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Days ahead of taking over the G20 presidency formally, the Union government plans to fly diplomats from all missions of G20 countries, invitees and United Nations agencies to a resort on the Andaman Island for a special briefing by the Ministry of External Affairs (MEA) and the G-20 Secretariat, officials told. The "offsite" for 30 to 40 diplomats will take place at Taj Exotica hotel on Havelock Island from November 25 to 27, where G20 'Sherpa' Amitabh Kant, 'Sous Sherpa' Abhay Thakur, and G20 National Coordinator and former Foreign Secretary Harsh Shringla will give them a preview of India's plans for the next year of its presidency.

In terms of weight, there has been an increase in the seizure of rhino horns after 2017, despite an overall reduction in poaching, says a global threat assessment report presented at a convention of wildlife conservation agencies in Panama City. The report says that "prolific" Vietnamese and Chinese criminal networks drive the trafficking of the horns throughout the illegal supply chain globally. But what has alarmed the wildlife crime fighters is the audacity with which the smugglers transport the rhino horns indicating unconcealed, that "corrupt elements" help the traffickers move the horn shipments without bothering to disguise the products.

India has opposed the developed world's efforts to extend the scope of mitigation to agriculture at the ongoing UN climate summit in Egypt, saying rich nations do not want to change their lifestyle to reduce emissions and are "searching cheaper solutions abroad", said sources on Thursday. Expressing concern over the draft decision text on the Koronivia Joint Work on Agriculture, India said developed countries are blocking a pro-poor and pro-farmer decision by insisting on expanding the scope for mitigation to agriculture, thereby compromising the very foundation of food security in the world, a source in the Indian delegation said.

India has evidence of social media platforms using crowdfunding measures to fund terror activities, Dinkar Gupta, Director-general of the National Investigation Agency (NIA), said on Thursday. The chief of the federal antiterror agency said the misuse of these platforms was an issue that needed to be discussed at

G20 CONCLUDES, INDIA TO TAKE OVER G20 PRESIDENCY FROM INDONESIA

- **1.**Bali Summit of G20 concluded with handing over of Presidency to India and a joint declaration. Key features of joint declaration Most members strongly condemned Ukraine war and stressed to uphold the intentional law. Called for policies for enabling, inclusionary, open, fair, and non-discriminatory digital economy. Reaffirmed commitment to close the gap in energy access and eradicate energy poverty.
- **2.**Welcomed Crypto-Asset Reporting Framework and amendments to the Common Reporting Standard for automatic exchange of information.
- **3.**Welcomed the pandemic fund and supported the establishment of global digital health network to strengthen the prevention and response to future
- **4.**In G20, the presidency steers the G20 agenda for one year but does not have any formal power. India will look to prioritize consensus on Slowing global economy, Financing to global south, Reforms in institutions like World Bank, International Monetary Fund etc.
- **5.**About G20-G20 is a strategic multilateral platform connecting the world's major developed and emerging economies. It consists of 19 countries and the EU. It does not have a permanent secretariat and the presidency is supported by the Troika previous, current and incoming presidency.

SFO TECHNOLOGIES PARTNERS WITH DRDO TO DEVELOP HIGHENERGY LASER SYSTEM (HELS)

- **1.**The collaboration with DRDO's Centre for High Energy Systems and Sciences (CHESS) is to develop a 2-kW single-mode continuous wave fibre laser. CHESS is a defence lab under DRDO for research and works on HELS.
- 2.About HELS-HELS weapons emit enough thermal energy to directly render a target ineffective without using a conventional munition. They could affect targets across the domains of air, ground, sea, and space. HELS is a laser weapon belonging to Directed Energy Weapon (DEW) Category.
- **3.**DEW is an umbrella term covering technologies that produce a beam of concentrated electromagnetic energy or atomic or subatomic particles. The weapon India is developing is Directionally Unrestricted Ray-Gun Array (DURGA II). Other projects: Kilo Ampere Linear Injector (KALI), Project Aditya and air defence dazzlers.
- **4.**Advantages of DEW-Speed of light engagement which makes responsiveness and tracking much faster. "Stealth-like" performance (quiet and invisible beams). Precision targeting for both lethal and non-lethal applications. Low-cost per shot. Russia, France, Germany, United Kingdom, Israel and China have robust programmes to develop DEWs.

CENTRAL TASK FORCE EXAMINING UNIFORMITY IN USB CHARGING PORTS

- **1.**A broad consensus emerged among stakeholders on adoption of USB Type-C as a charging port for electronic devices such as smartphones, tablets, and laptops.
- **2.**USB stands for Universal Serial Bus (an industry standard), used for connecting a wide variety of devices to a processor. Types of USB: USB-A is a flat and rectangular shape, USB-B has multiple designs, but the common shape is a square and USB-C is a smaller rectangular with rounded corners.
- **3.**Need for Uniformity-Consumers will not require to buy a new charger, thus reducing e-waste in India (as of 2021, 5 million tonnes of e-waste generated in India). It will be a step towards LiFE (Lifestyle for Environment) that nurtures a global network of individuals, i.e., 'Pro-Planet People' (P3). Ease out the technological 'lock-in' effect, whereby a consumer becomes dependent on a single manufacturer.
- **4.**Challenges: May limit the features of a device such as videos etc, damage the device due to variations in electricity supply requirements, etc. Recently, European Parliament voted in favour of legislation to standardize the USB-C charging port on

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the third "No Money for Terror Conference" (NMFT), which India will be hosting from November 18 to 19. Mr. Gupta, while sharing the details of the conference that is to be attended by representatives of 78 countries, said Pakistan and Afghanistan were not attending the event while a confirmation from China was awaited.

Chief Justice D.Y. of India Chandrachud agreed to list in due course a writ petition to reconsider the Collegium system of judicial appointments to the Supreme Court and the High Courts. The petition sought the revival of the National Judicial Appointments Commission (NJAC), which briefly gave the government an equal role along with the judiciary in the appointment of judges to the constitutional courts before it was struck down by the Supreme Court in 2015. The petition follows recent verbal attacks by Law Minister Kiren Rijiju the Collegium system, calling it opaque.

The Centre moved the Supreme Court seeking a review of its order prematurely releasing six convicts serving life imprisonment for the assassination of former Prime Minister Rajiv Gandhi in 1991. The Union contended that the court had afforded it an adequate opportunity of hearing before the of ordering release convicts. The Centre said the convicts had not made the Union a respondent in the Supreme Court despite being a "necessary and proper party" in the litigation.

35 lakh tonnes, is the amount of sugar that India has agreed to export so far in the ongoing 2022-23 season. Of that amount, 2,00,000 tonnes have been shipped last month, industry body ISMA said on Thursday. The 2022-23 sugar export policy announced on November 5 allowed exports of 60 lakh tonnes of the sweetener on a quota basis till May 31.

₹10,246 crore, the worth of electoral bonds sold by the State Bank of India (SBI) in 21 tranches since the instrument was launched in March 2018. Electoral bonds have been pitched as an alternative to cash donations made to political parties as part of efforts to bring transparency to political funding.

13 percentage of people involved in substance abuse in India who are

electronic items.

NASA LAUNCHES ARTEMIS-1 ROCKET ON A MISSION TO THE MOON

- **1.**Artemis I will be the first integrated test of NASA's deep space exploration systems: the Orion spacecraft and Space Launch System (SLS) rocket. It is the first in a series of increasingly complex missions that will enable human exploration to the Moon and Mars.
- **2.**Objective of Artemis 1-Demonstrate Orion's heat shield can withstand the high speed and high heat conditions when returning through Earth's atmosphere. Study the radiation environment of deep space that is present for missions to the Moon and beyond.
- **3.**Retrieving Orion after splashdown will provide information to engineers for future missions. Accomplish flight test objectives like certifying Orion's optical navigation system, deploying CubeSats (small satellites), etc.
- **4.**Other moon exploration missions Luna 2: first spacecraft to impact the moon spacecraft was launched by USSR. Apollo 11: the first humans to land on the moon was launched by the USA. Chandrayaan 1: It was launched by Indian Space Research Organisation in 2008.

GEOSPATIAL STRATEGY FOR NATIONAL DEVELOPMENT REPORT UNVEILED AT GEOSMART INDIA 2022 CONFERENCE

- **1.**Report has been prepared by Geospatial World and outlines opportunities and challenges associated with the Indian geospatial industry. Geospatial technology refers to all the technology used to acquire, manipulate, and store geographic information, such as GIS, GPS, remote sensing, geofencing, etc.
- 2.Key highlights of the report Geospatial market is forecasted to be INR 37.16 thousand crores by 2025 (CAGR of 10.35% between 2022 and 2025). Global Navigation Satellite System and Positioning to hold approximately 59 percent market share in 2022. Defence & Intelligence, urban development, agriculture, and Land administration will drive the growth in this sector. Guidelines for Geospatial Data 2021, and Drone Rules 2021 have democratized and liberalized on geospatial data and information.
- **3.**Challenges-Delay in establishing a modern and precise geodetic, terrestrial positioning augmentation infrastructure. Lack of real-time data collection and analysis. Ineffective implementation of geospatial standards. Absence of collaboration across different stakeholders. Suggestions Creation of Geospatial Industrial Development Board and Fund.
- **4.**Enhance participation of MSMEs and local manufacturing capabilities. Develop resilient Position, Navigation, and Timing (PNT) infrastructure. Setup Geospatial Incubation Centres and facilitate long-term Contract R&D.

LINKE HOFMANN MUSCH(LHB)

- **1.**Indian Railways will allot only LHB Coaches under the Bharat Gaurav Trains Scheme (BGTS). BGTS has Theme- based Tourist Circuit trains to showcase India's rich cultural heritage and magnificent historical places.
- **2.**LHB coaches have steel outside but their insides are forged with Aluminium (quite lighter) to curb the extra weightage of the train body.
- **3.**Owing to its feather-like structure, a train with LHB coaches can reach a maximum speed of 160 kmph. These coaches do not penetrate the adjacent coaches in case of accidents.

GRAPHENE

- **1.**A Centre for Nano and Soft Sciences (CeNS) team has developed Graphene-stabilized tuneable photonic crystal that can make more durable & better reflective display and laser devices. Photonic crystals are optical nanostructures in which refractive index changes periodically (such as in butterfly wings, peacock feathers).
- **2.**Graphene is a single layer of carbon atoms, tightly bound in a hexagonal honeycomb lattice. It is an allotrope of carbon. Characteristics: thinnest compound at one atom thick, lightest

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below 20 years, according to a UN official. Children face increased risk of drug and alcohol abuse due to their poor mental and physical health resulting from abuse against them, Billy Batware, Programme Officer of the United Nations Office on Drugs and Crime (UNODC), said at a international forum.

14.8 percentage, the rise in tea exports to 140.28 million kilograms (mkgs) in the first eight months of the 2022 calendar year, according to Tea Board data. Tea shipments during the January August period in 2021 stood at 122.18 million kilograms. The CIS countries, including Russia, Ukraine, and Kazakhstan, remain the largest importers of Indian tea.

€1 billion, the amount to be provided by the European Union and the four member countries for climate adaptation in Africa, EU climate policy chief Frans Timmermans told the COP27 summit in Sharm El-Sheikh. Timmermans also said that the EU will provide 60 million euros for loss and damage and will present ideas on how to take loss and damage negotiations forward.

material known, strongest compound discovered, good conductor of heat and electricity etc.

3.Applications: energy, telecommunications, electronics, sensors and imaging, biomedical technologies etc.