why in News?

- Odisha has achieved another milestone in disaster management. Venkataipur in Ganjam and Noliasahi in Jagatsinghpur have been recognised by UNESCO-IOC as Tsunami-Ready Communities.

About

- It is a **community performance-based programme** initiated by the Intergovernmental Oceanographic Commission (**IOC**) of **UNESCO**.
- Aim → To **promote tsunami preparedness** through active collaboration of public, community leaders and national and local emergency management agencies.
- Objectives →
 - To improve coastal community's preparedness for tsunami emergencies
 - To minimize the loss of life and property and
 - To ensure systematic approach in building community preparedness through implementing the best-practice indicators set by the UNESCO-IOC.

IOC-UNESCO

- It was established in **1960** as a body with **functional autonomy within UNESCO**.
- It is the only competent organization for **marine science within the UN system**.
- The purpose of the Commission is to **promote international cooperation** and to **coordinate programmes in research, services and capacity-building**, in order to **learn more about the nature and resources of the ocean and coastal areas** and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and the decision-making processes of its Member States.

8. Kisan Rail

Why in News?

- Kisan Rail or India's first Kisan Special Parcel Train has been inaugurated recently.

About

- The train will transport material **between Maharashtra's Devlali and Bihar's Danapur Railway station**.
- It will **carry fruits and vegetables** and will make stoppages at several stations and pick-up and deliver them.
- This will help in **bringing perishable agricultural products** like vegetables, fruits to the market in a short period of time.
- The Kisan Rail train **with frozen containers** is expected to build a seamless **national cold supply chain** for perishables, inclusive of fish, meat and milk.
- Initially, it will be operated on a **weekly basis**. However, further modifications can be done based on user experience.
- According to Railway Ministry, Kisan Rail is a step towards realizing the goal of **doubling farmers' incomes by the year 2022**.
- For Kisan Rail, aggressive marketing is being done with local farmers, loaders, individuals and APMC.
- The demand for this is being aggregated.

9. Vidyarthi Vigyan Manthan

Why in News?

- Recently, the Union Health and Family Welfare Minister launched an innovative initiative Vidyarthi Vigyaan Manthan 2020-21 (VVM).

About

- Objective → This initiative is a national programme for **popularizing science among school students of Class 6th to 11th**.
- It was designed to **identify the bright minds** with a scientific aptitude among the student community.
- This platform **identifies the talent in the field of science** and to promote the scientific acumen among the students.
- Students are made to **participate through comprehensive writing, objective type questions and answers, role play, practical examination** and by showing presentation and getting involved in a group discussion with peers.

10. Loya Jirga

Why in News?

- A three-day Loya Jirga-grand assembly has been called in Afghanistan to decide on freeing about 400 Taliban fighters convicted for serious crimes including murder and abductions.

About

- What is it? → It is a **mass national gathering** that brings together representatives from the various ethnic, religious, and tribal communities in Afghanistan.
- Participants → The gathering involves participation of Afghan **tribal elders, religious figures, and political leaders**.
- Significance → It is a **highly respected centuries-old consultative body** that has been convened at times of national crisis or to settle national issues.
- According to the Afghan Constitution, a **Loya Jirga** is considered the **highest expression** of the **Afghan people**.
- Status → It is **not an official decision-making body** and its decisions are **not legally binding**.

11. Food System Vision Prize 2020

Why in News?

- Rockefeller Foundation has selected Naandi Foundation, Hyderabad-based non-profit, as one of the 'Top 10 Visionaries' in the world for the Food Vision 2050 Prize. Naandi was recognised for its Arakunomics.

About

- What is it? → The Food System Vision Prize is an **invitation for organizations** across the globe to **develop a Vision of the regenerative and nourishing food system** that they aspire to create by the year 2050.
- Prize awards → a cash incentive of **USD \$200,000**.
- Presented by → **Rockefeller Foundation, USA**.
- Arakunomics → It is a **new integrated economic model** that **ensures profits for farmers** and **quality for consumers** through regenerative agriculture. It was based on work with **tribal farmers in Araku valley, Andhra Pradesh, for nearly 20 years**.

12. National Handloom Day

Why in News?

- August 7th was celebrated as the National Handloom Day. It was in 2015, the first National Handloom Day was celebrated.

About

- Why 7th August? →
- With the **partition of Bengal**, the **Swadeshi Movement** gained strength.
- It was on **August 7, 1905**, that a formal proclamation was made at the **Calcutta Town Hall** to **boycott foreign goods** and **rely on Indian-made products**.

👉 Initiatives launched on National Handloom Day, 2020

- Mobile App & Backend Website for Handloom Mark Scheme (HLM) → The app helps **ascertain the genuineness and originality of the product** through **unique and dynamic QR code labels** affixed on each handloom product.
- “My Handloom” portal → It is a **portal for individual weavers** and **other organizations** for applying for various benefits under the various handloom schemes.
- #Vocal4Handmade → It is a **social media campaign** launched to promote handloom products

13. Rashtriya Swachhata Kendra

Why in News?

- The Ministry of Culture has presented the first set of five volumes of Mongolian Kanjur published under the National Mission for Manuscripts (NMM) to the President.

About RSK

- A tribute to Mahatma Gandhi, the Rashtriya Swachhata Kendra (RSK) was first announced by the Prime Minister on **10th April 2017**, on the occasion of the **centenary celebrations of Gandhiji's Champaran Satyagraha**.
- It is an **interactive experience centre** on the Swachh Bharat Mission.
- The installations at RSK will include **audio visual immersive shows**, interactive **LED panels, hologram boxes, interactive games** etc.
- Roles and functions of RSK →
- It will introduce future generations to its successful journey as the **world's largest behaviour change campaign**.
- It will showcase the **core elements of the mission** and **anecdotes** on the journey of the country from **Satyagraha to Swachhagrah**.
- It will **impart information, awareness** and **education** on Swachhata (sanitation) and related aspects.

14. FARMS-app

Why in News?

- Union Agriculture ministry has developed a Multi lingual Mobile App, 'CHC (Custom Hiring Centers) - Farm Machinery' which connects farmers with Custom Hiring Service Centers situated in their locality.

About

- It encourages small and marginal farmers to **take machines on rental basis** for agriculture practices without them having to purchase such high-priced machines.
- The app has been further **modified** and been **given the acronym of FARMS-app** (Farm Machinery Solutions-app).

15. Swasthya Portal

Why in News?

- Recently, Union Tribal Affairs Minister will e-launch Swasthya Portal.

About Swasthya Portal

- What is it? → It is a first of its kind comprehensive platform that aims to provide **health and nutrition related information** of the **tribal population of India**.
- Managed by → The portal will be managed by the **Ministry of Tribal Affairs' Centre of Excellence** (CoE) for Knowledge Management in Health and Nutrition.

16. Pavitrapati and Aushada tara

Why in News?

- Pune based Defence Institute of Advanced Technology, developed an Ayurvedic based Biodegradable Nanofibres Face Mask "Pavitrapati" and an anti-microbial body suit in the name of "Aushada tara".

About

- Pavitrapati → acts a **virus neutralizer** to resist against the bacteria / virus.
- Aushada tara suit → has **super hydrophobic, breathing, anti-microbial, comfort feeling properties**.
 - The **fabric material** of the suit has the approval for fighting against the COVID-19.
 - The suit had **cleared the splash resistant tests** and it has got **good repellent property of any fluids**.
- The above two products are the **Trademarked products of DIAT** (DU).

17. Innovation Challenge Fund In India

Why in News?

- The UK government has launched a £3 million innovation challenge fund in India.

About

- Aim → The fund aims to **support scientists in academia and industry** to tackle the most acute global challenges like **Covid-19** and the **threat to the environment**.
- The fund will help to build on the **UK-India Tech partnership** which was launched in 2018 by the Indian and British Prime Ministers.

Also Remember

- Project Nirman Shree
 - Launched by → **the European Union** in four districts of Odisha and Maharashtra with the
 - Aim → aim of **empowering women by providing skills in the Housing Sector**.
 - Implemented by → the **Habitat for Humanity India**, a **housing-focussed not-for-profit organization**.

18. TIFAC

Why in News?

- Recently TIFAC (Technology Information Forecasting and Assessment Council) has flagged the lack of infra-structure in the chemical industry in the country as a barrier to competing with China.

About

- What is it? → TIFAC is an **autonomous organization**, a **think tank** set up in **1988 under DST**.
- Aim → It aims to **assess the technology trajectories**, and **support innovation** by networked actions in select areas of national importance.
- Tasks → TIFAC embarked upon the major task of formulating a **Technology Vision for the country** in **various emerging technology areas**.
- Under the leadership of **Dr. APJ Abdul Kalam**, the then **Chairman of TIFAC**, **Technology Vision 2020 exercise** led to set of **17 documents**, including sixteen technology areas and one on services.
- In more than 25 years of its service to the nation, it has **delivered number of technology assessment and foresight reports**.

19. DHANWANTARI RATH

Why in News?

- A MoU was signed between the All India Institute of Ayurveda and the Delhi Police recently for extending Ayurvedic mode of preventive and promotive health services.

About Dhanwantari Rath

- What is it? → is a **Mobile unit** of Ayurveda health care services.
- It would consist a **team of Doctors** who would be visiting Delhi Police colonies regularly.
- Benefits → These Ayurveda Health care services are expected to **reduce the incidence/prevalence of various diseases**.
- They also aim to **reduce the number of referrals to hospitals** thereby **reducing cost** to healthcare system as well as patient.

👉 AYURAKSHA:

- AYURAKSHA is a **joint venture of AIIA and Delhi Police** aims for maintaining the health of frontline COVID warriors like Delhi police.
- The joint programme '**Corona Se Jung- Delhi Police Ke Sang**' aims to fight against corona through simple and time-tested Ayurveda immunity boosting measures.
- Under the programme, **AYURAKSHA kits** have been **distributed to nearly 80,000 police personnel** for over a period of two months.
- In continuation of the project, Ayurveda Preventive and Promotive health care are now planned to be **extended to the families of Delhi Police personnel**.

20. Ninja UAVs

Why in News?

- Recently, Indian Railways started deploying "Ninja UAVs" (unmanned aerial vehicles) for establishing a drone-based surveillance system.

About

- Features → NINJA UAVs are capable of real-time tracking, video streaming and may be operated on **Automatic Fail-Safe mode**
- They are lightweight and economical micro contraptions built for mapping and surveillance.
- Significance →
 - They can be used to launch surveillance on criminal and anti-social activities like gambling, throwing of garbage, hawking etc in Railway premises.
 - It can be used at disaster sites for helping in rescue, recovery and restoration and coordination in efforts of various agencies.

21. Millennium Alliance

Why in News?

- Millennium Alliance Round 6 & COVID19 Innovation Challenge-Award Ceremony was recently held. 49 innovations in 5 focus areas were recognised.

About Millennium Alliance

- What is this? → It is an innovation-driven and impact-focused initiative leveraging collaborative resources to identify test and scale Indian innovations that address global development solutions.
- Bodies Involved → It is a consortium of partners (Public-Private Partnership) including the Department of Science and Technology, Govt. of India, United States Agency for International Development (USAID), FICCI, UK Government's Department for International Development (DFID), Facebook and Marico Innovation Foundation.
- Significance → The program has played an important role in providing funding, capacity building and business development support to Indian social enterprises.

22. Swachh Survekshan 2020

Why in News?

- Union Minister of Housing and Urban Affairs has released the results of Swachh Survekshan 2020.

About

- What is it? → It is an annual cleanliness survey of urban India conducted by the Ministry of Housing and Urban Affairs under the aegis of Swachh Bharat Mission- Urban (**SBM-U**).
- Objectives → a) To encourage large scale citizen participation and create awareness about cleanliness b) inculcate a spirit of healthy competition among cities and towns towards creating cleaner cities/towns.

📌 Key Takeaways

- India's Cleanest cities → Indore(MP) followed by Surat(Gujarat) and Navi Mumbai(Maharashtra).
- Best States → Chhattisgarh was the best-performing state with over 100 ULBs. On the other hand, Jharkhand was the best performing state with less than 100 ULBs.
- Ganga Towns → Varanasi has been awarded the cleanest town award along the banks of river Ganga.
- Cleanest Capital city → New Delhi has been awarded as the cleanest capital city in the country.
- Cantonment Board → Jalandhar Cantonment Board was conferred the cleanest cantonment board in the country.

👉 Also Remember

- **Swachh Survekshan 2021**
 - The 2021 survey will focus on parameters pertaining to **wastewater treatment**, reuse along with **faecal sludge**, **legacy of waste management**, **remediation of landfills** among others.
- **Prerak Daaur Samman**
 - It is a new category of awards which will be announced as **part of Swachh Survekshan 2021**.
 - The award has a total of five additional sub- **categories -Divya** (Platinum), **Anupam** (Gold), **Ujjwal** (Silver), **Udit** (Bronze), **Aarohi** (Aspiring) – with top three cities being recognized in each.

23. MY IAF

Why in News?

- Chief of the Air Staff has launched a mobile application called “MY IAF”.

About MY IAF

- Aim → It aims to provide **career related information** and details for those desirous of joining the Indian Air Force (IAF).
- Developed by → It has been developed by **Indian Air Force**(IAF) in association with Centre for Development of Advanced Computing (**C-DAC**) as a **part of Digital India initiative**.

👉 C-DAC

- It is the **premier R&D organization** under the Ministry of Electronics and Information Technology (**MeitY**) for carrying out R&D in IT, Electronics and associated areas.
- Established in → **1988**.

24. Chora Museum

Why in News?

- Recently, the Turkish President reconverted the Chora museum into a mosque.

About Chora Museum

- History → Chora Museum in Turkey was built initially as a **church in 534 AD**, during the early **Byzantine period**.
- It is also known as **Kariye in Turkish** and the **mediaeval Church** of the **Holy Saviour in Chora**.
- In the 11th century, its **internal walls**, **pillars** and **domes** were **covered with mosaics and frescoes** showing scenes from biblical stories.
- After the conquest of Constantinople (capital city of the Roman Empire) by the Ottomans (1453), the church was **seized** and **turned into a mosque in 1511**.
- In **1945**, it was **converted into a museum**.

25. SUPER APP

Why in News?

- Tata Group is planning to launch an all-in-one super app by the end of this year or early next year.

About SUPER APP

- What is it? → A super app is a platform developed by a company **offering various services under one umbrella**.
- For example, **China's WeChat**, which started out as a **messaging app**, **expanded into payments, cabs, shopping, food ordering**, cab services to become a super app.
- A physical world comparison of a super app would be a **mall, which allows retail space to various brands and shops across businesses and verticals**.
- Who makes super apps? → Typically, companies that have a **slew of services and products** to **offer tend to consolidate these offerings** into a super app.

26. PRERAK DAUR SAMMAN

Why in News?

- Minister of State (Independent Charge) for Ministry of Housing & Urban Affairs (MoHUA) has launched Swachh Survekshan 2021 Toolkit.

About Prerak Daur Samman

- It is a **new category of awards** launched as part of Swachh Survekshan 2021.
- It has a total of **five additional sub- categories** -Divya (Platinum), Anupam (Gold), Ujjwal (Silver), Udit (Bronze), Aarohi (Aspiring) - with top three cities being recognized in each.
- In a departure from the present criteria of evaluating cities on 'population category', this new category will categorize cities on the basis of **six select indicator** wise performance criteria which are as follows:
 - Segregation of waste into Wet, Dry and Hazard categories.
 - Processing capacity against wet waste generated.
 - Processing and recycling of wet and dry waste.
 - Construction & Demolition (C&D) waste processing.
 - Percentage of waste going to landfills.
 - Sanitation status of cities.

Swachh Survekshan:

- It is a **ranking exercise taken up by the Government of India** to assess rural and urban areas for their levels of cleanliness and active implementation of Swachhata mission initiatives in a timely and innovative manner.
- The **Union Ministry of Housing And Urban Development** takes up the Swachh Survekshan.
- **The Quality Council of India** (QCI) has been commissioned the **responsibility** of carrying out the assessment.
- It is being conducted **under the ambit of the Swachh Bharat Mission (Urban)**.
- The process of **ranking cities** and town of India on the basis of cleanliness was **first conducted in 2016**, which covered **73 cities**.
- The **second and third round of the survey in 2017 and 2018** widened the coverage of the assessment to **434 cities** with a population of one lakh and above and **4,203 cities respectively**.
- The 4th edition-2019 covered 4237 cities in a record time of 28 days and was a **fully digitized paperless survey**.

27. STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD (SOFI)

Why in News?

- Fight against hunger disrupted by coronavirus-induced recession.

About State of Food Security and Nutrition in the World (SOFI) 2020 report

- The report is presented by the **Food and Agriculture Organization** on the United Nations, the International Fund for Agricultural Development, the United Nations Children's Fund, World Food Programme and the **World Health Organization**.
- Its **first edition was brought out in 2017**.
- It presents the latest estimates on food insecurity, hunger and malnutrition at the global and regional levels.
- It is an annual flagship report.

From the report:

- The five agencies warn that **“five years after the world committed to end hunger, food insecurity and all forms of malnutrition, we are still off track to achieve this objective by 2030.”**
- As per the report, hunger continues to be on the rise since 2014 and the global prevalence of undernourishment, or overall percentage of hungry people, **is 8.9%**.
- Asia remains home to the **greatest number of undernourished** (38 crore), **followed by Africa** (25 crore).
- According to current estimates, in 2019, **21.3% (14.4 crore) of children under 5 years were stunted, 6.9% (4.7 crore) wasted and 5.6% (3.8 million) overweight**.

28. SAHIYAS

About

- The Accredited Social Health Activist (**ASHA**) workers in Jharkhand are known as Sahiyas.
- They have been **supporting delivery of health care services** to the last mile, especially in the tribal areas.

29. MoES KNOWLEDGE RESOURCE CENTER NETWORK (KRCNET)

About

- KRCNet is an ambitious project of the **Union Ministry of Earth Sciences (MoES)**.
- Under the project, an attempt has been made to develop a system for accessing MoES knowledge products developed in MoES and its institutes from a **centralized portal**.
- KRCNet aims to develop an integrated information system for providing **one-point 24x7** access to the Knowledge products like books, reports, journals, presentations, photographs, videos etc.

30. TEEN AGE POLICE (TAP)

About

- **Haryana Police** have decided to set up a dedicated wing named Teen Age Police (TAP).
- **TAP aims to address the age-linked problems faced by teenagers**.

- TAP will reach out to teenagers, who face classroom, neighborhood and online bullying, or have taken to drugs and alcohol or have been victims of human trafficking.

Quick revision (True/False)



1	International Covenant on Civil and Political Rights (ICCPR) -> The covenant commits its parties to respect the civil and political rights of individuals. Monitored by International Bar Association's Human Rights Institute.	
2	Perseverance Rover -> part of UAE Mission in exploring Mars with a Rover.	
3	Atal innovation mission -> set up by Ministry of HRD in 2016 to promote a culture of innovation and entrepreneurship.	
4	Smog Towers -> can only filter out PM 10 and not PM5.	
5	Alliance to End Plastic Waste -> founded in 2019 as an international not profit organisation based in Singapore.	
6	Yellow Fever -> is an acute viral haemorrhagic disease transmitted by infected mosquitoes.	
7	Blue Heart Campaign -> It is an international anti-trafficking program started by the United Nations Office on Drugs and Crime (UNODC).	
8	DHOLE -> native to Central, South and Southeast Asia. Endangered – IUCN.	
9	Galapagos Islands -> It is a group of Island in the Pacific Ocean which is administratively a province of the United States.	
10	Bharat Airfiber Services -> provides high speed broadband connectivity to subscribers of remote areas. introduced by the MTNL as part of digital India initiatives.	
11	Aarhus Convention -> India is the party.	
12	Barakah Nuclear Energy Plant -> Saudi Arabia.	
13	Pyrolysis -> it is performed in the presence of oxygen.	
14	Thenzawl Golf Resort -> Assam.	
15	Libya touches border with Mediterranean Sea.	
16	Ebrahim Alkazi was a famous painter.	
17	Higher Education Financing Agency -> formed in 1955 by Ministry of Human Resource Development. Non-deposit taking NBFC with RBI.	
18	Zimbabwe -> Line of equator passes through Zimbabwe.	
19	Ammonium Nitrate -> acts as a source of oxygen that can accelerate the combustion (burning) of other materials.	
20	Pokkali Rice -> known for its saltwater resistance and widely used in Punjab.	
21	Vidyarthi Vigyan Manthan is a national programme for popularizing science among school students of Class 6th to 11th.	
22	Siva drinking World Poison is famous painting of Abanindranath Tagore.	

23	Tsunami Ready Programme -> is a community performance-based programme initiated by the UN Office of Disaster Risk Reduction (UNDRR).	
24	Severe Fever with Thrombocytopenia Syndrome (SFTS) -> belongs to the Bunyavirus family and is transmitted to humans through tick bites.	
25	Sub-Mission on Agricultural Mechanization (SMAM) -> It aims to promote the usage of farm mechanization and increase the ratio of farm power to cultivable unit area up to 2 kW/ha.	
26	Indus Water Treaty -> signed in Karachi on 2001. between India and Pakistan, brokered by the World Bank.	
27	E-Sanjeevani Tele-Medicine Platform -> is a platform-independent, browser-based application facilitating only doctor-to-doctor teleconsultations.	
28	Bombay Natural History Society -> one of the largest NGO in India engaged in conservation and biodiversity research.	
29	Submarine optical fibre cable project -> is a 2,300 kilometre undersea cable that provides better connectivity from Chennai to Port Blair and seven other Islands.	
30	Sunspots -> Temperature here is relatively more as compare to surrounding area.	
31	Mount Sinabung is located in -> Philippines.	
32	Surakhya Portal -> is the National Portal on human tiger conflict.	
33	Mullaperiyar Dam -> located on the confluence of the Mullayar and the Periyar rivers, operated and maintained by Kerala.	
34	Student Entrepreneurship Programme 2.0 -> launched by the Ministry of Human Resources Development in collaboration with Dell Technologies.	
35	Ceres -> is the dwarf planet located in the outer solar system.	
36	Krishi Megh -> is a data recovery centre setup to protect the data of the Indian Council of Agricultural Research (ICAR).	
37	Sustainable Alternative towards Affordable Transportation (SATAT) scheme -> promote Compressed Biogas as an alternative, green transport fuel by establishing 5000 Compressed Biogas(CBG) plants across the country by 2023. by Ministry of Petroleum & Natural Gas.	
38	PAPUM RESERVE FOREST (RF) -> Kerala.	
39	OSOWOG initiative -> It is a Chinese initiative to build a global ecosystem of interconnected renewable energy resources.	
40	Next Generation Sequencing (NGS) -> allows parallel Genome Sequencing.	
41	Raman is -> India's fastest Super Computer.	
42	Addu Atoll -> is the southernmost atoll of the Sri Lanka.	
43	Sarthak -> anti-submarine warfare corvettes built for the Indian Navy by the Garden Reach Shipbuilders and Engineers of Kolkata under Project 28.	
44	Mediterranean Sea -> connects to the Atlantic Ocean by the strait of malacca in the west.	

45	National Overseas Scholarship Scheme -> is a central sector scheme under the Ministry of Human Resources Development.	
46	Business Responsibility Reporting (BRR) -> released by Commerce Ministry. is a disclosure of adoption of responsible business practices by a listed company to all its stakeholders.	
47	Arrow 2 -> is an advanced missile defence system developed jointly by the U.S and Israel.	
48	SRIJAN Portal -> To promote indigenisation of defence items production.	
49	6th Schedule -> Assam, Meghalaya, Tripura, Nagaland.	
50	Fishing Cats -> IUCN: Vulnerable. found only in Western Ghats.	
51	West Bank -> bordered by UAE to the east and by the Green Line separating it and Israel on the south, west and north.	
52	Aisatic Lion -> Endangered. found in India, Nepal and Bangladesh.	
53	Sarabhai Crater is related to mars.	
54	ARIIA 2020 Rankings -> initiative of the Niti Aayog.	
55	Swadeshi Microprocessor Challenge -> aims to invite innovators, startups and students to use microprocessors to develop various technology products. IIT Madras → Shakti.	
56	Lingaraj Temple -> is a temple dedicated to vishnu and is one of the oldest temples in Rajasthan.	
57	Mali -> is a landlocked country in East Africa.	
58	Microplastics -> These are plastic debris smaller than 5mm in length.	
59	African Cheetahs -> IUCN Status: Endangered.	
60	Inter-Parliamentary Union -> established in 1889. HQ: New Delhi.	
61	Kudremukh National Park -> Karnataka.	
62	Millennium Alliance -> is an innovation-driven and impact-focused initiative leveraging collaborative resources to identify test and scale Indian innovations that address global development solutions.	
66	Trifood Project -> enhance the income of tribals through better utilization of and value addition to the Minor Forest Produce. initiative of Ministry of Social Justice and Empowerment.	
67	Swachh Survekshan 2020 -> Cleanest cities – Prayagraj in UP.	
68	Supply Chain Resilience Initiative (SCRI) -> by India, Japan and USA.	
69	National Council for Transgender Persons -> Chairperson – PM.	
70	Nuakhai Juhar -> agricultural festival celebrated Only in Odisha.	
71	Dragonflies act as important bio-indicators of the ecological health of an area.	

72	Atal Bimit Vyakti Kalyan Yojana -> launched in 2018 by Employees State Insurance (ESI) Corporation. To provide financial support to those who lost their jobs.	
73	Astrosat is India's first dedicated multi wavelength space observatory launched on a PSLV-XL in 2015.	
74	The India's longest river ropeway was recently inaugurated in -> The Ganges.	
75	Bonda Tribe -> mostly living in the remote Garo Hills of Meghalaya.	
76	Indian Association of Parliamentarians for Population and Development (IAPPD) -> is a national level Non-Governmental organization (NGO) established in the year 1978.	
77	Glanders -> is an infectious disease that is caused by a fungus that lives on dead tissues. primarily a disease affecting horses.	
78	Warli Painting -> Andhra Pradesh. mixture of rice paste, gum and water is used as paint by the warlis.	
79	Edakkal Caves -> Tamil Nadu.	
80	Export Preparedness Index 2020 -> by NITI Aayog. Andhra Pradesh has topped the index followed by Maharashtra and Tamil Nadu.	
81	V. RAMAGOPAL RAO COMMITTEE -> To Prompt Digital Payment.	
82	PULIKKALI -> Kerala.	
83	Kiran Helpline -> to cope with the emergency situation arising out of the imposition of curfew/lockdown in the state in the light of COVID19 crisis.	
84	BRICS Innovation Base -> focus on digital transformation, especially in 5G, Artificial Intelligence and the digital economy.	
85	National Council for Promotion of Urdu Language (NCPUL) -> setup in 1996 as the National Nodal Agency for the promotion of the Urdu language. under the Ministry of Minority Affairs.	
86	Amnesty International -> Inter-governmental Organization.	
87	Barn Owl -> IUCN - Vulnerable.	
88	Wolbachia Bacterium -> are safe, natural bacteria present in up to 60% of insect species including some mosquitoes.	
89	Chunauti Contest -> to further boost Water conservation Technology and software products with special focus on Tier-II towns in the country.	
90	Sudan -> is a land locked country located in northeastern Africa.	