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APRIL - 2024 (English / Tamil)





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Iran Vs Israel War

unprecedented drone and missile attack launched by Iran against Israel, the region finds itself teetering on the edge of a potentially devastating conflict. With sirens blaring and explosions resonating over Jerusalem, the long-standing covert war between Iran and Israel has prompted fears of further escalation and instability.

To shed light on the intricate dynamics at play, NDTV spoke with Simon Mabon, Professor of International Politics at Lancaster University and author of multiple books on the Middle East, to understand the status quo and what the future might hold for the region.

Regional Escalation

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Elimination of Corporal Punishment in Schools

- The Madras High Court has ordered the Tamil Nadu government to implement the Guidelines for Elimination of Corporal Punishment in Schools (GECPS) devised by the National Commission for Protection Child Rights (NCPCR) and form school level committees to monitor its scrupulous implementation.
- He directed the government to communicate the guidelines to all the school education department authorities at the district level so as to follow the guidelines scrupulously to protect the mental health of the children. He asked for holding awareness events on the guidelines.
- The judge pointed out that the idea is not only for elimination of corporal punishment but also to take note of any indirect form of



- “The first respondent-principal secretary, School Education department, is directed to implement the GECPS provided by the NCPCR,” Justice SM Subramaniam said in an interim order passed recently on a petition seeking implementation of the guidelines.
- harassment of the children or circumstances affecting their mental health, for which, suitable remedial measures have to be taken.



Cotton Test Lab In 6 States

- The union government is planning to set up dedicated labs for testing high-grade cotton in Maharashtra, Tamil Nadu, Haryana, Punjab, Gujarat and Karnataka as part of a push to establish the Indian Kasturi cotton as a global brand.
- The labs would be set up in convergence with the Bureau of Indian Standards' (BIS) testing facilities, ensuring alignment with national quality standards.
- India aims to compete with global cotton brands such as Supima and Giza, which are known for their exceptional softness, strength and durability.
- While India has only recently branded its cotton despite being a major producer with the largest area under the crop, Egypt has successfully positioned its Giza cotton brand internationally with an annual output of a modest one million bales.
- The Indian product, Kasturi Cotton Bharat, is produced to stringent standards, with a strict 2% cap on trash content to ensure its premium quality and 100% traceability.

Organ transplants

- The Union government has initiated an investigation into organ transplants involving foreign nationals in India.
- Concerned about the rising number of such transplants, the Ministry of Health and Family Welfare has directed States and Union Territories to closely monitor these procedures.
- Hospitals found violating regulations will face consequences as authorities aim to curb potential commercial dealings in organ transplants.
- What is the National Organ & Tissue Transplant Organisation (NOTTO) ?
- NOTTO is a national organisation under the Directorate General of Health Services,

Ministry of Health and Family Welfare.

- Established as per the Transplantation of Human Organs (Amendment) Act 2011.
- Its National Network division acts as the apex centre for coordinating and networking nationwide activities related to organ and tissue procurement and distribution.
- About THOT Rules, 2014:
- Authorisation Committee: Rule 7 of the 2014 Rules outlines the formation and duties of the Authorisation Committee.
- Commercial Transactions: Rule 7(3) mandates the Committee to verify absence of commercial transactions when donor and recipient aren't close relatives.
- Expedited Evaluation: Rule 7(5) permits approaching hospitals for urgent evaluation if a recipient urgently needs transplantation within a week.

World Cybercrime Index –India 10th place

- India ranked number 10 in cybercrime, with frauds involving people to make advance fee payment being the most common type, according to a new research that surveyed cybercrime experts around the world.
- An international team of researchers has compiled the 'World Cybercrime Index' that ranks roughly 100 countries and identifies key hotspots according to various categories of cybercrime, including ransomware, credit card theft and scams.
- Russia topped the list, and was followed by Ukraine, China, the US, Nigeria and Romania. North Korea was at the seventh position, while the UK and Brazil were at the eighth and ninth positions, respectively, according to the research published in the journal PLoS ONE.

Indian Ocean Observing System

- India and the US recently joined forces to

revive the Indian Ocean Observing System (IndOOS), ensuring vital high-resolution oceanic and atmospheric data collection for enhanced weather predictions.

- **IndOOS Revival:** India and the US decide to reactivate the Indian Ocean Observing System (IndOOS), comprising 36 moored buoys, to gather essential oceanic and atmospheric data.
- **Neglect During Pandemic:** IndOOS suffered neglect and disrepair during the COVID-19 pandemic, leading to gaps in crucial observational data, particularly concerning the Indian Ocean Dipole and monsoon links.
- **Collaborative Efforts:** The reactivation plan for IndOOS was discussed during a meeting between Earth Sciences Secretary M Ravichandran and Rick Spinrad, Administrator of NOAA.
- **RAMA Programme:** The moored buoys are part of the Research Moored Array for African-Asian-Australian Monsoon Analysis and Prediction (RAMA) programme, a collaboration between India's Ministry of Earth Sciences and NOAA since 2008.
- **Instrumentation Support:** NOAA agrees to provide instrumentation, while India pledges ship-time from July to restart the RAMA array, requiring 60-90 days of ship-time.
- **Pandemic Disruption:** Deployment and maintenance cruises for the RAMA array were disrupted during the pandemic, leading to supply chain issues and servicing delays.
- **Importance of Marine Observations:** Observations from RAMA buoys are vital for various operational services like cyclone warnings, monsoon predictions, climate forecasts, and marine health assessments.

India-Peru Trade Agreement

- The seventh round of negotiations for the India-Peru Trade Agreement took place in New Delhi, from April 8 to April 11. These discussions were aimed at understanding each other's priorities and concerns while ensuring mutual respect and benefits.
- During the negotiations, Sunil Barthwal, Commerce Secretary, emphasized the longstanding diplomatic relations between

India and Peru, dating back to the 1960s. He referred to the visit of Teresa Stella Mera Gomez, Vice Minister of Foreign Trade, Peru to India and highlighted the significance of bilateral discussions held during the 9th CII India-LAC Conclave in August 2023, which led to the resumption of negotiations.

- Barthwal stressed the importance of understanding each other's strengths and respecting sensitivities. He encouraged stakeholder consultations, feedback from the industry, and a gainful approach to negotiation.

New director of the National Judicial Academy

- Supreme Court Justice Aniruddha Bose has been appointed as the new director of the National Judicial Academy (NJA), Bhopal. Supreme Court Chief Justice DY Chandrachud had announced the decision to appoint him during a ceremonial bench held on April 10 in honor of the retired judge.

About National Judicial Academy (NJA):

- The National Judicial Academy (NJA) in Bhopal was established in 1993 as an independent society under the Societies Registration Act, 1860. NJA is a fully funded by the Government of India.
- The NJA works under the instructions of the Supreme Court of India.
- The mandate of the NJA is to conduct training to assist judges in their adjudicative role and in the performance of court administration work.
- A Governing Council (GC) and General Body (GB) are established to control the functioning of the NJA. The Chief Justice of India is the Chairman of both the GC and GB of the NJA.

Higher rapeseed and mustard output - India

- India's rapeseed and mustard output is likely to rise 7% from last year to a record 12.09 million metric tons in 2024, helped mainly by a larger planting area, a leading industry body said on Wednesday.
- Higher rapeseed output will help the world's biggest vegetable oil importer to cut back on expensive palm oil and sunflower oil imports

from Malaysia, Indonesia, Brazil, Argentina, Ukraine, and Russia.

- The country meets 70% of its annual requirement through imports.
- The rise in production is mainly due to a 5% growth in acreage to 10 million hectares, the Solvent Extractors' Association of India (SEA) said.
- However, the upside in production was capped by untimely rainfall and hailstorms that hit crop in February and March, the SEA said.

First woman Vice Chancellor of AMU

- Professor Naima Khatoon has been appointed as the Vice Chancellor of Aligarh Muslim University (AMU). The Ministry of Education appointed Ms Khatoon after receiving approval from President Droupadi Murmu, who serves as the Visitor of the university.

to avail various voter-centric services related



to PwD voters in connection with elections. The interface of the app has been designed

- With that, AMU has also become the third central university to have a woman Vice-Chancellor. While Santishree Dhulipudi Pandit is the current VC of the Jawaharlal Nehru University, Najma Akhtar completed her tenure as the Vice-Chancellor of Jamia Millia Islamia in 2023.
- Ms Khatoon is the first woman to be appointed to the post in the varsity's 123-year history. Begum Sultan Jahan became the Chancellor of AMU in 1920, making her the first and only woman to hold the position.

Mobile app "Saksham"

- The Election Commission has launched a mobile app "Saksham" to help persons with disabilities (PwD) in casting their vote during the Lok Sabha election.
- As per a statement by Haryana's chief electoral officer (CEO), the Saksham app can be used

to cater to the needs of differently-abled individuals.

- Through the mobile app, PwD voters cannot only check their names in the voter list but also request wheelchair accessibility to the polling booth among other services. They can register themselves as new voters, make corrections in their voter cards, link voter cards with Aadhaar cards, or request other types of services related to the electoral process.
- Information about candidates contesting in the elections can also be obtained through the app.

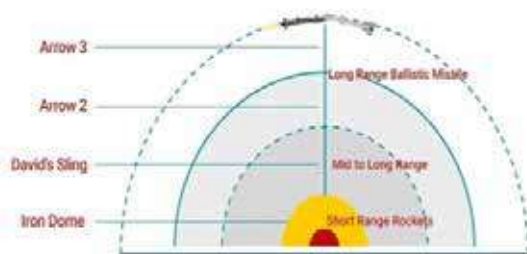
Israel Defence Forces

- According to the Israel Defence Forces (IDF), its Aerial Defense Array successfully intercepted the majority of the surface-to-surface missile launches from Iran using the Arrow Aerial Defense System.

What is the Arrow Aerial Defense System?

- It is a surface-to-surface missile system forming an upper tier in Israel's multi-layered air defence system (consisting of Iron Dome, David's Sling, and the Arrow). It was developed by Israel's Aerospace Industries, in collaboration with the US Missile Defence Agency. The Arrow 3 defence system is the latest addition (inducted in 2023) to Israel's air defence capabilities to intercept and neutralise long-range threats in the exo-atmosphere.

Israel's Multi-Tier Defence System



- How Does the Arrow Defence System Work? The (Green Pine) radar constantly detects incoming threats towards the territory. Once a target is detected, real-time information is relayed to the control centre. The missile is vertically launched, and the two-stage booster powers the rocket to Mach 9. The finned kill vehicle in the rocket can steer its explosion in the direction specified by the missile seeker. If it fails to strike the target, the fragmentation warhead can explode within 40 metres of the target.

- What is the Significance of the Arrow Aerial Defense System? It gave Israel the capability to intercept short, medium and long-range missiles with its hit-and-kill approach in the upper atmosphere. The objective is to neutralise the incoming missile before its descent stage.

Iran Vs Israel War

- In the wake of the unprecedented drone and missile attack launched by Iran against Israel, the region finds itself teetering on the edge of a potentially devastating conflict. With sirens blaring and explosions resonating over Jerusalem, the long-standing covert war between Iran and Israel has prompted fears of further escalation and instability.
- To shed light on the intricate dynamics at play, NDTV spoke with Simon Mabon, Professor of International Politics at Lancaster University and author of multiple books on the Middle East, to understand the status quo and what the future might hold for the region.

Regional Escalation

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- Professor Mabon highlighted the repercussions of Israel's targeted strike on the Iranian embassy in Damascus. The fallout from this attack has significantly destabilised the region, creating a precarious environment fraught with uncertainty.

Restoring property rights of the Hindu and the Sikh - Taliban

- India described as "positive development" the move by the Taliban regime to restore private land rights to Afghan Hindus and Sikh minorities.

- According to reports, the Taliban administration has taken steps to restore property rights of the Hindu and the Sikh communities.
- If the Taliban administration has decided to restore property rights to their citizens belonging to the Afghan Hindu and Sikh community, we see this as a positive development,” External Affairs Ministry spokesperson Randhir Jaiswal said.

Parliamentary election - South Korea

- South Korea’s liberal opposition parties scored a landslide victory in a parliamentary election held, dealing a resounding blow to President Yoon Suk Yeol and his conservative party but likely falling just short of a super majority.
- The Democratic Party (DP) was projected to take more than 170 of the 300 seats in the new legislature, data by the National Election Commission and network broadcasters showed with more than 99% of the votes counted as of 5:55 a.m. on Thursday (2055 GMT Wednesday).
- A splinter liberal party considered allied with the DP was expected to take at least 10 seats, projections showed.

Ukraine’s parliament passing a new law:

- Ukraine’s parliament passed a law that will govern how the country recruits new conscripts, following months of delay and after thousands of amendments were submitted to water down the initial draft.
- Lawmakers dragged their feet for months over the law, which is expected to be unpopular. The law was spurred by a request from Ukraine’s military, which wanted to mobilize up to 500,000 more troops, President Volodymyr Zelenskyy said in December.
- Exhausted soldiers, on the front lines since Russia launched a full-scale invasion of Ukraine, had no means to rotate out for rest, while many thousands of Ukrainian men evade the draft, The Associated Press said.
- The law was passed to the backdrop of an escalating Russian campaign that has devastated Ukraine’s energy infrastructure in recent weeks. Authorities said Russian overnight missile and drone attacks again

struck infrastructure and power facilities across several regions and completely destroyed the Trypilska thermal power plant, the largest power generating facility in Kyiv region.

- The law brings into effect a host of changes to the current system by expanding the powers of Ukrainian authorities to issue draft notices using an electronic system.

Taiwan earthquake

- A magnitude 7.2 earthquake struck at almost 8am off Taiwan’s eastern coast at a depth of 15.5km (9.6 miles).
- The epicentre was about 25km (15.5 miles) southeast of Hualien.
- The quake, the strongest to hit Taiwan in 25 years, was followed by several strong aftershocks, including one of magnitude 6.5.
- Several buildings in Hualien were severely damaged.
- At least nine people have been confirmed dead and more than 900 injured.
- Rescue efforts are under way to save more than 100 people trapped in tunnels or buildings, all in the area around the city of Hualien.

Renaming Tactics From China

- India has come down hard on China for unilaterally renaming places in Arunachal Pradesh for the fourth time in recent months. The Ministry of External Affairs called the neighbouring country’s action a “senseless attempt” and Arunachal Pradesh Chief Minister Pema Khandu described it as “another gimmick”.
- According to a report, the list of places renamed includes 11 residential areas, 12 mountains, four rivers, one lake, one mountain pass and a piece of land. The Chinese Ministry of Civil Affairs released the fourth list of standardised geographical names in Zangnan which is the so-called Chinese name for Arunachal Pradesh.

History of India and China on Arunachal

- Ties between India and China have been frosty due to the dispute over the international border. Both the nations share an “ill-defined 3,440-km-long border”. Currently, the Indian states Himachal Pradesh, Ladakh, Sikkim, and Arunachal Pradesh share a border with China.

India's claim on Arunachal Pradesh rests on the Simla Convention of 1914.

Tiangong space station - China

- China's Shenzhou-18 mission sends three
- In the latest advancement of China's space program, the Shenzhou-18 mission saw the successful launch of a three-member crew aboard the Shenzhou-18 spacecraft. The mission's objective is to rendezvous with the Tiangong space station, marking another milestone in China's ambitious space exploration endeavors.

astronauts to the Tiangong space station for a six-month tenure, focusing on scientific research and space station maintenance.

- China Launches Shenzhou-18 Crew to Tiangong Space Station

Mission Details

- The Shenzhou-18 spacecraft, dubbed the "Divine Vessel," lifted off atop a Long March-2F rocket from the Jiuquan Satellite Launch Centre.
- The crew comprises mission commander Ye Guangfu, along with crewmates Li Cong and Li Guangsu, with diverse backgrounds in



spaceflight and aviation.

- After reaching orbit, the spacecraft will conduct an automated rendezvous to dock with the Tiangong space station, situated approximately 400 km above the Earth.

Mission Objectives

- Upon arrival at the Tiangong space station, the Shenzhou-18 crew will join the astronauts from the Shenzhou-17 mission, who have been on station since October.

- The primary responsibilities of the Shenzhou-18 crew during their six-month tenure include scientific experiments, spacewalks, and routine maintenance of the space station.
- China's broader space exploration goals aim to put astronauts on the Moon by 2030, with significant progress made in developing crucial elements for crewed lunar missions.

June-September Southwest Monsoon Season:

- India is likely to receive above normal rainfall during the upcoming June-September southwest monsoon season, the India Meteorological Department (IMD) predicted in its first long-range seasonal forecast issued on April 15, 2024.
- This is the first time, after a gap of eight years, that the IMD has forecast “above normal” rains in the country. This above normal seasonal rainfall was “very likely” over most parts of the country, the IMD said, except in some areas over northwest, east and northeast India, where below normal rainfall was “very likely”.
- Quantitatively, the seasonal rainfall over the country as a whole is likely to be 106 per cent of Long Period Average (LPA). The IMD categorises the seasonal rainfall as above-normal when it ranges between 105-110 per cent of the LPA

The forecast is based on four main factors:

- Retreat of El Nino.
- Favourable La Nina conditions.
- Positive Indian Ocean Dipole (IOD).
- Reduced snow cover in Northern Hemisphere.

Green Credit Programme

- Madhya Pradesh has taken lead in implementing the Centre’s Green Credit Programme (GCP) which got over 500 land parcels spanning 4,980 hectares across 10 states approved for tree plantation in the past two months. These states, along with three others, have together identified more than 10,000 hectares of land for the programme.
- MP has, so far, reported the highest 954 hectares of approved degraded forest land for plantation/greening exercises followed by Telangana (845 hectares), Chhattisgarh (713 hectares), Gujarat (595 hectares) and Assam

(454 hectares).

- Other five states where such land parcels have been approved by the administrator — Indian Council of Forestry Research and Education (ICFRE) — are Bihar, Rajasthan, Tamil Nadu, Maharashtra and Odisha. As many as 14 public sector undertaking and other entities have been registered to do plantations on degraded forest land and eventually earn green credits. Individuals, industries and other public/private entities, including philanthropies and local bodies, can voluntarily participate in GCP.

Wayanad Wildlife Sanctuary

- Fire destroys nearly 100 hectares of wayanad sanctuary
- Location: Wayanad Wildlife Sanctuary in Kerala.
- Area Affected: Nearly 100 hectares of forest.
- Incident Time: Reported around 10:30 a.m. at Karassery in the Sulthan Bathery forest range.
- Duration: Nearly six hours to extinguish the flames.
- Participants: Involvement of forest and fire services departments, along with local residents.

About Wayanad Wildlife Sanctuary:

- Location: Wayanad Wildlife Sanctuary is situated in Kerala and is part of the Nilgiri Biosphere Reserve.
- Adjacent Reserves: It borders the tiger reserves of Nagarhole and Bandipur in Karnataka, and Madhumalai in TamilNadu.
- River: The Kabini River, a tributary of the Kaveri River, flows through the sanctuary.
- Flora: The sanctuary features moist deciduous forests, West Coast semi-evergreen forests, and plantations of teak, eucalyptus, and Grewelia.
- Fauna: Wildlife includes elephants, gaurs, tigers, panthers, sambar deer, spotted deer,

barking deer, wild boar, sloth bears, and Nilgiri langurs.

Tiger Conservation Conference 2024

- On Earth Day 2024, Bhutan is spearheading the Sustainable Finance for Tiger Landscapes Conference. With a goal of mobilizing \$1 billion over a decade, the conference aims to preserve tiger habitats critical for biodiversity and supporting millions of people.

Event Overview

- Under the patronage of Bhutan's Queen Jetsun Pema Wangchuck, the conference, co-organized by the Royal Government of Bhutan and the Tiger Conservation Coalition, will spotlight sustainable finance, UN's Global Biodiversity Framework, and public-private partnerships vital for tiger conservation.

Tiger Conservation Coalition's Role

- Formed ahead of the 2022 Year of the Tiger, the coalition, comprising leading organizations like IUCN, WWF, and UNDP, supports tiger range countries in ambitious conservation efforts, ensuring impact for both nature and communities.

Leadership Voices

- Keynote speakers include Bhutan's Prime Minister Tshering Tobgay, CEO of the Global Environment Facility Carlos Manuel

Rodríguez, and financial sector leaders. Their insights will highlight the crucial role of tigers in global biodiversity, climate, and sustainable development agendas.

Golden Trevally

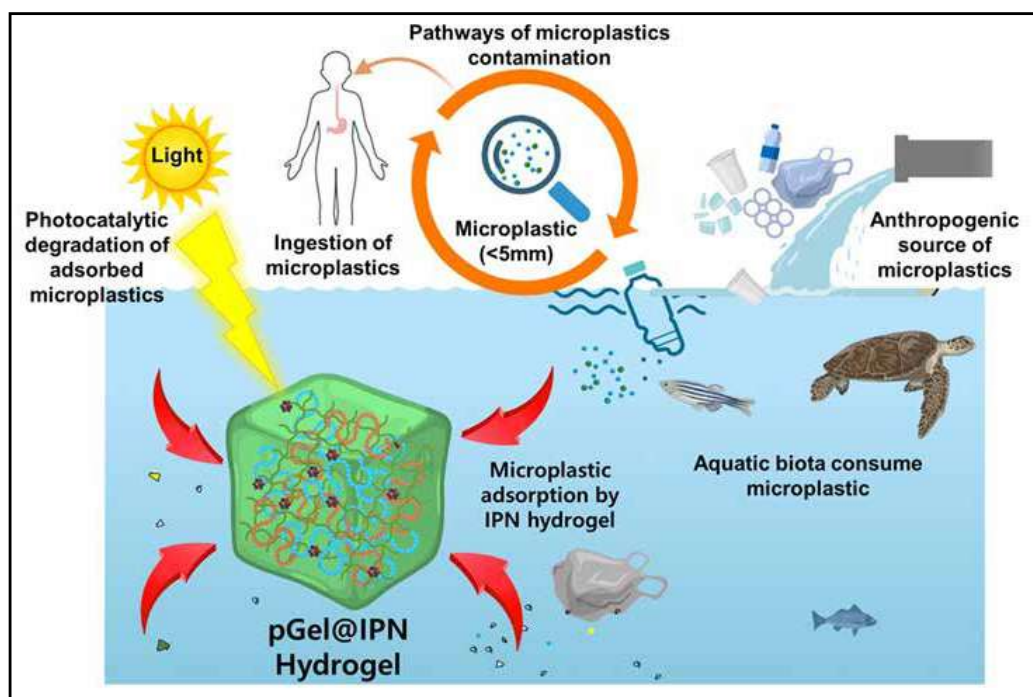
- The researchers of the ICAR-Central Marine Fisheries Research Institute (CMFRI) have succeeded in captive breeding of golden trevally fish. Golden Trevally (*Gnathanodon speciosus*) which is a high value marine fish.

About Golden Trevally Fish

1. Characteristics- Golden trevally is also known as golden kingfish. It has yellowish belly, scattered black patches, yellow fins, and black tail.
2. Location- These fish are found in the reef areas. The golden trevally is primarily found in reef area fishing grounds in Tamil Nadu, Puducherry, Kerala, Karnataka, and Gujarat.
3. High Commercial Value- It is a promising marine aquaculture species due to its rapid growth rates, high meat quality, and high market demand for consumption and ornamental purposes. It is a popular choice for aquariums due to its attractive appearance.

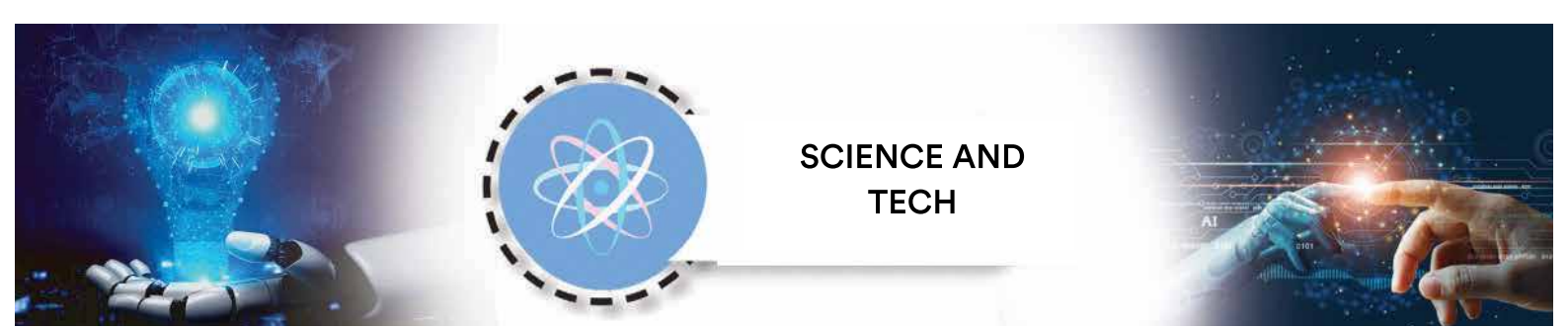
Microplastics - great threat to human health

- Microplastics pose a great threat to human health. These tiny plastic debris can enter



our bodies through the water we drink and increase the risk of illnesses. They are also an environmental hazard; found even in remote areas like polar ice caps and deep ocean trenches, they endanger aquatic and terrestrial lifeforms.

- To combat this emerging pollutant, researchers at the Indian Institute of Science (IISc) have designed a sustainable hydrogel to remove microplastics from water. The material has a unique intertwined polymer network that can bind the contaminants and degrade them using UV light irradiation.
- Scientists have previously tried using filtering membranes to remove microplastics. However, the membranes can become clogged with these tiny particles, rendering them unsustainable. Instead, the IISc team led by Suryasarathi Bose, Professor at the Department of Materials Engineering, decided to turn to 3D hydrogels.
- The novel hydrogel developed by the team consists of three different polymer layers – chitosan, polyvinyl alcohol and polyaniline – intertwined together, making an Interpenetrating Polymer Network (IPN) architecture. The team infused this matrix with nanoclusters of a material called copper substitute polyoxometalate (Cu-POM). These nanoclusters are catalysts that can use UV light to degrade the microplastics. The combination of the polymers and nanoclusters resulted in a strong hydrogel with the ability to adsorb and degrade large amounts of microplastics.
- Most microplastics are a product of incomplete breakdown of household plastics and fibres. To mimic this in the lab, the team crushed food container lids and other daily-use plastic products to create two of the most common microplastics existing in nature: polyvinyl chloride and polypropylene.



SCIENCE AND TECH

2nd Indian citizen in space



• Amazon founder Jeff Bezos' space company Blue Origin has announced that Indian national Gopichand

Thotakura will be part of a six-member crew that will blast off into space on the next New Shepard mission.

- A successful launch will make the US-based wellness entrepreneur and pilot the second Indian citizen in space after wing commander Rakesh Sharma in 1984 and the country's first civilian astronaut. Astronauts Kalpana Chawla, Sunita Williams, Raja Chari and Sirisha Bandla were US citizens of Indian origin. The date of the launch of the NS-25 suborbital mission has not been announced but is likely to take place within the next few weeks.

PSLV Orbital Experimental Module-3 (POEM-3)

- The Indian Space Research Organisation's PSLV-C58/XPoSat mission has practically left zero debris in earth's orbit. The last stage of the Polar Satellite Launch vehicle (PSLV) used in the mission was transformed into a kind of orbital station- called the PSLV Orbital Experimental Module-3 (POEM-3), before it was left to re-enter the earth's atmosphere instead of floating in orbit once its mission was completed.
- What is POEM?
- Developed by the Vikram Sarabhai Space Centre (VSSC) as an inexpensive space platform, POEM uses the spent fourth stage of a PSLV rocket as an orbital platform.
- Used for the first time in the PSLV-C53 mission in 2022, ISRO had POEM orbit the earth

as a stabilised platform to perform in-orbit scientific experiments with various payloads.

- POEM is powered by solar panels mounted on the fuel tank of the rocket's fourth stage and a lithium-ion (Li-ion) battery.
- It has a dedicated navigation, guidance, and control (NGC) system to stabilise its altitude along with helium control thrusters.
- The NGC system has four Sun sensors, a magnetometer, and gyroscopes, and talks to ISRO's NavIC satellite constellation for navigation.
- POEM also has a telecommand system to communicate with the ground station

Statio Shiv Shakti

- The International Astronomical Union (IAU) has granted approval for the name 'Statio Shiv Shakti' to designate the landing site of Chandrayaan-3's Vikram lander. This decision, announced on March 19, 2024, follows Prime Minister Narendra Modi's declaration on August 26, 2023, that the landing site would be named 'Shiva Shakti'.
- The Gazetteer of Planetary Nomenclature, which documents planetary names approved by the IAU, defines 'Statio Shiv Shakti' as a compound word from Indian mythology that represents the masculine (Shiva) and feminine (Shakti) duality of nature.
- Modi made the announcement at the Isro Telemetry Tracking and Command Network (Istrac) in Bengaluru, where he underscored the significance of the names in connecting India from the Himalaya to Kanyakumari. He stated, "...In Shiva, there's resolution for humanity's welfare and Shakti gives us strength to fulfil those resolutions. This Shiva Shakti Point of Moon also gives a sense of connection with the Himalaya to Kanyakumari."

Gaia BH3 - Milky Way

- Astronomers at the European Space Agency (ESA) have identified the biggest stellar black hole, named Gaia BH3, discovered in the Milky Way, with a mass 33 times that of the Sun. This black hole was detected “by chance” during data collection from ESA’s Gaia mission and it imposes an odd ‘wobbling’ motion on the companion star orbiting it.
- “Remarkably, this black hole is also extremely close to us — at a mere 2000 light-years away in the constellation Aquila, it is the second-closest known black hole to Earth,” a statement from ESA said.

ISRO Report-Glacial Lakes in Indian Himalayas

- The Indian Space Research Organisation (ISRO) has released a report highlighting significant expansion of glacial lakes in the Himalayas, particularly in India. The findings, based on satellite data archives spanning the past three to four decades, underscore the urgent need for attention to the cascading consequences of warming-induced lake expansion in the region, experts warn.
- According to the report, at least 89 percent of the 2,431 glacial lakes identified in the Himalayas during the 2016-17 period have notably expanded since 1984. This trend, attributed to warming temperatures, has raised concerns among experts about potential downstream impacts.
- The long-term satellite imagery covering the catchments of Indian Himalayan river basins from 1984 to 2023 reveals significant changes in glacial lakes, with 676 lakes larger than 10 hectares experiencing notable expansion. Notably, 130 of these lakes are located within India, distributed across the Indus, Ganga, and Brahmaputra River basins.
- Elevation-based analysis further reveals that a significant number of these expanding lakes are situated in elevations ranging from 4,000 to 5,000 meters and above 5,000 meters. Among the expanding lakes, the majority are categorized as Moraine-dammed, followed by Erosion, other, and Ice-dammed glacial lakes.

NASA - Advanced Composite Solar Sail System

- NASA’s next-generation solar sail technology, known as the Advanced Composite Solar Sail

System (ACS3), is set to embark on its journey on April 24. Scheduled to launch within a 30-day window aboard a Rocket Lab Electron rocket from the American space agency’s Launch Complex 1 on Mahia Peninsula, New Zealand, the ACS3 mission promises to revolutionise space exploration.

- Solar sail technology utilises the pressure of sunlight for propulsion, similar to how a sailboat is powered by wind, eliminating the need for traditional rocket propellant, and offering potential for longer duration and lower-cost missions.
- The goal of the Advanced Composite Solar Sail System is to facilitate ambitious missions that enhance our understanding of the Sun and the solar system.
- Upon reaching its Sun-synchronous orbit approximately 600 miles above Earth, the ACS3 spacecraft will commence the intricate process of unfurling its composite booms. Within approximately 25 minutes, the solar sail will be fully deployed, measuring about 860 square feet.

VASA-1 (AI - Microsoft)

- Not long ago, some apps could bring photographs to life with GIF-like motions. Now, we have an AI system that can make photographs dance and sing. A team of AI researchers at Microsoft Research Asia has created an AI application that can convert still images of people and audio tracks into animation. It’s not merely animation/Reportedly the output accurately shows the people in images speaking or singing to the audio track, along with apt facial expressions.
- The latest application, Vasa, is a framework for generating life-like talking faces of virtual characters with appealing visual affective skills (VAS) from a single static image and a speech audio clip. “Our premiere model, VASA-1, is capable of not only producing lip movements that are exquisitely synchronized with the audio but also capturing a large spectrum of facial nuances and natural head motions that contribute to the perception of authenticity and liveliness,” wrote researchers in a paper describing the framework.



SPORTS NEWS

Leading cricketer in the world

- Nat Sciver-Brunt has become the first English woman to be honoured as Wisden's leading cricketer in the world, heading an awards list that also includes Harry Brook and Mark Wood among the almanack's five cricketers of the year.
- Leading women's cricketer in the world: N Sciver-Brunt
- Leading men's cricketer in the world: P Cummins

President of Paralympic Committee of India

- Devendra Jhajharia appointed as President of Paralympic Committee of India
- Devendra Jhajharia won two gold medals for India at the Paralympics during his playing career. He bagged his first Paralympics gold in Athens in 2004 and the second on in Rio in 2016. He also claimed a silver medal in the Tokyo Paralympics.
- One of the most celebrated Indian Paralympians of all time, Devendra Jhajharia has been elected as the new president of the Paralympic Committee of India (PCI).
- Jhajharia's appointment comes a few days after the news that he will be contesting on a

BJP (Bhartiya Janta Party) ticket in the Lok Sabha elections from his hometown Churu (Rajasthan).

Gukesh won the 2024 FIDE

- D Gukesh won the 2024 FIDE Candidates after a draw against Hikaru Nakamura (USA), with Ian Nepomniachtchi (Russia) and Fabiano Caruana (USA) also drawing their match.. The 17-year-old became the youngest-ever winner of the FIDE Candidates, and also will be the youngest in chess history to challenge for the FIDE World Championship later this year, against reigning world champion Ding Liren of China.
- Gukesh also becomes the first Indian since Viswanathan Anand in 2014 to win the Candidates.
- He entered the tournament as the third-youngest ever to appear in it (Bobby Fischer and Magnus Carlsen were younger in their debuts), and was relatively unfancied to emerge as a challenger, let alone the winner. In comparison, Garry Kasparov won the Candidates at the age of 21, while Carlsen was 22.
- Gukesh finished with five wins, eight draws and the solitary loss to garner a winning tally of 9 points.



Weightlifting

- Bindyarani Devi wins bronze medal at weightlifting World Cup.
- Commonwealth Games medallist weightlifter Bindyarani Devi clinched the bronze medal in the women's 55kg event at the IWF World Cup

ICC Men's T20 - Brand Ambassador Usain Bolt

- The International Cricket Council (ICC) have announced Olympic legend Usain Bolt as an ambassador for the upcoming ICC Men's T20 World Cup, which will be played in the West Indies and USA from 1-29 June 2024.



- Bolt created history at the 2016 Olympic Games in Rio when he achieved the 'Triple-Triple', three gold medals at three consecutive Olympic Games. His journey to worldwide stardom started at the 2008 Olympic Games in Beijing where he won the 100m, 200m and 4x100m, all in world record times.
- Bolt currently holds world records in the 100m, 200m and 4x100m with times of 9.58 secs, 19.19 secs and 36.84 secs. His first world record was in the 100m in 2008 when he posted a time of 9.72 secs in New York. He lowered it to 9.69 secs at the 2008 Olympic Games in Beijing and then to 9.58 secs at the 2009 World Championships in Berlin. He holds the three fastest times ever run: 9.58, 9.64 and 9.69 seconds.



AWARDS

2024 John L. 'Jack' Swigert Jr. Award



• India's Chandrayaan-3 mission team was recently awarded the prestigious 2024 John L. 'Jack' Swigert Jr. Award for Space Exploration, acknowledging their efforts to elevate the standards of space exploration.

• With the successful Chandrayaan-3 mission in August last year, India became the first country to land on the south pole of the moon. The giant stride in lunar exploration of the south pole, was crafted by the Indian Space Research Organisation (Isro), which 'broadens humanity's horizons in space exploration, opening up new realms for comprehension and collaboration,' as stated in a press release by the Space Foundation.

- The award was accepted by India's Consul General in Houston, D C Manjunath, on behalf of the Isro at the inaugural event of the annual Space Symposium in Colorado.
- Comprising both the lander (Vikram) and the rover (Pragyan), India's lunar mission, Chandrayaan-3, successfully touched down on the southern pole of the Moon at 6:04 pm on August 23. With this achievement, India joined the ranks of the US, China, and the former Soviet Union as the fourth nation to demonstrate the capability of soft landing on the lunar surface.



Lata Deenanath Mangeshkar award

• Legendary actor Amitabh Bachchan will be honoured with the Lata Deenanath Mangeshkar award, the Mangeshkar family announced. The family and the trust instituted the award in the memory of Lata Mangeshkar, who died on February 6 in 2022, following multiple organ failure. Big B will receive the recognition on April 24, the memorial day of their father and theatre-music veteran Deenanath Mangeshkar.

• This award, known as the Lata Deenanath Mangeshkar Puraskar, is given every year to an individual who has made a path-breaking contribution towards the nation, its people and society. Prime Minister Narendra Modi was its first recipient, followed by Lata Mangeshkar's sister Asha Bhosle in 2023.

International Culture Award

- Professor Meena Charanda, Principal of Kalindi College, Delhi University, was given the 'International Culture Award' for the year 2024. Prof. Meena Charanda has been given this honor for her remarkable work in the field of education and social service. Prof. Charanda was presented with this honor at a program at the India International Center on March 30, 2024.



IMPORTANT DAYS



DATE	DAY	THEME AND OBJECTIVES
April - 2	World Autism Awareness Day	<ul style="list-style-type: none"> Since autism is a spectrum disorder, there are many manifestations of this condition. While autism symptoms are likely to be apparent in children as young as 2 years old, many people do not receive an official diagnosis of autism until later in life. This day is celebrated on April 2 every year, as designated by the United Nations. Some nations, like the United Kingdom, celebrate Autism Awareness Week around World Autism Day. Other countries, like the United States, also celebrate World Autism Month throughout April. The theme of World Autism Awareness Day this year is 'Empowering Autistic Voices'
April - 4	International Day for Mine Awareness	<ul style="list-style-type: none"> The International Day for Mine Awareness and Assistance in Mine Action is observed on April 4, annually to raise public attention towards mine action activities, the land mines, its threats to the safety of mankind and how to work towards its elimination. The theme of International Mining Awareness Day 2024 is "Protecting Lives. Building Peace."
April - 5	National Maritime Day	<ul style="list-style-type: none"> Every year, April 5 is observed as National Maritime Day to spread awareness about international trade and economy. On this day, the "NMD Award of Excellence" is also presented to honour the individuals for their lifetime distinguished and exceptional achievements in the Indian maritime sector at the senior level. The theme for National Maritime Day 2024 is "Navigating the future: safety first!"
April - 7	World Health Day	<ul style="list-style-type: none"> World Health Day is observed on 7th April every year globally. This annual event draws attention to a specific health topic that affects people all over the world. This day marks the anniversary of the founding of WHO in 1948. The theme for World Health Day 2024 is 'My health, my right'

April - 10	World Homoeopathy Day	<ul style="list-style-type: none"> World Homoeopathy Day (WHD) is celebrated on 10 April and the day has become the red-letter day for the Homoeopathy profession because it is being celebrated under the aegis of the Ministry of AYUSH, Govt. of India for the last few years in New Delhi. The theme for World Homeopathy Day 2024 is "Homeoparivar: One Health, One Family".
April - 11	National Pet Day	<ul style="list-style-type: none"> It serves as a platform to raise awareness about important issues such as pet adoption, animal cruelty prevention, and responsible pet care practices. On National Pet Day, many people take the opportunity to adopt a new pet from a shelter or rescue organisation, providing a loving home for animals in need. The theme for National Pet Day 2024 is "Don't Shop! Adopt!"
April - 11	National Safe Motherhood Day	<ul style="list-style-type: none"> Every year, National Safe Motherhood Day is observed on April 11 to highlight the importance of maternal health and wellness and reduce maternal mortality rate in the country. The Government of India officially recognised the day as National Safe Motherhood Day in 2003. Theme : Equity in Maternal Healthcare: Leaving No Mother Behind.
April - 15	World Art Day	<ul style="list-style-type: none"> The significance of World Art Day is to promote and highlight the importance of art in the lives of human beings. It is celebrated to raise awareness about the contributions of various artists throughout the world. This day aims to encourage art education as a means of inclusive and equitable education. The theme of World Art Day 2024 is 'A GARDEN OF EXPRESSION: Cultivating Community Through Art.'
April - 17	World Hemophilia Day	<ul style="list-style-type: none"> April 17 was decided as the date to observe the health day every year to honour the founder of the organisation Frank Schnabel, who played a significant role in advocating for hemophilia awareness and treatment and dedicated his life towards improving lives of those suffering from the disorder. The theme for World Hemophilia Day 2024 is "Equitable access for all: recognizing all bleeding disorders".

April - 18	World Heritage Day	<ul style="list-style-type: none"> The purpose of World Heritage Day is to raise awareness among local communities about protecting our cultural heritage. People from various places and backgrounds come together and exchange knowledge about their histories and customs. This year, the theme for World Heritage Day 2024 is 'Discover and Experience Diversity.'
April - 21	Civil Services Day	<ul style="list-style-type: none"> April 21 was chosen as Civil Services Day because it is on this day in 1947 that the first Home Minister of India, Sardar Vallabhbhai Patel, addressed the probationers of Administrative Services Officers. Theme : Public service in a changing world - Addressing the adaptation of civil service to evolving societal needs and technological advancements. Promoting ethical and transparent governance: Emphasizing the importance of integrity, accountability, and citizen-centric service delivery.
April - 22	Earth Day	<ul style="list-style-type: none"> Earth Day has its roots in growing concern over pollution in the 1960s, when author Rachel Carson's 1962 book "Silent Spring," about the pesticide DDT and its damaging effects on the food chain, hit bestseller lists and raised awareness about nature's delicate balance. This year, the event is being celebrated with the theme "Planet vs Plastics", to raise awareness of the harms of plastic pollution for human and planetary health.
April - 23	World Book and Copyright Day	<ul style="list-style-type: none"> World Book and Copyright Day is a celebration to promote the enjoyment of books and reading. Each year, on 23 April, celebrations take place all over the world to recognize the scope of books - a link between the past and the future, a bridge between generations and across cultures. The theme for this year is "Read Your Way." This theme emphasizes the importance of choice and enjoyment in fostering a love of reading.
April - 24	National Panchayati Raj Day	<ul style="list-style-type: none"> This Act became effective on 24 April 1993. Then, Prime Minister of India Manmohan Singh declared the first National Panchayati Raj Day on 24 April 2010. He mentioned that if Panchayati Raj institutions (PRIs) functioned properly and locals participated in the development process, the Maoist threat could be countered. This year 2024 there is no theme for National Panchayati Raj Day 2024 in India but an award ceremony appreciates the best panchayats across the country. These awards are a way of recognition for the work done by these panchayats in improving the lives of rural households.

April - 25	World Malaria Day	<ul style="list-style-type: none"> World Malaria Day, annual observance held on April 25 to raise awareness of the global effort to control and ultimately eradicate malaria. World Malaria Day, which was first held in 2008, developed from Africa Malaria Day, an event that had been observed since 2001 by African governments. Theme : “Accelerating the fight against malaria for a more equitable world” In recent years, progress in reducing malaria has ground to a standstill. Not only does malaria continue to directly endanger health and cost lives, but it also perpetuates a vicious cycle of inequity.
April - 26	World Intellectual Property	<ul style="list-style-type: none"> World Intellectual Property Day emphasizes the importance of a balanced IP system to recognize and reward inventors and creators for their work and ensure that society benefits from their creativity and ingenuity. This year's theme is 'IP and the Sustainable Development Goals (SDGs): Building our common future with innovation and creativity' and is an opportunity to explore how IP encourages and can amplify the impact of the innovative and creative solutions we need to build our common future.
April - 28	World Day for Safety and Health at Work	<ul style="list-style-type: none"> In 2003, the International Labour Organization (ILO), began to observe World Day to stress the prevention of accidents and diseases at work, capitalizing on the ILO's traditional strengths of tripartism and social dialogue. The theme of the World Day for Safety and Health at Work 2024 is "The impacts of climate change on occupational safety and health". According to the survey, there is a lot of people die as a result of occupational accidents and work-related diseases. The death rate is increasing by millions of death.
April - 29	International Dance Day	<ul style="list-style-type: none"> World Dance Day is also referred to as International Dance Day and is celebrated on April 29 to commemorate the birthday of Jean-Georges Noverre, a French dancer and ballet master known as the father of modern ballet.
April - 30	Ayushman Bharat Diwas	<ul style="list-style-type: none"> In India, April 30 is celebrated as Ayushman Bharat Diwas to uplift the ideals of the Government of India's Ayushman Bharat Yojana. The Pradhan Mantri Jan Arogya Yojana (PMJAY) or Ayushman Bharat Yojana aims to make healthcare accessible and affordable to around 50 crore economically backward Indian citizens



Upgrading the ground perimeter security

- With the threat of terror attacks on military establishments remaining a clear and present danger, the IAF has now kicked off a plan to upgrade the ground perimeter security of 30 more of its air bases around the country.
- The new comprehensive multi-layered, multi-sensor, hi-tech surveillance and intrusion detection systems at the 30 air bases will follow the ongoing installation of a similar integrated perimeter security system (IPSS) at 23 “crucial and sensitive” air bases.
- “Of the 23 high-priority air bases, the IPSS is now functional at 17-18 after some delay. Now, the plan is to install the IPSS, with some additional features and upgrades, at 30 more air bases,” a senior officer told TOI.
- The government had approved the IPSS for the first 23 air bases, with Bharat Electronics (BEL) as the lead contractor and several foreign sub-contractors, after JeM terrorists attacked the Pathankot airbase in January 2016 to expose gaping holes in the security set-up of military installations. The “pilot” IPSS project at the Pathankot airbase was subsequently launched, and eventually commissioned in February 2021.

Defence Research and Development Organisation

- India’s state-owned Defence Research and Development Organisation (DRDO) and the Indian Army have test-fired a manportable anti-tank guided missile (MPATGM) weapon system at the Pokhran field firing range in Rajasthan, the Indian Ministry of Defence (MoD) said.
- The MPATGM weapon system – consisting of the missiles, the tripod-mounted command

launch unit, the target acquisition system, and the fire-control unit – was field evaluated in different flight configurations several times “with the objective of proving its technology”.

- During the test, an “adequate number of missile firing trials have been successfully conducted towards achieving compliance of complete operational envelope as stipulated in the Indian Army’s General Staff Qualitative Requirements.
- The penetration trials of the tandem warhead system of the MPATGM were “successfully” conducted during the test and the missile’s warhead “found capable of defeating modern armour-protected main battle tanks”.

Ek Missile Ek Tank

- Indian Army tests Anti-tank Guided Missile system in Sikkim with aim of ‘Ek Missile Ek Tank’
- Trishakti Corps of the Indian Army conducted a training exercise, involving the firing of anti-tank guided missiles. The exercise was conducted at a super high-altitude area of 17,000 feet in Sikkim on April 12. Missile-firing detachments from mechanised and infantry units of the entire Eastern Command participated. The exercise encompassed comprehensive continuity training and live firing from different platforms. It included moving as well as static targets which depicted actual battlefield conditions for the commandos. The ATGM system’s performance in high-altitude environments reaffirms the aim of ‘Ek Missile Ek Tank’.

Indian Navy’s Submersible Platform ‘Space’ Inaugurated

- In a significant step towards enhancing

India's naval capabilities, the Department of Defence (R&D) and the Defence Research and Development Organisation (DRDO) have recently inaugurated a state-of-the-art facility called the Submersible Platform for Acoustic Characterisation and Evaluation (SPACE) at the Underwater Acoustic Research Facility in Kulamavu, Idukki, Kerala. This cutting-edge facility, set up by the Naval Physical & Oceanographic Laboratory of DRDO, is designed to serve as a premier testing and evaluation hub for sonar systems destined for the Indian Navy, a critical component of the country's maritime defense strategy.

- Importance of Sonar Systems in Naval Warfare
- Sonar (Sound Navigation and Ranging) systems play a vital role in modern naval warfare, enabling the detection, tracking, and identification of submarines, surface vessels, and other underwater objects. These advanced acoustic sensors are essential for effective Anti-Submarine Warfare (ASW) operations, which are crucial in protecting a nation's maritime interests and ensuring the safety of naval assets.
- As the Indian Navy continues to expand its fleet and modernize its capabilities, the need for robust and reliable sonar systems has become increasingly paramount. The establishment of the SPACE facility reflects the DRDO's commitment to developing and testing these critical technologies, ensuring that the Indian Navy is equipped with cutting-edge sonar systems to maintain a strategic edge in the maritime domain.

Sagar Parikrama IV

- Lieutenant commanders Dilna K and Roopa Alagirisamy, the two women officers handpicked as potential candidates for the upcoming Sagar Parikrama IV, the Navy's most ambitious voyage yet, have successfully completed their 'final examination' on the seas.
- The so-called test entailed undertaking a transoceanic sortie aboard INSV Tarini from Goa to Port Louis in Mauritius, and back. This nearly 5,000 nautical mile journey in double-handed mode was the first-of-its-kind

by Indian women, thus marking a significant milestone for the Navy.

ROCKS or Crystal Maze 2

- The Indian Air Force (IAF) has achieved a significant milestone with the successful test firing of an air-launched ballistic missile capable of hitting targets over 250 kilometers away. The missile, known as ROCKS or Crystal Maze 2, is of Israeli origin and was test-fired from a Su-30 MKI fighter jet in the Andaman and Nicobar Islands.
- Preparations for the test were conducted in the area under the tri-services Andaman and Nicobar Command, led by an Air Force officer. The successful test marks a major boost to the IAF's capabilities, and plans are underway to acquire Israeli missiles in large numbers through the Make in India initiative.
- The Crystal Maze 2 is an extended stand-off range air-to-surface missile designed to strike high-value stationary and relocatable targets, including long-range radars and air defense systems. It is specifically effective in GPS-denied environments, similar to the conditions faced by India during the Kargil War, and can also penetrate areas protected by air defense systems.

India's lightest bullet proof jacket

- The Defence Research and Development Organisation or DRDO has developed India's lightest bullet proof jacket for protection against highest threat level 6 of BIS. Its unit, Defence Materials and Stores Research and Development Establishment (DMSRDE), Kanpur, the DRDO has created the jacket for protection against 7.62 x 54 R API (Level 6 of BIS 17051) ammunition. The bulletproof jacket can stop six bullets.
- DMSRDE, Kanpur has successfully developed indigenous light weight Bullet Proof Jacket (BPJ) for protection against highest threat level 6 of BIS. This is the first of its kind in monolithic ceramic which can stop 6 7.62x54 API bullets.

VSHORAD – Developed by Indian Army

- The Indian Army is set to develop over 500 launchers and around 3,000 missiles domestically to address aerial threats from the Pakistan and China borders, as reported by Money control.



- The army has also reportedly invested Rs 6,800 crore in developing very short range air defence (VSHORAD) systems domestically.
- This move comes amid a shortage of inventory of shoulder-fired missiles for VSHORAD systems.
- The current VSHORAD missiles in the Indian Army and Indian Air Force's arsenal are equipped with IR homing guidance systems.
- The Iгла 1M VSHORAD missile system, which was inducted in 1989, was planned for deinduction in 2013.
- Additionally, there is a Rs 4,800 crore project underway involving a public sector unit based in Hyderabad and a private firm in Pune.
- They are tasked with developing a laser beam riding VSHORAD system to protect borders from enemy drones, fighter aircraft and helicopters.
- The project aims to develop 200 launchers and 1,200 missiles for supply to the army and air force. The Indian Army is expected to receive 700 missiles, while the remaining will go to the IAF.
- The firms involved are required to produce a prototype of the system under the Indian Designed, Developed, and Manufactured clause of the Defence Acquisition Procedure.

World's fourth-largest exporter

- India has become the world's fourth-largest exporter of digitally delivered services, constituting over a fifth of global trade in services. According to the latest Global Trade Outlook and Statistics report from the World Trade Organisation (WTO), India's exports of digitally delivered services stood at \$257 billion in 2023 registering a 17 percent increase from the previous year. The country's performance was much better than Germany and China, which registered a growth of 4 percent each.
- According to WTO estimates, global exports of digitally delivered services reached \$4.25 trillion in 2023, up 9 percent year-on-year (YoY), accounting for 13.8 percent of world exports of goods and services.
- Unlike trade in goods, which fell in 2023

globally and in all regions, exports of digitally delivered services continued to thrive. In Europe and Asia (which hold a global share of 52.4 percent and 23.8 percent, respectively) exports rose by 11 percent and 9 percent, the report added.

- In 2023, business, professional, and technical services accounted for 41.2 percent of world exports of digitally delivered services, followed by computer services (20.5 percent), financial services (16 percent), intellectual property related services (10.9 percent), insurance and pension services (5.2 percent), telecommunications services (2.6 percent), audio-visual and other personal, cultural, and recreational services (2.1 percent), and information services (1.5 percent).

India Jewellery Export Growth in FY24

- India's plain gold jewellery exports witnessed a remarkable surge of 61.72 per cent in FY 2023-24, reaching USD 6.8 billion compared to USD 4.2 billion in the previous year, according to data released by the Gem & Jewellery Export Promotion Council (GJEPC).



- This growth stands in stark contrast to the overall decline of 14.45 per cent in total gems and jewellery exports for the same period.

- “Total Gold jewellery (plain & studded jewellery), which experienced a 10.47 per cent decline between April 2023 to September 2023, rebounded strongly in the latter half of the year, achieving a growth of 46.91 per cent,” GJEPC said in a statement.

- The strong performance of plain gold jewellery exports can be attributed to several factors. The United Arab Emirates (UAE) emerged as a key market, with exports surging by 107.2 per cent to USD 4.5 billion. This growth is likely linked to the India-UAE Comprehensive Economic Partnership Agreement (CEPA) that came into effect in May 2022.
- Australia also witnessed a significant increase of 37 per cent in plain gold jewellery imports, potentially due to the India-Australia Economic Cooperation and Trade Agreement (ECTA) implemented in December 2022.

2024 APRIL MONTH QUESTIONS

- When was the Wildlife (Protection) Act brought in?**
 - 1973
 - 1962
 - 1952
 - 1972
- At present, there are about _____ tahrs in the Western Ghats.**
 - 1000
 - 500
 - 3000
 - 250
- Mismatch in cotton testing labs to be started in states to position Indian Kasturi cotton as a global brand?**
 - Maharashtra
 - Tamil Nadu
 - Delhi
 - Haryana
 - Punjab
 - Kerala
 - Gujarat
 - Karnataka
 - 1 and 2
 - 3 and 6
 - 7 and 8
 - None of the above
- The Transplantation of Human Organs (Amendment) Act under the Ministry of Health and Family Welfare was established as per _____.**
 - 2009
 - 2011
 - 2014
 - 2006
- India ranks _____ in the Global Cybercrime Index?**
 - 8
 - 12
 - 10
 - 4
- Which country has joined hands with India to renew the Indian Ocean Observing System (IndOOS)?**
 - America
 - Russia
 - Japan
 - Australia
- Diplomatic relations between India and Peru started from which year?**
 - 1950
 - 1960
 - 1980
 - 1990
- To select the inconsistencies in the statements about National Judicial Academy (NJA).**
 - NJA is fully funded by the Government of India.
 - The NJA works as per the instructions of the Supreme Court of India.
 - The NJA's mandate is to train judges in their adjudicative role and in the performance of court administration.
 - 1 only
 - 2 only
 - 2&3
 - All of the above are correct
- India's rapeseed and mustard production is _____ than last year.**
 - 7% up
 - 5% down
 - 6% up
 - 8% up
- The Election Commission has launched a mobile application called _____ for differently abled people to vote during the Lok Sabha elections.**
 - Meri Sadak
 - Saksham
 - m-Sainik Kalyan
 - Sujas
- Who was appointed as the first woman Vice-Chancellor of Aligarh Muslim University (AMU)?**
 - Soma Mondal
 - Kiran Majumdar-Shah
 - Naima Katoon
 - Draupadi Murmu
- It is Israel's multi-layered air defense system developed by Israel Aerospace Industries in collaboration with the _____ Missile Defense Agency.**
 - India
 - Russia
 - America
 - China

13. Which of the following is the new law passed by the Parliament of Ukraine?
- Manages how the country recruits new soldiers.
 - All men must serve in the army.
 - War violence should be avoided.
 - Economic development of Ukraine.
14. The largest earthquake to hit ___ in 25 years was recorded at 6.5 on the Richter scale.
- Philippines
 - Taiwan
 - Nepal
 - Mexico
15. Which of the following Indian states share a border with China?
- Himachal Pradesh
 - Rajasthan
 - Ladakh
 - Sikkim
 - Uttar Pradesh
 - Arunachal Pradesh
 - Bhutan
- 1,2,3 & 4
 - 4,5 & 7
 - 1,3,4 & 6
 - All of the above
16. When was the Shimla Conference held for India's claim to Arunachal Pradesh?
- 1924
 - 1933
 - 1942
 - 1914
17. What is China's broad space exploration goal (by 2030)?
- It aims to put astronauts on the moon.
 - Colonization of the Moon.
 - Landing astronauts on Mars.
 - Publishing a full study of the Sun.
18. How far is Tiangong Space Station from Earth?
- 800 km
 - 1200 km
 - 400 km
 - 600 km
19. Golden trevally, belongs to which species?
- Spider
 - Fish
 - Butterfly
 - Frog
20. Who has been honored with the 'International Culture Award 2024'?
- Rizwana Hasan
 - Meena Saranda
 - Najla Mangush
 - Taif Sami Mohammed
21. Which organization recently collaborated with the Tamil Nadu State Forest Department for the successful radio collaring of the Nilgiri Tahr at Mukkuruti National Park?
- United Nations Environment Program (UNEP)
 - World Health Organization (WHO)
 - Wildlife Conservation Society (WCS)
 - World Wildlife Fund (WWF)
22. What is the season of southwest monsoon in India?
- June-September
 - July-October
 - January- March
 - October – December
23. Ineligibility in states recognized by Indian Council of Forestry Research and Education (ICFRE) under Green Credit Scheme?
- Bihar
 - Rajasthan
 - Tamil Nadu
 - Kerala
24. Which of the following statements is false?
- UV light cannot be used to degrade microplastics.
 - A combination of polymers and nanoclusters are capable of adsorbing and degrading large amounts of microplastics.
 - These nanoclusters are catalysts
 - All of the above are correct
25. Wayanad Wildlife Sanctuary is a part of -----.
- Agasthiyamalai Biosphere Reserve
 - Nilgiris Biosphere Reserve
 - Gulf of Mannar Biosphere Reserve
 - Nanda Devi Biosphere Reserve
26. Which country leads the sustainable funding for the Tiger Habitat Convention 2024 ?
- Bhutan
 - India
 - Nepal
 - Afghanistan
 - e)

27. India has become the world's _____ largest exporter of digitally delivered services.
- Second
 - Fourth
 - Seventh
 - Tenth
28. India's exports have increased by how much percent over the previous year?.
- 10%
 - 12%
 - 17%
 - 5%
29. India's normal gold jewellery exports rose by a significant _____ percent in FY 2023-24.
- 61.72%
 - 64.5%
 - 52.7%
 - 82.6%
30. Who owns the space company Blue Origin?
- Meta
 - Amazon
 - Google
 - Microsoft
31. It has approved the name ----- to designate the landing pad of Chandrayaan-3's Vikram Lander.
- Stadium Shivashakti
 - Tiranga
 - Trimuna
 - Power
32. Gaia BH3, the largest stellar black hole discovered in the Milky Way, has a mass of ---- times that of the Sun.
- 100
 - 44
 - 33
 - 35
33. Glacial lakes in the Indian Himalayas have increased by how much in 2023?
- 54%
 - 43%
 - 89%
 - 64%
34. When did NASA's next-generation solar sail technology, the Advanced Composite Solar Sail System (ACS3), begin its journey?
- April 3
 - April 13
 - April 24
 - April 14
35. Which space agency has developed an advanced composite solar sail system?
- NASA
 - ISRO
 - CNSA
 - JAXA
36. Which company has developed an AI system that converts human still images and audio tracks into animation?
- Google
 - Tesla
 - Microsoft
 - Meta
37. Recently awarded the prestigious 2024 John L. Who was awarded the 'Jack' Swigert Jr. Award?
- America
 - India
 - Japan
 - China
38. Which award is given every year to those who have made path-breaking contributions to the nation, its people and society?
- Lata Dinanath Mangeshkar Award
 - International Culture Award
 - Kalidas Samman Award
 - National Youth Award
39. Who has been awarded Lata Dinanath Mangeshkar Award 2024?
- Narendra Modi
 - Amitabh Bachchan
 - Rahul Gandhi
 - None of the above
40. Who was the first recipient of Lata Dinanath Mangeshkar Award?
- Narendra Modi
 - Amitabh Bachchan
 - Rahul Gandhi
 - Asha Bhosle
41. In which year Jaish-e-Im terrorists attacked the Pathankot air force base?
- 2012
 - 2013
 - 2016
 - 2020
42. The "Pilot" IPSS program at Pathankot Air Base was launched in February_____.
- 2020
 - 2021
 - 2022
 - 2023

43. India's Pokhran firing range is located in which state?
 a) Madhya Pradesh
 b) Gujarat
 c) Rajasthan
 d) Mizoram
44. Where did the Indian Army conduct the 'Ak Missile Ak Tank' test?
 a) Sikkim
 b) Cumula
 c) Arunachal Pradesh
 d) Jharkhand
45. Recently, which mission received the 2024 John L 'Jack' Swigert Jr. Award for space exploration?
 a) Chandrayaan-3 Mission
 b) Chandrayaan-2 Mission
 c) Mars Orbiter Mission
 d) Gaganyaan Mission
46. How many bullets is India's lightweight bulletproof jacket capable of blocking?
 a) 10
 b) 5
 c) 6
 d) 8
47. Iglu 1M VSHORAD missile system was introduced in India in which year?
 a) 1968
 b) 1975
 c) 1989
 d) 1990
48. Who has been appointed as the brand ambassador of the ICC Men's T20 World Cup 2024?
 a) Yuvraj Singh
 b) Harbhajan Singh
 c) Usain Bolt
 d) Neeraj Chopra
49. When is National Maritime Day celebrated annually?
 a) April 10
 b) April 5
 c) April 8
 d) April 12
50. What is the theme for World Health Day 2024?
 a) Health for All
 b) Our planet, our health
 c) Building a fairer, healthier world
 d) My health, my right

Answers:

1.	D	11.	C	21.	D	31.	A	41.	C
2.	C	12.	C	22.	A	32.	C	42.	B
3.	B	13.	A	23.	D	33.	C	43.	C
4.	B	14.	B	24.	A	34.	C	44.	A
5.	C	15.	C	25.	B	35.	A	45.	A
6.	A	16.	D	26.	A	36.	C	46.	C
7.	B	17.	A	27.	B	37.	B	47.	C
8.	B	18.	C	28.	C	38.	A	48.	C
9.	A	19.	B	29.	A	39.	B	49.	B
10.	B	20.	B	30.	B	40.	A	50.	D



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