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WEST BENGAL SPECIAL

Padma Awards 2024 winner from West Bengal

• The Padma Awards, among the highest civilian honours in India, are conferred annually in three categories: Padma Vibhushan, Padma Bhushan, and Padma Shri.

Award	Name	Work Area
Padma Bhushan	Mithun Chakraborty	Art
	Satyabrata Mookherjee (Posthumous)	Public Affairs
	Usha Uthup	Art
Padma Shri	Gita Roy Barman	Art
	Takdira Begum	Art
	Narayan Chakraborty	Science & Engineering
	Ratan Kahar	Art
	Dukhu Majhi	Social Work
	Sanatan Rudra Pal	Art
	Eklabya Sharma	Science & Engineering
	Nepal Chandra Sutradhar (Posthumous)	Art

5 Products Awarded GI Tags

- The state recently secured Geographical Indication (GI) tags for five of its special products, adding to its cultural and agricultural heritage. This recognition comes as part of the National GI Drive Mission, which aims to protect the unique identity and quality of regional specialities.
- Sundarban Honey: This honey, collected by the "Mouli" community from the Sundarbans, boasts a distinct flavour thanks to the unique floral diversity of the forest. The West Bengal Forest Development Corporation (WBFDCL) played a key role in securing the GI tag and even sold it under the brand name "Mouban."
- **Black Nunia Rice:** Hailing from the Jalpaiguri district, this indigenous rice variety is known as the "Prince of Rice" for its rich, nutty flavour and high nutritional value.
- **Tangail Sarees:** These exquisite sarees, woven with intricate designs, come from Birbhum and Murshidabad districts. Their delicate beauty and cultural significance are now officially recognized.
- **Gorod Sarees:** Woven from a special type of silk in the Birbhum district, these sarees are known for their vibrant colours and durability. The GI tag will help preserve their traditional weaving techniques.
- **Kadiyal Sarees:** Produced exclusively in Murshidabad, these sarees are famed for their fine silk and intricate "buti" work. The GI tag ensures their authenticity and promotes the skills of local artisans.





Jan Man Survey

- Launched by the Indian Prime Minister, it aims to capture citizens' views on the government's performance across various sectors like infrastructure, healthcare, education, economy, and social welfare.
- Conducted online through the NaMo App and other platforms, the survey features multiple-choice and open-ended questions to gather comprehensive feedback and suggestions for improvement.
- By making the survey results publicly available, the Jan Man Survey promotes transparency and accountability

in governance, encouraging citizen participation in shaping India's future.



PRERANA Program

- The "Prerana: An Experiential Learning program" is **launched by the Department of School Education & Literacy**, Ministry of Education.
- The program is **designed for students in classes IX to XII** and is aimed at providing a meaningful and inspiring experience to empower participants with leadership qualities.
- It is a week-long residential program designed for students in grades 9-12 from across India. It takes place at a Vernacular School in Vadnagar, Gujarat, established in 1888.
- The curriculum, prepared by IIT Gandhi Nagar, revolves around nine value-based themes such as Swabhiman, Vinay, Shaurya, Sahas, etc., fostering respect for India's unity in diversity.
- Prerana accommodates a batch of 20 selected students (10 boys and 10 girls) each week from various parts of the country.
- The program aims to inspire the youth, foster respect for unity in diversity, and contribute to making the youth agents of positive change in line with the vision of "Vasudhaiva Kutumbakam."

International Purple Fest 2024

- The International Purple Fest 2024, held in Goa, was a vibrant and inclusive event celebrating the achievements and rights of persons with disabilities. This global gathering took place from January 18th to 23rd, 2024.
- The festival served as a platform for showcasing the talents and abilities of individuals with disabilities, challenging stereotypes and promoting their equal participation in society. It also aimed to raise awareness about the challenges they face and advocate for solutions.
- The festival culminated in a grand closing ceremony called "Purple Rain," featuring live music, dance performances, and comedy shows, leaving a lasting impression on attendees.



Swachh Survekshan Awards 2023

- The Swachh Survekshan Awards 2023 were held on January 20, 2024, in New Delhi. The awards were presented by the Ministry of Housing and Urban Affairs (MoHUA) to recognize the efforts of cities, states, and individuals in promoting cleanliness and sanitation in India.
- Indore and Surat were jointly declared the cleanest cities in India.
- Maharashtra was ranked the cleanest state, followed by Karnataka and Gujarat.
- Dehradun Cantonment was ranked the cleanest cantonment.
- Chandigarh was ranked the safest city for Safaimitra.
- Varanasi and Prayagraj were jointly declared the cleanest Ganga towns.
- Maharashtra was awarded the Best Performing State for its overall performance in the Swachh Survekshan 2023.
- The National Award for Innovation in Sanitation was awarded to the Smart Swachh Suraksha model developed by the Ahmedabad Municipal Corporation.

All India Survey on Higher Education (AISHE) 2021-2022

- The All India Survey on Higher Education (AISHE) 2021-2022 was released by the Ministry of Education.
- The total student enrollment in higher education has increased by 26.5% since 2014-15, reaching nearly 4.33 crore in 2021-22.
- **Female enrollment has seen a significant rise** of 32% since 2014-15, reaching 2.07 crore in 2021-22. This trend is particularly encouraging for promoting gender equality in education.
- The enrollment of SC, ST, and OBC students has witnessed substantial increases, indicating improved access to higher education for these communities.
- The number of female faculty members has increased by 22% since 2014-15, contributing to a more diverse and inclusive academic environment.

First All-Girls Sainik School

- The Union Defence Minister Rajnath Singh recently inaugurated the country's first-ever all-girls Sainik School in Vrindavan, Mathura.
- Named Samvid Gurukulam Girls Sainik School, it's part of a larger initiative to establish 100 new Sainik Schools across India. These schools, partnering with NGOs and private/state institutions, aim to provide quality education aligned with the National Education Policy (NEP).







- This school will be staffed by experienced ex-servicemen, offering rigorous training and academic excellence. This empowers girls to develop leadership skills, discipline, and the physical fitness needed for a military career if they choose.
- These schools offer quality education with an emphasis on discipline, teamwork, and leadership, shaping well-rounded individuals who can contribute to various fields, and fostering national progress.

Ayodhya Airport Gets International Status

- Ayodhya Airport will now be able to handle direct flights from other countries, boosting tourism and
 pilgrimage in the city. This is a significant step for Ayodhya's economic growth and its recognition as a
 global pilgrimage centre.
- The airport will be officially named "Maharishi Valmiki International Airport, Ayodhyadham". This pays homage to Maharishi Valmiki, the revered author of the epic Ramayana, deeply connected to Ayodhya's cultural and religious significance.
- International flights will make it easier for foreign pilgrims and tourists to visit Ayodhya, potentially increasing tourism revenue and cultural exchange.
- Improved connectivity will likely attract investments and businesses, leading to job creation and economic development in the region.

National Youth Festival in Nashik

- On January 12th, Prime Minister Narendra Modi inaugurated the **27th National Youth Festival in Nashik, Maharashtra.**
- The Department of Youth Affairs Collaborated with various government departments and organizations across India to make this a national

event.

This year's theme is "MYBharat-ViksitBharat@2047- By the Youth,
 For the Youth." It emphasizes the
 role young people will play in
 building a developed India by 2047.

IREDA Releases Vigilance Iournal 'Pahal'

- Development Agency (IREDA), a public sector enterprise under India's Ministry of New and Renewable Energy, has launched a new initiative to promote transparency and accountability within the organization. This initiative is the Pahal", a house journal published by IREDA's Vigilance Department.
- The journal aims to shed light on





the activities of IREDA's Vigilance Department, promoting transparency and public trust.

- By highlighting best practices and potential areas of improvement, the journal encourages employees to uphold ethical standards and contribute to a culture of accountability.
- The journal's focus on renewable energy aligns with IREDA's core mission of promoting sustainable development in India.
- **IREDA was founded in 1987** and is a leading provider of financial assistance and other services for renewable energy and energy efficiency projects in India.



INTERNATIONAL

India and Guyana

- Cabinet approves signing of Memorandum of Understanding (MoU) between India and Guyana on cooperation in the hydrocarbon sector.
- The MoU aims to boost economic ties between the two nations by facilitating joint ventures and investments in hydrocarbon exploration and development.
- By tapping into Guyana's emerging oil reserves, India can reduce its dependence on foreign oil imports and secure a more stable energy supply.



• Indian companies can collaborate with their Guyanese counterparts to learn best practices and acquire valuable expertise in the hydrocarbon sector.

Guyana

- Location: Northeastern coast of South America, bordering Venezuela, Suriname, Brazil, and the Atlantic Ocean.
- Currency: Guyanese dollar (GYD).
- Present Leader: President Mohamed Irfaan Ali (elected in 2020).

India International Science Festival (IISF) 2023

- The festival will be held from January 17th to 20th, 2024, at the Department of Biotechnology (DBT) Translational Health Science and Technology Institute (THSTI)-Regional Centre for Biotechnology (RCB) campus in Faridabad, Haryana.
- Theme: "Science and Technology Public Outreach in Amrit Kaal," celebrating advancements in science and technology while making them accessible to the public, especially during India's 75th anniversary year.

India Joins the UN Statistical Commission

• India has secured a seat on the prestigious United Nations Statistical Commission (UNSC), marking its return after a 20-year absence. This four-year term will be crucial for both India and global statistics.



- Joining the UNSC, the highest body for global statistics shows international recognition of India's expertise in data and development. India will have a say in setting new standards for how countries measure their economies and progress, potentially impacting its own GDP calculations.
- The UNSC is the highest body of the global statistical system, established in 1947. It has 24 member
 countries with four-year terms. The headquarters is located at the United Nations Headquarters in New
 York City, USA.
- The **current president of the UNSC is Gabriella Vukovich**, who is also the Director General of the Hungarian Central Statistical Office.

India Upgrades Manufacturing Standards

- The Indian government has taken a significant step towards improving the quality of medicines by revising Schedule M of the Drugs and Cosmetics Rules, 1945. This means **stricter rules are now in place for pharmaceutical companies, focusing on:**
- The revised schedule outlines stricter Good Manufacturing Practices (GMP), which are essentially the guidelines companies must follow to ensure the safety, purity, and effectiveness of their medicines.
- The new rules also mandate specific requirements for the premises, plants, and equipment used in pharmaceutical production. This ensures companies have the necessary infrastructure to meet the higher quality standards.
- The revisions aim to bring Indian GMP standards in line with those of the World Health Organization (WHO), ensuring they are recognized and accepted globally.

South Korea's New "Workation" Visa

- South Korea has launched a brand new visa called the "workation" visa, allowing foreigners to "live, work, and travel" in the country for up to two years.
- This exciting opportunity allows foreign nationals to live and work remotely in South Korea for up to one year, with the possibility of extending for another year.
- This visa is open to foreign nationals with at least one year of work experience in their field and proof of sufficient income to support themselves during their stay.

Cabo Verde Beats Malaria

- Cabo Verde has become the third African country to be declared malaria-free by the World Health Organization (WHO). This is a significant milestone in the global fight against this deadly disease.
- Cabo Verde joins 43 other countries and 1 territory that have eliminated malaria. This is a huge achievement, especially considering the challenges faced by many African nations.
- Malaria remains a major health concern in Africa, accounting for 95% of global cases and 96% of deaths in 2021.
- Malaria is a mosquito-borne infectious disease that affects humans and other vertebrates. It is caused by singlecelled microorganisms of the Plasmodium group. The





disease is spread exclusively through bites of infected female Anopheles mosquitoes.

Kyrgyzstan Makes Snow Leopard Its National Symbol

- **Kyrgyzstan has declared the majestic snow leopard its national symbol**, highlighting its importance for the country's natural heritage, cultural identity, and ecological health.
- In Kyrgyz culture, the snow leopard embodies greatness, courage, and resilience traits deeply valued by the people. This selection strengthens the connection between the animal and the nation's identity.
- Making the snow leopard a national symbol puts a spotlight on its vulnerable status and the need for conservation efforts. This could attract more resources and support for protecting these magnificent creatures.



ECONOMICS

Sukanya Samriddhi Yojana (SSY)

- The government increased the SSY interest rate from 8% to 8.2% in January 2024.
- The account can be opened in the name of a girl child up to the age of 10 years.
- A minimum of ₹250 and a maximum of ₹1.5 lakh can be deposited in a financial year.
- The account matures after 21 years from the date of opening.
- The maturity amount is tax-free.
- Premature closure of the account is allowed only in certain cases, such as the girl child's marriage after attaining the age of 18 years.

SVAMITVA Scheme

- The SVAMITVA Scheme indeed won the Best Innovation Award for its Innovation Sandbox presentation during the Public Policy Dialogues–2024 at the Indian School of Business in Hyderabad.
- The **SVAMITVA Scheme is a Central Sector Scheme of the Ministry of Panchayati Raj**, Government of India. It was launched by the Prime Minister on National Panchayati Raj Day, 24th April 2020.
- The scheme aims to establish clear ownership of property in rural inhabited areas by mapping land parcels using drone technology and providing a 'Record of Rights' to village household owners with the issuance of legal ownership cards (Property cards/Title deeds) to the property owners.
- The scheme helps to improve land records in rural areas, which will make it easier for the government to plan and implement development projects.

Startup India Innovation Week 2024

- The Department for Promotion of Industry and Internal Trade (DPIIT) held the Startup India Innovation
 Week 2024 from January 10th to 18th, 2024.
- This week-long event aimed to bring together all the key players in India's startup ecosystem, including startups, entrepreneurs, investors, policymakers, and other stakeholders.
- This year's Innovation Week marked the 8th anniversary of the Startup India initiative launched by Prime
 Minister Narendra Modi in 2016. The initiative aimed to build a strong ecosystem that fosters innovation
 empowers startups and attracts investments.



Bharatmala Phase 1 Deadline Extended

- The government has extended the deadline for completing the Bharatmala Phase 1 highway project to 2027-28 (previously 2022).
- Bharatmala Pariyojana aims to improve road connectivity and economic growth by constructing and upgrading highways across India.
- The first phase was approved in 2017 with a cost of Rs 5.35 trillion.

e-SAKSHI Mobile App

- A new mobile app called MPLADS e-SAKSHI was launched to improve the Member of Parliament Local Area Development Scheme (MPLADS).
- This app aims to make proposing, tracking, and monitoring development projects in constituencies easier and faster for MPs.
- It offers real-time information, better communication with authorities, and ultimately, a more efficient scheme.
- The MPLADS scheme empowers Members of Parliament (MPs) to recommend development projects in their constituencies. To improve efficiency and transparency, the government launched the MPLADS e-SAKSHI Mobile Application.

Members of Parliament Local Area Development Scheme (MPLADS)

- The Members of Parliament Local Area Development Scheme (MPLADS) is a centrally sponsored scheme that was introduced by the Government of India in 1993.
- The scheme aims to enable Members of Parliament (MPs) to recommend developmental works in their constituencies.
- Each MP has an allocation of Rs. 5 crore per year under the MPLADS scheme. They can recommend works to the tune of this amount to the district collector for implementation in their constituency. The works can be related to any sector, such as drinking water, sanitation, education, health, infrastructure, etc.
- The district collector is responsible for scrutinizing the recommendations made by the MP and ensuring that they are in accordance with the guidelines of the scheme. Once the recommendations are approved, the district collector releases the funds to the implementing agencies.

Atal Setu

- Atal Setu is the official name of the Mumbai Trans Harbour Link (MTHL).
- It is a 21.8-kilometer-long, six-lane bridge that **connects Mumbai with** its satellite city, across the Thane Creek.
- It is expected to significantly reduce travel time between Mumbai and Navi Mumbai, it is estimated to cut travel time from two hours to just 20 minutes, boosting economic activity, trade, and overall connectivity within the Mumbai Metropolitan Region (MMR).



- The bridge features the **first use of orthotropic decks in India**, enabling longer spans and increased structural efficiency.
- It is also equipped with advanced traffic monitoring and surveillance systems to ensure safety and security.



Windfall Tax

- India has reduced its windfall tax on petroleum crude to 1,700 rupees per tonne from 2,300 rupees per tonne.
- India first imposed the windfall tax in July 2022 on crude oil producers and later extended it to exports
 of gasoline, diesel, and aviation fuel. The tax is revised every two weeks based on international oil
 prices.
- A windfall tax is a type of tax that is **imposed on an unexpected or sudden increase in income or profits.**
- The purpose of a windfall tax is to redistribute some of the excess profits to the government or the public and to discourage speculation or excessive risk-taking.



DEFENCE & SECURITY

Exercise 'Desert Cyclone'

- It is a joint military exercise between India and the United Arab Emirates (UAE) that kicked off on January 2nd, 2024, in Mahajan, Rajasthan.
- It aims to strengthen interoperability, hone skills in sub-conventional operations, and boost collaboration between the two nations' armed forces.
- It seeks to improve coordination and communication between the Indian Army and the UAE Land Forces, fostering a seamless working relationship in challenging environments.



- The focus lies on refining tactics and strategies for urban warfare, particularly in desert and semi-desert terrains. This includes scenarios like fighting in built-up areas (FIBUA).
- The exercise aligns with the UN Charter on peacekeeping, preparing both forces for potential future deployments in global peacekeeping missions.

United Arab Emirates (UAE)

- The United Arab Emirates (UAE) is a fascinating country with a rich history, diverse culture, and modern infrastructure.
- Located in the southeast of the Arabian Peninsula, bordering Oman and Saudi Arabia.
- Comprises seven emirates: Abu Dhabi (capital), Dubai, Sharjah, Ajman, Umm Al-Quwain, Fujairah, and Ras Al Khaimah.
- Currency: The official currency of the UAE is the United Arab Emirates Dirham (AED).
- Leader: The UAE is a federation of seven emirates, each with its own ruler. However, the President of the UAE serves as the head of state for the entire country, currently holding the position is Sheikh Mohamed bin Zayed Al Nahyan. He is also the Emir of Abu Dhabi, the wealthiest and most populous emirate.



Exercise "Sada Tanseeq"

- The first-ever India-Saudi Arabia joint military exercise "Sada Tanseeq," held in Rajasthan from January 29th to February 10th, 2024, marks a significant development in the strategic partnership between the two nations.
- This exercise signifies a growing strategic convergence between India and Saudi Arabia, two key players
 in the Indian Ocean region. It fosters greater understanding, trust, and cooperation between their
 militaries.
- Focused on semi-desert terrain operations, the exercise aims to enhance interoperability and joint operational capability to counter terrorism and other regional security threats.
- Both nations share concerns about terrorism, maritime security, and extremism. This exercise allows them to share best practices and refine tactics for addressing these common challenges.

Ugram

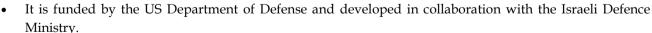
- The Defence Research and Development Organisation (DRDO) recently unveiled the Ugram, a state-of-the-art assault rifle.
- It is a 7.62x51mm caliber rifle designed to meet the operational requirements of the Indian Army, paramilitary forces, and state police.
- Weighing less than four kilograms, the Ugram is lighter than most assault rifles in its class, making it easier for soldiers to carry and manoeuvre during combat.



- It has an effective range of 500 meters, ensuring accuracy and lethality in various combat scenarios.
- The rifle is capable of firing in both single and fully automatic modes, allowing soldiers to adapt their firing patterns to the situation at hand.

Sky Dew

- Sky Dew is a massive radar blimp deployed by Israel along the Lebanese border to monitor and detect unmanned aircraft and cruise missiles, primarily from Iran and Syria.
- Sky Dew, delivered to the Israeli Air Force in 2022, is designed to
 detect unmanned aircraft and cruise missiles from Iran and Syria,
 particularly those that are small and challenging to detect.
- It operates at a high altitude (10,000ft) and boasts a long-range radar with a 250 km observation range.



• It offers cost-effective, long-term surveillance compared to traditional aircraft, but remains vulnerable to visual detection and potential technical issues.



• The Indian Air Force (IAF) has located the debris of an AN-32 transport aircraft that went missing almost seven-and-a-half years ago.





- The debris was discovered at a depth of approximately 3.4 km in the Bay of Bengal, 310 km off the coast of Chennai.
- The aircraft disappeared in July 2016, during a mission and had 29
 personnel on board. Despite extensive search efforts involving aircraft
 and ships over the years, no traces of the missing personnel or wreckage
 were found until this recent discovery.



Exercise Sea Dragon

- The Indian Navy's P8I aircraft has landed at Guam to participate in Exercise Sea Dragon 24.
- Primary participating navies include the United States, India, Japan, Canada, and South Korea.
- The objective is to bolster multinational interoperability in anti-submarine warfare (ASW), enhance mutual understanding, and strengthen maritime security in the Indo-Pacific.
- The exercise tested the capabilities of advanced maritime patrol aircraft like the Boeing P-8I in tracking simulated and live underwater targets, pushing the boundaries of ASW technology.

Vijay Raghavan Committee

- The Vijay Raghavan Committee was set up by the Union Defence Minister to review and redefine the role of the Defence Research and Development Organization (DRDO).
- The committee is headed by Prof K Vijay Raghavan, a former Principal Scientific Advisor to the government and one of the key architects of the National Research Foundation (NRF).
- The main objectives of the committee are to restructure and align the DRDO with futuristic technological requirements in the defence domain, to maximise the participation of academia, MSMEs, and start-ups in developing cutting-edge technologies, and to attract and retain high-quality manpower.

Pinaka Weapon System

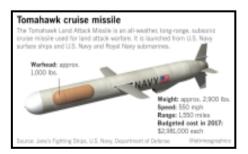
- The Pinaka weapon system is a multi-barrel rocket launcher developed by the Defence Research and Development Organisation (DRDO).
- The current Pinaka rockets can strike targets at a distance of up to 75-80 km.
- DRDO is actively developing new long-range variants with strike capabilities of 120 km and even 200 km. These improved versions will significantly enhance Pinaka's operational reach.



• The development involves collaboration with private and public sector industries for producing and developing the new Pinaka rockets.

Tomahawk Missile

- Japan's decision to purchase 400 long-range Tomahawk missiles from the United States as part of its efforts to bolster its military capabilities in response to growing regional security threats, particularly from China's military expansion and North Korea's nuclear capabilities.
- The Tomahawk missile is a long-range, subsonic, all-weather cruise missile that has been a mainstay of the US military arsenal since the 1980s.





- The Tomahawk missile has a length of 5.56 meters, a diameter of 0.51 meters, and a wingspan of 2.67 meters.
- Weighing 1,200 kilograms, it can reach a range of up to 1,500 miles at speeds of up to 550 miles per hour.
- Depending on the mission, the **Tomahawk can carry various warheads**, including high-explosive, blast-fragmentation, and even submunitions for area effect.

Exercise Ayutthaya

- The first-ever Bilateral Maritime Exercise between the Indian Navy (IN) and the Royal Thai Navy (RTN) took place from December 20 to 23, 2023.
- The exercise is named Ex-Ayutthaya, which translates to "The Invincible One" or "Undefeatable." This name symbolizes the historical and cultural ties between the ancient cities of Ayodhya in India and Ayutthaya in Thailand.
- India sent indigenously built ships Kulish and IN LCU 56, while Thailand was represented by His Thai Majesty's Ship (HTMS) Prachuap Khiri Khan.
- The 36th edition of the India-Thailand Coordinated Patrol (Indo-Thai CORPAT) was also conducted alongside the bilateral exercise.

Exercise Khanjar

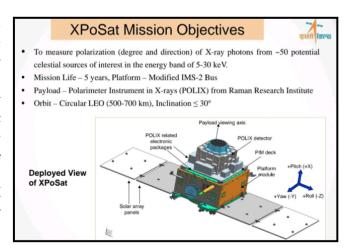
- The exercise took place from January 22 to February 3, 2024, at the Special Forces Training School in Bakloh, Himachal Pradesh, India. This is an annual event that is held alternately in India and Kyrgyzstan.
- The exercise focused on exchanging experiences and best practices in counter-terrorism operations, especially in built-up areas and mountainous terrain. This is crucial for both countries as they face similar security threats in their respective regions.
- Exercise KHANJAR enhances the military capabilities of both nations and strengthens their ability to
 jointly tackle challenges like international terrorism and extremism. This contributes to regional security
 and stability.



SCIENCE

XPoSat Satellite

- Launched by ISRO in January 2024, XPoSat is India's first dedicated telescope to study cosmic X-rays. It peeks into the universe's high-energy secrets, focusing on bright X-ray sources.
- While most satellites only capture X-ray brightness, XPoSat goes a step further. It measures the "polarization," revealing the direction and intensity of the X-ray waves, like sunlight through sunglasses.
- XPoSat carries two powerful payloads: POLIX for measuring polarization and XSPECT for detailed spectral analysis. This combo helps





understand the physical processes behind X-ray emission from black holes, neutron stars, and other cosmic wonders.

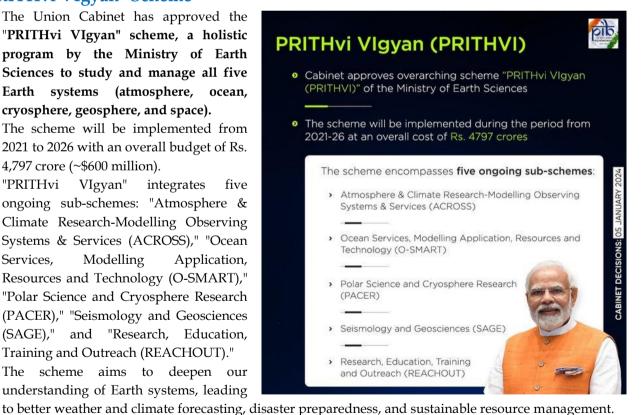
XPoSat has an expected mission lifespan of five years, during which it will observe various X-ray objects, pushing the boundaries of our knowledge about the universe's most energetic phenomena.

Indian Space Research Organisation (ISRO)

- In 1962, Dr. Vikram Sarabhai, the "Father of the Indian Space Programme," established the Indian National Committee for Space Research (INCOSPAR).
- In 1969, INCOSPAR evolved into the Indian Space Research Organisation (ISRO).
- ISRO prioritized self-reliance, designing and building its launch vehicles like the Polar Satellite Launch Vehicle (PSLV) and Geosynchronous Satellite Launch Vehicle (GSLV) and satellites like Aryabhata, India's first satellite launched in 1975.
- ISRO's focus extends beyond scientific curiosity. Its satellites provide vital data for weather forecasting, resource management, communication, and disaster preparedness. Missions like Chandrayaan and Mangalyaan showcase India's ambition to explore the cosmos.

"PRITHvi VIgyan" Scheme

- The Union Cabinet has approved the "PRITHvi VIgyan" scheme, a holistic program by the Ministry of Earth Sciences to study and manage all five Earth systems (atmosphere, ocean, cryosphere, geosphere, and space).
- The scheme will be implemented from 2021 to 2026 with an overall budget of Rs. 4,797 crore (~\$600 million).
- "PRITHvi VIgyan" integrates ongoing sub-schemes: "Atmosphere & Climate Research-Modelling Observing Systems & Services (ACROSS)," "Ocean Services. Modelling Application, Resources and Technology (O-SMART)," "Polar Science and Cryosphere Research (PACER)," "Seismology and Geosciences (SAGE)," and "Research, Education, Training and Outreach (REACHOUT)."
- The scheme aims to deepen our understanding of Earth systems, leading



Aditya-L1

Aditya-L1, India's first dedicated solar observatory, was successfully inserted into a halo orbit around the Sun-Earth Lagrange point 1 (L1) on January 6, 2024, about 1.5 million kilometres from Earth.



- L1 is a unique point where the gravitational forces of the Sun and Earth balance, making it ideal for observing the Sun without interference from Earth.
- It will observe the Sun's atmosphere, including the corona, chromosphere, and photosphere.
- The mission aims to understand solar flares, coronal mass ejections, and other solar activities that can impact Earth's environment.



SPORTS

Sports and Adventure Awards 2023

- The President of India, Droupadi Murmu, presented the prestigious Sports and Adventure Awards 2023 at a ceremony held at Rashtrapati Bhavan on January 9, 2024. These awards recognize and celebrate the outstanding achievements of Indian athletes and adventurers in various fields.
- Major Dhyan Chand Khel Ratna Awards: The highest sporting honour in India, awarded to badminton

doubles duo Chirag Shetty and Satwiksairaj Rankireddy for their exceptional performance in 2023.

• Arjuna Awards:

chess,

more,

Bestowed
upon 15
athletes from
various
sports like
cricket,
kabaddi,
hockey,
archery, golf,

and

for

Major Dhyan Chand Khel Ratna Award:

- Chirag Shetty and Satwik Sairaj Rankireddy (badminton)

Arjuna Awards (Selected):

- Ojas Pravin Deotale (archery)
- Aditi Gopichand Swami (archery)
- Murali Sreeshankar (athletics)
- Parul Chaudhary (athletics)
- Mohammad Hussamuddin (boxing)
- R. Vaishali (chess)
- Mohammed Shami (cricket)
- Anush Agarwalla (equestrian)
- Divyakriti Singh (equestrian dressage)
- Diksha Dagar (golf)
- Krishan Bahadur Pathak (hockey)
- Sushila Chanu (hockey)
- Pawan Kumar (kabaddi)
- Ritu Negi (kabaddi)
- Nasreen (kho-kho)
- Pinki (lawn bowls)
- Aishwary Pratap Singh Tomar (shooting)
- Esha Singh (shooting)
- Harinder Pal Singh Sandhu (squash)
- Ayhika Mukherjee (table tennis)
- Sunil Kumar (wrestling)
- Antim Panghal (wrestling)
- Naorem Roshibina Devi (wushu)
- Sheetal Devi (para archery)
- Illuri Ajay Kumar Reddy (blind cricket)
- Prachi Yadav (para canoeing)

National Sports and Adventure Awards 2023

Dronacharya Award (Regular Category) for Outstanding Coaches:

- Lalit Kumar (wrestling)
- R.B. Ramesh (chess)
- Mahayeer Prasad Saini (para athletics)
- Shivendra Singh (hockey)
- Ganesh Prabhakar Devrukhkar (mallakhamb)

Dronacharya Award (Lifetime Category) for Outstanding Coaches:

- Jaskirat Singh Grewal (golf)
- Bhaskaran E (kabaddi)
- Jayanta Kumar Pushilal (table tennis)

Dhyan Chand Award for Lifetime Achievement:

- Manjusha Kanwar (badminton)
- Vineet Kumar Sharma (hockey)
- Kavitha Selvaraj (kabaddi)

Maulana Abul Kalam Azad (MAKA) Trophy 2023:

- Guru Nanak Dev University, Amritsar (overall winner university)
- Lovely Professional University, Punjab (1st runner-up)
- Kurukshetra University, Kurukshetra (2nd runnerup)

their consistent excellence over the past four years.

- <u>Dronacharya Awards:</u> Recognized five coaches who have made significant contributions to the development of athletes in their respective sports.
- <u>Tenzing Norgay National Adventure</u> <u>Awards:</u> Honored seven individuals for





their remarkable feats in mountaineering, water sports, and other adventure activities.

- <u>Rashtriya Khel Protsahan Puruskar:</u> Awarded to Jain Deemed to be University and Bengaluru and Odisha Mining Corporation Limited for their outstanding contributions to the promotion of sports in India.
- <u>Maulana Abul Kalam Azad Trophy:</u> Conferred upon the Sports Authority of India (SAI) Training Centre,
 Gandhinagar, for its excellence in sports training and development.

ICC Awards 2023 Winners

- Men's Player of the Year (Sir Garfield Sobers Trophy): Pat Cummins
- ODI Player of the Year: Virat Kohli
- Test Cricketer of the Year: **Usman Khawaja**
- Women's Cricketer of the Year (Rachael Heyhoe Flint Trophy): Nat Sciver-Brunt
- Men's T20I Cricketer of the Year: Suryakumar Yadav
- Men's Emerging Cricketer of the Year: Rachin Ravindra
- Chamari Athapaththu won the Women's ODI Cricketer of the Year award.
- Bas de Leede won the Men's Associate Cricketer of the Year award.
- Queentor Abel won the Women's Associate Cricketer of the Year award.
- Phoebe Litchfield won the Women's Emerging Cricketer of the Year award.

Australian Open

- Bopanna and Ebden clinched the Australian Open men's doubles title by defeating the Italian pair of Simone Bolelli and Andrea Vavassori in the final. This victory showcased Bopanna's resilience and skill on the court.
- At the age of 43 years and 329 days, Bopanna became the oldest man to win a Grand Slam title in the Open era. His longevity and ability to compete at the highest level demonstrate not only his talent but also his dedication to the sport.



- Bopanna now joins the esteemed list of Indian tennis greats who have triumphed at the Australian Open.
 This includes iconic names like Leander Paes, Mahesh Bhupathi, and Sania Mirza, who have left an indelible mark in the history of Indian tennis with their Grand Slam victories.
- The Australian Open, established in 1905 as the Australasian Championships, is the oldest Grand Slam tournament. It transitioned to the Australian Open in 1969. The tournament is held annually in January at Melbourne Park, featuring events such as men's singles, women's singles, men's doubles, women's doubles, and mixed doubles.
- In the men's single final, **Jannik Sinner of Italy claimed his first Grand Slam** title by defeating Daniel Medvedev of Russia in four sets, 6-4, 3-6, 7-5, 6-3.
- In the women's single final, **Aryna Sabalenka of Belarus also won her maiden Grand Slam title** by edging out Zheng Qinwen of China.

Aman Sehrawat

- Aman Sehrawat, an Indian wrestler, won the gold medal in the men's 57kg category at the Zagreb Open.
- He achieved this victory as a neutral athlete due to the suspension of the Wrestling Federation of India.



Yogesh Singh

- Yogesh Singh, an Indian shooter, secured the gold medal in the men's 25m centre fire pistol event at the Asian Shooting Championships 2024 in Jakarta, Indonesia.
- He topped the field with a score of 573 in this non-Olympic discipline.

Lionel Messi

- Lionel Messi, the Argentine footballer, won The Best FIFA Men's Player award for the seventh time.
- This achievement followed his leadership in leading Argentina to FIFA World Cup glory.

Rameshbabu Praggnanandhaa

- Rameshbabu Praggnanandhaa, a young chess prodigy from India, surpassed the legendary Viswanathan Anand to become India's top-ranked chess player.
- This accomplishment came after defeating the reigning world champion Ding Liren at the Tata Steel Chess tournament.

Man Singh

- Man Singh, an Indian marathon runner, won the gold medal at the Asian Marathon Championships 2024 in Hong Kong, China.
- He achieved this victory with a personal best timing of 2:14:19, becoming only the second Indian to be crowned the Asian marathon champion.



PERSON IN NEWS

Air Vice Marshal S Sivakumar

- Air Vice Marshal S Sivakumar assumed the role of Senior Officer-in-Charge Administration (SOA) at the Headquarters Western Air Command of the Indian Air Force on January 1, 2024.
- He has been commissioned in the Administration Branch of the Indian Air Force since June 1990 and possesses a distinguished career spanning over three decades.
- Prior to his current appointment, he served as Assistant Chief of Air Staff (Air Force Works) at Air Headquarters (Vayu Bhavan).



Vijayakanth

- Vijayakanth passed away in December 2023, leaving behind a rich legacy in film and politics.
- He is remembered for his charismatic screen presence, his political boldness, and his compassion for the underprivileged.
- He worked in over 150 films, mostly in Tamil cinema.
- He earned the nickname "Captain" after playing a forest officer in the 1991 film "Captain Prabhakaran."





Sheikh Hasina

- Prime Minister Sheikh Hasina of Bangladesh secured a landslide victory in the January 8th, 2024, general elections, marking her fourth consecutive term in office.
- Sheikh Hasina's Awami League party won a majority of seats in the 300-member parliament, securing her party's fifth term in office.
- This is a historic achievement for Sheikh Hasina, making her the longest-serving prime minister in Bangladesh's history.



Ustad Rashid Khan

- Rashid Khan, a renowned musician and composer, passed away on January 9, 2024, in Kolkata.
- He was awarded the Padma Shri in 1980, the Padma Bhushan in 2000, and the highest civilian award, the Bharat Ratna, in 2013.
- His music was characterized by its purity, clarity, and emotional depth. He
 was able to evoke a wide range of emotions in his listeners, from joy and
 sorrow to devotion and hope.



- He was one of the few vocalists who was equally adept at both Khayal and Thumri styles of singing. This
 made him a truly versatile musician.
- He composed several ragas and bandishes, adding to the rich repertoire of Hindustani classical music.

Tshering Tobgay

- Tshering Tobgay was elected as the Prime Minister of Bhutan for a second term in the recent National Assembly elections held on January 9, 2024. His party, the People's Democratic Party (PDP), secured a resounding victory with 30 out of 47 seats in the National Assembly.
- Tobgay's PDP won a strong majority, securing almost two-thirds of the seats in the National Assembly. This indicates a clear mandate for his leadership and his party's policies.



• This is Tobgay's second time serving as Prime Minister. He previously held the office from 2013 to 2018.

Munawwar Rana

- Munawwar Rana, the renowned Urdu poet, passed away on January 14, 2024, at the age of 71. He had been battling throat cancer for a long time.
- He received the prestigious Sahitya Akademi Award in 2014 for his poem "Shahdaba."
- His poems were often recited at mushairas (poetry symposiums) and gained immense popularity among Urdu enthusiasts across India and beyond.



Vice Admiral AN Pramod

- Vice Admiral AN Pramod has taken over as the new Director General Naval Operations (DGNO) of the Indian Navy, effective January 15, 2024.
- Vice Admiral Pramod is a seasoned naval officer with extensive experience in various operational and command roles.





- As DGNO, he will be responsible for leading the planning and execution of all operational activities of the Indian Navy, including combat, training, and logistics.
- His appointment comes at a crucial time for the Navy, as it faces challenges such as increasing maritime threats in the region and the need for further modernization of its forces.

Book 'Assam's Braveheart Lachit Barphukan' by Arup Kumar Dutta

- The Union Home Minister Amit Shah launched the book in Guwahati, Assam, emphasizing Lachit Barphukan's contribution to Indian history.
- The book, written by Arup Kumar Dutta, explores Lachit Barphukan's life and his crucial role in defending Assam against the Mughals.
- The book's translation into 24 Indian languages aims to make Lachit's story accessible to a wider audience.

Azali Assoumani

- Azali Assoumani was re-elected as the President of Comoros on January 23rd, 2024.
- Assoumani won 60.7% of the vote in the second round of the election, defeating Mahamoudou Ahamada who secured 39.3%.
- The opposition raised concerns about irregularities and violence during the election process, but the Supreme Court upheld the results.



Dr. Nitya Anand

- Dr. Nitya Anand, a renowned scientist known for discovering India's first oral contraceptive pill 'Saheli,'
 passed away at the age of 99 after a prolonged illness.
- He served as the former director of the Central Drug Research Institute (CDRI) from 1974 to 1984. Dr. Anand has been associated with CDRI since its inception in 1951.
- Anand's prolific career included the publication of over 400 research papers and holding more than 130 patents. He supervised the research work of 100 PhD students, showcasing his dedication to academic and scientific advancement.
- Nitya Anand received the Padma Shri, one of India's highest civilian honours, in recognition of his significant contributions to science and medicine.

Vice President Releases Book on India's Fertilizer Independence Journey

- India's Vice President, Jagdeep Dhankhar, recently launched a **book titled** "Fertilising the Future: Bharat's March Towards Fertilizer Self-Sufficiency."
- Written by the Minister of Chemicals and Fertilizers, Dr Mansukh Mandaviya, the book highlights India's progress towards becoming self-sufficient in fertilizer production.
- The book, also available in Hindi as "Urvarak-Atmanirbharta ki Raah," details the steps taken under Prime Minister Narendra Modi's leadership to achieve this goal and the significant changes implemented in the fertilizer sector.

Amit Shah Launches Book Praising Modi in Braille

• Indian Home Minister Amit Shah launched a book titled "A Promised Nation: Hon'ble Shri Narendra Modi - the Maker of New India" in Braille script.



- This book, written in Braille for visually impaired people, details Prime Minister Modi's life journey and his achievements during his ten years in office.
- Shah praised Modi for reviving India's cultural values and showcasing the country's true potential to the world.

Nadia Calviño

- Nadia Calviño (Spain), has made history by becoming the first woman and first Spaniard to preside over the European Investment Bank (EIB).
- Calviño, an experienced economist, officially took over the reins on January 1, 2024, succeeding Werner Hoyer, who had held the position since 2012.
- She began working in her home country's Ministry of Economy before joining the European Commission in 2006. Over the years, she held key positions within the Commission, eventually rising to the prominent role of Director-General for Budget in 2014.



The European Investment Bank (EIB) acts as the investment arm of the European Union, owned by its 27
member states.



AWARDS

Rashtriya Khel Protsahan Puruskar' 2023

- The Ministry of Youth Affairs & Sports announced the recipients of the Rashtriya Khel Protsahan Puruskar 2023, recognizing outstanding contributions to sports promotion and development.
- The awards were **presented by the President of India** on January 9th, 2024, at Rashtrapati Bhavan.
- Odisha Mining Corporate Limited received the award in the category of "Encouragement to sports through Corporate Social Responsibility" for their dedication to supporting sports initiatives.
- Jain Deemed to be University, Bengaluru was awarded for "Identification and nurturing of budding/young talent," highlighting their commitment to fostering future sports stars.
- The Rashtriya Khel Protsahan Puruskar is one of six core awards constituting India's National Sports
 Awards. This award recognizes and encourages individuals and organizations to play a significant role
 in promoting and developing sports in India.

Subhash Chandra Bose Aapda Prabandhan Puraskar-2024

- The Subhash Chandra Bose Aapda Prabandhan Puraskar is an annual award given by the Government of India to individuals and organizations for their outstanding contributions to disaster management.
- The award is named after Netaji Subhas Chandra Bose, a freedom fighter and visionary leader who played a key role in the Indian independence movement.
- The award was instituted in 2023 by the Ministry of Home Affairs. The award carries a cash prize of ₹51 lakh for institutions and ₹5 lakh for individuals.
- For the year 2024, 60 Parachute Field Hospital, Uttar Pradesh, in the Institutional category, has been selected for the Subhash Chandra Bose Aapda Prabandhan Puraskar-2024 for its excellent work in Disaster Management.



Padma Awards 2024

- The Padma Awards, among the highest civilian honours in India, are conferred annually in three categories: Padma Vibhushan, Padma Bhushan, and Padma Shri.
- These awards recognize outstanding contributions in various fields such as art, social work, public affairs, science and engineering, trade and industry, medicine, literature and education, sports, and civil service.
- The President of India confers the awards at ceremonial functions held at Rashtrapati Bhawan around March/April each year.
- For the year 2024, the President approved the conferment of 132 Padma Awards, including 5 Padma Vibhushan, 17 Padma Bhushan, and 110 Padma Shri Awards.

Padma Vibhushan				
Name	Field	State/Region/Country		
Ms. Vyjayantimala Bali	Art	Tamil Nadu		
Shri Konidela Chiranjeevi	Art	Andhra Pradesh		
Shri M Venkaiah Naidu	Public Affairs	Andhra Pradesh		
Shri Bindeshwar Pathak (Posthumous)	Social Work	Bihar		
Ms. Padma Subrahmanyam	Art	Tamil Nadu		

Padma Bhushan				
Name	Field	State/Region/Country		
Ms. M Fathima Beevi (Posthumous)	Public Affairs	Kerala		
Shri Hormusji N Cama	Literature & Education - Journalism	Maharashtra		
Shri Mithun Chakraborty	Art	West Bengal		
Shri Sitaram Jindal	Trade & Industry	Karnataka		
Shri Young Liu	Trade & Industry	Taiwan		
Shri Ashwin Balachand Mehta	Medicine	Maharashtra		
Shri Satyabrata Mookherjee	Public Affairs	West Bengal		
(Posthumous)				
Shri Ram Naik	Public Affairs	Maharashtra		
Shri Tejas Madhusudan Patel	Medicine	Gujarat		
Shri Olanchery Rajagopal	Public Affairs	Kerala		
Shri Dattatray Ambadas Mayaloo alias	Art	Maharashtra		
Rajdutt				
Shri Togdan Rinpoche	Others - Spiritualism	Ladakh		
(Posthumous)				
Shri Pyarelal Sharma	Art	Maharashtra		
Shri Chandreshwar Prasad Thakur	Medicine	Bihar		
Ms. Usha Uthup	Art	West Bengal		
Shri Vijaykanth (Posthumous)	Art	Tamil Nadu		
Shri Kundan Vyas	Literature & Education - Journalism	Maharashtra		



Tatrakshak Medal & Tatrakshak Medal

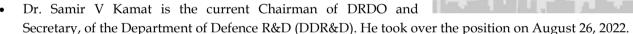
- On the eve of the 75th Republic Day, President Smt Droupadi Murmu has approved the President's Tatrakshak Medal (PTM) and Tatrakshak Medal (TM) for outstanding Indian Coast Guard (ICG) personnel in recognition of their acts of conspicuous gallantry, exceptional devotion to duty, and distinguished/meritorious service.
- President's Tatrakshak Medal (Distinguished Service): IG Bhisham Sharma, TM (0247-L)
- Tatrakshak Medal (Gallantry): Comdt Sunil Dutt (0662-D), Comdt (JG) Saurabh (0735-S)
- Tatrakshak Medal (Meritorious Service): DIG Anil Kumar Parayil (0265-C), DIG Jamal Taha (4085-J), Dipak Roy, P/Adh (AR), 01111-Z



IMPORTANT DAYS

DRDO's 66th Foundation Day

- The Defence Research and Development Organisation (DRDO) marked its 66th anniversary on January 1, 2024.
- Established in 1958, it's the chief agency under the Department of Defence Research and Development in India's Ministry of Defence.
- Headquartered in Delhi, it oversees a network of 52 laboratories spread across the country, specializing in diverse fields like aeronautics, electronics, missiles, materials, naval systems, and life sciences.





World Braille Day 2024

- World Braille Day is celebrated on January 4th every year to honour the legacy of Louis Braille, the inventor of the Braille system.
- The theme for World Braille Day 2024, is "Empowering Through Inclusion and Diversity".
- Braille is a tactile reading and writing system that allows people who are blind or visually impaired to access information and communicate independently.
- Braille is used for a variety of purposes, including reading books, newspapers, and magazines, writing letters and emails, taking notes, and playing music.
- Braille is an essential tool for education, employment, and social inclusion for people who are blind or visually impaired.

Startup India Innovation Week 2024

- The Startup India Innovation Week 2024 was held from January 10th to 18th, 2024. It was a week-long celebration of the Indian startup ecosystem, organized by the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry.
- The event marked the 8th anniversary of the Startup India initiative, which aims to foster and support the growth of startups in India.
- The theme "Startups Unlocking Infinite Potential" is a powerful and evocative one for Startup India Innovation Week 2024.



 The week witnessed a variety of events and activities across India, including conferences, workshops, hackathons, investor meetups, and startup exhibitions.

Pravasi Bharatiya Divas (PBD)

- Pravasi Bharatiya Divas (PBD) or NRI Day is celebrated on January 9 every year to mark the contribution
 of the Overseas Indian community to the development of India. The day commemorates the return of
 Mahatma Gandhi to India from South Africa on January 9, 1915.
- The official Pravasi Bharatiya Divas (PBD) is held every two years. There is no NRI Day/PBD in 2024. The last one was held on January 9, 2023, and the next one will be held in 2025.
- Established in 2003 by then Prime Minister Atal Bihari Vajpayee.
- Celebrated annually until 2015. Since 2015, it has been celebrated biennially (every two years).

World Hindi Day

- World Hindi Day, also known as Vishwa Hindi Diwas, is a significant annual event celebrated on January 10th to promote the Hindi language and its usage globally.
- The first World Hindi Conference was held in Nagpur, India, in 1975. This event marked a significant step in recognizing the global reach and importance of Hindi.
- In 2006, then-Prime Minister Manmohan Singh declared January 10th as World Hindi Day. This established a dedicated day to celebrate and promote the language.
- Hindi is the third most spoken language globally, with over 600 million speakers worldwide.
- In 2024, the theme of the World Hindi Day is "Hindi-Bridging Traditional Knowledge and Artificial Intelligence".

National Road Safety Week 2024

- National Road Safety Week, observed from January 11th to 17th, 2024, aimed to raise awareness about responsible road behaviour and empower individuals to contribute to safer roads for everyone.
- The theme "Be a Road Safety Hero" emphasized the collective responsibility of creating a secure environment for all road users.
- Educational workshops and seminars focused on traffic rules, safe driving practices, and responsible pedestrian behaviour were organized across the country.
- Awareness programs were conducted in schools and communities to sensitize young people and citizens about their role in promoting road safety.

Netaji Subhas Chandra Bose Jayanti

- The birth anniversary of Netaji Subhas Chandra Bose on 23rd January, a prominent leader of the Indian independence movement.
- Bose is remembered for his courage, leadership, and unwavering commitment to India's freedom. He
 formed the Azad Hind Fauj, an armed force that fought against British rule and is considered one of the
 most iconic figures in Indian history.
- Various events and programs are organized across India to commemorate Bose's legacy. These include speeches, parades, cultural performances, and exhibitions.



National Voters Day

- January 25th marks National Voters' Day in India. This day holds immense significance in promoting active participation in the democratic process by emphasizing the importance of voting.
- The theme for National Voters Day 2024 was "Nothing Like Voting, I Vote For sure". This theme aimed to empower individuals and inspire them to actively participate in the electoral process. It emphasized the feeling of empowerment and the impact each vote can have on shaping the nation's future.

25th January - National Tourism Day

- The tourism industry in India and its contribution to the economy and cultural exchange.
- Tourism plays a vital role in generating employment, promoting cultural understanding, and showcasing India's rich heritage to the world.
- The theme for National Tourism Day 2024 was "Sustainable Journeys, Timeless Memories," emphasizing responsible and eco-friendly tourism practices.
- Tourism fairs, cultural events, and promotional activities are organized to attract domestic and international tourists to India.

30th January - Shaheed Diwas

- The martyrdom of Mahatma Gandhi and other freedom fighters who sacrificed their lives for India's independence.
- Shaheed Diwas is a day to remember the sacrifices made by those who fought for India's freedom and to reaffirm our commitment to the values of peace and non-violence.
- Prayer meetings, silent marches, and tributes are held at memorials and statues of Mahatma Gandhi and other martyrs.



IMPORTANT GK FACTS IN NEWS

- The Air Quality Index (AQI) is a measure of how clean or polluted the air is in a given location. It is
 calculated based on the concentration of various air pollutants, such as particulate matter, ozone, nitrogen
 dioxide, sulfur dioxide and carbon monoxide.
- A **Graded Response Action Plan (GRAP)** is a set of measures that are implemented to reduce air pollution in a specific area. The GRAP is based on the Air Quality Index (AQI) levels, which indicate how polluted the air is.
- The **Pradhan Mantri Matsya Sampada Yojana (PMMSY)** was launched by the Government of India in 2020 to develop and enhance the fisheries sector in India.
- **Kisan Credit Card (KCC)** was launched in 1998 by the National Bank for Agriculture and Rural Development (NABARD). The main objective of KCC is to enable farmers to meet their cultivation expenses and other contingencies without depending on moneylenders or informal sources of credit.



- **Electoral bonds** are a form of anonymous donation to political parties in India. They were introduced by the government in 2017 as a way to curb black money and increase transparency in political funding.
- Enacted on July 1, 2017, India's **Goods and Services Tax (GST)** was a transformative tax reform that replaced an intricate web of central and state levies.
- The All India Institute of Medical Sciences (AIIMS) was established in 1956 as an autonomous institution under the Ministry of Health and Family Welfare in India.
- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), formerly known as the National Rural Employment Guarantee Act (NREGA) enacted in 2005, aims to guarantee at least 100 days of wage employment in a financial year to every household in rural areas whose adult members volunteer to do unskilled manual work.
- The National Mobile Monitoring System (NMMS) app, launched in 2021-22, is a game-changer for the MGNREGA program. It empowers citizen oversight through real-time attendance tracking and geotagged photos, making MGNREGA more transparent and accountable.
- The Kabini Elephant Project, also known as the Kabini Elephant Conservation Project, is a dedicated initiative aimed at protecting and conserving the Asian elephant population in the Kabini River basin of Karnataka.
- The **Agatti Airport** is the only airport in the Lakshadweep archipelago, India. It is located on Agatti Island, which is the largest island in the archipelago. The airport was inaugurated in 1988 and is operated by the Airports Authority of India.
- Sickle cell disease (SCD) is a group of inherited red blood cell disorders that affect haemoglobin, the protein that carries oxygen throughout the body. In SCD, the haemoglobin is abnormal, causing the red blood cells to become stiff and sticky and take on a C-shaped, sickle-like appearance.
- The National Anti-Doping Agency (NADA India) is the apex body responsible for promoting, coordinating, and monitoring the Doping Control Program in India for all sports disciplines.
- **Kavaratti** is the capital of the Union Territory of Lakshadweep, India. It is located in the Laccadive Sea, about 404 kilometres (251 nautical miles) from Kochi, the nearest major city on the Indian mainland.





- The One District One Product (ODOP) initiative is a flagship program of the Government of India launched in 2021. It aims to achieve balanced and inclusive growth by focusing on the unique strengths and potential of each district in the country.
- The Quality Council of India (QCI) is a national accreditation body established in 1997 by the Government of India and representatives of Indian Industry. Its mission is to establish and operate a national accreditation structure for conformity assessment bodies, and to promote quality through the National Quality Campaign.
- The National Highways Authority of India (NHAI) is a vital agency responsible for the development, maintenance, and management of India's national highways. Established in 1988 by an Act of Parliament, NHAI plays a crucial role in the country's infrastructure development and economic growth.
- The National Remote Sensing Centre (NRSC) is a key organization in India's space and geospatial technology landscape. Established in 1978 under the Indian Space Research Organisation (ISRO), NRSC plays a vital role in acquiring, processing, and disseminating satellite and aerial remote sensing data for various applications.
- PM SHRI Schools, officially known as PM Schools for Rising India, is a centrally sponsored scheme
 launched by the Government of India in 2022. The initiative aims to establish over 14,500 exemplar
 schools across the country by strengthening existing schools managed by various entities like the Central
 Government, State/UT Governments, local bodies, Kendriya Vidyalaya Sangathan (KVS), and Navodaya
 Vidyalaya Samiti (NVS).
- The Ramsar Convention, established in 1971 in Ramsar, Iran, is the only global intergovernmental treaty
 dedicated to the conservation and wise use of wetlands, encompassing diverse ecosystems like marshes,
 swamps, bogs, lakes, rivers, and coastal areas, providing a framework for international cooperation and
 national initiatives to safeguard these vital ecosystems.
- The National Cadet Corps (NCC) in India was founded in 1948 to groom youth into disciplined and responsible citizens, fostering leadership qualities, and promoting national unity and social integration through military training and community service activities.
- The PAiSA Portal Dashboard is a central online platform for managing the interest subvention scheme on bank loans provided to beneficiaries under the Deendayal Antyodaya Yojana - National Urban Livelihoods Mission (DAY-NULM).
- PM SVANidhi, or Pradhan Mantri Street Vendor's AtmaNirbhar Nidhi, is a government-backed microcredit scheme launched in 2020 to provide financial assistance to street vendors in India. The scheme aims
 to help street vendors recover from the economic impact of the COVID-19 pandemic and to improve their
 livelihoods.



- **Bhitarkanika National Park** in Odisha is situated in the estuarine region of Brahmani and Baitarani rivers and is the second-largest mangrove ecosystem in India. The park is home to a variety of wildlife, including saltwater crocodiles, olive ridley sea turtles, and over 200 species of birds.
- **PM GatiShakti** is a national master plan for multi-modal connectivity, launched by the Government of India in 2021. The plan aims to create a seamless and efficient network of roads, railways, airports, waterways, and logistics infrastructure to boost economic growth and competitiveness.
- The **SVAMITVA Scheme**, also known as Survey of Villages and Mapping with Improvised Technology in Village Areas, is a central sector scheme launched by the Ministry of Panchayati Raj in 2020. The scheme aims to provide a clear and legible record of rights (RoR) to property owners in rural inhabited areas.
- GIFT City, formally known as Gujarat International Finance Tec-City, is a rapidly developing business
 district in India situated between the cities of Ahmedabad and Gandhinagar in Gujarat. It aims to be a
 global financial and technology hub.
- The Colombo Security Conclave (CSC) is a trilateral maritime security grouping between India, Sri Lanka, and the Maldives. It was established in 2011 and has since expanded its scope to include activities like counter-terrorism, cyber security, and humanitarian assistance and disaster relief (HADR).
- The **ANUBHAV Awards Scheme** is an annual award scheme instituted by the Department of Pension and Pensioners' Welfare, Ministry of Personnel, Public Grievances and Pensions, Government of India, to recognize the valuable contributions and experiences of retired government servants to nation-building.
- Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) is a flagship scheme of the Government of India launched on 23 September 2018, with the aim to provide health cover of ₹5 lahks per family per year to over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries) that form the bottom 40% of the Indian population.
- The Chenab River is a major river in the Punjab region, flowing through northwestern India and northeastern and eastern Pakistan. It is one of the five major tributaries of the Indus River and is formed by the confluence of the Chandra and Bhaga streams in the western (Punjab) Himalayas in India's Himachal Pradesh state.
- **UDAN** ("Ude Desh ka Aam Nagrik"), launched by the Government of India in 2017, is a regional connectivity scheme that aims to make air travel more affordable and accessible to the common people in India's tier II and III cities.
- Electronic ink (e-ink) is a display technology that mimics the appearance of ordinary ink on paper. Unlike traditional displays that emit light, e-ink displays reflect light, making them easier on the eyes and more comfortable to read in bright light.



- The newly launched **Meghalaya state anthem**, which features Khasi, Garo, and English but excludes the Jaintia or Pnar language, has sparked a controversy over linguistic representation and cultural inclusivity.
- The India Meteorological Department (IMD) is the national meteorological agency of India, established
 in 1875, responsible for providing accurate weather forecasts, warnings, and climate-related information
 to support various sectors and ensure public safety.
- Multidimensional poverty refers to a measure that assesses poverty not solely based on income but
 considers a range of factors such as health, education, and living standards, providing a more
 comprehensive understanding of deprivation and well-being.
- Pongal is a four-day harvest festival celebrated by Tamils around the world. It is the most important
 festival in the Tamil calendar and marks the end of the winter solstice and the beginning of the Tamil
 solar year.
- India Post Payments Bank (IPPB), established in 2017, is a wholly-owned subsidiary of the Department
 of Posts under the Ministry of Communications, Government of India. It aims to provide basic banking
 services like deposits, withdrawals, money transfers, and bill payments to unbanked and underbanked
 rural areas through its extensive network of post offices.
- Baljek Airport, also known as Tura Airport, is a public airport located in Baljek, Meghalaya, India. While it may be the smallest airport in India with a 3,300-foot runway, it holds significant importance for the region and has ambitious expansion plans.
- **REC Limited**, a government-owned infrastructure finance company in India, has issued its inaugural Yen-denominated Green Bonds, amounting to 61.1 billion Japanese Yen. This issuance reflects REC Limited's engagement in international financial markets to fund green and sustainable projects.
- The **Finance Commission** is a constitutional body in India constituted under Article 280 of the Constitution. Its primary role is to recommend the distribution of financial resources between the Union government and the state governments.
- The **United Nations** is an international organization founded in 1945, dedicated to maintaining international peace and security, developing friendly relations among nations, achieving international cooperation in solving global problems, and promoting respect for human rights.
- The **Kori Creek** is a tidal creek in the Kutch region of the Indian state of Gujarat. It lies just to the west of the Great Rann of Kutch area of India. This region is a part of the Indus River Delta, which lies across Gujarat state in India and Sindh in Pakistan.
- **Lavender cultivation** is the process of growing lavender plants for various purposes, including the production of essential oils, culinary uses, and ornamental purposes. Lavender is a flowering plant in the mint family known for its fragrant purple flowers and silvery green leaves. It is native to the Mediterranean region but is now cultivated worldwide.



- A carbon market is a specialized market where carbon credits are bought and sold. These credits
 represent the right to emit one ton of carbon dioxide or equivalent greenhouse gas emissions. By buying a
 credit, an entity can offset their emissions or invest in projects that reduce emissions elsewhere.
- The Unlawful Activities (Prevention) Act, or UAPA, is a law enacted by the Indian Parliament in 1967.
 Its primary purpose is to prevent and combat "unlawful activities" that threaten the security and integrity of India.



BOOSTER DOSE

- On January 1st, 2024, Gujarat made the Guinness World Record by achieving a remarkable feat: over 50,000 people across 108 venues simultaneously performed Surya Namaskar, the iconic sun salutation yoga sequence.
- Vice Admiral B Sivakumar took over the responsibility of Controller Warship Production and Acquisition.
- **Maharashtra** currently holds the top spot for contributing the highest GST in India.
- The first-ever India-UAE joint military exercise 'Desert Cyclone' commenced in Rajasthan on January 2nd, 2024.
- The Indian Renewable Energy Development Agency (IREDA) has declared 2024 the "Year of Human Resource Development and Discipline."
- The Competition Commission of India (CCI) approved the acquisition of 100% shareholding of GVK Power (Goindwal Sahib) Limited by Punjab State Power Corporation Ltd. (PSPCL) on January 2, 2024.
- On January 3, 2024, Prime Minister Narendra Modi visited Kavaratti, Lakshadweep, to

- inaugurate and lay the foundation stone for several development projects worth over Rs 1,150 crore.
- Aatmanirbhar Bharat Utsav 2024 was held from January 3 to 10, 2024, at Bharat Mandapam, Pragati Maidan, New Delhi. The event showcased a wide range of products and services from Indian businesses.
- Viksit Bharat Sankalp Yatra, also known as the "Developed India Pledge Journey", is a public awareness campaign launched by the Government of India. It aims to educate people across the country about the government's schemes and encourage them to avail of them.
- Uttar Purvi Mahotsav 2024 was a five-day cultural festival held at Bharat Mandapam, Pragati Maidan, New Delhi from January 13-17, 2024. The festival was organized by the Ministry of Development of the North Eastern Region (DoNER) to showcase the rich art, culture, and heritage of the eight North Eastern states of India.
- The Prerana program, initiated by the Department of School Education & Literacy, Government of India, offers a week-long experiential learning opportunity for selected



students from classes IX to XII, focusing on value-based education, heritage, and diverse activities to inspire leadership qualities aligned with the principles of the National Education Policy 2020.

- Prime Minister Narendra Modi expressed his condolences on the passing away of Shri Dhanjibhai Senghani, a former MLA from Mandvi, Gujarat, on January 5, 2024.
- The Indian Cabinet has approved the Ayodhya Airport's designation International Airport, naming it "Maharishi Valmiki International Airport, Ayodhyadham," signifying the historical and significance of Avodhya cultural honouring the revered sage Maharishi Valmiki.
- The Indian Cabinet has approved the signing of a Memorandum of Understanding (MoU) between India and Guyana to facilitate cooperation in the hydrocarbon sector, marking a strategic step towards collaboration and mutual engagement in the development of this vital industry.
- The Indian Cabinet has approved the signing of a Memorandum of Understanding (MoU) between India and the United States for International Development/India (USAID/India). This MoU aims to support Indian Railways in achieving the goal of Mission Net Zero Carbon Emission.
- The Union Cabinet, chaired by Prime Minister Shri Narendra Modi, has approved the "PRITHvi VIgyan (PRITHVI)" scheme by the Ministry of Earth Sciences.
- The Cabinet has approved the Memorandum of Understanding (MoU) between the **Indian** Space Research Organization (ISRO) and the

Mauritius Research and Innovation Council (MRIC). This MoU outlines cooperation on the joint development of a Small Satellite.

- Project Veer Gatha 3.0 is the third edition of the national-level initiative launched by the Ministry of Defence (MoD) in India in 2021.
- The Scholarships for Higher Education for Young Achievers Scheme (SHREYAS) is a recently launched initiative by the Indian government to provide financial assistance to meritorious students belonging to Other Backward Classes (OBCs) and Economically Backward Classes (EBCs) for pursuing higher education in India and abroad.
- Aditya-L1, India's first dedicated solar observatory, was successfully inserted into a halo orbit around the Sun-Earth Lagrange point 1 (L1) on January 6, 2024.
- The Indian research vessel MV Vasiliy Golovnin successfully entered Antarctic waters on January 3, 2024, marking the official start of the 43rd Indian Scientific Expedition (ISEA).
- India and the Kingdom of Saudi Arabia (KSA) have signed the Bilateral Haj Agreement 2024, paving the way for Indian pilgrims to undertake the annual pilgrimage to Mecca.
- Indus Food 2024 was a resounding success, bringing together the world of food and beverage (F&B) under one roof in India.
- Ustad Rashid Khan, one of the most celebrated classical singers of India, has passed away.
- Tshering Tobgay was elected as the Prime Minister of Bhutan for a second term in the



recent National Assembly elections held on January 9, 2024.

- Pravasi Bharatiya Divas (PBD) is a day celebrated every year on 9 January to mark the contribution of the overseas Indian community to the development of India.
- The National Kala Utsav 2023, a national-level cultural festival for school students, was held from 9-12 January 2024 at the National Bal Bhavan and the Gandhi Smriti and Darshan Samiti in New Delhi, India.
- The Sagar Parikrama Phase- XII events in West Bengal from 10th to 11th January 2024 were a resounding success.
- The Regional Conference on the theme "e-Governance" in Guwahati started on January 9, 2024.
- On January 9, 2024, Prime Minister Narendra Modi attended the Global FinTech Forum held at GIFT City, India's international financial services centre.
- On January 10, 2024, the World Health Organization (WHO) officially launched the International Classification of Diseases, 11th Revision (ICD-11), Traditional Medicine Module 2.
- The **Startup India Innovation Week 2024** was already held from January 10th to 18th, 2024.
- The National Youth Festival in Nashik, Maharashtra, which took place on January 12th, 2024, was a significant event celebrating the contributions of young people and fostering their potential.
- The Indian Space Research Organisation (ISRO) has been awarded the prestigious

- "Indian of the Year Award" for 2023 in the category of "Outstanding Achievement."
- The Swachh Survekshan Awards 2023 were held on January 20, 2024, in New Delhi. Indore and Surat were jointly declared the cleanest cities in India.
- The Atal Bihari Vajpayee Sewri-Nhava Sheva Atal Setu connects the island of Sewri in Mumbai with Nhava Sheva in Navi Mumbai.
- Dr Mansukh Mandaviya, Union Minister of Chemicals and Fertilizers & Health and Family Welfare, virtually inaugurated the permanent campus of the National Institute of Pharmaceutical Education and Research (NIPER) in Guwahati, Assam, on January 12, 2024.
- The Defence Research and Development Organisation (DRDO) has achieved a major milestone in India's air defence capabilities with the successful flight-test of the New Generation AKASH (NGAK) missile off the Odisha coast.
- The Climate Conference 2024 with the theme "Decoding the Green Transition for India" was held on January 12, 2024, in Mumbai, Maharashtra.
- Divya Kala Mela 2024 was a ten-day exhibition and cultural festival held in Nagpur, Maharashtra, from January 12 to 21, 2024.
- **Dr. Atre**, a legendary Indian classical vocalist, passed away on January 13, 2024, at the age of 92.
- The inauguration of India's first National Highway Steel Slag Road section on NH-66



marks a significant step towards sustainable and innovative road construction in India.

- The inaugural Beach Games 2024, the first multi-sports beach event in India, concluded at Ghoghla Beach in Diu. Madhya Pradesh emerged as the overall champion.
- Munawwar Rana, the renowned Urdu poet, passed away on January 14, 2024, at the age of 71.
- Cameroon has become the first country in the world to include the RTS, S malaria vaccine in its routine national immunization services.
- Vice Admiral AN Pramod has taken over as the new Director General Naval Operations (DGNO) of the Indian Navy, effective January 15, 2024.
- Shri Sheel Vardhan Singh, a former IPS officer, has taken the oath of Office and Secrecy as a Member of the UPSC.
- The e-SAKSHI Mobile App marks a transformative step in the Member of Parliament Local Area Development Scheme (MPLADS) by providing Members of Parliament (MPs) with real-time control over project proposals, budgets, and progress.
- The Cabinet has approved the Memorandum of Intent (MoI) between India and the Netherlands, fostering cooperation in the field of Medical Products Regulation.
- The Cabinet has approved a Memorandum of Understanding (MoU) between India and the Dominican Republic, facilitating cooperation in the field of Medical Products Regulation.
- The Cabinet has approved a Memorandum of Understanding (MoU) between India and

- **Kenya**, focusing on cooperation in sharing successful digital solutions implemented at the population scale for digital transformation.
- The Cabinet has approved a Memorandum of Understanding (MoU) between India and Ecuador, fostering cooperation in the field of Medical Products Regulation.
- The Cabinet has approved a Memorandum of Understanding (MoU) between India and the European Commission, outlining working arrangements on Semiconductors Ecosystems under the framework of the EU-India Trade and Technology Council.
- Union Cabinet Minister for the Ministry of Earth Science, Shri Kiren Rijiju, inaugurated the esteemed Young Scientist Conference on January 17, 2024, as part of the Indian International Science Festival held in Faridabad, Haryana.
- The Prime Minister inaugurated the opening ceremony of the Khelo India Youth Games 2023 in Chennai, Tamil Nadu.
- The Pradhan Mantri Rashtriya Bal Puraskar (PMRBP) is bestowed upon children between the ages of 5 and 18 who exhibit exceptional abilities and outstanding achievements in seven distinct categories.
- India launched the "Alliance for Global Good
 - Gender Equity and Equality" at the World
 Economic Forum's Annual Meeting in Davos,
 held from January 15-19, 2024.
- Japan successfully achieved its first soft landing on the Moon on January 20, 2024, a historic milestone for the country's space program.



- India and Cuba have signed a Memorandum of Understanding (MoU) on Cooperation in the field of Sharing Successful Digital Solutions Implemented at Population Scale for Digital Transformation.
- The 60th Foundation Day celebrations of the Sashastra Seema Bal (SSB) took place on January 20, 2024.
- The Indian International Science Festival (IISF) 2023 featured the Vigyanika event organized by CSIR-National Institute of Science Communication and Policy Research (NIScPR).
- The Parakram Diwas 2024 commemoration at Red Fort was a nine-day event that took place from January 23 to January 31, 2024.
- On January 24, 2024, the Government of India announced that it would posthumously award the Bharat Ratna, India's highest civilian award, to Shri Karpoori Thakur, a socialist leader and former Chief Minister of Bihar, known for his commitment to social justice and the empowerment of backward classes.
- For the year 2024, 60 Parachute Field Hospital, Uttar Pradesh, in the Institutional category, has been selected for the Subhash Chandra Bose Aapda Prabandhan Puraskar-2024 for its excellent work in Disaster Management.
- National Girl Child Day, celebrated on January 24th each year, holds great significance in promoting awareness of girls' rights, equality, and empowerment in Indian society.
- The Cabinet has approved the signing of a Memorandum of Understanding (MoU)

- between **India and Oman** on cooperation in the field of Information Technology.
- The Cabinet has approved the Protocol for the establishment of a joint Economic and Trade Committee between India and the Dominican Republic.
- World Neglected Tropical Diseases Day 2024, observed on January 30, carries the theme "Unite. Act. Eliminate." to raise awareness and support for eliminating neglected tropical diseases (NTDs).
- The Election Commission of India is celebrating the 14th National Voters' Day (NVD) on January 25, 2024.
- On January 23, 2024, the Indian Air Force (IAF) conducted Exercise Desert Knight in collaboration with the French Air and Space Force (FASF) and the United Arab Emirates (UAE) Air Force.
- The two-day "All India Secretaries' Conference on Water Vision @ 2047 -Way Ahead" held in Mahabalipuram, Tamil Nadu, recently concluded with a focus on strengthening India's water security.
- Raksha Mantri Shri Rajnath Singh, along with Education Minister Shri Dharmendra Pradhan, felicitated the 'Super-100' winners of Project Veer Gatha 3.0 in New Delhi on January 25, 2024. Each of the 100 winners was awarded a cash prize of Rs 10,000, along with a medal and a certificate.
- The Secretary of the Ministry of Rural Development, Shri Shailesh Kumar Singh, launched the "SARATHI" app at Krishi Bhawan. This app, developed under the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM), serves as



the national tech solution for the strategy aimed at working with the most vulnerable populations.

- The 14th National Voters' Day was celebrated across India on January 25, 2024, with the theme "Nothing Like Voting, I Vote for Sure." This theme aimed to encourage and motivate citizens, particularly young voters, to actively participate in the electoral process.
- Himachal Pradesh celebrates its Statehood Day on January 25th every year. This day marks the state's official recognition as a fullfledged state within the Indian Union in 1971.
- The guest of honour for the 2024 Republic Day Parade in India was President Emmanuel Macron of France.
- Ek Bharat Shreshtha Bharat (EBSB) is a programme that was launched by the Government of India in 2015 to promote national integration and understanding between different states and union territories of India.
- **Azali Assoumani** was re-elected as the President of Comoros on January 23rd, 2024.
- The Beating Retreat Ceremony is a military ceremony that marks the end of the Republic Day celebrations in India. It is held on the evening of January 29th every year at Vijay Chowk in New Delhi.
- The Ministry of Culture's tableau, themed 'India: Mother of Democracy,' secured the first spot at the Republic Day Parade 2024.
- World Leprosy Day, celebrated on the last Sunday of January each year, is an international day dedicated to raising

- awareness about leprosy. The theme for World Leprosy Day 2024 is "Beat Leprosy."
- Rajasthan and Madhya Pradesh signed a Memorandum of Understanding (MoU) with the Union Ministry of Jal Shakti recently to implement the Modified Parbati-Kalisindh-Chambal-ERCP (Modified PKC-ERCP) Link Project.
- The government recently announced the diversion of Chenab River water through diversion tunnels at Drabshalla in Kishtwar district to expedite the 850-MW Ratle Hydro Electric Project in Jammu & and Kashmir.
- Exporters have urged the government to allocate funds worth \$3.88 billion for the Market Access Initiative (MAI) Scheme scheme to promote Indian exports.
- The Vice President is set to inaugurate the 'Hamara Samvidhan, Hamara Samman' campaign in New Delhi.
- The Prime Minister has inaugurated Boeing India's aerospace engineering centre in Bengaluru.
- India has launched the 'Alliance for Global Good- Gender Equity and Equality' at the Davos World Economic Forum 2024.
- India has been elected as the First Vice Chair of the COFI Sub-Committee on Fisheries Management.
- 19 children have been selected for the Pradhan Mantri Rashtriya Bal Puraskar 2024.
- A Protocol on Consultations has been signed by India and Russia for the period of the next four years (2024-28).



- Russian and United States (US) space agencies have agreed to keep working together to deliver crews to the International Space Station (ISS) until at least 2025.
- South Korea has passed a law banning the dog meat trade.
- Climate change has caused Greenland's ice sheet to lose 20% more ice than previously thought, according to recent research.
- Japan has signed a deal with its ally the United States to buy 400 long-range Tomahawk missiles.
- AP Moller-Maersk has revealed the Ane Maersk, the world's largest Ship that can run on the green hydrogen derivative.
- Saudi Arabia is set to inaugurate Riyadh's First Alcohol Store Exclusively for Non-Muslim Diplomats.
- The Icon of the Seas successfully set sail on its maiden voyage from Miami on January 27, 2024, officially claiming the title of the world's largest cruise ship.
- Kerala has introduced the K-Smart Tech Solution for streamlining Local Self-Government Services.
- Jharkhand government has reduced the qualifying age for old-age pension to 50.
- Jammu and Kashmir has become the first Union Territory to implement the PM Vishwakarma Yojana.
- Himachal Pradesh Government has notified the granting of Scheduled Tribe (ST) Status to the Hatti Community.

- Arunachal Pradesh's ginger, locally known as Adi Kekir, handmade carpets and Wancho wooden craft have secured the Geographical Indication (GI) tag.
- Assam Government has initiated 'Gunotsav 2024' to assess the performance of 40 lakh students in government schools.
- Mayurbhanj's Red Ant Chutney in Odisha has secured the Geographical Indication (GI) Tag.
- Maharashtra Pench Tiger Reserve has become India's first Dark Sky Park.
- Haryana CM has inaugurated the 2nd Panchkula Book Fair with the theme 'Knowledge and Electricity'.
- Bengal CM Mamata Banerjee has inaugurated the 47th Kolkata International Book Fair.
- The 'Gole Mela' Festival has taken place at the Jagannath Temple, Udhampur, J&K.
- The Odisha Cabinet has approved a new scheme for the development of the tribals of Odisha - LABHA (Laghu bana jatya drabya kraya).
- Telangana Chief Minister Revanth Reddy has launched "Abhaya Hastam" for Congress' Six Guarantees Implementation in 100 Days.
- Flipkart co-founder Binny Bansal has launched a new e-commerce start-up OppDoor, a business-to-business (B2B) platform.
- Krutrim, an AI startup founded by Ola founder Bhavish Aggarwal, has raised a funding round that values it at \$1 billion.



- RBI has designated SBI, HDFC Bank, and ICICI Bank as Domestic Systemically Important Banks (D-SIBs).
- The World Bank has maintained its economic growth projection for India in the fiscal year 2024-25 at 6.4 percent.
- Chaudhary Charan Singh Haryana Agricultural University's Vice Chancellor Prof B R Kamboj has been honoured with the M S Swaminathan Award.
- Bangalore and Delhi airports jointly won the Best Airport award at the 4th edition of "Wings India Awards" in the Civil Aviation Sector.
- The tableau of the Ministry of Culture secured the first prize at the Republic Day Parade 2024.
- Former India wicket-keeper Mr Farokh
 Engineer and all-rounder Mr Ravi Shastri
 were bestowed with the Col. C.K. Nayudu
 Lifetime Achievement Awards.
- Former Bihar Chief Minister Karpoori Thakur to be awarded Bharat Ratna posthumously.
- Ravindra Kumar Tyagi has been appointed as the new Chairman and Managing Director of Power Grid Corporation of India Limited (POWERGRID).
- Former Niti Aayog Vice-Chairman Arvind Panagariya was appointed as head of the 16th Finance Commission.
- Shashi Singh has been elected as the new president of the All India Rubber Industries Association (AIRIA).

- Kuwait's new emir Sheikh Meshal al-Ahmad al-Sabah appointed Sheikh Mohammed Sabah al-Salem al-Sabah as the country's prime minister.
- The government has appointed senior bureaucrat Vikas Sheel as the Executive Director (ED) of the Asian Development Bank (ADB) in Manila, Philippines.
- Awami League President Sheikh Hasina will be sworn in as Prime Minister of Bangladesh for the fourth straight term.
- Raghuram Iyer was appointed as Chief Executive Officer by the Indian Olympic Association.
- Nadia Calviño becomes the First Female President of the European Investment Bank (EIB).
- IAS officer Senthil Pandian was appointed as India's representative to the World Trade Organization (WTO).
- Justice BR Gavai was nominated as Chairperson of the Supreme Court Legal Services Committee.
- Indra Mani Pandey, a veteran diplomat and a 1990-batch Indian Foreign Service (IFS) officer, has taken charge as the new Secretary General of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC).
- Denmark's King Frederik X takes the throne as his mother Queen Margrethe II steps down after 52 years.
- **Bernardo Arevalo** was sworn in as Guatemala's president.



- Sue Redfern to make history as first ICCappointed female neutral umpire in bilateral series.
- Senior IPS officer Daljit Singh Chaudhary was appointed chief of Sashastra Seema Bal.
- The government has appointed former chairman and chief executive officer of the Railway Board chairman, Anil Kumar Lohati, as the new chairperson of the Telecom Regulatory Authority of India (Trai) chairperson.
- Bhutan's liberal politician Tshering Tobgay, leader of the People's Democratic Party (PDP), officially began his second term as prime minister.
- Sudhir Sekhri, an Apparel industry veteran, has taken over as the new Chairman of the Apparel Export Promotion Council (AEPC).
- The 19th Non-Aligned Movement (NAM) Summit is set to begin in Uganda's Kampala.
- India has signed an agreement for a Lithium Exploration & Mining Project in Argentina.
- Pakistan has successfully conducted a flight test of its indigenously developed rocket system, Fatah-II.
- NASA has relaunched the OSIRIS-REx spacecraft to intercept the 'God of Chaos' asteroid, Apophis, as it approaches Earth's orbit.
- ISRO plans to use Elon Musk's SpaceX Falcon-9 rocket to launch the GSAT-20 satellite.
- Researchers have developed 'electronic soil' that enhances crop growth by 50%.

- ISRO's Vikram Sarabhai Space Centre has unveiled 'FEAST', an analysis software for Indian academia and industries.
- Reliance Jio and IIT-Bombay are collaborating to develop 'BharatGPT', an AI for India.
- Tata Motors has introduced its first pure Electric Vehicle architecture, 'acti.ev'.
- Japan has become the 5th country in history to reach the moon with a successful soft landing on the lunar surface.
- Indian Immunologicals Limited has launched 'Havisure', the first indigenously developed Hepatitis A vaccine.
- Iran has successfully launched the Sorayya satellite into orbit.
- India, France, and the United Arab Emirates are collaborating in a joint mega air exercise, "Desert Knight", over the Arabian Sea.
- The 11th edition of the India-Kyrgyzstan Joint Special Forces Exercise 'Khanjar' has commenced in Himachal Pradesh.
- Australian batter David Warner has announced his retirement from One Day International cricket.
- Aman Sehrawat won the Gold medal in Men's 57kg at the Zagreb Open 2024 Wrestling Tournament in Croatia.
- Yogesh Singh won Gold in Men's 25m Centre Fire Pistol at Asia Olympic Qualifiers.
- Rameshbabu Praggnanandhaa surpassed Viswanathan Anand to become India's number-one Chess player.



- **Rohan Bopanna**, the oldest Grand Slam winner, clinched the Australian Open 2024.
- **Virat Kohli** won the ICC ODI Player of the Year award for the 4th time.
- Man Singh of India won the gold medal in the 2024 Asian Marathon Championships in Hong Kong.
- Argentine superstar **Lionel Messi** once again won The Best FIFA Men's Player Award.
- The International Cricket Council (ICC) has lifted the suspension of Sri Lanka Cricket with immediate effect.
- Tata Group has won IPL sponsorship rights for 5 years for \$300 million.
- Brazil's 4-time FIFA World Cup champion Mario Zagallo passed away.
- Andrew Paul Saberton has been appointed as Assistant Secretary-General and Deputy

- Executive Director (Management) of the United Nations Population Fund (UNFPA) by United Nations Secretary-General António Guterres.
- The 4th edition of Military Exercise VINBAX-2023 between India and Vietnam took place in Hanoi, Vietnam.
- The 14th edition of Exercise Vajra Prahar 2023 between India & USA was held in Umroi, Meghalaya.
- The 9th edition of Mitra Shakti 2023 between India and Sri Lanka was conducted in Aundh, Pune.
- The 7th edition of 'Exercise KAZIND-2023' between India and Kazakhstan occurred in Otar, Kazakhstan.
- The Coastal Security Exercise Sagar Kavach was carried out in Andhra Pradesh, Tamil Nadu, and Puducherry.



PRACTICE QUESTIONS

- Q1. Which of the following statements is true about the inheritance of sickle cell anaemia?
- (a) Only one parent needs to carry the sickle cell gene for the child to be affected.
- (b) Both parents must have sickle cell anaemia for the child to be affected.
- (c) Individuals with sickle cell trait cannot pass the gene to their children.
- (d) People with sickle cell anaemia cannot have healthy children.

- Q2. Which organization has declared 2024 the "Year of Human Resource Development and Discipline"?
- A) Ministry of New and Renewable Energy
- B) Indian Renewable Energy Development Agency (IREDA)
- C) International Solar Alliance
- D) World Bank
- Q3. Which Indian state is a major producer of tasar silk?
- A) Karnataka
- B) Jharkhand
- C) Tamil Nadu



- D) Punjab
- Q4. The term "Chalcolithic" refers to a period characterized by the use of both:
- A) Stone and iron
- B) Stone and copper
- C) Copper and bronze
- D) Bronze and iron
- Q5. Which of the following helps food stay fresh longer?
- A) Leaving it out in the open air
- B) Storing it in a sealed container in the refrigerator
- C) Wrapping it in aluminium foil
- D) Microwaving it for short intervals
- Q6. What happens to the air in a balloon when you heat it?
- A) It stays the same.
- B) It contracts.
- C) It expands.
- D) It disappears.
- Q7. Adding baking soda to vinegar causes an eruption. Which scientific principle explains this?
- A) Conservation of mass
- B) Exothermic reaction
- C) Endothermic reaction
- D) Law of universal gravitation
- Q8. Why does adding salt to water lower the freezing point?
- A) Salt disrupts the hydrogen bonding between water molecules, making them freeze faster.
- B) Salt absorbs heat from the surrounding environment, accelerating freezing.
- C) Dissolved salt particles create more nucleation points, promoting ice formation.
- D) Salt lowers the water's vapour pressure, preventing it from reaching its freezing point.

- Q9. A car accelerates uniformly from rest to a speed of 20 m/s in 5 seconds. What is its acceleration?
- A) 1 m/s^2
- B) 2 m/s^2
- C) 4 m/s^2
- D) 10 m/s^2

Q10. Why does a rainbow appear in the sky after rain?

- A) Water droplets reflect sunlight at specific angles.
- B) Water droplets refract sunlight, separating the colours.
- C) Water droplets diffract sunlight, creating a colourful pattern.
- D) Water droplets scatter sunlight, causing a white rainbow.
- Q11. The process of photosynthesis takes place in which part of a plant cell?
- A) Nucleus
- B) Cytoplasm
- C) Chloroplasts
- D) Mitochondria
- Q12. Which vitamin deficiency can lead to night blindness?
- A. Vitamin A
- B. Vitamin C
- C. Vitamin D
- D. Vitamin E
- Q13. What structure in the ear helps maintain balance?
- A) Cochlea
- B) Semicircular canals
- C) Tympanic membrane
- D) Ossicles
- Q14. Rusting of iron occurs when it reacts with oxygen and water. What type of reaction is this?
- A) Single displacement



- B) Double displacement
- C) Redox
- D) Neutralization
- Q15. Aspirin (acetylsalicylic acid) works as a pain reliever by inhibiting the enzyme cyclooxygenase (COX). What does COX do in the body?
- A) Breaks down carbohydrates
- B) Produces inflammatory molecules
- C) Transports oxygen
- D) Builds muscles
- Q16. Soaps and detergents clean by interacting with dirt and water. How do they work?
- A) By dissolving the dirt directly
- B) By forming micelles around dirt particles, trapping them in water
- C) By changing the pH of water
- D) By attracting dirt particles with magnetic forces
- Q17. When you cook an egg, the protein structure changes from a liquid (albumin) to a solid (cooked egg white). What causes this change?
- A) Addition of water molecules
- B) Denaturation of protein molecules
- C) Polymerization of protein molecules
- D) Breaking of peptide bonds
- Q18. Which element is essential for all living organisms and forms the backbone of DNA and RNA?
- A) Calcium
- B) Iron
- C) Phosphorus
- D) Potassium
- Q19. The Rigveda is considered the oldest religious text in India. It primarily deals with:
- A) Sacrificial rituals and their instructions.

- B) Philosophical inquiries and spiritual contemplations.
- C) Practical spells and magical incantations.
- D) Hymns dedicated to various deities and natural phenomena.

Q20. Why do fruits ripen faster when stored with other ripe fruits?

- A) Increased temperature
- B) Ethylene gas release
- C) Reduced moisture
- D) Exposure to sunlight

Q21. What is the primary function of CRISPR-Cas9 technology?

- A) Energy production
- B) Gene editing
- C) Weather forecasting
- D) Communication technology
- Q22. Which law of motion states that an object at rest will remain at rest, and an object in motion will stay in motion with the same speed and in the same direction unless acted upon by an external force?
- A) Newton's First Law
- B) Newton's Second Law
- C) Newton's Third Law
- D) Kepler's Law

Q23. What is the chemical formula for glucose?

- A) $C_6H_{12}O_6$
- B) CO₂
- C) H₂O
- D) CH₄

Q24. What is the function of the cornea in the human eye?

- A) Focusing light onto the retina
- B) Controlling the size of the pupil
- C) Producing tears
- D) Refracting light within the lens



- Q25. In the context of the electromagnetic spectrum, which type of radiation has longer wavelengths than visible light?
- A) X-rays
- B) Gamma rays
- C) Infrared radiation
- D) Ultraviolet radiation
- Q26. What is the function of the nephrons in the kidneys?
- A) Producing urine
- B) Filtering blood
- C) Absorbing nutrients
- D) Storing waste
- Q27. What is the function of the alveoli in the respiratory system?
- A) Pumping blood
- B) Exchanging gases
- C) Filtering air
- D) Producing mucus
- Q28. What is the function of the nucleus in a eukaryotic cell?
- A) Producing energy
- B) Synthesizing proteins
- C) Controlling cell activities
- D) Packaging and sorting proteins
- Q29. Who is the Chairman of the 16th Finance Commission?
- A) Dr. Arvind Panagariya
- B) N.K. Singh
- C) Ajay Narayan Jha
- D) Ritvik Ranjanam Pandey
- Q30. The process of rock formation through the accumulation of sediments is called:
- A) Weathering
- B) Erosion
- C) Sedimentation
- D) Metamorphism

- Q31. What is the function of the cerebrum in the human brain?
- A) Regulating heart rate
- B) Controlling voluntary movements
- C) Maintaining balance
- D) Digesting food
- Q32. What is the main function of the Golgi apparatus in a cell?
- A) Energy production
- B) Protein synthesis
- C) Packaging and shipping proteins
- D) DNA replication
- Q33. Which of the following pairs accurately reflects the chronological order of the Vedas?
- A) Rigveda Samaveda Yajurveda Atharvaveda
- B) Atharvaveda Yajurveda Samaveda Rigveda
- C) Samaveda Rigveda Yajurveda Atharvaveda
- D) Rigveda Yajurveda Samaveda -Atharvaveda
- Q34. What was the revised return on the Sukanya Samriddhi Account Scheme (SSAS) for the first quarter of 2024 (January-March 2024)?
- A) 7.5%
- B) 8.0%
- C) 8.2%
- D) 8.5%
- Q35. Ajanta and Ellora caves, famous for their intricate paintings and sculptures, belong to which period of Indian history?
- (a) Gupta Empire
- (b) Mauryan Empire
- (c) Early Chola Dynasty
- (d) Post-Gupta period



- Q36. What is the function of the hormone adrenaline in the human body?
- A) Regulating blood sugar levels
- B) Controlling metabolism
- C) Stimulating fight-or-flight response
- D) Promoting bone growth
- Q37. Which Union Territory was the first to implement the PM Vishwakarma Yojana (PMVY)?
- A) Jammu and Kashmir
- B) Ladakh
- C) Puducherry
- D) Dadra and Nagar Haveli and Daman and Diu
- Q38. Queen Margrethe II, who recently announced her abdication after 52 years, is the monarch of which country?
- A) Norway
- B) Sweden
- C) Denmark
- D) Finland
- Q39. Who was the prominent Bengali leader associated with the "Quit India Movement" and later became the first Chief Minister of independent West Bengal?
- A) Sarat Chandra Chatterjee
- B) Netaji Subhash Chandra Bose
- C) Bidhan Chandra Roy
- D) Prafulla Chandra Ghosh
- Q40. The golden age of the Gupta Empire primarily refers to:
- A) Military expansion and territorial conquests.
- B) Advancements in literature, art, and science.
- C) Development of strong centralized administration.
- D) Spread of Buddhism and Jainism throughout India.
- Q41. Who led the Jugantar party, an extremist revolutionary group in Bengal?

- A) Aurobindo Ghosh
- B) Subhash Chandra Bose
- C) Chittaranjan Das
- D) Jatindra Nath Mukherjee
- Q42. During which period did the Maurya Empire consider Tamralipta in West Bengal as its main seaport?
- A) Gupta period
- B) Mauryan period
- C) Vedic period
- D) Pala period
- Q43. Which national cricket team has David Warner represented in One Day Internationals (ODIs)?
- A) England
- B) Australia
- C) South Africa
- D) New Zealand
- Q44. Which ruler established the Pallava dynasty as a major power in South India?
- a) Mahendravarman I
- b) Narasimhavarman I
- c) Simhavishnu
- d) Mahendravarman II
- Q45. What literary work by a contemporary scholar provides valuable insights into Harshavardhana's life and reign?
- A) "Harshacharita" by Banabhatta
- B) "Prithviraj Raso" by Chand Bardai
- C) "Meghaduta" by Kalidasa
- D) "Dhammapada" by Gautama Buddha
- Q46. Who was the revolutionary leader known as 'Masterda' and played a key role in the Chittagong Armoury Raid?
- A) Subhas Chandra Bose
- B) Surva Sen
- C) Aurobindo Ghosh
- D) Rash Behari Bose



- Q47. In which year did the British take control of Bengal, including West Bengal, from the Nawabs of Bengal?
- A) 1650
- B) 1700
- C) 1765
- D) 1800
- Q48. Which kingdom was present in the southern part of West Bengal between 1100 BCE and 350 BCE?
- A) Vanga Kingdom
- B) Magadha Kingdom
- C) Pala Kingdom
- D) Gupta Kingdom

- Q49. Which state in India has the longest coastline?
- A) Tamil Nadu
- B) Gujarat
- C) Maharashtra
- D) Andhra Pradesh
- Q50. Who authored the book "Discovery of India," providing an insightful account of India's history and culture?
- A) Jawaharlal Nehru
- B) Mahatma Gandhi
- C) Rabindranath Tagore
- D) Sardar Patel

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Explanation: Sickle cell anaemia is an autosomal recessive disorder. This means a child needs to inherit one copy of the mutant gene from each parent to have the disease. If only one parent carries the gene, the child will have sickle cell trait, which usually doesn't cause

symptoms. People with sickle cell trait can still pass the gene to their children.

2. Answer: B

1. Answer: A

Explanation: The Indian Renewable Energy Development Agency (IREDA) has declared 2024 the "Year of Human Resource Development and Discipline."

3. Answer: B

Explanation: While Karnataka is the leading producer of mulberry silk in India, it's not a major producer of tassar silk. Jharkhand, on the other hand, is the largest producer of tasar silk in the country. Its forests provide an ideal habitat for the tasar silkworms, and the state has a long tradition of tasar silk production, with many communities involved in the process.

Jharkhand produces around 70% of India's total tasar silk output. Jharkhand's tasar silk industry supports the livelihoods of numerous tribal communities and contributes significantly to the state's economy.

4. Answer: C

Explanation: The Chalcolithic period, also known as the Copper Age, marks a transitional phase in human

history where societies began to use both copper and later bronze, a metal alloy of copper and tin. This period lies between the Neolithic (characterized by the use of stone tools and the development of agriculture) and the Bronze Age (marked by the widespread use of bronze tools and weapons). During the Chalcolithic period, people started experimenting with metallurgy, particularly the use of copper, which eventually led to the development of bronze, a stronger and more durable metal alloy. This technological advancement had significant implications for tools, weapons, and various aspects of material culture.

5. Answer: B

Explanation: Storing food in a sealed container in the refrigerator helps to keep it fresh longer. Refrigeration slows down the growth of bacteria, yeasts, and moulds that can spoil food. The sealed container helps prevent exposure to air, which can contribute to the deterioration of food through oxidation and the growth of spoilage microorganisms.

6. Answer: C

Explanation: When you heat the air inside a balloon, the molecules of air gain energy and move faster. As the air molecules move more rapidly, they collide with the walls of the balloon more frequently and with greater force. This increased molecular motion results in the expansion of the air inside the balloon.



7. Answer: B

Explanation:

The reaction between baking soda (sodium bicarbonate) and vinegar (acetic acid) is an example of an exothermic reaction. In this reaction, sodium bicarbonate reacts with acetic acid to produce carbon dioxide gas, water, and sodium acetate. The release of carbon dioxide gas creates bubbles and leads to the effervescence or eruption commonly observed when these two substances are combined.

8. Answer: B

Explanation: When water is heated, it undergoes a phase transition from a liquid to a gas (steam). As the water reaches its boiling point, bubbles of water vapour form and rise to the surface. The bubbles are primarily composed of water vapour, not air. The presence of dust particles or other impurities in the water can provide surfaces for steam to condense onto. As steam rises through the liquid water, it can condense on these particles, forming visible bubbles. The process of steam condensation on impurities creates the appearance of bubbles rising to the surface during boiling.

9. Answer: C

Explanation:

The acceleration of an object can be calculated using the formula:

a=ΔtΔv

where:

- (a) is the acceleration,
- (\Delta v) is the change in velocity, and
- (\Delta t) is the change in time.

Given that the car accelerates uniformly from rest (initial velocity = 0 m/s) to a speed of 20 m/s in 5 seconds, we can substitute these values into the formula:

a=5s20m/s-0m/s=4m/s2

So, the correct answer is C) 4 m/s^2 .

10. Answer: B

Explanation: Rainbows appear in the sky after rain due to the refraction, reflection, and dispersion of sunlight by water droplets. When sunlight enters a raindrop, it is refracted or bent and then reflected off the inside surface of the raindrop. When it exits the raindrop, it is refracted again. During these refractions, the light is separated into its various colours, creating a spectrum. This process is known as dispersion. So, the correct answer is (b) Water droplets refract sunlight, separating the colours.

11. Answer: C

Explanation: The process of photosynthesis takes place in the chloroplasts of a plant cell. Chloroplasts contain a pigment called chlorophyll, which absorbs light energy from the sun and uses it to combine carbon dioxide and water to produce glucose and oxygen. This process is fundamental to the life cycle of a plant. So, the correct answer is C) Chloroplasts.

12. Answer: A

Explanation: Night blindness is often associated with a deficiency in Vitamin A. Vitamin A is essential for maintaining healthy vision, particularly in low-light conditions. The retina contains a light-sensitive pigment called rhodopsin, which is crucial for vision in low-light environments. Vitamin A is a key component in the synthesis of rhodopsin. When there is a deficiency of Vitamin A, the production of rhodopsin is impaired, leading to a reduced ability to see in low-light conditions. This condition is known as night blindness. Apart from its role in vision, Vitamin A is also important for the immune system, skin health, and various other bodily functions.

13. Answer: B

Explanation: The correct answer is: B) Semicircular canals. While all the listed structures play a role in hearing, only the semicircular canals are directly involved in maintaining balance. Here's why:

Cochlea: This snail-shaped structure converts sound waves into electrical signals sent to the brain for interpretation as sound.

Tympanic membrane: This thin membrane vibrates in response to sound waves, transmitting them to the middle ear bones (ossicles).

Ossicles: These three tiny bones (hammer, anvil, stirrup) amplify the sound vibrations before passing them to the inner ear.

Semicircular canals: These three fluid-filled loops detect head rotations and accelerations, sending information to the brain about spatial orientation and movement, crucial for maintaining balance.

14. Answer: C

Explanation: The correct answer is: (c) Redox

Single displacement: This type of reaction involves one element replacing another in a compound. While elements are involved in rusting, there's no direct replacement happening.

Double displacement: This type of reaction involves two ionic compounds exchanging ions to form two new compounds. Rusting doesn't involve ionic compounds.

Redox: This type of reaction involves the transfer of electrons between reactants. In rusting, iron loses electrons to oxygen, making it an oxidation reaction. Oxygen gains electrons, making it a reduction reaction.



Since both oxidation and reduction occur simultaneously, it's considered a redox reaction.

Neutralization: This type of reaction involves an acid and a base reacting to form salt and water. Rusting doesn't involve an acid or a base.

15. Answer: B

Explanation: Cyclooxygenase (COX) is an enzyme that plays a key role in the production of prostaglandins, which are lipid compounds that have various roles in the body, including mediating inflammation. When COX is inhibited by aspirin, the production of these prostaglandins is reduced, which can help alleviate inflammation and pain.

So, the correct answer is (B) Produces inflammatory molecules.

16. Answer: C

Explanation: Soaps and detergents clean by forming micelles around dirt and oil particles. A micelle is a spherical structure where the hydrophilic (water-attracting) heads of the soap molecules face outward and the hydrophobic (water-repelling) tails face inward, trapping the dirt and oil. These micelles are soluble in water, so they can be washed away, effectively removing the dirt and oil.

So, the correct answer is (B) By forming micelles around dirt particles, trapping them in water.

17. Answer: B

Explanation: When you cook an egg, the heat causes the proteins in the egg white (albumin) to undergo denaturation. This is a process where the proteins lose their original structure and take on a new form. In the case of the egg, the proteins change from a liquid state to a solid state, which is why the egg white hardens when cooked. So, the correct answer is (B) Denaturation of protein molecules.

18. Answer: C

Explanation: One of the most important elements for life is phosphorus. It is part of the nucleotides that make up the genetic material of all living organisms, DNA and RNA. Phosphorus also plays a role in energy transfer, cell signalling, and bone formation. Without phosphorus, life as we know it would not exist.

The other elements listed are also essential for life, but not in the same way as phosphorus. Calcium is needed for muscle contraction, nerve transmission, and bone structure. Iron is needed for oxygen transport and enzyme function. Potassium is needed for maintaining fluid balance, nerve impulses, and muscle contractions.

19. Answer: D

Explanation: The Rigveda consists of hymns dedicated to a variety of deities, including Agni (the god of fire), Indra (the god of thunder and rain), Varuna (the god associated with cosmic order), and many others. Additionally, natural phenomena like the sun, moon, rivers, and elements of nature are praised and personified in these hymns. The Rigveda reflects the religious and cultural worldview of the ancient Indo-Aryan people.

20. Answer: B

Explanation: The correct answer is (B) Ethylene gas release. Fruits ripen faster when stored with other ripe fruits because ripe fruits produce ethylene gas, which is a plant hormone that triggers the ripening process. Ethylene gas can diffuse through the air and affect nearby fruits, causing them to ripen faster as well. This is why it is advisable to separate ripe and unripe fruits when storing them.

21. Answer: B

Explanation: CRISPR-Cas9 technology is a powerful tool for gene editing, which allows scientists to modify the DNA of living organisms. The technology consists of two main components: CRISPR, which is a sequence of DNA that guides the Cas9 enzyme to the target site, and Cas9, which is an enzyme that cuts the DNA at the target site. By using CRISPR-Cas9 technology, scientists can add, remove, or change specific genes in cells, plants, animals, or humans. Therefore, the correct answer is b) Gene editing.

22. Answer: A

Explanation: Newton's First Law of Motion, also known as the law of inertia, states that an object at rest will remain at rest and an object in motion will stay in motion with the same speed and in the same direction unless acted upon by an external force. In other words, an object will not change its state of motion (either at rest or in motion) unless a force is applied to it. This law provides the foundation for understanding the behaviour of objects under various conditions and is a fundamental principle in classical mechanics.

23. Answer: A

Explanation: Glucose is a simple sugar, and its chemical formula is C₆H₁₂O₆. This means it is composed of six carbon atoms, twelve hydrogen atoms, and six oxygen atoms. Glucose is a crucial molecule in biology, serving as a primary source of energy for many living organisms through the process of cellular respiration. The other options (b) CO₂, (c) H₂O, and (d) CH₄ represent carbon dioxide, water, and methane,



respectively, but they are not the chemical formula for glucose.

24. Answer: A

Explanation: The cornea is the transparent front part of the eye that covers the iris, pupil, and anterior chamber. Its main function is to refract (bend) and focus light entering the eye, playing a crucial role in the initial focusing of light onto the retina at the back of the eye. This process helps create a clear and sharp image on the retina, allowing for visual information to be transmitted to the brain. The other options (b) controlling the size of the pupil, (c) producing tears, and (d) refracting light within the lens are associated with other structures in the eye, but they do not represent the primary function of the cornea.

25. Answer: C

Explanation: In the electromagnetic spectrum, radiation with longer wavelengths than visible light is found in the infrared region. The electromagnetic spectrum is a continuum of all electromagnetic waves arranged according to their frequencies and wavelengths. Visible light falls within a specific range of wavelengths, and infrared radiation comes after the red end of the visible spectrum, having longer wavelengths. The other options, X-rays, gamma rays, and ultraviolet radiation, have shorter wavelengths than visible light and are located in different parts of the electromagnetic spectrum.

26. Answer: B

Explanation: Nephrons are the functional units of the kidneys, and their primary function is to filter blood to remove waste products and excess substances, ultimately producing urine. Each kidney contains thousands of nephrons, and they play a crucial role in maintaining the body's internal environment by regulating water and electrolyte balance. As blood passes through the nephrons, they selectively filter out waste products, toxins, and excess substances while reabsorbing essential nutrients and water. The concentrated waste and excess fluids are then excreted as urine. Options (C) Absorbing nutrients and (D) Storing waste are not accurate descriptions of the main function of nephrons in the kidneys.

27. Answer: B

Explanation: The alveoli are tiny air sacs located at the end of bronchioles in the lungs. Their primary function is to facilitate the exchange of gases, particularly oxygen and carbon dioxide, between the air and the bloodstream. During inhalation, oxygen diffuses from the air in the alveoli into the blood, while carbon

dioxide, a waste product of cellular metabolism, diffuses from the blood into the alveoli to be expelled during exhalation. This gas exchange is a crucial part of the respiratory process and is essential for maintaining the proper levels of oxygen and carbon dioxide in the body.

28. Answer: C

Explanation: The nucleus is a membrane-bound organelle found in eukaryotic cells, and its primary function is to control cell activities by regulating gene expression and storing the cell's genetic material in the form of DNA.

29. Answer: A

Explanation: The Chairman of the 16th Finance Commission is Dr. Arvind Panagariya. The 16th Finance Commission will recommend the tax-sharing formula between the central government and states for the five years starting April 1st, 2026. Other responsibilities include examining the financial position of the central and state governments, assessing their revenue needs, and making recommendations for improving their fiscal health.

30. Answer: C

Explanation: The process of rock formation through the accumulation and compaction of sediments is called sedimentation. This process involves the gradual deposition of mineral and organic particles, such as sand, silt, and clay, that settle out of water or air onto the Earth's surface. Over time, these deposited sediments undergo compaction and cementation, transforming into sedimentary rocks.

31. Answer: B

Explanation: The cerebrum is the largest and most developed part of the human brain, comprising the outer layer known as the cerebral cortex. It is responsible for a wide range of complex functions, and one of its primary roles is to control voluntary movements.

32. Answer: C

Explanation: The Golgi apparatus, often referred to as the Golgi complex or Golgi body, is an organelle within the cell with a crucial role in processing, packaging, and shipping proteins.

33. Answer: D

Explanation: The correct chronological order of the Vedas is: D) Rigveda - Yajurveda - Samaveda - Atharvaveda

Chronological order of the Vedas:

Rigveda: This is the oldest of the Vedas, composed around 1700-1100 BCE. It primarily consists of hymns



praising various deities and contains valuable information about early Vedic society and mythology. Yajurveda: Composed around 1300-700 BCE, the Yajurveda focuses on sacrificial rituals and instructions for priests. It draws heavily on the Rigveda but also introduces new deities and rituals.

Samaveda: Composed around 1000-500 BCE, the Samaveda is based on musical hymns derived primarily from the Rigveda. It serves as a chant book for ritual performances.

Atharvaveda: The youngest of the Vedas, composed around 1200-800 BCE, deals with spells, charms, and magical practices. It differs significantly in content from the other three Vedas, suggesting a later development within the Vedic tradition.

34. Answer: C

Explanation: The revised return on the Sukanya Samriddhi Account Scheme (SSAS) for the first quarter of 2024 (January-March) is 8.2%. This marks an increase from the previous rate of 8.0% for the October-December 2023 quarter.

35. Answer: D

Explanation: Ajanta and Ellora caves, famous for their intricate paintings and sculptures, belong to the Post-Gupta period in Indian history. The construction and embellishment of these caves spanned several centuries, with the majority of the work being done between the 5th and 8th centuries CE. These caves showcase a blend of religious art, including Buddhist, Hindu, and Jain themes, and are considered masterpieces of Indian rock-cut architecture. The caves are located in the present-day state of Maharashtra, India.

36. Answer: C

Explanation: Adrenaline, also known as epinephrine, is a hormone and neurotransmitter that plays a crucial role in the "fight-or-flight" response, which is the body's immediate physiological reaction to a perceived threat or stressor. When an individual encounters a stressful or dangerous situation, the release of adrenaline prepares the body to respond quickly and effectively.

37. Answer: A

Explanation: The first Union Territory to implement the PM Vishwakarma Yojana (PMVY) in the country is Jammu and Kashmir. It launched the scheme on January 2nd, 2024, aiming to empower and enhance the skills of the craftsman community. PMVY aims to revitalize traditional crafts and empower artisans through skill development, financial assistance, and market access.

38. Answer: C

Explanation: Queen Margrethe II is the current reigning monarch of Denmark. She ascended the throne in 1972, making her the longest-reigning monarch in Danish history and the longest-reigning queen regnant in the world at the time of her abdication on January 14, 2024.

39. Answer: C

Explanation: The correct answer is C) Bidhan Chandra Roy. He was a prominent Bengali leader who participated in the Quit India Movement in 1942, along with other freedom fighters like Mahatma Gandhi and Jawaharlal Nehru. He was also a renowned physician and educationist, who founded several medical colleges and hospitals in West Bengal. He became the second Chief Minister of West Bengal in 1948, after Prafulla Chandra Ghosh resigned, and served in that position until he died in 1962. He is widely regarded as the chief architect of modern West Bengal.

40. Answer: B

Explanation: The golden age of the Gupta Empire primarily refers to advancements in literature, art, and science. The Gupta period, which is generally considered to be from around the 4th to the 6th century CE, is renowned for its cultural and intellectual achievements. During this time, there were significant developments in literature, including the works of Kalidasa, a renowned poet and playwright. Art and architecture also flourished, with the creation of elaborate sculptures and the construction of important temples.

41. Answer: A

Explanation: The Jugantar party was one of the most prominent extremist revolutionary groups in Bengal during the Indian independence movement. It was founded by Aurobindo Ghosh and his brother Barin Ghosh in 1906 and later led by Jatindra Nath Mukherjee, also known as Bagha Jatin. The party was involved in several violent activities against British colonial rule, such as assassinations, bombings, robberies and arms smuggling. The party also had links with other revolutionary groups in India and abroad, such as the Ghadar Party, the Berlin Committee and the Indian National Army. The party was suppressed by the British authorities after a series of arrests and trials, and many of its members were executed, imprisoned or exiled. The Jugantar party played a significant role in inspiring the younger generation of freedom fighters and nationalists in Bengal and beyond.



42. Answer: C

Explanation: Tamralipta was a prominent city and seaport in ancient India. It was located on the banks of the Rupnarayan River in present-day West Bengal. Tamralipta was an important centre of trade and commerce, especially with Southeast Asia. The Maurya Empire, which ruled most of India from the 4th to the 2nd century BCE, considered Tamralipta as its main seaport. Tamralipta was also a hub of Buddhism and Jainism and hosted many famous monks and scholars. The correct answer to the question is (b) the Mauryan period.

43. Answer: B

Explanation: David Warner, the explosive Australian batsman, announced his retirement from Test and ODI cricket on January 6, 2024, after playing his final Test match at the Sydney Cricket Ground. He had earlier announced his retirement from ODIs on January 1st. While he has retired from international cricket, he will continue to play in the Big Bash League (BBL) and other T20 leagues around the world.

44. Answer: C

Explanation: Simhavishnu is credited with establishing the Pallava dynasty as a major power in South India. He ruled during the 6th century CE and laid the foundations for the Pallava dominance in the region. Simhavishnu's reign marked the beginning of the Pallava dynasty's prominence, and subsequent rulers, including his descendants, continued to play a significant role in the political and cultural history of South India.

45. Answer: A

Explanation: The literary work that provides valuable insights into Harshavardhana's life and reign is "Harshacharita" written by Banabhatta. "Harshacharita" is a biography of Harsha, the ruler of the Indian subcontinent during the 7th century, composed by Banabhatta, who was a contemporary scholar and a court poet in Harsha's court.

46. Answer: B

Explanation: The correct answer is B) Surya Sen. He was a Bengali revolutionary leader who organized and led the Chittagong Armoury Raid in 1930, which was a daring attack on the British colonial forces in India. He was popularly known as 'Masterda', meaning 'respected teacher', as he was a school teacher by profession. He was also involved in other anti-British activities and

movements, such as the Non-Cooperation Movement and the Civil Disobedience Movement. He was captured and executed by the British in 1934, but his legacy lives on as a national hero and a symbol of resistance.

47. Answer: C

Explanation: The British East India Company gradually expanded its influence and power in India, especially after the Battle of Plassey in 1757, when it defeated the Nawab of Bengal and his French allies. However, it was not until 1765 that the Company obtained the Diwani of Bengal, which gave it the right to collect revenue from the province. This effectively marked the beginning of British control over Bengal, which included the regions of West Bengal, Bihar, and Odisha. The Nawabs of Bengal became nominal rulers who depended on the Company for protection and administration. The answer to the question is C) 1765.

48. Answer: A

Explanation: The history of West Bengal is rich and diverse, with many kingdoms and dynasties ruling over different parts of the region. One of the earliest kingdoms that emerged in the southern part of West Bengal was the Vanga Kingdom, which existed between 1100 BCE and 350 BCE. The Vanga Kingdom was mentioned in several ancient texts, such as the Mahabharata, the Ramayana, and the Puranas, as well as in Buddhist and Jain literature. The Vanga Kingdom was known for its maritime trade and cultural contacts with other regions, such as Southeast Asia, Sri Lanka, and Greece. The Vanga Kingdom was eventually conquered by the Magadha Kingdom, which became one of the most powerful empires in ancient India.

49. Answer: B

Explanation: Gujarat boasts a coastline of approximately 1,600 kilometres along the Arabian Sea, which accounts for nearly 24% of India's total coastline. Tamil Nadu ranks second with a coastline of around 1,076 kilometres. Andhra Pradesh comes in third with approximately 974 kilometres of coastline.

50. Answer: C

Explanation: Jawaharlal Nehru wrote the book "Discovery of India" during his imprisonment in Ahmednagar Fort (present-day Maharashtra) from 1942 to 1946. It is a personal reflection on Indian history, culture, and philosophy, offering insights into Nehru's own evolving thoughts on India's identity and future.