

My Notes....

NATIONAL

PANNA GETS UNESCO'S 'BIOSPHERE RESERVE' STATUS

Panna National Park in Madhya Pradesh, a popular tourist spot for wildlife lovers **has been declared as a UNESCO Biosphere Reserve**. The **tiger reserve to UNESCO's list** will help in **exploring new measures towards the conservation of wildlife and sustainability**.

What

1. **Every year UNESCO designates new Biosphere reserves and removes others** to promote the **conservation of biodiversity** and **resolve man-animal conflict** at that site and enable sustainable use of natural resources.
2. **Panna Tiger Reserve last year witnessed a remarkable turnaround in tiger population** by increasing the number of big cats to 50 from zero estimated a decade ago.
3. The **Tiger Reintroduction Project started in 2009** by bringing five female and two male felines from **Bandhavgarh and Kanha national parks**.
4. Covering an area of approx **542.67 sq km**, the thick deciduous forest of the **Panna National Reserve is the natural habitat of sloth, Indian wolf, Bear Pangolin, Leopard, Gharial, Indian fox** and a lot more.
5. The **Panna National Park got the status of Project Tiger Reserve 13 years after its formation in 1981**.
6. A Report by the All India Tiger Estimation made Madhya Pradesh the state with the highest number of tigers.
7. The state had a total of 526 big cats according to the 2018 census.

What are Biosphere Reserves?

1. **Biosphere reserves are 'learning places for sustainable development'**.
2. They are **sites for testing interdisciplinary approaches to understanding and managing changes** and interactions between social and ecological systems, including **conflict prevention and management of biodiversity**.
3. They are places that provide local solutions to global challenges. **Biosphere reserves include terrestrial, marine and coastal ecosystems**.
4. Each site promotes solutions reconciling the conservation of biodiversity with its sustainable use.
5. **Biosphere reserves are nominated by national governments** and remain under the sovereign jurisdiction of the states where they are located.
6. Biosphere Reserves are designated under the **intergovernmental MAB Programme by the Director-General of UNESCO** following the decisions of the **MAB International Coordinating Council (MAB ICC)**.

8. After Madhya Pradesh, **Karnataka and Uttarakhand** have the highest number of tigers.

EOS-01 LAUNCHED

India's PSLV-C49 carrying its latest earth observation satellite EOS-01 and nine customer satellites lifted off from the spaceport on 7 November 2020. The Polar Satellite Launch Vehicle (PSLV-C49/EOS-01) blasted off from the Satish Dhawan Space Centre. This is the first mission by the Indian Space Research Organisation (ISRO) this year. EOS-01 is intended for applications in agriculture, forestry and disaster management support, the Indian Space Research Organisation (ISRO) said. The customer satellites are from Lithuania (1), Luxembourg (4) and USA (4).

What

1. In its first space mission in nearly a year, the Indian Space Research Organisation (ISRO) on 7 November 2020 launched the Polar Satellite Launch Vehicle (PSLV) with the Earth observation EOS-01 and nine other foreign satellites. This is the PSLV's 51st mission.
2. The last time ISRO launched a satellite from Indian soil was on December 11, 2019, when the earth observation RISAT-2BR1 was placed in orbit.
3. In January this year, the space agency launched the GSAT-30 from French Guiana.
4. Among the customer satellites, one is from Lithuania for technology demonstration, four from Luxembourg for maritime applications and four from the United States for multi-mission remote sensing.
5. The synthetic aperture radars onboard EOS-01 are designed to capture high-resolution images of the terrain.
6. Radar imaging is unaffected by weather changes. High wave-length signals from the radars are capable of penetrating even dense tree covers.

LONAR LAKE DECLARED RAMSAR SITE

The world-famous Lonar crater in Buldhana district has been added to 'Ramsar sites', getting the highest level of protection. It got the designation with another wetland, the Sur Sarovar, a bird haven in Agra. The convention on wetlands of international importance (i.e. Ramsar Convention) is an international treaty that provides for international cooperation for the conservation of wetlands. It was signed on February 2, 1971, at Ramsar in Iran. A Ramsar site is a wetland site designated to be of international importance. The two new Ramsar sites were added to the list on November 11, 2020. Sur Sarovar is listed at 2,440 while Lonar is at 2,441 places. Now, Maharashtra has two Ramsar sites, the first being Nandur Madhmeshwar in Nashik district. The letter is now the declaration of Lonar lake as Ramsar site.

About Lonar lake

1. Lonar lake is part of Lonar wildlife sanctuary, which was notified on June 8, 2000, with an area of 3.65 sq km.
2. The area of the lake is 77.69 hectares. Earlier, Lonar was under the control of the

- territorial division** but it was brought under the **control of Melghat on December 4, 2018**, as part of the unified control of MTR.
- Lonar crater sits inside the Deccan Plateau**, a massive plain of volcanic basalt rock leftover from eruptions of some **65 million years ago**.
 - Lonar crater is the result of a meteorite impact that occurred 50,000 years ago**. The lake is high in **salinity and alkalinity**, as the lack of an outflow leads to a concentration of minerals as the lake water evaporates.
 - Specialized microorganisms such as **anaerobes, cyanobacteria, and phytoplankton** survive in this harsh chemical environment.
 - Outside the lake, there is a considerable **diversity of plants and animals**. Inhabiting the site are **160 species of birds** including the **vulnerable Asian woolly neck** and common pochard, **46 species of reptiles**, and **12 species of mammals** including the iconic grey wolf.

About Sur Sarovar

- The **Sur Sarovar was originally created to supply water to the city of Agra in summer**.
- The wetland soon became an important and **rich ecosystem**.
- The site's **patchwork of different habitat types provides refuge to resident and migratory birds**, and more than 60 species of fish.
- Threatened species include the **vulnerable greater spotted eagle, sarus crane and catfish**.
- Sur Sarovar is important for bird species which migrate on the Central Asian flyway** and over 30,000 water birds visit the reservoir annually.

CENTRAL FUNDS FOR LITERACY DRIVE

Kerala is getting ready **to receive the central funds for literacy programmes** as the southern state is now part of the union government's ambitious literacy drive "**Padhna Likhna Abhiyan**," the reading and writing campaign. The **core objective of the new scheme**, envisaged as a leap forward for **achieving the goal of the total literacy in the country by 2030**, is to impart functional literacy and numeracy to 57 lakh non-literate and non-numerate adults in both rural and urban areas across India in the age group of 15 years and above.

What

- The **Kerala State Literacy Mission Authority (KSLMA)**, the autonomous agency under the state government, said that it was for the first time in the last 10 years that the southern state was receiving the central fund for literacy initiatives, which is a **significant step after achieving 100 percent literacy**.
- After 2009, the union government had not granted any fund to Kerala for informal education.
- Kerala is also now part of the union government's new literacy drive "**Padhna Likhna Abhiyan**".

4. The Union Ministry of Human Resources has issued minutes in this regard. Of the total Rs 4.74 crore-worth project, the Centre will provide Rs 2.84 crore while the state government Rs 1.90 crore.
5. **Women, scheduled caste and tribe people and coastal dwellers would get priority under the programme** which lays thrust on districts with low literacy rate.
6. Around 1, 15,000 illiterates, belonging to educationally backward districts like **Wayand, Idukki, Palakkad and Malappuram**, would be made literate in the first phase of the drive.
7. **As per the 2011 census**, there were 6, 12,624 illiterates in these districts and **4, 27,166 of them were women**.
8. The **Mission would conduct a survey and trace out these persons before implementing the programme**.

INTERNATIONAL

PROVISIONAL STATUS OF GILGIT-BALTISTAN

The **Ministry of External Affairs** on 1 November 2020 said **Pakistan's decision to grant "provisional provincial status" to Gilgit-Baltistan** was an **attempt to camouflage its illegal occupation**. MEA said the **Union Territories of J&K, Ladakh, including Gilgit-Baltistan, were an integral part of India**. The government of India firmly rejects attempt by **Pakistan to bring material changes to a part of Indian Territory**, under its illegal and forcible occupation.

What

1. **Union Territories of J&K, Ladakh, including Gilgit-Baltistan**, are an integral part of India by virtue of the legal, complete and irrevocable accession of Jammu and Kashmir to the Union of India **in 1947**.
2. Though Pakistan, like India, **links G-B's fate to that of Kashmir**, its administrative arrangements are **different from those in PoK**.
3. While **PoK has its own Constitution that sets out its powers and their limits vis-à-vis Pakistan**, G-B has been ruled mostly by executive fiat.
4. Until 2009, the region was simply called Northern Areas.
5. It got its present name only with the **Gilgit-Baltistan** (Empowerment and Self-Governance) Order, 2009, which **replaced the Northern Areas Legislative Council with the Legislative Assembly**.
6. The **NALC was an elected body**, but had no more than an advisory role to the Minister for Kashmir Affairs and Northern Areas, who ruled from Islamabad.
7. The **Legislative Assembly is only a slight improvement**. It has **24 directly elected members** and **nine nominated ones**.

US EXIT FROM PARIS CLIMATE DEAL

The **US formally exited the Paris Climate Agreement** on 4 November 2020; **three years after President Donald Trump announced his intent to remove** the country from

participating in the landmark global pact to **reduce greenhouse gas emissions**. President Trump originally announced his **intention to withdraw from the agreement in 2017** and **formally notified the United Nations last year**. The US exited the pact after a mandatory year-long waiting period ended on 4 November 2020.

What

1. The **historic accord seeks to limit global warming to less than 2 degrees Celsius**; the value that climate scientists have determined will have disastrous consequences if exceeded.
2. Trump has repeatedly **criticised the agreement as economically detrimental** and **claimed it could cost the country 2.5 million jobs by 2025**. He also said it gave other major emitters, like China and India, a free pass.
3. The **US is the only country to withdraw from the global pact**. It can still attend negotiations and give opinions, but is relegated to observer status.
4. The **US is the second leading producer of all carbon dioxide emissions globally**, behind China. But whether the US exit turns out to be brief or lasting depends on the outcome of the presidential contest.
5. **At COP 21 in Paris, on 12 December 2015**, Parties to the **UNFCCC reached a landmark agreement to combat climate change** and to accelerate and intensify the actions and investments needed for a **sustainable low carbon future**.

JOE BIDEN BECOMES 46TH US PRESIDENT

Joseph Robinette Biden Jr. has defeated Donald Trump to become the 46th U.S. president, unseating the incumbent with a pledge to unify and mend a nation reeling from a worsening pandemic, faltering economy and deep political divisions. **Biden, 77, will become the oldest president-elect in U.S. history** and the first to oust a sitting commander-in-chief after one term since Bill Clinton defeated George H.W. Bush in 1992.

INDIA-ASEAN SUMMIT

Prime Minister along with **Vietnamese counterpart HE Nguyen Xuan Phuc, co-chaired the 17th ASEAN-India Summit**. The leaders of **all ten ASEAN (Association of Southeast Asian Nations)** member states are participating in the virtual summit on 12 November 2020 to review the **status of the ASEAN-India Strategic Partnership** and take stock of progress made in key areas such as **connectivity, maritime cooperation, trade and commerce, education and capacity building**.

What

1. The **Association of Southeast Asian Nations (ASEAN)** is considered **one of the most influential groupings in the region**, and India and several other countries including the **US, China, Japan and Australia are its dialogue partners**.
2. The **10 member countries of ASEAN** are **Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar and Cambodia**.
3. The ties between India and ASEAN have been on an upswing in the last few years with focus being on ramping up cooperation in the areas of trade and investment as well as

security and defence.

- The ASEAN region along with India together comprises a **combined population of 1.85 billion people**, which is one fourth of the global population and their combined GDP has been estimated at over USD 3.8 trillion.
- Prime Minister Modi attended the **16th ASEAN-India Summit in Bangkok in November last year**.

15TH EAST ASIA SUMMIT

India on 14 November 2020 **expressed concern over "actions and incidents"** that "erode" trust in the **South China Sea**, and underlined the **importance of adhering to international law**, respecting territorial integrity and sovereignty. In an address at the **15th East Asia Summit (EAS)**, External Affairs Minister S Jaishankar also talked about the Indo-Pacific and noted the growing interest in the region as an **integrated and organic maritime space with 10-nation ASEAN at its centre**.

What

- The summit**, held in the virtual format, was **chaired by Prime Minister of Vietnam Nguyen Xuan Phuc** in his **capacity as chair of the ASEAN** and **all the EAS member nations attended it**. India is generally represented at the summit by the prime minister.
- India also **underlined the need for greater international cooperation in the post-Covid world** to tackle the challenges cutting across national boundaries such as terrorism, climate change and pandemics.
- The **East Asia Summit is a premier forum in the Asia-Pacific region** dealing with **issues relating to security and defence**.
- Since its inception in 2005**, it has been playing a significant role in the strategic, geopolitical and economic evolution of East Asia.
- Apart from the **10 ASEAN (Association of Southeast Asian Nations) member states**, East Asia Summit **includes India, China, Japan, Republic of Korea, Australia, New Zealand, United States and Russia**.
- India has been pitching for promoting a rules-based order in the region including through upholding adherence to international law, especially the **UNCLOS (United Nations Convention on the Law of the Sea)**.
- The summit issued a declaration and also adopted four statements on marine sustainability; epidemics prevention and response; women, peace and security; and

Flashback

- At the **East Asia Summit in Bangkok last year**, Prime Minister **proposed setting up of the Indo-Pacific Ocean's Initiative (IPOI)** to conserve and sustainably use the maritime domain and to make meaningful efforts to create a safe and secure maritime domain.
- The concept is gaining traction with **Japan already agreeing to be the lead partner in the connectivity pillar of the IPOI**.

steady growth of regional economy, the MEA said.

EXPANDED MALABAR EXERCISE

The **Malabar exercise among the navies of India, the US, Japan and Australia** kick start off Visakhapatnam in the **Bay of Bengal** on 3 November 2020, in a reflection of growing congruence in strategic interests of the **four nations**.

What is Malabar Exercise?

1. **It is one of the oldest war games undertaken by the Indian Navy**, which began the Malabar series of **bilateral naval exercises with the US Navy in 1992**.
2. **Three drills were held before 1998** when the US imposed sanctions on India in the wake of **Pokhran-II nuclear tests** and cut off all bilateral military links.
3. **It was resumed in 2002** after India joined hands with the USA to fight terrorism globally in the aftermath of 9/11.

ECONOMY

THE RURAL DEVELOPMENT FUND

The Union government's decision to **withhold rural development fee from Punjab**, and letters asking the Punjab Government to explain its utilisation of the **Rural Development Fund (RDF)** that it gets largely from the **Food Corporation of India (FCI)** has enraged the state government.

What is Rural Development Fund or RDF?

1. **RDF is the 3 per cent cess levied on the purchase or sale of agricultural produce** under the **Rural Development Fund Act, 1987** which is executed by Punjab Rural Development Board (PRDB) with the Chief Minister as its chairman.
2. The **RDB was incorporated in April 1987 under Rural Development Act, 1987** and is mandated with the promotion of better agriculture, and granting relief for the loss and damage to agricultural produce.
3. It also provides the facility of streets lights, dharamshalas, panchayat ghars, canals and drains, government health infrastructure, drinking water, sanitation, and government educational institutions in rural areas.

THIRD STIMULUS PACKAGE

Union Finance Minister Nirmala Sitharaman on 12 November 2020 announced a **third stimulus package totalling around Rs 20 lakh crore** to help pull the **Covid-19-battered economy**, which **entered recession for the first time**. The FM announced **12 measures under Atmanirbhar 3.0**. The measures included **employment boost, incentives for domestic manufacturing, relief for the MSME sector**, middle class home-buyers and real estate sector. The stimulus package **focuses on sectors worst-hit by the coronavirus pandemic**. This comes a day after it announced **production-linked incentives** worth about Rs 2 lakh crore over five years for manufacturers in 10 sectors.

Key takeaways:

1. Atmanirbhar Bharat Rozgar Yojana

1. It will be launched **to incentivise job creation during Covid-19 recovery**. It will be **effective from Oct 1, 2020, to June 30, 2021**.
2. This is for **EPFO registered establishments** - if they take in new employees or those who lost jobs earlier - these employees will get some benefits
3. Central govt to give subsidy to establishments doing new hiring to cover for retirement fund contributions for new jobs for 2 years
4. More than **95% of all establishments** and **65% of all employees in the formal sector** are estimated to be covered in the first category, wherein EPF contributions will be given by government by way of subsidy support

2. Emergency Credit Line Guarantee Scheme (ECLGS) 2.0

1. **EECLG 2.0 for MSMEs**, businesses, MUDRA borrowers and individuals (loans for business purposes), has been extended till March 31, 2021
2. The **new scheme will have a 1-year moratorium** and **5 years of repayment**.
3. Entities will get additional credit up to **20% of outstanding credit**, repayment can be done in five years' time (1-year moratorium + 4 years repayment)

3. Atmanirbhar Manufacturing Production-Linked Incentives for 10 champion sectors

1. **Production Linked Incentives worth Rs 1.46 lakh crore** will be offered to ten stressed sectors to boost domestic manufacturing.

4. To boost demand in Real Estate sector, relief for home buyers and sellers

1. Rs 18,000 crores additional outlay for **PM Awas Yojana (Urban)** over the Budget Estimates for 2020-21.
2. This is over and above Rs 8,000 core already this year.
3. This will help **12 lakh houses to be grounded** and 18 lakhs to be complemented.
4. The scheme will also guarantee additional jobs to 78 lakhs.

5. Support for construction and Infrastructure: Relaxation of EMDs and Performance Security on government tenders

1. Performance Security on Contracts will now be **reduced to 3% instead of 5-10%**.
2. This will be extended to all ongoing contracts which are free of disputes. This will also be extended to public sector enterprises.
3. **Relaxations till December 31, 2021**, under **General Financial rules**.

6. Income tax relief for homebuyers and developers

1. FM announced the **doubling of the differential between circle rate and agreement value** for the primary sale of residential units of up to Rs 2 crore

7. Infrastructure Debt Financing

1. Govt. to make Rs 6,000 crore equity investment in debt platform of **National Investment and Infrastructure Fund**, which will help NIIF raise Rs 1.1 lakh

crore by 2025 for financing infrastructure projects

8. Support for Agriculture

1. Rs 65,000 crore fertiliser subsidy will be provided to farmers for the upcoming crop season.

9. Boost for rural employment

1. Further additional outlay of Rs 10,000 crores will be provided for PM Garib Kalyan Rozgar Yojana in the current financial year.

10. Boost for Project Exports

1. Rs 3,000 crore will be released to EXIM Bank for promotion of project exports through Line of Credit under IDEAS Center

11. Capital and Industrial Stimulus

1. Rs 10,200 crore additional budget stimulus will be provided for capital and industrial expenditure on defence equipment, industrial infrastructure and green energy

12. Research and Development grant for Covid-19 vaccine

1. Rs 900 crores provided for Covid-19 Suraksha Mission for the development of the Indian vaccine to the Department of Biotechnology.
2. This does not include the cost of vaccine or logistics for vaccine distribution, which will be undertaken by the Ministry of health and Family Welfare

NORM TO REGULATE BANKING APPROVED BY IFSCA

Paving the way for setting up banking units in the International Financial Services Centre (IFSC), the body's regulator approved the International Financial Services Centres Authority (Banking) Regulations, 2020 on 11 November 2020. The regulations, to be notified by the government soon, will enable the International Financial Services Centres Authority (IFSCA) to lay down the rules on the kind of banking activities that will be permitted within IFSCs and mark a major step in the development of GIFT City into a global financial hub.

What

1. Apart from laying down the requirements for setting up IFSC banking units (IBUs), the draft regulations enable the authority to decide the permissible activities IBUs may undertake.
2. These include credit enhancement, credit insurance, and sale, purchase of portfolios, engage in factoring and forfaiting of export receivables and undertake equipment leasing, including aircraft leasing.
3. It also permits a person residing outside India (with a networth exceeding USD 1 million) to open foreign currency accounts in any freely convertible currency at an IBU.
4. Under the Reserve Bank of India's Liberalised Remittance Scheme, a person residing in India (with a networth exceeding USD 1 million) may be allowed the same in order to undertake permissible current account or capital account

transaction.

RBI REPORT ON MSME EMPLOYMENT GENERATORS

Uttar Pradesh has found place among top five states of the country for providing employment under the Micro, Small and Medium Enterprises (MSMEs) during Corona pandemic. In a recent report of the **Reserve Bank of India (RBI)**, Uttar Pradesh has secured a place ahead of **Karnataka, Rajasthan, Delhi, Haryana and Telangana in the list of top 10 states.** The states ahead of Uttar Pradesh are Madhya Pradesh, Gujarat, Tamil Nadu and Maharashtra.

SCIENCE AND TECHNOLOGY

A-SAT MISSILE MODEL UNVEILED

Defence Minister Rajnath Singh on 9 November 2020 unveiled a **model of Anti-Satellite (A-SAT) missile** at the DRDO Bhawan premises. **'Mission Shakti'** was the **country's first ever A-SAT missile test** successfully conducted on March 27, 2019 from **Dr APJ Abdul Kalam Island in Odisha**, where a fast-moving Indian orbiting target satellite in Low Earth Orbit (LEO) was neutralised with pinpoint accuracy.

What

1. **Mission Shakti** is India's **anti-satellite (A-SAT) weapon programme** led by **Defence Research and Development Organisation (DRDO)** and the **Indian Space Research Organisation (ISRO)**.
2. An anti-satellite (A-SAT) weapon was launched and targeted an Indian satellite which had been decommissioned.
3. Mission Shakti was carried out from DRDO's testing range in Odisha's Balasore.
4. **India is only the 4th country** to acquire such a specialised and modern capability, and Entire effort is indigenous.

TRANSLOCATION OF CORALS

The **BMC gets permission to translocate corals from Mumbai coast, but with conditions.** The forest department has **allowed the Brihanmumbai Municipal Corporation (BMC)** to translocate the endangered corals **from the coast in Mumbai.** The **BMC would be translocating 18 colonies of corals.** These corals **are in danger due to the coastal road project at Haji Ali and Worli.**

What are corals?

1. **Corals exhibit characteristics of plants, but are marine animals** that are **related to jellyfish and anemones.**
2. **Coral polyps are tiny, soft-bodied organisms.** At their base is a hard, protective limestone skeleton called a **calicle**, which forms the structure of **coral reefs?**
3. Reefs begin when a **polyp attaches itself to a rock** on the seafloor, then divides, or buds, into thousands of clones.
4. The **polyp calicles connect to one another**, creating a colony that acts as

a **single organism**.

5. As **colonies grow over hundreds and thousands of years**, they join with other colonies, and **become reefs**.
6. **There are soft corals as well**, which are non-reef-building, and resemble bushes, grasses, and trees.

Where are these corals in Mumbai?

1. The **Mumbai coast hosts a tiny population of corals**. The corals found across rocky patches along the Mumbai coastline are mostly fast-growing and non-reef building corals.
2. **Small coral colonies have been documented off Marine Drive**, Geeta Nagar in Colaba, Haji Ali, and Worli.
3. The **National Institute of Oceanography (NIO)**, appointed to study the presence of **marine biodiversity along with the Coastal Road project area**, has identified six coral species at **Worli and Haji Ali**: two species of the **Rhizangiidae family** (Oulangia and one unidentified species), with **18 colonies documented across 0.251 square metres in Worli**; and **another species (Dendrophylliidae family)** along with Rhizangiidae across 1.1 square foot area at Haji Ali.
4. These documented species are **hard corals that are visible during low tide**.

Why are coral reefs important?

1. **Coral reefs are like underwater cities** that **support marine life**.
2. According to the **UN Environment programme**, they provide at least half a billion people around the world with food security and livelihoods.
3. **Coral reefs also act as 'wave breaks' between the sea and the coastline** and **minimise the impact of sea erosion**.
4. In India, they are **protected in the same way as the tiger or elephant**, under **Schedule I of the Wildlife Protection Act (WPA), 1972**.

HIGH BIODIVERSITY IN 49% OF GANGA MAIN RIVER

With celebrations of the **Ganga Utsav** — to mark the **12th anniversary of declaring the Ganga as a national river** — having come to an end, the **Wildlife Institute of India (WII)** in the second phase of its survey of the entire main stem of the **Ganga river (the main river without its tributaries)**, has **found that 49 per cent of the river has high biodiversity** and that biodiversity sightings, including of the **Gangetic Dolphin** and others, have increased in the river.

What

1. The **study was initiated by WII on behalf of the National Mission for Clean Ganga**, one of the flagship projects undertaken by the **Ministry of Jalshakti**, and the first phase of the survey was carried out 2017-2019.

2. **This is the first study ever done in the country on the entire river**, and the first also of all its biodiversity.
3. The sightings of biodiversity have increased. While it is unlikely that any river can be completely pollution free, there is a certain standard necessary for life to exist and thrive – and the goal is to achieve this standard.
4. The **Ganga and its tributaries flow through 11 states** and cover 26.3 per cent of the country's total geographical area.
5. But its main stem flows through five states — **Uttarakhand, UP, Bihar, Jharkhand and West Bengal**.
6. There was a commonly held belief that there are areas in the Ganga that had no biodiversity.
7. This is not what we have found – the entire river has some biodiversity or the other, and 49 per cent has very high levels of biodiversity.
8. **Ten per cent of the high biodiversity areas fall alongside national parks and sanctuaries** such as **Rajaji national park in Uttarakhand, Hastinapur wildlife sanctuary in UP and Vikramshila gangetic Dolphin sanctuary in Bihar**.
9. The **high biodiversity stretches** have been divided into **six zones – Devprayag to Rishikesh (61 km), Makdumpur to Narora (147 km), Bhitaura to Ghazipur (454 km), Chhapra to Kahalgaon (296 km), Sahibganj to Rajmahal (34 km) and Baharampur to Barackpore (246 km)**.

MISCELLANEOUS

PANEL TO LOOK INTO TRP SYSTEM

The Centre announced a **four-member committee**, to be headed by **Prasar Bharati CEO Shashi Shekhar Vempati**, to look into the **Television Rating Points (TRP)** system and **recommend any changes required to make it more robust and transparent**, the **News Broadcasters Federation (NBF)** wrote to the Prime Minister, seeking a “**national-level independent body**” to “deal with misconduct by professional journalists”. The **NBF is an industry body** founded last year by Republic TV editor-in-chief Arnab Goswami.

What is TRP?

1. In simple terms, **TRP (Television Rating Points)** represent **how many people, from which socio-economic categories, watched which channels for how much time during a particular period**.
2. This could be **for an hour, a day, or even a week**; India follows the international standard of **one minute**. The data is usually made public every week.
3. **TRPs are the main currency for advertisers** to decide which channel to advertise on by calculating the **cost-per-rating-point (CPRP)**.

QRSAM TEST FIRED SUCCESSFULLY

India was successfully test-fired on 13 November 2020 the **Quick Reaction Surface-to-Air Missile (QRSAM) system** at an **integrated test range in Chandipur off the Odisha coast**. The successful test-firing of the QRSAM, having a **range of around 30 km**, paves the way for its commercial production. The **QRSAM system** has achieved a major milestone by a direct hit on a **Banshee pilotless target aircraft** at medium range and medium altitudes, the defence ministry said.

What

1. The missile is **propelled by a single-stage solid propellant rocket motor** and uses all indigenous subsystems.
2. The system is **capable of detecting and tracking targets** on the move and engaging targets with short halts.
3. The system is designed to give **air defence coverage** against strike columns of Indian Army.
4. The missile is **canisterised for transportation** and launch using a mobile launcher capable of **carrying 6 canisterised missiles**.
5. **All QRSAM weapon system elements** like **Battery Multifunction Radar, Battery Surveillance Radar, Battery Command Post Vehicle and Mobile Launcher** were deployed in the flight test.
6. The **radar tracked the Banshee target** from the farthest range and the missile was launched when the target was within the kill zone and achieved the direct hit with terminal active homing by RF Seeker guidance. Various DRDO labs **DRDL, RCI, LRDE, R&DE(E), IRDE, ITR** have participated in the test.
7. The weapon system elements have been realized through **Defence PSUs BEL, BDL and private industry L&T**.
8. The missile system is fully indigenous with **active RF Seekers, Electro-Mechanical Actuation (EMA) systems** sourced from various industries.
9. The Radar is a **four-walled Active Phased Array Radar**. All range Tracking stations, Radar, EOTs and Telemetry Stations monitored the flight parameters.
10. In the last two months, India has test-fired a number of missiles including a new version of the **surface-to-surface supersonic cruise missile BrahMos** and an **anti-radiation missile named Rudram-1**.

ARBITRATION AWARD AGAINST ANTRIX

The **Supreme Court** on 4 November 2020 **stayed execution of the international arbitration award** that asked **Antrix Corporation**, the **commercial arm of Indian Space Research Organisation**, to pay **compensation of \$1.2 billion** to **Bengaluru-based startup Devas Multimedia** for **cancelling a satellite deal in 2005**. While the **international arbitral tribunal** had passed the award in **September 2015**, the order to execute it was delivered by a US court last week.

What

1. **As per the agreement in January 2005**, Antrix had **agreed to build, launch and operate two satellites** and **to make available 70 MHz of S-band spectrum to Devas**, which the latter planned to use to offer **hybrid satellite and terrestrial communication services** throughout India.
2. The **agreement was terminated by Antrix in February 2011**. Over the next several years, Devas approached various legal avenues in India. This included the Supreme Court, which directed for a tribunal.
3. In his October 27 order, the **US District Judge ruled that Antrix Corporation pay a compensation of \$562.5 million** to Devas Multimedia Corporation and the related interest rate amounting to a total of \$1.2 billion.

Flashback

1. **Antrix Corporation Limited (ACL), Bengaluru is a wholly owned Government of India Company** under the administrative control of the **Department of Space**.
2. Antrix Corporation Limited was incorporated as a private limited company owned by Government of India in **September 1992** as a Marketing arm of ISRO for promotion and commercial exploitation of space products, technical consultancy services and transfer of technologies developed by ISRO.
3. Another major objective is to facilitate development of space related industrial capabilities in India.

NEW CIC TAKES OATH

Yashvardhan Kumar Sinha was **appointed as the Chief Information Commissioner (CIC)** on 7 November 2020, according to a Rashtrapati Bhavan statement. President Ram Nath Kovind has administered the oath of office to **Sinha as the Chief Information Commissioner in the Central Information Commission** at a ceremony held at Rashtrapati Bhavan. The post had been lying vacant for over two months after **Bimal Julka completed his term on August 26**.

NATIONAL EDUCATION DAY

The birth anniversary of **India's first Education Minister Maulana Abul Kalam Azad** is being **celebrated across the nation as National Education Day on November 11**. Abul Kalam Ghulam Muhiyuddin served as the first education minister of independent India **from 1947 to 1958**. The Ministry of Human Resource Development (now Ministry of Education) on September 11, 2008, announced, "The ministry has decided to commemorate the birthday of this great son of India by recalling his contribution to the cause of education in India."

MULTI POINT TEMPERATURE MEASUREMENT SENSOR

Indian Institute of Technology Madras Researchers have developed a **disruptive sensor technology** to greatly **increase the efficiency of industrial ovens in fertilizer, petrochemical, chemical and manufacturing sectors**. Called '**μTMapS**' (or) '**Multi Point Temperature Measurement Sensor**,' it provides automated and intelligent measurements that can replace existing heat process control systems that cause expensive forced shutdowns and early retirement of components well before its designed life.

What

1. **High-temperature processes are critical to oil and gas**, chemical, power generation and manufacturing industries.
2. However, the control of these processes has been a challenge due to the **complexity in the processes**.
3. Currently, industries use sparse measurements and the data are interpreted through manual intervention and/or operator intuitions.
4. **IIT Madras Researchers at the Centre for Non-destructive Evaluation** developed an **Ultrasonic Waves-based temperature Measurement Sensors** that can accurately measure temperatures in the **range of -100°C to 1,400°C**.
5. This technology also generates data in real-time through **Industrial Internet of Technology (IoT) devices**, which will provide inputs to the industry to greatly improve their manufacturing processes and enhance their process efficiency.