



WBCS

GAZETTE

A House Journal of **APTI PLUS**



- › Santiniketan
- › 18th G 20 Summit In New Delhi, India.
- › Nuclear Energy
- › Antim Panghal
- › Oscars

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01

WEST BENGAL SPECIAL

Santiniketan

- Santiniketan, established by Nobel laureate Rabindranath Tagore in West Bengal's Birbhum district, has earned a place on UNESCO's World Heritage List, underscoring its global cultural and historical importance.
- Santiniketan is the birthplace of Visva-Bharati University, founded by Rabindranath Tagore in 1921, known for its distinctive educational approach focused on art, culture, and human values.
- Its addition to the UNESCO World Heritage List marks India's 41st World Heritage Site, highlighting the nation's cultural and historical richness.



World Heritage Sites in India

- India has a total of 42 World Heritage Sites, making it the country with the sixth-largest number of such sites in the world.
- These 42 sites in India are categorized into three main types:

There are 34 cultural World Heritage Sites in India, which include monuments, groups of buildings, and archaeological sites.

India has 7 natural World Heritage Sites, consisting of physical, biological, and geological formations, as well as habitats of threatened species.

Khangchendzonga National Park is the one mixed-type World Heritage Site in India, meaning it has both cultural and natural significance.

- In addition to the 42 listed sites, India has 50 sites on its tentative list. These are potential candidates for future inclusion on the World Heritage List after undergoing a nomination process and meeting the necessary criteria.



The first Indian sites to be listed as World Heritage Sites were the Ajanta Caves, Ellora Caves, Agra Fort, and Taj Mahal, all of which were inscribed in the 1983 session of the World Heritage Committee.

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RANK 24	RANK 13	RANK 14	RANK 4

Our Toppers in **WBCS 2021**



West Bengal's new State Education Policy for 2023

- The West Bengal government has come up with the State Education Policy, 2023
- It recommends a **three-language formula for students in Classes 5 to 8**, with an emphasis on Bengali.
- It suggests that Bengali be introduced as a subject for students from Class 1 to Class 10, regardless of their medium of instruction.
- It places importance on students' mother tongue as the medium of instruction for the first language (e.g., Nepali in Nepali medium schools, Santhali in Santhali medium schools, etc.).
- It **retains the existing school structure** of 5+4+2+2, rejecting the proposed 5+3+3+4 system. This is because the 5+3+3+4 system advocates abolishing the Class 10 board examination.
- It **recommends the introduction of a semester system** for better assessment starting from Class 8 and continuing in a phased manner over the next three years.
- The policy advocates for allocating a significant portion of the Gross Domestic Product (GDP) for education. It calls for cooperation between the Central government and State governments to allocate a share of their respective GDPs for education. Additionally, the policy encourages private financing in education in a systematic manner.

02

NATIONAL

Special Session of Parliament

- The Government convened a five-day special session of Parliament from September 18 to September 22.
- **Article 85 of the Indian Constitution mandates Parliament to meet at least twice a year.** The Budget Session (February to May) focuses on financial proposals, and the Monsoon Session (July and August) handles legislative matters. The **Constitution limits the gap between two sessions to six months**, ensuring regular parliamentary oversight.
- The **President can summon special sessions** to address urgent matters beyond regular schedules. Reasons include natural disasters, security threats, urgent legislation, political crises, and constitutional requirements.
- **Special sessions can last a maximum of 14 days.** The President can extend it for an additional 14 days if required.
- **Special sessions adhere to regular parliamentary rules**, including quorum and voting procedures. Legislation, even money bills, introduced during special sessions must pass through normal parliamentary procedures and gain majority approval.
- The session resulted in the passage of one bill, the Constitution (128th Amendment) Bill, 2023, which provides for 33% reservation to women in the Lok Sabha and state legislative assemblies. The bill was passed unanimously in both the Rajya Sabha and the Lok Sabha.
- The special session was also marked by discussions on 75 years of India's parliamentary journey and the achievements of the Chandrayaan-3 mission.

SPECIAL SITTINGS OF PARLIAMENT

When the House convenes on September 18 for a five-day special session for an as-yet-undisclosed agenda in the new building, it will be the ninth such meeting since 1977

26 November 2019

Special Sitting in Central Hall commemorating 70th anniversary of Constitution.

30 June 2017

Joint Special Session in Central Hall at midnight to roll out GST.

26 and 27 November 2015

Special Sitting to commemorate Constitution Day.

13 May 2012

Special Sitting to commemorate 60th anniversary of first sittings of Rajya Sabha and Lok Sabha.

22 July 2008

Special Session of Lok Sabha for a trust vote after the Left parties withdrew support from UPA-I government.

26 August 1997 to 1 September 1997

Special Session to commemorate 50th anniversary of Indian Independence.

3 June 1991 to 4 June 1991

Special Session (158th Session) of Rajya Sabha for approval of President's Rule in Haryana, under the proviso to Article 356(3).

28 February 1977 to 1 March 1977

Special Session of Rajya Sabha held for two days for the extension of President's Rule in Tamil Nadu and Nagaland under the second proviso to Article 356(4).



Ram Nath Kovind committee on "one nation, one election"

- The Union government has established a **committee headed by former President Ram Nath Kovind to explore the feasibility of implementing "one nation, one election"**.
- "One nation, one election" involves the **synchronization of Lok Sabha and state assembly elections through a common election cycle**, necessitating substantial amendments to the Indian Constitution, the Representation of the People Act 1951, and rules of procedure for implementation.
- The significance of "one nation, one election" lies in its potential to **reduce election costs, ensure continuous governance, and enhance the efficient use of resources**, leading to a more effective and streamlined electoral process in India.

Important constitutional provisions related to elections in India:

Article 324	The power of superintendence, direction and control of elections to Parliament, state legislatures, the office of President of India and the office of Vice-President of India shall be vested in the Election Commission.
Article 325	No person shall be ineligible for inclusion in, or to claim to be included in a special electoral roll on grounds of religion, race, caste or sex.
Article 326	Article 326: Elections to the Lok Sabha and Legislative Assemblies of States to be based on adult suffrage.
Article 327	Power of Parliament to make provision with respect to elections to legislature.
Article 328	Power of Legislature of a State to make provision with respect to elections to such Legislature.

Election Commission of India (ECI)

- ECI is an **autonomous constitutional authority** responsible for administering election processes in India.
- It was **established on 25 January 1950**, a day before India became a republic, **under Article 324 of the Constitution of India**.
- It consists of the Chief Election Commissioner (CEC) and two Election Commissioners (ECs), **appointed by the President of India for a term of six years or until they attain the age of 65 years, whichever is earlier**.
- It conducts elections to the Lok Sabha, Rajya Sabha, state legislative assemblies, state legislative councils, and the offices of the President and Vice President of India.
- It also supervises the registration of political parties, monitors their expenditure and compliance with the Model Code of Conduct, and ensures free and fair elections in the country.



Malaviya Mission

- The **Union Minister for Education and Skill Development & Entrepreneurship** has inaugurated the **Malaviya Mission - Teachers Training Programme** in New Delhi.
- It focuses on elevating the quality of higher education through specialized training for teachers in higher educational institutions.
- It seeks to empower 1.5 million higher education teachers through specialized training across 111 centres, aligning with the National Education Policy (NEP).
- It is a two-week online program that focuses on eight thematic areas, emphasizing continuous professional development and career progression to enhance the quality of higher education in India.

Madan Mohan Malaviya

- He was a prominent Indian freedom fighter, politician, and social reformer who made significant contributions to the Indian independence movement and the field of education.
- He is best known for **founding Banaras Hindu University (BHU) in Varanasi**.
- He acted as a bridge between the Moderates and Extremists within the Indian National Congress.
- He joined the Indian National Congress in 1886 and **served as its president four times: in 1909 (Lahore), 1918 (Delhi), 1930 (Delhi), and 1932 (Calcutta)**.
- He was one of the founders of the Hindu Mahasabha.
- In protest against the Communal Award's provisions for separate electorates for minorities, Malaviya, along with Madhav Shrihari Aney, left the Congress and **founded the Congress Nationalist Party**.
- He was one of the founders of the **Bharat Scouts and Guides**.
- The title of **"Mahamana"** was given to Madan Mohan Malviya by Mahatma Gandhi. However, there are also sources that mention Rabindranath Tagore as the one who conferred the title. It's possible that both of these great personalities referred to Malviya as "Mahamana".
- He was also **referred to as Karmayogi**, which means "one who is dedicated to selfless work", by Dr. S. Radhakrishnan, the **second President of India**.
- He founded the English newspaper "The Leader" in 1909, With the assistance of Motilal Nehru published from Allahabad.
- In 1910, he started the Hindi newspaper "Maryada."
- He started his own Hindi weekly called "Abhyudaya".



Sacred Ensembles of the Hoysalas

- The **Sacred Ensembles of the Hoysalas** is now the **42nd World Heritage Site in India**.
- It is a group of three temples, namely the Chennakeshava Temple in Belur, the Hoysaleswara Temple in Halebidu, and the Keshava Temple in Somanathapura, which are located in Karnataka.
- The Hoysalas were a dynasty that ruled over much of present-day Karnataka from the 11th to the 14th centuries. They were known for their patronage of the arts and architecture, and the temples they built are some of the most exquisite in India.



**List of UNESCO World Heritage Sites in India**

Name of Sites	Year	Location
Ajanta Caves	1983	Maharashtra
Ellora Caves	1983	Maharashtra
Agra Fort	1983	Agra
Taj Mahal	1983	Agra
Sun Temple	1984	Orissa
Mahabalipuram Monuments	1984	Tamil Nadu
Kaziranga National Park	1985	Assam
Keoladeo National Park	1985	Rajasthan
Manas Wildlife Sanctuary	1985	Assam
Churches and Convents of Goa	1986	Goa
Monuments of Khajuraho	1986	Madhya Pradesh
Monuments of Hampi	1986	Karnataka
Fatehpur Sikri	1986	Agra
Elephanta Caves	1987	Maharashtra
Great Living Chola Temples	1987	Tamil Nadu
Pattadakal Monuments	1987	Karnataka
Sundarbans National Park	1987	West Bengal
Nanda Devi & Valley of Flowers National Park	1988	Uttarakhand
Monuments of Buddha	1989	Sanchi, Madhya Pradesh
Humayun's Tomb	1993	Delhi
Qutub Minar and its Monuments	1993	Delhi
Mountain Railways of Darjeeling	1999	Darjeeling
Mahabodhi Temple	2002	Bihar
Bhimbetka Rock Shelters	2003	Madhya Pradesh
Chhatrapati Shivaji Terminus	2004	Maharashtra
Champaner Pavagadh Archaeological Park	2004	Gujarat
Red Fort	2007	Delhi
Jantar Mantar	2010	Delhi
Western Ghats	2012	Karnataka, Kerala, Tamil Nadu, Maharashtra
Hill Forts	2013	Rajasthan
Rani Ki Vav (The Queen's Stepwell)	2014	Gujarat
Great Himalayan National Park	2014	Himachal Pradesh
Nalanda	2016	Bihar
Khangchendzonga National Park	2016	Sikkim
Architectural Work of Le Corbusier (Capitol Complex)	2016	Chandigarh
The Historic City	2017	Ahmedabad
Victorian Gothic and Art Deco Ensembles	2018	Mumbai
Pink City	2019	Jaipur
Kakatiya Rudreshwara (Ramappa) Temple	2021	Telangana
Dholavira	2021	Gujarat
Santiniketan	2023	West Bengal
Hoysala temples of Belur, Halebid and Somananthpura	2023	Karnataka



03

INTERNATIONAL

Gujarat Declaration

- The **WHO Traditional Medicine Global Summit 2023 in Gujarat, India, concluded with the "Gujarat Declaration,"** reaffirming global commitments to indigenous knowledge, biodiversity, and traditional, complementary, and integrative medicine (TCIM).
- The declaration highlights the **importance of rigorous scientific methods in traditional medicine,** emphasizing India's role in hosting the WHO Global Traditional Medicine Centre and its commitment as a valuable asset in promoting traditional medicine globally.
- The declaration emphasizes collaborative efforts to integrate evidence-based traditional medicine into modern healthcare, harnessing its potential for universal health coverage, while ensuring ethical practices, biodiversity preservation, and the utilization of digital health technologies.

World Health Organization (WHO)

- The World Health Organization (WHO) is the United Nations specialized agency for international public health.
- It is **headquartered in Geneva, Switzerland,** and has six regional offices and 150 field offices worldwide.
- The WHO was **founded in 1948** with the aim of achieving "the highest attainable standard of health for all people."
- The WHO is funded by a combination of contributions from its member states, voluntary donations from individuals and organizations, and grants from foundations and other donors.
- The **current Director-General is Dr Tedros Adhanom Ghebreyesus.** He was elected to the position in May 2017 and re-elected to a second term in May 2022.

East Asia Summit (EAS)

- The **18th East Asia Summit (EAS) was held on September 7, 2023, in Jakarta, Indonesia.**
- The summit was **chaired by Indonesian President Joko Widodo,** and it took place in Jakarta, Indonesia.
- The EAS included the participation of **18 countries, including India.**
- During the summit, leaders discussed a wide range of important issues, including regional security and cooperation, economic development and trade, climate change and environmental protection, sustainable development, and global health and pandemics.
- The EAS was established in 2005 and is held annually, hosted by one of the member countries.



New Delhi Leaders' Declaration

- The **G20 New Delhi Leaders' Declaration was issued on September 10, 2023, at the conclusion of the 18th G20 Summit in New Delhi, India.**
- G20 leaders pledged to collaborate on global economic stability, addressing challenges like COVID-19, Ukraine conflict, and rising costs, while also committing to ambitious climate action, clean energy transition, biodiversity protection, and resilience in sustainable development efforts.



- G20 leaders vowed to promote free and fair trade, reduce barriers, and support an inclusive global trading system, while also committing to sustainable development through increased investment, technology transfer, and addressing poverty and inequality, expressing concern over the Ukraine war and calling for a peaceful resolution and adherence to international law.

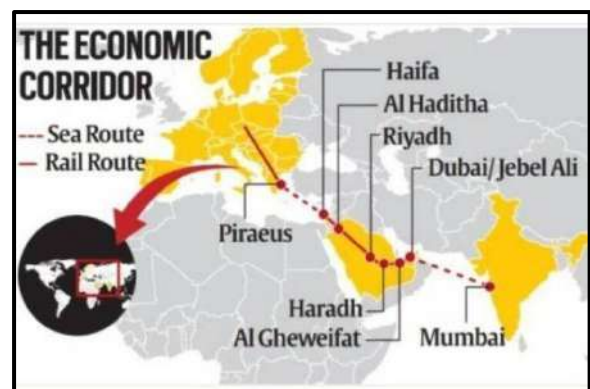
Group of Twenty (G20)

- The G20 was **established in 1999 in response to the Asian financial crisis.**
- The members of the G20 are: **Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Türkiye, the United Kingdom, the United States, the African Union and the European Union.**
 - The **European Union (EU) is a political and economic union of 27 member states:** Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.
- G20 members collectively account for approximately **80% of global GDP, 75% of international trade, and two-thirds of the world's population.**
- The **G20 is not a formal organization and lacks a permanent secretariat.** The presidency of the G20 rotates annually among its members, and the current president is India.



India-Middle East-Europe Mega Economic Corridor

- Prime Minister Narendra Modi announced the India-Middle East-Europe Mega Economic Corridor at the G20 summit,** involving India, UAE, Saudi Arabia, the European Union, France, Italy, Germany, and the United States.
- It is part of the Partnership for Rail and Shipping Corridors, involves G-7 countries collaborating to enhance infrastructure in developing nations and is considered an alternative to China's Belt and Road Initiative.
- It aims to connect Europe, the Middle East, and Asia through railways and sea routes,** fostering commercial connectivity, clean energy export, and expanding undersea cables, energy grids, and telecommunication lines.
- The proposed corridor consists of two distinct segments: the Eastern Corridor linking India to the Arabian Gulf and the Northern Corridor connecting the Arabian Gulf to Europe.



Global Innovation Index (GII) 2023

- India's 40th rank in the Global Innovation Index (GII) 2023** reflects the country's continuous progress in the field of innovation. It is the highest ranking India has ever achieved.
- The **GII is an annual ranking of countries based on their performance in innovation.**
- The ranking is compiled by the World Intellectual Property Organization (WIPO)** and takes into account a number of factors, including research and development spending, the number of patents filed, and the quality of scientific publications.



Key Schemes to promote innovation

- **Startup India:** The Startup India initiative was launched in 2016 to create a supportive ecosystem for startups in India.
- **Atal Innovation Mission (AIM):** AIM has established a network of Atal Tinkering Labs (ATLs) in schools and colleges across the country.
- **Make in India:** The Make in India initiative was launched in 2014 to promote manufacturing in India.
- **Digital India:** The Digital India initiative was launched in 2015 to transform India into a digitally empowered society.
- **Skill India:** The Skill India initiative was launched in 2015 to train youth in the skills required for the job market.

**INDIA RETAINS
40TH RANK
IN THE
GLOBAL
INNOVATION
INDEX 2023**



04

ECONOMICS

Koraput Kala Jeera Rice

- The Geographical Indications (GI) status was granted to 'Koraput Kala Jeera Rice' by the Geographical Indications Registry.
- 'Koraput Kala Jeera Rice,' cultivated by tribal communities in Odisha's Koraput district, is affectionately called the 'Prince of Rice' for its coriander seed-like appearance and is prized for its nutritional value, enticing aroma, superb taste, and appealing texture.
- 'Kala Jeera Rice,' as per ancient texts, is believed to offer health benefits, while the Geographical Indications (GI) status safeguards its unique qualities, preserving traditional knowledge, and promoting the economic well-being of local farmers and communities.

Geographical Indications (GI)

- Geographical Indications (GI) protect products with distinct qualities or reputations linked to specific geographic regions.
- **GI covers various product categories, including agriculture, handicrafts, industry, and food.** Examples of GI products worldwide include Darjeeling tea, Basmati rice, Kanchipuram silk, and Champagne.
- Benefits of GI tags include enhanced market value, preservation of local culture, socio-economic development, and support for biodiversity conservation.
- **India's Geographical Indications of Goods (Registration and Protection) Act was enacted in 1999 and became effective in 2003.**
- **GI tags in India are initially valid for 10 years, with the possibility of renewal.**
- India's Department for Promotion of Industry and Internal Trade (DPIIT) houses a Geographical Indications Cell to coordinate GI-related activities.
- India promotes its GI products through dedicated centres and a common logo and tagline, "Invaluable Treasures of Incredible India."



<u>GI Tags in 2023</u>		
Product List	State	Type
Srivalliputhur Palkova	Tamil Nadu	Food Product
Kaji Nemu	Assam	Agricultural
Khola Chilli	Goa	Agricultural
Pawndum	Mizoram	Handicraft
Rasagola	Orissa	Food Product
Kandhamal Haladi	Orissa	Agricultural
Dindigul Locks	Tamil Nadu	Industrial Product
Kodaikanal Malai Poondur	Tamil Nadu	Agricultural
Manipuri Black Rice	Manipur	Food Product
Gulbarga Tur Dal	Karnataka	Agricultural
Hmaram	Mizoram	Handicraft
Tawla Lohan	Mizoram	Handicraft
Tirur Betel Leaf (Tirur Vettala)	Kerala	Agricultural
Palani Panchamirtham	Tamil Nadu	Food Product
Idu Mishmi Textiles	Arunachal Pradesh	Handicraft
Kandangi Saree	Tamil Nadu	Handicraft
Ngotekherh	Mizoram	Handicraft
Amroha Dholak	Uttar Pradesh	Handicraft
Mahoba Gaura Patthar Hastashilp	Uttar Pradesh	Handicraft
Sambhal Horn Craft	Uttar Pradesh	Handicraft
Baghpat Home Furnishings	Uttar Pradesh	Handicraft
Barabanki Handloom Product	Uttar Pradesh	Handicraft
Kalpi Handmade Paper	Uttar Pradesh	Handicraft

Salem Sago received Geographical Indication (GI) tag

- Salem Sago, or Javvarisi, produced in Tamil Nadu's Salem district, is made from tapioca roots with 30-35% starch content, widely used as Sabudana in Indian cuisine.
- GI tag granted to Salem Sago acknowledges its unique qualities and strong Salem district connection, with over 80% of India's sago production in Tamil Nadu's Salem region.
- It holds diverse applications in industries like food, paper, textiles, and more, showcasing its economic value; however, the term "sago" varies globally, encompassing starch pearls from tapioca, sago palm, and other sources, reflecting regional preferences.



RuPay NCMC Prepaid Card

- The State Bank of India (SBI) has launched the "RuPay NCMC Prepaid Card" to streamline digital fare payments for multiple modes of transportation, including metro, buses, water ferries, parking, and more, using a single card.
- It was introduced by SBI is part of the government's comprehensive effort to modernize and integrate payment





systems for both public transportation and retail services under the NCMC program.

- It offers versatile payment options for transportation and retail, promoting seamless travel and transactions, aligning with India's "One Nation, One Card" vision.

State Bank of India (SBI)

- SBI's origins date back to the early 19th century when the Bank of Calcutta (later Bank of Bengal) was founded in 1806, one of the three Presidency banks with the exclusive right to issue currency until 1861 when the Indian government assumed this privilege.
- **In 1921, the Presidency banks amalgamated to form the Imperial Bank of India**, which remained a joint-stock company without government participation.
- **In 1955, as per the provisions of the State Bank of India Act, the Reserve Bank of India (RBI) acquired a controlling interest in the Imperial Bank of India, and it was renamed the State Bank of India on July 1, 1955.**
- Arundhati Bhattacharya became the first woman to be appointed Chairperson of SBI in 2013. During her tenure, she oversaw the merger of the remaining five associate banks into SBI.
- **The current chairman of the State Bank of India (SBI) is Dinesh Kumar Khara.** He was appointed chairman in October 2020 and his tenure was extended till August 2024 in October 2023.

Sovereign Gold Bonds (SGB)

- The Reserve Bank of India (RBI) has revealed that the issue price for the September 2023 series of Sovereign Gold Bonds (SGB) will be ₹5,923 per gram.
- **It allows investors to buy government-backed gold in digital form**, with denominations in grams, offering a discount for online transactions, eight-year tenure, and a 2.5% annual interest paid semiannually.
- It can be redeemed at the prevailing market gold price in Indian rupees upon maturity or can be prematurely redeemed starting from the fifth year with a decreasing penalty.



PM Vishwakarma Scheme

- It is a **Central Sector Scheme, approved with a budget of Rs. 13,000 crore over five years**, and aims to preserve and promote traditional skills practised by artisans and craftspeople through the Guru-Shishya parampara.
- The scheme facilitates **free digital registration for artisans**, leading to official recognition through certificates and ID cards and prioritizes skill upgradation to enhance traditional craftsmanship.
- **Artisans under the "PM Vishwakarma" scheme receive a ₹15,000 toolkit incentive** to acquire and maintain essential tools, and they can **access collateral-free credit of up to ₹2 lakh at a concessional interest rate of 5% to scale up their craft.**
- The scheme encourages digital transactions among artisans, provides incentives for cashless payments, and offers marketing support to help them expand their customer base, ultimately boosting the demand for traditional crafts.





05

DEFENSE AND SECURITY

Mahendragiri

- India's latest warship, Mahendragiri, was launched at the Mazagon Dock Shipbuilders Limited in Mumbai on September 1.
- The ship is named after a mountain peak in the Eastern Ghats located in Odisha and is the seventh vessel of the Project 17A frigates, a significant addition to the Indian Navy's fleet.
- 75% of the orders for equipment and systems for the ships have been sourced from indigenous firms, including micro, small, and medium enterprises (MSMEs).

Project 17A

- Project 17A (P-17A) is an initiative by the Indian Navy to construct a series of advanced stealth guided-missile frigates. They are being built by two Mazagon Dock Shipbuilders Limited (MDL) and Garden Reach Shipbuilders & Engineers (GRSE).
- Under the P-17A program, a total of seven ships are being constructed, with four at MDL and three at GRSE. The ships have been named after prominent hill ranges in India, such as INS Nilgiri, INS Himgiri, INS Udaygiri, INS Dunagiri, INS Taragiri, INS Vindhyagiri, and INS Mahendragiri.



Polish Warmate loitering drones

- Indian Army has recently acquired the Polish Warmate loitering drones.
- Loitering munitions, or suicide drones, passively wait around target areas and crash into identified targets, ensuring rapid response against hidden threats without risking high-value platforms.
- It operates within a 30 km range via line-of-sight. It reaches speeds of 80 km/h, has a wingspan of 1.6 m, a fuselage length of 1.1 m, and a maximum take-off weight of 5.7 kg.
- It operates at altitudes between 150 to 300 m above sea level and supports different warhead types, achieving a maximum attack speed of 150 km/h.



Exercise Trishul

- The Indian Air Force launched its annual Trishul training exercise, featuring various fighter aircraft, transport planes, and choppers like Rafale, Mirage 2000, Su-30MKIs, Chinook, and Apache, and involving Garud Special Forces to showcase comprehensive air power utilization.
- The Trishul exercise is conducted in the northern sector, encompassing Ladakh, Himachal Pradesh, Jammu & Kashmir, and Punjab, to evaluate operational preparedness and coordination.

The current Chief of the Air Staff (CAS) of the Indian Air Force (IAF) is Air Chief Marshal Vivek Ram Chaudhari. He took over the office on 30 September 2021, following the retirement of Air Chief Marshal Rakesh Kumar Singh Bhadauria.



Project Naman

- 'Project Naman' is an Indian Army initiative aimed at offering support to ex-servicemen and the families of martyrs, focusing on rehabilitation, reintegration, and honouring the sacrifices of soldiers.
- It prioritizes the welfare of army veterans and their families, offering facilitation and grievance redressal centres for streamlined access to essential government services, acknowledging and addressing their needs and concerns.
- It collaborates with HDFC Bank Limited and CSE e-Governance India Limited, demonstrating a commitment to efficient implementation and broader support for veterans, while also emphasizing digital integration and future expansion plans.

Indian Army

- Indian Army is managed by the Indian Ministry of Defence.
- The Chief of the Army Staff (COAS) is the highest-ranking officer in the Indian Army and is responsible for its overall command and control.
- **Indian Army is divided into seven commands:** the Northern Command, the Western Command, the Eastern Command, the Southern Command, the Central Command, the South Western Command, and the Training Command. Each command is headed by an Army Commander.
- It has fought in four wars against Pakistan and one war against China. The Indian Army has also played a key role in peacekeeping operations around the world, such as in Somalia, Congo, and Lebanon.
- **General Manoj Pande is the current Chief of Army Staff** and he took over the office on April 30, 2022.

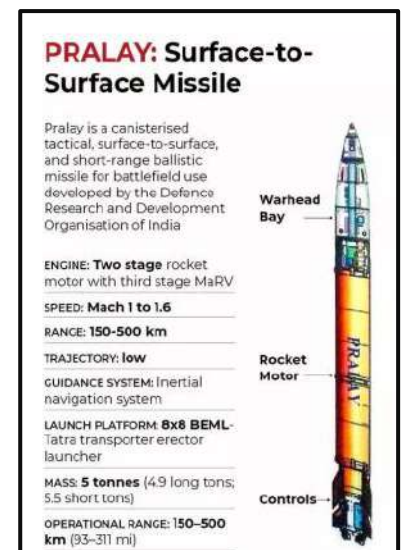
Exercise Bright Star-23

- Exercise Bright Star-23 is a multinational tri-services joint military exercise that was held in Egypt from August 31 to September 14, 2023.
- It was the largest joint military exercise ever held in the Middle East and North Africa region, with 34 countries participating. INS Sumedha participated in the Exercise
- The exercise was led by US CENTCOM and the Egyptian Army and involved a wide range of military activities, including air, land, and sea operations.
- The goal of the exercise was to improve interoperability and cooperation among participating countries and to enhance their ability to respond to regional threats.



Pralay tactical ballistic missiles

- The Defence Ministry has cleared the proposal of buying a regiment of Pralay tactical ballistic missiles for the Indian Army.
- Pralay, India's longest-range surface-to-surface missile combines a quasi-ballistic trajectory, low profile, and manoeuvrability, boasting advanced guidance systems that enhance interception resistance.
- Pralay, with a range of 150-500 km, carries a 350-700 kg high-explosive warhead and can alter its trajectory mid-flight, primarily designed for targeting radar, communication hubs, command centres, and advanced airfields using conventional warheads.





Dhruvastra

- India's Defence Acquisition Council (DAC) has given the green light to indigenous **Dhruvastra short-range air-to-surface missiles**.
- **Dhruvastra, formerly Helina, is a versatile helicopter-launched anti-tank guided missile (ATGM)** developed under the Integrated Guided Missile Development Program (IGMDP) by the Defence Research and Development Organisation (DRDO).
- It boasts a range of 500 meters to 7 kilometres, launches from altitudes up to 4 kilometres, and effectively targets objects moving at speeds up to 70 kilometres per hour.



SIMBEX

- The 30th edition of SIMBEX, conducted from 21 to 28 September 2023, highlighted the enduring maritime partnership **between Singapore and India**.
- It was **held in the southern South China Sea** within international waters, encompassing anti-submarine warfare, surface and air defence exercises, tactical manoeuvres, and live weapon firings, demonstrating the naval capabilities of Singapore and India.

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06

SCIENCE

Kakrapar Atomic Power Project's third unit operational at full capacity

- The Kakrapar Atomic Power Project (KAPP3) in Gujarat, comprises three units with a total installed capacity of 1,950 MWe, using Pressurized Heavy Water Reactors (PHWRs) fueled by natural uranium and utilizing heavy water as both moderator and coolant.
- KAPP3 is expected to provide electricity for around 4 million people annually, aiding India's efforts to reduce reliance on fossil fuels, and is equipped with safety measures like a containment building, reactor pressure vessel, and cooling system, operated by the Nuclear Power Corporation of India Limited (NPCIL)

Nuclear Energy

- Nuclear energy is the energy released from the nucleus of an atom. It can be released in two ways: fission and fusion.
- **Fission is the splitting of a heavy atom, such as uranium or plutonium, into two lighter atoms.** This releases a large amount of energy, as well as neutrons. The neutrons can then split other atoms, creating a chain reaction.
- **Fusion is the combining of two light atoms, such as hydrogen, to create a heavier atom.** This also releases a large amount of energy, as well as neutrons. However, fusion is much more difficult to achieve than fission, and it is not yet commercially viable.



Types of nuclear reactors

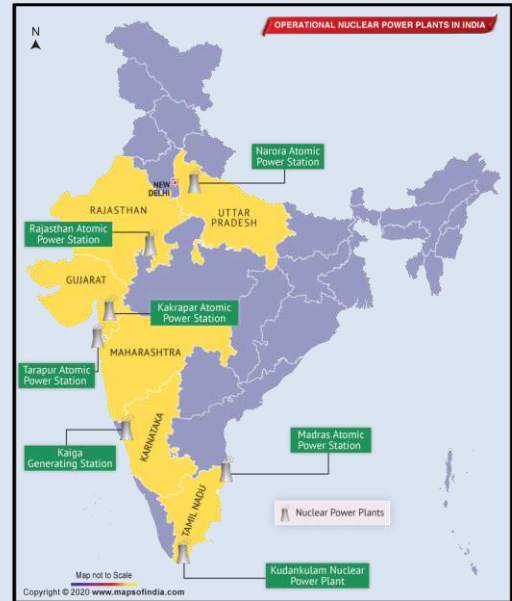
- **Light water reactors (LWRs):** These reactors use ordinary water as a moderator to slow down neutrons and sustain the fission chain reaction. LWRs are the most common type of nuclear reactor in the world.
- **Heavy water reactors (HWRs):** These reactors use heavy water, which is a form of water that contains deuterium atoms instead of hydrogen atoms, as a moderator. HWRs are less common than LWRs, but they are more efficient at using fuel.
- **Graphite-moderated reactors:** These reactors use graphite, a form of carbon, as a moderator. Graphite-moderated reactors are less common than LWRs or HWRs, but they are more versatile and can be used with a wider range of fuels.
- **Pressurized water reactor (PWR):** PWRs are the most common type of nuclear reactor in the world. They use ordinary water as both a moderator and a coolant. The water is kept under high pressure to prevent it from boiling.
- **Boiling water reactor (BWR):** BWRs are similar to PWRs, but the water is allowed to boil in the reactor core. The steam produced by the boiling water is used to drive a turbine to generate electricity.
- **Canadian deuterium uranium reactor (CANDU):** CANDU reactors are a type of HWR. They use heavy water as a moderator and ordinary water as a coolant. CANDU reactors are more efficient at using fuel than LWRs, but they are also more complex and expensive to build.
- **RBMK reactor:** RBMK reactors were a type of graphite-moderated reactor that was used in the Soviet Union. They were designed to be very efficient at producing plutonium for nuclear weapons, but they also had a number of safety flaws. The Chernobyl disaster was caused by a meltdown of an RBMK reactor.
- **Fast neutron reactor (FNR):** FNRs do not use a moderator to slow down neutrons. This allows them to use a wider range of fuels, including plutonium and depleted uranium. FNRs are still under



development, but they have the potential to be more efficient and produce less waste than other types of reactors.

Nuclear Reactors in India

- The Nuclear Research Reactor APSARA was commissioned on August 4, 1956, by the Bhabha Atomic Research Centre (BARC). **Dr. Homi Bhabha, often referred to as the "Father of the Indian nuclear program,"** conceptualized the design of APSARA in 1955.
 - The reactor was named APSARA and officially dedicated to the nation in 1957 by India's first Prime Minister, Pandit Jawaharlal Nehru. **APSARA was the first nuclear research reactor in India and Asia.**
 - **APSARA was located at the BARC campus in Mumbai.**
 - **The reactor was permanently shut down in 2009, marking the end of its operational life.**
- **The first nuclear power plant in India is the Tarapur Atomic Power Station (TAPS), located in Tarapur, Maharashtra.** It was commissioned in October 1969. The plant was built under an **agreement between India, the United States, and the International Atomic Energy Agency (IAEA).**
- **India currently operates 22 nuclear power reactors in 7 Nuclear Power Plants,** with an installed capacity of 6,780 MegaWatt electric (MWe), consisting of 18 Pressurised Heavy Water Reactors (PHWRs) and four Light Water Reactors (LWRs).
- India is also building 8 new nuclear reactors, including 6 PHWRs and 2 light water reactors (LWRs). The LWRs are being built in cooperation with Russia.



Aditya L1 spacecraft

- Indian Space Research Organisation (ISRO) successfully launched the **Aditya L1 spacecraft, aimed at studying the Sun from a distance of 1.5 million kilometers.**
- It is **equipped with seven payloads capable of observing the Sun** in multiple wavelengths and studying various solar phenomena, such as radiation, particles, and magnetic fields, contributing to a deeper understanding of our star.
- It will be manoeuvred to reach a halo orbit around the **L1 point, situated 1.5 million kilometres away from Earth.** This strategic location provides an excellent vantage point for continuous and detailed observations of the Sun.
- The mission marks a significant international collaboration, as **it becomes the third space agency worldwide, following NASA and the European Space Agency (ESA), to establish an observatory at the L1 point for advanced solar research.**



Indian Space Research Organisation (ISRO)

- The Indian Space Research Organisation (ISRO) was **formed in 1969.** It was **previously known as the Indian National Committee for Space Research (INCOSPAR), which was established in 1962.**
- ISRO is **headquartered in Bangalore, Karnataka,** and has nine major research and development centres across India.



- ISRO has achieved a number of significant milestones in the field of space exploration and satellite applications. Some of its notable achievements include:
 - **Launch of India's first satellite, Aryabhata, in 1975.**
 - Development of the Polar Satellite Launch Vehicle (PSLV), which is one of the most reliable launch vehicles in the world.
 - Launch of the Geosynchronous Satellite Launch Vehicle (GSLV), which can launch satellites into higher orbits.
 - Development of the Cryogenic Upper Stage (CUS), which allows ISRO to launch heavier satellites into higher orbits.
 - Launch of **India's first lunar mission, Chandrayaan-1, in 2008.**
 - Launch of **India's first Mars mission, Mangalyaan, in 2013.**
 - Launch of India's second lunar mission, Chandrayaan-2, in 2019.
 - Launch of India's third lunar mission, Chandrayaan-3, in 2023.
 - Development and launch of a variety of satellite applications for remote sensing, communication, navigation, and meteorology.
- **Current Chairman of the ISRO - S. Somanath**

Nipah virus

- A new outbreak of the Nipah virus has been reported in Kerala.
- The Nipah virus was first identified in 1998 during an outbreak in Malaysia and Singapore. **The virus gets its name from the Malaysian village of Sungai Nipah**, where one of the first major outbreaks occurred.
- It is classified as a **zoonotic virus, meaning it can be transmitted from animals to humans.**
- The natural reservoir hosts of Nipah virus are fruit bats (Pteropus species), which do not typically show symptoms of the disease but can shed the virus in their urine, saliva, and faeces.
- Human infections often occur through the consumption of contaminated fruit or close contact with infected animals.
- There is **no specific cure or antiviral medication approved for the treatment of Nipah virus infection.**



07

SPORTS

International Cricket Council (ICC) revealed the mascots for the 2023 World Cup as Blaze and Tonk.

- Blaze, the female mascot, is described as a fast-bowling sensation with pinpoint accuracy.
- Tonk, the male mascot, is characterized by his exceptional batting skills. His range of shots dazzles the crowds, displaying finesse and power in equal measure.
- Unlike previous World Cup mascots, Blaze and Tonk represent a departure from traditional animal-themed designs.



About Cricket World Cup 2023

- It is the **13th edition of the Cricket World Cup**, a quadrennial One Day International (ODI) cricket tournament organized by the International Cricket Council (ICC).



- The tournament is **hosted by India** and began on October 5, 2023. It is scheduled to conclude on November 19, 2023.
- **Ten national teams are participating** in the competition. These teams are Afghanistan, Australia, Bangladesh, England, India, Netherlands, New Zealand, Pakistan, South Africa, and Sri Lanka.
- The tournament is being **held at ten different stadiums across India**. The semi-finals will take place at Wankhede Stadium in Mumbai and Eden Gardens in Kolkata, while the **final will be held at Narendra Modi Stadium in Ahmedabad**.
- The **oldest player in the tournament is Dutch player Wesley Barresi**, 39 years old, while the **youngest is Afghan spinner Noor Ahmad**, aged 18 years.
- The **winning team will receive prize money of US \$4 million** and the runner-up will be awarded US \$2 million.

Winners of the ICC Men's ODI Cricket World Cup (1975-2019)

<u>Year</u>	<u>Host</u>	<u>Winner</u>	<u>Runner-up</u>
1975	England	West Indies won the inaugural World Cup, captained by Sir Clive Lloyd.	Australia
1979	England	West Indies successfully defended their title, captained by Sir Clive Lloyd.	England
1983	England	India won their first World Cup, captained by Kapil Dev.	West Indies
1987	Indian Subcontinent	Australia claimed their first World Cup victory.	England
1992	Australia, New Zealand	Pakistan won under the captaincy of Imran Khan.	England
1996	Indian Subcontinent	Sri Lanka secured their first World Cup title under Arjuna Ranatunga's leadership.	Australia
1999	England	Australia won the tournament, led by Steve Waugh.	Pakistan
2003	Africa	Australia emerged victorious, with Ricky Ponting as captain.	India
2007	Caribbean	Australia clinched their third consecutive title, with Ricky Ponting as captain.	Sri Lanka
2011	India	India won their second World Cup, captained by MS Dhoni.	Sri Lanka
2015	Australia, New Zealand	Australia secured their fifth World Cup victory.	New Zealand
2019	England	England claimed their maiden World Cup win in a thrilling final against New Zealand.	New Zealand

Novak Djokovic

- **Novak Djokovic clinched his fourth US Open title**, defeating Daniil Medvedev and securing his 24th Grand Slam singles championship.
- He equalled Margaret Court's record for the most Grand Slam victories in the Open Era and became the oldest men's champion in the history of the US Open.
- The US Open, one of tennis' four Grand Slam tournaments, held annually since 1881 except during World War I and II, serves as the final major championship of the year, alongside the Australian Open, French Open, and Wimbledon.

**US Open 2023 Winners in Different Categories**

<u>Category</u>	<u>Winner</u>	<u>Runner Up</u>
Men's Singles	Novak Djokovic	Daniil Medvedev



Women's Singles	Coco Gauff	Aryna Sabalenka
Men's Doubles	Rajeev Ram and Joe Salisbury	Rohan Bopanna and Matthew Ebden
Women's Doubles	Gabriela Dabrowski and Erin Routliffe	Vera Zvonareva and Laura Siegemund
Mixed Doubles	Harri Heliövaara and Anna Dalinina	Jessica Pegula and Austin Krajicek

Danielle McGahey

- **Danielle McGahey, a transgender woman from Canada, fulfils ICC's eligibility criteria, poised to make history as the first transgender woman player in international cricket at 29 years.**
- McGahey's inclusion signifies a significant step toward inclusivity in sports, breaking gender barriers and promoting diversity within the international cricket arena.
- Her presence amplifies representation for the transgender community, emphasizing the importance of acceptance and equal opportunities, paving the way for a more inclusive future in sports.



Durand Cup

- **Mohun Bagan secured the 132nd Durand Cup, ending a 23-year wait and becoming the first team to clinch 17 titles, defeating East Bengal 1-0 at the Salt Lake Stadium in Kolkata.**
- This win marks a historic milestone for Mohun Bagan SG, solidifying their position as the most successful team in the history of the Durand Cup, with **17 titles to their name.**
- The victory further intensifies the age-old rivalry between Mohun Bagan and East Bengal, as both teams continue to compete for supremacy in one of India's most prestigious football tournaments.
- **Winners list:** Golden Ball (Nandhakumar Sekar), Golden Boot (David Lahlanga), Golden Gloves (Visal Kaith).
- **Durand Cup is the oldest football tournament in Asia** and the third oldest in the world, after the FA Cup and the Scottish Cup. It was first held in 1888 and is named after Sir Mortimer Durand, the then-Foreign Secretary of India.

Asia Cup cricket tournament

- The 16th edition of the Asia Cup cricket tournament took place from 30 August to 17 September 2023. **It was co-hosted by Pakistan and Sri Lanka.**
- **Six teams participated in the tournament:** Afghanistan, Bangladesh, India, Pakistan, Sri Lanka, and Nepal.
- **India won their eighth Asia Cup title by defeating Sri Lanka in the final match.**
- During the tournament, Indian cricketer **Shubman Gill** emerged as the top run-scorer, while Sri Lanka's Matheesha Pathirana was the leading wicket-taker.
- **Kuldeep Yadav of India was recognized as the Player of the Series for his outstanding performance.**



Antim Panghal

- **19-year-old Indian wrestler Antim Panghal secured a bronze medal in the women's 53 kg category at the World Championships in Belgrade, Serbia, marking India's first medal in the ongoing tournament and the 23rd overall in World Championships history.**
- In addition to the bronze, Antim Panghal's victory also earned India a quota spot for the Paris Olympics 2024, demonstrating her talent and potential on the international stage.





- Antim's impressive win came after defeating two-time European Champion Emma Jonna Denise Malmgren with a score of 16-6 in the bronze medal bout, showcasing her skill and determination in the competition.

08

GEOGRAPHY AND ENVIRONMENT

Report titled 'Air Quality Life Index (AQLI) Annual Update 2023'

- Air pollution in South Asia, particularly in Bangladesh, India, Nepal, and Pakistan, is reducing the average lifespan of individuals by 5.1 years, according to the 'Air Quality Life Index (AQLI) Annual Update 2023' by the University of Chicago's Energy Policy Institute.
- **Bangladesh is ranked as the most polluted country globally, facing an average life expectancy reduction of 6.8 years, while India has ranked 2nd in the list.**

WORST-HIT NATIONS		
Country	PM2.5*	Years lost**
B'desh	74	6.8
India	58.7	5.3
Nepal	51.7	4.6
Pakistan	44.7	3.9
Mongolia	36	3

Air Pollution

- Air pollution refers to the presence of harmful substances in the Earth's atmosphere that can cause health problems and damage the environment. These pollutants can be natural or human-made and are primarily released into the air as gases, particulate matter, or biological materials.

Common air pollutants include:

- **Particulate Matter (PM2.5 and PM10):** Tiny particles suspended in the air, which can be solid or liquid. They are a major component of air pollution and can penetrate deep into the lungs, causing respiratory issues and other health problems.
- **Nitrogen Oxides (NOx):** These are gases produced by burning fossil fuels, primarily in vehicles and power plants. Nitrogen oxides contribute to the formation of smog and acid rain and can irritate the respiratory system.
- **Sulfur Dioxide (SO2):** A gas produced by burning fossil fuels containing sulfur, such as coal and oil. It can lead to respiratory problems and contribute to the formation of acid rain.
- **Volatile Organic Compounds (VOCs):** These are organic chemicals that can easily evaporate into the air. They are released from various sources, including vehicle emissions and industrial processes. VOCs can contribute to the formation of ground-level ozone and smog.
- **Carbon Monoxide (CO):** A colourless, odourless gas produced by incomplete combustion of carbon-containing fuels. High levels of carbon monoxide can be deadly, as it interferes with the body's ability to transport oxygen.
- **Ozone (O3):** Ground-level ozone is a result of chemical reactions between nitrogen oxides and volatile organic compounds in the presence of sunlight. While ozone in the upper atmosphere (stratosphere) is beneficial as it protects us from the sun's ultraviolet rays, ground-level ozone can cause respiratory problems and other health issues.
- **Heavy Metals:** Pollutants such as lead, mercury, and cadmium can be released into the air from various industrial processes and can have severe health impacts even in small quantities.

Zealandia



- Scientists have finally confirmed the existence of a "missing" continent known as Zealandia.
- Zealandia, a submerged continent, once part of Gondwana, began separating from it 105 million years ago, with over 94% of it lying underwater, and its **above-water parts form New Zealand's north and south islands.**
- It is the **eighth continent discovered**, and it's the **smallest, thinnest, and youngest one.**



Continents	Area (km ²)	Number of countries	Largest country	Smallest country
Asia	31,033,131,150	48	Russia	Maldives
Africa	29,648,481	54	Algeria	Seychelles
Europe	22,134,900	44	Russia	Vatican City
North America	21,330,000	23	Canada	St. Kitts and Nevis
South America	17,461,112	12	Brazil	Suriname
Australia	8,486,460	03	Australia	Nauru
Antarctica	13,720,000	N/A	N/A	N/A

Global Biofuels Alliance

- **Prime Minister Narendra Modi announced the launch of the Global Biofuels Alliance.**
- India, Brazil, and the US, as founding members, contribute approximately 85% of global ethanol production and 81% of consumption within the alliance.
- It aims to promote sustainable biofuels, accelerate their adoption, establish industry standards, and encourage global cooperation, marking a significant step toward sustainability and clean energy.

Biofuels

- **Biofuels are fuels that are produced from biomass, which is organic matter from plants or animals.** Biomass can be converted into biofuels using a variety of processes, including fermentation, combustion, and pyrolysis.
- It can be used in a variety of applications, including transportation, heating, and electricity generation.

Types of biofuels:

- **Ethanol is an alcohol fuel that is produced from the fermentation of sugars.** Ethanol is typically blended with gasoline and used in vehicles.
- **Biodiesel is a liquid fuel that is produced from vegetable oils or animal fats.** Biodiesel can be used in diesel engines without modification.
- **Biogas is a gaseous fuel that is produced from the anaerobic digestion of organic matter.** Biogas can be used for heating, cooking, and electricity generation.



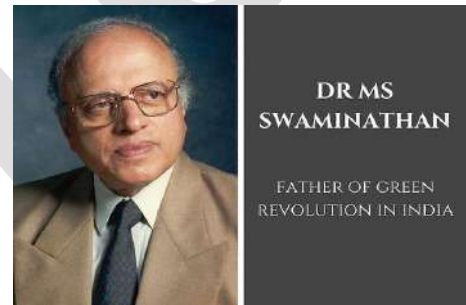
- **Syngas is a mixture of hydrogen and carbon monoxide** that is produced from the thermochemical conversion of biomass. Syngas can be used to produce a variety of fuels, including hydrogen, methane, and electricity.
- **Drop-in biofuels are biofuels that are chemically identical to petroleum fuels.** Drop-in biofuels can be used in existing vehicles and infrastructure without modification.

09

OBITUARIES

M. S. Swaminathan

- M. S. Swaminathan passed away on September 28, 2023, at the age of 98 in Chennai.
- **He earned the title "Father of India's Green Revolution"** for developing high-yielding rice and wheat varieties, pivotal in India's transition to self-sufficiency in food production.
- He made significant scientific contributions to agricultural research, focusing on potato genetics, frost-resistant potato varieties, cytogenetics of hexaploid wheat, high-yielding wheat varieties, C4 carbon fixation in rice, and radiation botany, enhancing plant responsiveness to fertilizers.
- **As the chair of the National Commission on Farmers in 2004,** Swaminathan recommended the proposal for a Minimum Support Price (MSP) at least 50% higher than production costs.



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10

APPOINTMENTS

Jaya Verma Sinha

- **Jaya Verma Sinha becomes the first woman to be appointed as the Chairperson of India's Railway Board**, the highest decision-making body in the Railway Ministry.
- She previously served as a Member (Operations and Business Development), overseeing critical incidents like the Balasore train accident, and played a pivotal role in inaugurating the Maitree Express during her tenure in Dhaka.



Historical Development of Indian Railway

- **1832: The first railway proposals in India were made in Madras**, marking the inception of India's railway history.
- **1837: The Red Hill Railroad, India's first railway line**, was constructed to transport granite for road-building, running from Red Hills in Chennai to Chintadripet bridge in Madras. It was the first railway line on the Indian Subcontinent, primarily used for freight transport.
- **1853: The Great Indian Peninsula Railway operated India's first passenger train between Bori Bunder (Mumbai) and Thane**, covering 34 km. This marked the beginning of passenger railway services in India.
- **1854: The Thane viaducts, India's first railway bridges**, were built over Thane creek as the Mumbai-Thane line was extended to Kalyan.
- **1873-1874: Horse-drawn tram services were introduced in Calcutta and Bombay**, enhancing urban transportation in these cities.
- **The Railway Board was established in 1905**, on the recommendations of the Sir Thomas Robertson Committee regarding the administration and working of the railways.
- **1925: The first electric passenger train in India** ran between Victoria Terminus and Kurla, showcasing the adoption of electric traction technology.
- **1951: The organization of Indian Railways into regional zones began** with the creation of Southern, Central, and Western zones, streamlining operations and management. Currently 19 Zones.
- **1956: The introduction of the fully air-conditioned train, Poorva Express, between Howrah and Delhi**, marked a significant milestone in passenger comfort.
- **1986-2000: Various technological advancements were made**, including computerized ticketing, the introduction of the Shatabdi Express, the deployment of air-conditioned coaches, and the launch of the official Indian Railways website.
- **2017: Indian Railways announced ambitious plans for complete electrification of the rail network by 2022-2023 and a commitment to becoming a net-zero carbon emission railway by 2030**, reflecting a shift towards sustainable practices.





Vivek Bhasin

- Senior nuclear scientist **Vivek Bhasin** assumed charge as the **director of Bhabha Atomic Research Centre (BARC)**.
- He succeeds Ajit Kumar Mohanty, who was appointed as the Secretary, of the Department of Atomic Energy and Chairman Atomic Energy Commission earlier this year.
- **The Bhabha Atomic Research Centre (BARC), founded by Dr. Homi Jehangir Bhabha in 1954**, is a multidisciplinary research institution based in Trombay, Mumbai, dedicated to advancing nuclear science and technology for peaceful applications and societal betterment.



Geetika Srivastava

- Geetika Srivastava, a 2005 batch **Indian Foreign Service (IFS) officer**, has been appointed as India's charge d'affaires at its High Commission in Islamabad, Pakistan.
- **The appointment is significant as it marks the first time a female diplomat will lead India's representation in Pakistan**, breaking new ground in diplomatic history between the two countries.
- Geetika Srivastava's role as India's charge d'affaires highlights the evolving dynamics and increasing representation of women in diplomatic roles, emphasizing diplomatic diversity and gender equality in the Indian Foreign Service.



NV Ramana

- **Former Chief Justice of India (CJI) NV Ramana** has been appointed as a member of the **International Mediator Panel**, a prestigious recognition, by the **Singapore International Mediation Centre (SIMC)**.
- NV Ramana's appointment highlights his stature in the field of law and mediation, as well as India's representation in international dispute resolution, showcasing global recognition of Indian legal expertise.
- As a member of the International Mediator Panel, NV Ramana will contribute to mediating international disputes, furthering India's presence in the realm of international mediation and promoting peaceful resolution mechanisms





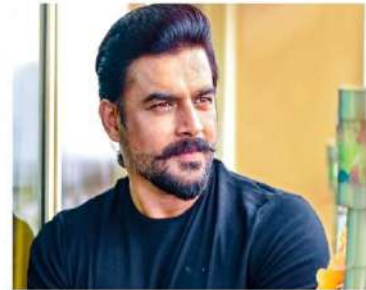
Tharman Shanmugaratnam

- **Tharman Shanmugaratnam's election as Singapore's 9th President marks a historic moment as the first non-Chinese and Indian-origin president, emphasizing inclusivity and meritocracy in leadership.**
- His background as a respected economist and former senior minister showcases his expertise in economic policy, commitment to social justice, and significant contributions to shaping Singapore's foreign policy.
- Tharman's presidency signifies Singapore's shift towards embracing diverse leadership, highlighting the nation's readiness for leaders of varied ethnic backgrounds based on merit and experience.



R Madhavan

- **R Madhavan has been appointed as the new president of the Film and Television Institute of India (FTII) and chairman of the governing council.** He replaces filmmaker Shekhar Kapur, whose tenure ended in March 2023.
- Madhavan is a well-known and respected actor in India, with a career spanning over two decades. He has starred in many successful films, including "3 Idiots," "Tanu Weds Manu," and "Rang De Basanti." He also recently directed and starred in the biopic "Rocketry: The Nambi Effect."
- Madhavan's appointment as FTII president has been welcomed by many in the Indian film industry. They believe that his experience and passion for cinema will help him to guide the institute into a new era.



11

AWARDS

Ravi Kannan

- **Oncologist Dr. Ravi Kannan from Assam, India, receives the 2023 Ramon Magsaysay award** for his exceptional efforts in offering free or affordable cancer treatment to rural communities.
- He transformed cancer treatment in Assam through Cachar Cancer Hospital, providing comprehensive care, pro-poor initiatives, and decentralized services, benefiting thousands of economically disadvantaged patients.



Ramon Magsaysay Award

- It was **established in 1957 and named after Philippines President Ramon Magsaysay**, recognizing exceptional contributions to public service across diverse fields, and emphasizing selfless dedication to societal betterment in various categories.
- It honours outstanding individuals and groups for selfless dedication to societal betterment, **awarding them a cash prize of US\$50,000** and a medallion.
- It recognizes outstanding contributions in categories such as Government Service, Public Service, Community Leadership, Journalism, Literature, Creative Communication Arts, Peace and International Understanding, and honors young leaders and independent voices, highlighting impactful work that fosters positive change and societal betterment.

Indian Recipients of the Ramon Magsaysay Award

Name of the Recipient	Year Awarded	Awarded For
Vinobha Bhave	1958	Community Leadership
Chintaman Deshmukh	1959	Government Services
Amitabha Chowdhury	1961	Journalism, Literature and Creative Communication Arts
Mother Teresa	1962	Peace and International Understanding
Dara Khurody	1963	Community Leadership
Vergheze Kurien	1963	Community Leadership
Tribhuvandas Patel	1963	Community Leadership
Welthy Fisher	1964	Peace and International Understanding
Jayaprakash Narayan	1965	Public Service
Kamaladevi Chattopadhyay	1966	Community Leadership
Satyajit Ray	1967	Journalism, Literature and Creative Communication Arts
Moncompu Sambasivan Swaminathan	1971	Community Leadership
M.S. Subbalakshmi	1974	Public Service
Boobli George Vergheze	1975	Journalism, Literature and Creative Communication Arts
Henning Holck-Larsen	1976	Peace and International Understanding



Ela Ramesh Bhatt	1977	Community Leadership
Mabelle Arole	1979	Community Leadership
Rajanikant Arole	1979	Community Leadership
Gour Kishore Gosh	1981	Journalism, Literature and Creative Communication Arts
Pramod Karan Sethi	1981	Community Leadership
Chandi Prasad Bhatt	1982	Community Leadership
Manibhai Desai	1982	Public Service
Arun Shourie	1982	Journalism, Literature and Creative Communication Arts
Rasipuram Lakshman	1984	Journalism, Literature and Creative Communication Arts
Muralidhar Amte	1985	Public Service
Lakshmi Chand Jain	1989	Public Service
K.V. Subbanna	1991	Journalism, Literature and Creative Communication Arts
Ravi Shankar	1992	Journalism, Literature and Creative Communication Arts
Banoo Jehangir Coyaji	1993	Public Service
Kiran Bedi	1994	Government Services
Pandurang Athavale	1996	Community leadership
Tirunellai Seshan	1996	Government Services
Maheshweta Devi	1997	Journalism, Literature and Creative Communication Arts
Jockin Arputham	2000	Peace and International Understanding
Aruna Roy	2000	Community Leadership
Rajendra Singh	2001	Community Leadership
Sandeep Pandey	2002	Emergent Leadership
James Michael Lyngdoh	2003	Government Services
Shantha Sinha	2003	Government Services
Lakshminarayan Ramdas	2004	Peace and International Understanding
V. Shantha	2005	Public Service
Arvind Kejriwal	2006	Emergent Leadership
Palagummi Sainath	2007	Journalism, Literature and Creative Communication Arts
Mandakini Amte, Mr. Prakash Amte	2008	Community Leadership
Deep Joshi	2009	Community Leadership
Neelima Mishra	2011	Emergent Leadership
Harish Hande	2011	Community Leadership
Kulandei Francis	2012	Emergent Leadership
Anshu Gupta & Sanjiv Chaturvedi	2015	Emergent Leadership
Bezwada Wilson, Thodur Madabusi Krishna	2016	Human rights activist, Carnatic music
Bharat Vatwani, Sonam Wangchuk	2018	Restoring health and dignity to troubled lives, Education for community progress
Ravish Kumar	2019	Journalist



Ravi Kannan R

2023

Healthcare

Ramon Magsaysay Award 2023

- In the 65th edition of the ceremony, **four outstanding individuals from Asia were honoured** with the prestigious Ramon Magsaysay Award.
- The awardees for this year include Korvi Rakshand from Bangladesh, Eugenio Lemos from Timor-Leste, Miriam Coronel-Ferrer from the Philippines, and Dr. Ravi Kannan R. from India.
- In addition to the recognition, each recipient received a certificate, a medallion bearing the image of the late President Ramon Magsaysay, and a monetary prize of USD 50,000.

Honoree Name	Country	Remarkable Endeavors
Dr. Ravi Kannan R.	India	Immense commitment to medicine emphasizing holistic care and patient-first treatment
Korvi Rakshand	Bangladesh	Pioneering efforts in inclusive education for disadvantaged children in Bangladesh
Eugenio Lemos	Timor-Leste	Influencing the perspective of young Timorese about their environment and cultural surroundings
Miriam Coronel-Ferrer	Philippines	Firm conviction in the transformative potential of non-aggressive methods in building peace

Dr P V Satyanarayana

- Dr. P V Satyanarayana**, a Principal Scientist at Acharya N.G. Ranga Agricultural University, Ragolu, received the 8th **Dr. MS Swaminathan Award for his outstanding contributions to agriculture** in 2021-2022.
- The Dr. MS Swaminathan Award, presented at the Indian Institute of Rice Research (IIRR) in Hyderabad, is a biennial national award honouring exceptional contributions to agriculture, including a cash prize and gold medal.

Swati Nayak

- Swati Nayak**, an Indian agriculture scientist known as "**Bihana Didi**" (Seed Lady) by local communities in Odisha, was awarded the prestigious **Norman E Borlaug Award for 2023**.
- Swati Nayak became the third Indian agriculture scientist to receive the Norman E Borlaug Award in 2023. The other two Indian recipients of this award were Aditi Mukherji in 2012 and Mahalingam Govindaraj in 2022.
- Nayak's work with the International Rice Research Institute (IRRI) focused on introducing drought-tolerant Shahabhazi Dhan rice varieties in Odisha. This initiative significantly impacted rainfed areas by providing farmers with a resilient rice variety.



Norman E. Borlaug Award

- The Norman E. Borlaug Award, presented annually by the World Food Prize Foundation, recognizes exceptional scientists under 40 actively engaged in addressing global challenges related to food and nutrition security, as well as the eradication of hunger, honouring their direct work with rural communities.
- Named in memory of Dr. Norman E. Borlaug, a Nobel laureate agronomist and the chief architect of the Green Revolution, the award includes a diploma featuring Dr. Borlaug's image and a cash prize of \$10,000.



Waheeda Rehman

- Veteran actor **Waheeda Rehman** to receive **Dadasaheb Phalke Lifetime Achievement Award** for her contribution to Indian cinema.
- The Dadasaheb Phalke Award, India's highest cinema honour, is presented annually at the National Film Awards ceremony, bestowed by the Directorate of Film Festivals, Ministry of Information and Broadcasting.



India's official entry to Oscars 2024

- The Malayalam survival drama film "2018-Everyone is a Hero" has been selected as India's official entry to the Best Foreign Language Film category at the 96th Academy Awards in 2024.
- The film is set during the devastating floods that hit Kerala in 2018. It tells the story of a group of ordinary people who come together to rescue and help their fellow citizens.
- The film has been praised for its realistic portrayal of the floods and its heartwarming stories of human resilience.



SASTRA Ramanujan Prize

- **Dr. Ruixiang Zhang** to receive the prestigious **2023 SASTRA Ramanujan Prize** for his exceptional contributions to the field of mathematics.
- Dr Zhang is known for his significant contributions across various mathematical domains. His work spans analytic number theory, combinatorics, Euclidean harmonic analysis, and geometry.

Srinivasa Ramanujan

- Ramanujan, despite lacking formal training, made groundbreaking contributions to mathematics at Cambridge, especially in number theory, infinite series, and mathematical analysis, notably advancing partition functions, mock theta functions, and modular forms, leaving an enduring impact on the field.
- Ramanujan, one of the youngest Fellows of the Royal Society and the first Indian Fellow of Trinity College, Cambridge, tragically passed away in 1920 at the age of 32, leaving behind a legacy of profound mathematical contributions.

MATHEMATICIAN RUIXIANG ZHANG TO RECEIVE 2023 SASTRA RAMANUJAN PRIZE



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I had joined their Interview guidance Programme. The materials provided during the Mock interview was really helpful.

Thank you for your help.

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12

IMPORTANT DAYS

National Nutrition Week

- **National Nutrition Week is marked annually from September 1 to September 7**, emphasizing the significance of consuming nutritious foods for overall well-being.
- The **theme for National Nutrition Week 2023 is "Healthy Diet Gaining Affordable for All,"** aiming to make nutritious food options accessible to everyone, promoting both health and affordability.
- Established in 1975 by the American Dietetic Association (now the Academy of Nutrition and Dietetics), National Nutrition Week serves to raise awareness about the importance of nutrition-rich foods, advocating for healthier dietary choices among individuals and communities.

Nutrition

- Nutrients are substances in food that the body needs to function properly. They are essential for building and repairing tissues, providing energy, and regulating body processes.
- There are two main types of nutrients: macronutrients and micronutrients.

Macronutrients

- **Carbohydrates are the body's main source of energy.** They are found in foods such as bread, pasta, rice, cereal, fruits, and vegetables.
- **Proteins are the building blocks of muscles, bones, and other tissues.** They are found in foods such as meat, poultry, fish, eggs, dairy products, legumes, and nuts.
- **Fats provide energy and help the body absorb certain vitamins.** They are also important for cell growth and hormone production. Fats are found in foods such as oils, butter, nuts, seeds, and avocados.

Micronutrients

- **Vitamins are essential for many different bodily functions, such as cell growth, immune function, and vision.** Vitamins can be found in a variety of foods, including fruits, vegetables, whole grains, and dairy products.
- **Minerals are also essential for many different bodily functions, such as bone health, muscle function, and nerve function.** Minerals can be found in a variety of foods, including fruits, vegetables, whole grains, dairy products, nuts, and seeds.

Teachers' Day

- **Teachers' Day in India on September 5th commemorates Dr. Sarvepalli Radhakrishnan's birth**, highlighting his advocacy for education and the pivotal role of teachers in shaping the nation's future.
- Dr. Sarvepalli Radhakrishnan, after a distinguished academic career, held key diplomatic roles, was a member of the Constituent Assembly of India, and served as India's first Vice President from 1952 and second President from 1962 to 1967.

International Day of Clean Air for Blue Skies

- The **United Nations General Assembly designated September 7 as the International Day of Clean Air for Blue Skies** to foster global cooperation in enhancing air quality and mitigating air pollution, with its inaugural observance taking place on September 7, 2020.
- The **theme for this year is "Together for clean air,"** emphasizing the need for enhanced partnerships, investments, and shared responsibility to address air pollution and public health risks, with a focus on regional cooperation due to the transboundary nature of air quality.

Rayleigh Scattering

- The sky appears blue during the day because of Rayleigh scattering. Sunlight contains different wavelengths of light, with shorter wavelengths like blue and violet being scattered more by the tiny molecules in the atmosphere. This scattering causes blue light to be more prominent, giving us a blue sky on clear days.
- On cloudy days, the sky may appear less blue because clouds consist of larger water droplets that scatter all wavelengths of light equally, making the sky appear white.
- During sunrise and sunset, sunlight has to pass through more of the atmosphere. Most of the blue light is scattered away by the time it reaches our eyes, leaving longer wavelengths like red and orange, which is why we often see red or orange hues during these times.
- Rayleigh scattering also plays a role in the blue colour of the ocean. Water molecules in the ocean scatter blue light more than other colours, giving the ocean a blue appearance on sunny days.

World Physical Therapy Day

- World Physical Therapy Day, observed on September 8th annually, recognizes the crucial role of physical therapy and physiotherapists in enhancing health and well-being worldwide.
- It was established by the World Confederation for Physical Therapy in 1996.
- The theme for World Physiotherapy Day 2023 is "Prevention and Management of Osteoarthritis."

World Literacy Day

- World Literacy Day, also known as International Literacy Day, is commemorated globally on the 8th of September each year, highlighting the critical importance of literacy in individuals' lives and society as a whole.
- The theme for World Literacy Day 2023 is "Promoting literacy for a world in transition: Building the foundation for sustainable and peaceful societies," emphasizing literacy's role in fostering stability, sustainability, and peace in a rapidly changing world.
- In 1966, UNESCO (United Nations Educational, Scientific and Cultural Organization) declared September 8th as World Literacy Day to raise awareness about literacy as a fundamental human right, emphasizing its significance in upholding dignity and human rights for all people.

Literacy in India

- According to the 2011 Census of India, the overall literacy rate in India is 74.04%, with 82.14% for males and 65.46% for females.
 - Kerala has the highest literacy rate at 93.91%, followed by Lakshadweep (92.28%) and Mizoram (91.58%).
 - Bihar has the lowest literacy rate at 63.82%, followed by Arunachal Pradesh (66.95%) and Rajasthan (67.06%).
- The Union government has implemented a number of initiatives to improve literacy rates, including the Sarva Shiksha Abhiyan (SSA) and the Right to Education Act (RTE).
- The SSA is a universal elementary education program that aims to provide free and compulsory education to all children aged 6 to 14. The RTE guarantees free and compulsory education to all children aged 6 to 14.





Hindi Diwas

- India observes Hindi Diwas on September 14th each year, commemorating the adoption of Hindi in the Devanagari script as one of the official languages of the nation.
- The Constituent Assembly of India, on September 14, 1949, formally recognized Hindi as the official language for central government and Union purposes, a decision enshrined in Article 343 of the Indian Constitution.
- Hindi Diwas holds cultural significance, celebrating India's linguistic diversity and reinforcing the importance of Hindi in the country's identity and administrative functions



Key Information

- **Hindi is not the national language of India.** India does not have a national language.
- Hindi and English are the two official languages of the Indian government.
- **Hindi is the third most spoken language in the world, after Chinese, and English.**
- Hindi is written in the Devanagari script.

World Lymphoma Awareness Day

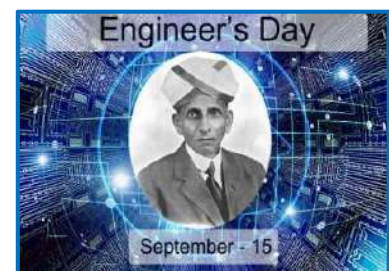
- **World Lymphoma Awareness Day, observed annually on September 15th,** aims to raise awareness about lymphoma, a cancer that impacts the lymphatic system.
- **The theme for World Lymphoma Awareness Day in 2023, "We Can't Wait to Focus on Our Feelings,"** underscores the psychological and emotional challenges experienced by lymphoma patients.

Cancer

- **Cancer is a group of diseases involving abnormal cell growth** with the potential to invade or spread to other parts of the body. These abnormal cells are often called cancer cells or malignant cells.
- **Cancer can start almost anywhere in the body.** It occurs when healthy cells change their DNA and start to grow uncontrollably. These cells can form tumours, which are lumps of tissue. **Tumors can be cancerous or not cancerous (benign).**
- Cancerous tumors spread into, or invade, nearby tissues and can travel to distant places in the body to form new tumors (a process called metastasis).

Engineer's Day

- **Engineer's Day in India, observed on September 15,** pays tribute to the contributions of the renowned civil engineer Bharat Ratna Sir Mokshagundam Visvesvaraya, born in 1861.
- **Sir M. Visvesvaraya, an eminent Indian engineer and statesman,** made significant contributions to irrigation projects, hydroelectric power generation, and Mysore state planning, playing a crucial role in India's development.
- **He authored two important books, "Reconstructing India" and**





"Planned Economy of India," published in 1920 and 1934, respectively.

World Ozone Day

- On September 16, the world observes World Ozone Day, also known as the International Day for the Preservation of the Ozone Layer.
- The theme for World Ozone Day 2023 is "Montreal Protocol: fixing the ozone layer and reducing climate change".

Ozone (O₃)

- **Ozone (O₃) is a molecule consisting of three oxygen atoms** and is naturally found in the Earth's atmosphere, particularly in the stratosphere, where it forms the ozone layer. This layer absorbs harmful ultraviolet (UV) radiation from the Sun, protecting life on Earth. However, ozone in the troposphere, the lower atmospheric layer, can be a pollutant causing health issues.
- **Ozone in the stratosphere is created through a chemical reaction between oxygen molecules and UV radiation from the Sun.** While it can be destroyed as well, the production typically outpaces destruction, maintaining the stability of the ozone layer.
- Human activities, such as releasing ozone-depleting substances (ODS) like **chlorofluorocarbons (CFCs), halons, and carbon tetrachloride, can harm the ozone layer** by breaking down ozone molecules, leading to its thinning. Thinning allows more UV radiation to reach the Earth's surface, which increases the risk of health problems and damages plants and animals.
- The **Montreal Protocol, signed in 1987, is an international treaty that phased out the production and use of ODS, contributing to the gradual recovery of the ozone layer.**

International Day of Peace

- The **International Day of Peace is observed worldwide on September 21 each year**, promoting the importance of peace and highlighting efforts to reduce conflict and violence globally.
- The **theme for this year, "Actions for Peace: Our Ambition for the #GlobalGoals,"** emphasizes the collective commitment to achieving peace and working towards the United Nations' Sustainable Development Goals.
- The United Nations General Assembly established the International Day of Peace to strengthen the ideals of peace and encourage cooperation among nations, aiming to foster a culture of peace and understanding among people.



International Day of Sign Language

- **International Day of Sign Languages 2023 was celebrated on September 23rd with the theme "A World Where Deaf People Everywhere Can Sign Anywhere!"**
- The focus was on promoting sign language access and inclusion for the deaf community, emphasizing their right to use sign language in all aspects of life.
- World Sign Language Day was officially established by the United Nations General Assembly in 2017.



World Tourism Day

- **World Tourism Day is observed globally on September 27 each year**, emphasizing the economic and social importance of tourism.



- **The 2023 theme, "Tourism and Green Investments,"** highlights the potential of tourism as a force for positive change when it aligns with environmental and social sustainability goals, encouraging responsible travel practices.
- The day serves as a platform to raise awareness about the positive impacts of tourism, emphasizing its role in fostering sustainable development and promoting cultural exchange among nations.

World Environmental Health Day

- **World Environmental Health Day is celebrated globally on September 26 each year,** dedicated to raising awareness about the profound impact of environmental health on people's overall well-being.
- The day emphasizes the critical relationship between environmental factors and human health, highlighting the importance of clean air, water, and other aspects of the environment in maintaining a healthy population.
- The 2023 theme, "Global Environmental Public Health: Standing up to protect everyone's Health each and every day," underscores the collective responsibility to safeguard public health through environmental awareness and action, promoting a healthier and more sustainable future for all.

World Maritime Day

- **World Maritime Day occurs on the last Thursday of September each year.** In 2023, it falls on Thursday, September 28th.
- **The theme for World Maritime Day 2023 is "MARPOL at 50 – Our commitment goes on,"** signifying the International Maritime Organization's enduring dedication to safeguarding the environment from the effects of shipping through a strong regulatory framework established over five decades.
- The theme underscores the organization's historical efforts in environmental preservation, emphasizing its ongoing commitment to this crucial work, and highlighting the importance of sustainable practices in the maritime industry.

Indian Maritime Sector

- **India boasts 12 major ports and approximately 200 non-major ports,** forming a significant part of the country's maritime infrastructure.
- The Indian shipping industry plays a vital role in the nation's economy, facilitating about 95% of trade by volume and 68% by value through maritime transport, underlining its critical importance in the country's trade and commerce.

World Heart Day

- **World Heart Day, observed on September 29 annually,** aims to raise awareness about cardiovascular disease and advocate for heart health on a global scale, emphasizing prevention and healthy lifestyle choices.
- **The theme for World Heart Day 2023, "Use Heart, Know Heart,"** underscores the importance of understanding heart health and making informed choices to prevent cardiovascular diseases.
- The first World Heart Day was observed in 1999 when the World Heart Federation (WHF) collaborated with the World Health Organization (WHO), marking the beginning of a joint effort to address the global burden of heart-related illnesses and promote heart-healthy living.



13

IMPORTANT GK FACTS IN NEWS

- The Boramdeo Wildlife Sanctuary in Chhattisgarh is named after the 11th-century Boramdeo Temple complex and serves as a vital tiger habitat and biodiversity hotspot in the region.
- Stem cells give rise to specialized cells and fall into two categories: **pluripotent stem cells found in embryos** and **induced pluripotent stem cells from mature adult cells**.
- Preeclampsia is a serious medical condition that can affect pregnant women after 20 weeks of pregnancy or after delivery. It is characterized by high blood pressure and protein in the urine.
- The rapid global spread of the "Pirola", a variant of COVID-19 with increased transmissibility and potential resistance to vaccines, is causing concern among health experts.
- The Justice Amitava Roy Committee was formed to examine and address the various problems affecting prisons in India. It was constituted by the Supreme Court of India in 2018.
- The Global Fund is vital in the global fight against HIV/AIDS, tuberculosis, and malaria, aligned with the United Nations' Sustainable Development Goals (SDGs), fostering multi-stakeholder collaboration, and mobilizing resources globally, headquartered in Geneva, Switzerland.
- Meningococcal disease, a rare but serious bacterial illness, is spreading in Virginia (USA), causing symptoms such as high fever, severe headaches, neck stiffness, nausea, photophobia, mental confusion, and a non-blanching rash.
- ISRO has achieved a significant milestone by launching the Aditya L1 spacecraft, designed for Sun study from a distance of 1.5 million kilometres, requiring precise orbital manoeuvres and a unique mission mode.
- The PM-DAKSH Yojana in India, launched in 2020-21, aims to enhance the employability of target groups for socio-economic development, fostering self-employment and wage-employment opportunities.

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- **Article 1 of the Indian Constitution was drafted to read, "India, that is Bharat, shall be a Union of States."** The inclusion of both 'India' and 'Bharat' in Article 1 of the Indian Constitution signifies the intricate historical and cultural considerations that shaped the document's drafting.
- **The Kuiper Belt, a cold, doughnut-shaped region beyond Neptune,** is a source of short-period comets and home to icy objects like Pluto, Eris, and Haumea, representing remnants from the early solar system and an ongoing area of astronomical exploration.
- The Periodic Labour Force Survey (PLFS) is a quarterly survey of the Indian population to estimate key employment and unemployment indicators. It was **launched in 2017-18 by the Ministry of Statistics and Programme Implementation (MOSPI).** The PLFS is **conducted by the National Sample Survey Office (NSSO)** on a sample basis of households in both rural and urban areas.
- The Incremental Cash Reserve Ratio (ICRR) is a temporary measure by the Reserve Bank of India (RBI) to manage liquidity, help control inflation and stimulate economic growth.
- Meniere's disease is thought to result from fluid accumulation in the inner ear, known as the labyrinth, disrupting the balance and hearing signals between the inner ear and the brain.
- D'Ering Memorial Wildlife Sanctuary in Arunachal Pradesh, housing diverse wildlife including tigers, leopards, red pandas, etc.
- Plant-based polyphenols like tannic acid in Chestnut and Oak twigs offer a promising, safe solution for combating Alzheimer's disease.
- The Dividend Distribution Tax (DDT) in India, introduced in 1997, was a tax levied on Indian corporations for distributing dividends to shareholders; however, it was eliminated in the 2020 budget, shifting the taxation burden to individual investors.
- The Jal Jeevan Mission (JJM) is a flagship program of the Union Ministry of Jal Shakti aimed at providing safe and adequate drinking water to every rural household in India by 2024, launched in August 2019, and focusing on the principle of 'Har Ghar Jal' for improving rural life and health.
- **The Bagmati River, a transboundary river between Nepal and India,** starts in Kathmandu, Nepal, and ends in Bihar, India, spanning a total length of 3 km, and is considered sacred by Hindus and Buddhists.
- **West Bengal has the highest number of elephant corridors in India,** with 26 out of the 150 identified nationwide, according to a recent report by the Ministry of Environment and Forests.
- The Sardar Sarovar Dam (SSD) on the Narmada River in Gujarat's Kevadia is India's third-highest concrete gravity dam, and it ranks second globally in terms of concrete volume after the Grand Coulee Dam in the United States.
- **The Cauvery Water Dispute involves Tamil Nadu, Kerala, Karnataka, and Puducherry,** revolving around the allocation of Cauvery River water for agriculture, drinking water, and industrial purposes, leading to a prolonged disagreement.
- **The Rafflesia flower is the largest individual flower in the world.**
- **Nuakhai is a festival celebrated in the western districts of Odisha** where the first produce of the field is offered to the goddess and people seek the blessings of elders in each household.
- The free movement regime along the India-Myanmar border enables residents from both countries in border regions to travel 16 kilometres into each other's territory without documentation.
- **A dead zone is a region of an ocean or lake where the oxygen concentration is so low** that most marine life cannot survive. Dead zones are also known as hypoxic zones.
- **The Five Eyes, founded in 1941, is an intelligence alliance comprising nations including Australia, Canada, New Zealand, the United Kingdom, and the US.**
- **Hirakud Dam in Odisha stands as the world's longest earthen dam,** controlling the Mahanadi River's flow and was inaugurated by Prime Minister Jawaharlal Nehru in 1957.
- **Semeru Volcano, Java's highest and most active volcano,** situated within Indonesia's seismic Ring of Fire, erupted recently.
- The Jhelum River, a significant Indus River tributary, originates from Verinag Spring in



Kashmir, flows through Srinagar and Wular Lake, carves a steep valley, and eventually merges with the Chenab River at Trimmu in Pakistan. Major tributaries include the Kishenganga and Kunhar Rivers.

- The **Argyle mine in Australia was the world's largest producer of pink diamonds**, accounting for over 90% of the global supply. The mine closed in 2020, and as a result, the supply of pink diamonds has decreased significantly.
- **Polycystic ovary syndrome (PCOS) is a prevalent hormonal disorder in women**, affecting up to 10% of those of childbearing age, characterized by imbalances in hormones regulating menstrual cycles, ovulation, and various bodily functions.
- The annular solar eclipse, often called the "ring of fire" eclipse, occurs when the moon, appearing smaller, doesn't entirely cover the

sun due to its position in the farthest point of its orbit.

- Caribbean box jellyfish are barely a centimetre long and have no brain.
- **Mukurthi National Park is located in the Nilgiri Hills in the Western Ghats mountain range** of India. It is known for its high-altitude grasslands, sholas, and diverse wildlife, including the endangered Nilgiri tahr.
- An angel investor is a wealthy individual who provides capital to early-stage startups in exchange for equity.
- Chincholi Wildlife Sanctuary in Karnataka.
- **The Pink Bollworm is a highly destructive pest of cotton**, originating in India and now found worldwide, causing substantial economic losses by damaging cotton bolls through feeding, reducing yield and quality.
- The **Multipurpose Seaweed Park in Tamil Nadu** is India's first Fisheries Aquapark.

14**BOOSTER DOSE**

- Major electronics companies including Asus and Dell have applied for India's Production Linked Incentive (PLI) scheme, designed to enhance domestic laptop manufacturing and attract significant investments in the IT hardware sector.
- The Indian Space Research Organisation's Liquid Propulsion Research Centre has successfully tested the CE-20 cryogenic rocket engine for 'Mission Gaganyaan,' aiming to send humans to space in 2024 for a three-day stay in a 400 km orbit.
- **The United Nation's "funga" initiative aims to elevate the awareness of fungi's importance in ecosystems and human life, alongside "flora and fauna."**
- ENTAZIA biofungicide by FMC India, offers farmers an effective and sustainable solution for crop protection against fungal diseases.
- The Union Education Minister announced that the National Council of Educational Research and Training (NCERT) have been granted deemed university status.
- The Indian government has established a committee headed by former **President Ram**

Nath Kovind to explore the feasibility of implementing "one nation, one election" to synchronize Lok Sabha (national) and state assembly elections in India.

- The Ministry of Jal Shakti's 6th census report on minor irrigation schemes shows a 6.9% increase in Groundwater (GW) schemes and a 1.2% increase in Surface Water (SW) schemes at the national level.
- The third unit of the indigenous 700-MWe nuclear power reactor at Gujarat's Kakrapar Atomic Power Project (KAPP3) has begun operating at full capacity.
- The Indian government has exempted imports of LPG, liquified propane, and liquified butane from the 15% Agriculture Infrastructure Development Cess (AIDC) starting from September 1.
- **The first of five Diving Support Crafts (DSC), "DSC A 20," was launched at Titagarh, West Bengal**, and designed for operational and training diving operations in harbours and coastal waters.
- The **Indian Air Force initiated its annual mega training exercise Trishul**, featuring various fighter aircraft, transport planes,



choppers, and Garud Special Forces to showcase the utilization of air power.

- The Indian Navy has finalized the Maritime Infrastructure Perspective Plan (MIPP) to accelerate coastal and island territory infrastructure development, aligning with operational needs and government directives, up to 2027.
- **National Carbon Registry by the United Nations Development Programme (UNDP)**, accredited as a digital public good (DPG), provides open-source software for streamlined carbon credit data and process management.
- Teachers' Day, celebrated on September 5th, honours Dr Sarvepalli Radhakrishnan and recognizes the invaluable impact teachers have on their students' lives.
- The UN's **Zero Draft Treaty on plastic pollution aims to cover the "full life cycle of plastics,"** from extraction of raw materials to disposal, but some member states are seeking further clarification on its scope.
- **Zealandia, a once-submerged continent** the size of Australia, has been confirmed by scientists, **with its above-water parts forming New Zealand's north and south islands and New Caledonia.**
- The WHO Traditional Medicine Global Summit 2023 in Gujarat, India, concluded with the "Gujarat Declaration," reaffirming global commitments to indigenous knowledge, biodiversity, and traditional, complementary, and integrative medicine (TCIM).
- The Union Minister for Education and Skill Development & Entrepreneurship has inaugurated the **Malaviya Mission - Teachers Training Programme** in New Delhi.
- Leading banks like **State Bank of India and Bank of Baroda have introduced UPI interoperability** on their digital rupee apps, **enabling customers to use any UPI-enabled app for seamless transactions,** streamlining payments via a single QR code that works with both UPI and RBI's digital rupee.
- The **Kh-47M2 Kinzhal is a Russian hypersonic air-launched ballistic missile** designed to hit NATO warships and missile defence systems, with a range of 1,500–2,000 km and speeds up to Mach 10.
- SEBI (Securities and Exchange Board of India) to launch a One-hour trade settlement system by March next year for instant fund and securities transfer.
- Astronomers have discovered evidence of an Earth-like planet within the **Kuiper Belt, a region in our solar system 30 to 50 astronomical units from the Sun,** containing remnants from the early days of the solar system's formation.
- Comet Nishimura (C/2023 P1) was discovered by astronomer Hideo Nishimura in mid-August and it made a close approach to Earth on September 12, reaching as close as 125 million kilometers away from us.
- The **Geographical Indications (GI) tag for 'Koraput Kalajeera Rice'** celebrates the unique agricultural heritage of **Odisha's Koraput district.**
- The unemployment rate in India was 6.1% in 2017, the highest recorded, and it decreased to 4.1% in the Periodic Labour Force Survey (PLFS) of 2021-22, reflecting a notable decline.
- **'Project Naman' is an Indian Army initiative aimed at offering support to ex-servicemen and the families of martyrs,** focusing on rehabilitation, reintegration, and honouring the sacrifices of soldiers.
- The International Day of Clean Air for Blue Skies, designated by the UN on September 7, aims to enhance global collaboration to improve air quality and reduce pollution.
- The Indian Army is procuring 170 Armoured Recovery Vehicles in collaboration with the Defence Research and Development Organisation (DRDO) and Bharat Earth Movers Limited (BEML) as part of the 'Make in India' and 'Atmanirbhar Bharat' initiatives.
- The Reserve Bank of India (RBI) has revealed that the issue price for the September 2023 series of Sovereign Gold Bonds (SGB) will be ₹5,923 per gram.
- India's cotton production is grappling with the pink bollworm, a formidable pest that conventional control methods like pesticides and genetically modified seeds have struggled to curb effectively.
- Crude oil prices surged to a nearly 10-month high, with Brent crude surpassing \$90 per barrel in 2023 amid expectations of high demand and tightening supply.



- Scientists found unique greenish crystal-containing rocks in the Sahara Desert, identifying them as fragments of the Erg Chech 002 meteorite, the oldest volcanic rock known at approximately 4.5 billion years.
- August rainfall was the lowest in almost a century, with India receiving 36% less than typical for the month.
- **The 18th East Asia Summit (EAS) was held on September 7, 2023, in Jakarta, Indonesia.** The summit was chaired by Indonesian President Joko Widodo. The EAS is a regional forum for dialogue and cooperation among 18 countries in the East Asia region
- The Reserve Bank of India (RBI) has proposed setting up a Self Regulatory Organisation (SRO) for fintechs to address several key objectives and concerns within the fintech industry.
- The RBI implemented the I-CRR (Incremental Cash Reserve Ratio) temporarily to counter excess liquidity stemming from factors like the return of Rs 2,000 notes to the banking system and other contributing factors.
- **SBI has launched the "RuPay NCMC Prepaid Card"** to streamline digital fare payments for multiple modes of transportation, including metro, buses, water ferries, parking, and more, using a single card.
- Scientists have generated a lab-based model of a human embryo using stem cells, bypassing the need for sperm and egg cells by guiding the stem cells to differentiate into embryo-like structures via specific chemicals.
- The discovery of Fujianvenator prodigiosus, a bird-like dinosaur in southeastern China's Fujian Province dates back to the Jurassic Period.
- The **Digital Markets Act (DMA) is a European Union regulation**, that promotes competition in European digital markets by preventing market power abuse by large companies and facilitating entry for new players, ensuring a fair "level playing field.
- A significant earthquake with its epicentre in the Ighil area near Marrakesh, Morocco, was felt across the country and even reached southern Spain.
- The Tonga Islands, situated along the Ring of Fire, experienced a significant undersea volcanic eruption, characterized by its high explosiveness due in part to fuel-coolant interactions.
- Prime Minister Narendra Modi announced the India-Middle East-Europe Mega Economic Corridor at the G20 summit, involving India, UAE, Saudi Arabia, the European Union, France, Italy, Germany, and the United States.
- UK Prime Minister Rishi Sunak and his wife Akshata Murty visited the Akshardham Temple in Delhi.
- The Indian Coast Guard participated in the 19th Heads of Asian Coast Guard Agencies Meeting (HACGAM) at Istanbul, Türkiye.
- The United Nations Food and Agriculture Organization (FAO) reported that the world food price index for food commodities fell to a new two-year low in August.
- The International Treaty on Plant Genetic Resources for Food and Agriculture hosted a global symposium on farmers' rights, inaugurated by the President of India, to discuss challenges and opportunities in the worldwide implementation of farmers' rights.
- **Italy is planning to leave China's Belt and Road Initiative (BRI).**
- Saudi Arabia's Crown Prince Mohammed bin Salman Al Saud and Prime Minister Narendra Modi held talks, agreeing to enhance trade and security cooperation while co-chairing the inaugural summit-level meeting of the India-Saudi Arabia Strategic Partnership Council (SPC).
- **Novak Djokovic clinched his fourth US Open title, defeating Daniil Medvedev and securing his 24th Grand Slam singles championship, equaling Margaret Court's record** for the most Grand Slam victories in the Open Era, and becoming the oldest men's champion in the history of the US Open.
- Salem sago, extracted from palm tree pith, receives the Geographical Indication (GI) tag (Salem district of Tamil Nadu).
- The 2022 Shanti Swarup Bhatnagar Prize honoured 12 male scientists from diverse scientific fields for their outstanding contributions.
- The Assam government, in collaboration with Patanjali Food Limited (PFL), has launched a large-scale oil palm plantation project covering 370,000 hectares to support self-reliance in edible oil production.



- The Ministry of Education (MoE) is launching **Vidya Samiksha Kendras (VSKs)** as part of the National Digital Education Architecture (NDEAR) to establish a unified data platform **for monitoring and analyzing the impact of its schemes and initiatives.**
- The TTPs (tactics, techniques and procedures)-based cybercrime investigation framework tracks and classifies human-targeted cybercrimes, identifying evidence chains and mapping evidence to aid in convictions, specifically focusing on cases like insurance fraud and online matrimonial fraud.
- **The President of India has inaugurated the Ayushman Bhav campaign and portal,** a significant step towards Universal Health Coverage, enhancing accessibility and affordability of healthcare, especially for the underserved, aiming to ensure healthcare for all.
- Indian Air Force received the first C-295 Transport Aircraft from Spain, enhancing its tactical capabilities with its 9-tonne payload capacity and air-to-air refuelling capabilities.
- September 13, 2023, marks the 75th anniversary of Operation Polo, the Indian Army's military action that integrated the princely state of Hyderabad after Nizam's forces surrendered on September 18, 1948, following India's independence.
- World Physical Therapy Day, observed on September 8th annually, recognizes the crucial role of physical therapy and physiotherapists in enhancing health and well-being worldwide.
- World Duchenne Muscular Dystrophy Day on September 7th raises awareness and promotes initiatives to enhance the lives of those affected by this debilitating condition.
- **A new outbreak of the Nipah virus has been reported in Kerala.**
- The Union Minister of Ports, Shipping & Waterways and Ayush represented India at the 8th Eastern Economic Forum 2023 held in Vladivostok, Russia, from 10-13 September.
- The Indian government extends Pradhan Mantri Ujjwala Yojana (PMUY) for three more years, aiming to provide 75 lakh additional households with clean LPG connections, enhancing the health and well-being of women in rural and below-poverty-line households.
- **Hurricane Lee in the Atlantic Ocean has impacted Bermuda.**
- Hindi Diwas, observed on September 14th, marks the adoption of Hindi as an official language of India by the Constituent Assembly in 1949, celebrating the cultural and linguistic diversity of the nation.
- The first-ever MotoGP Bharat Grand Prix is held from September 22-24, 2023, at the Buddh International Circuit in Greater Noida, Uttar Pradesh.
- Skill India Digital (SID) is a transformative digital platform, serving as India's Digital Public Infrastructure, designed to revolutionize skills, education, employment, and entrepreneurship, launched by the Union Minister of Skill Development and Entrepreneurship.
- National Bank for Agriculture and Rural Development (NABARD) and the United Nations Development Programme (UNDP) have signed a MoU to collaborate on data-driven innovations in agriculture and food systems to benefit smallholder farmers.
- The Defence Acquisition Council (DAC) approved the acquisition of 12 Su-30 MKI fighter aircraft and indigenous Dhruvastra missiles for the Indian Air Force.
- The establishment of 31 GST appellate tribunal benches across India is aimed at streamlining the resolution of disputes related to Goods and Services Tax (GST).
- The "PM Vishwakarma" scheme, fully funded by the Union Government with an allocation of Rs 13,000 crore, aims to support traditional artisans, preserve cultural heritage, and promote local craftsmanship through financial assistance, skill upgradation, toolkit incentives, collateral-free credit, and marketing support.
- World Lymphoma Awareness Day is observed every year on September 15th to raise awareness about lymphoma, a type of cancer that affects the lymphatic system.
- **Engineer's Day is celebrated in India on September 15 every year to honour the contributions of Bharat Ratna Sir**



Mokshagundam Visvesvaraya, also known as Sir MV, who was born on this day in 1861.

- The 14th World Spice Congress (WSC) has begun in Vashi, Navi Mumbai, organized by the Spices Board India, under the Ministry of Commerce and Industry, in partnership with trade bodies and export forums.
- **The Unified Portal for Agricultural Statistics (UPAg Portal), launched by NITI Aayog, aims to address governance challenges in India's agriculture sector by improving data management for more efficient and responsive policy development.**
- INS Sumedha participated in Exercise Bright Star-23 alongside the navies of Egypt, Italy, Greece, Cyprus, and Qatar.
- Senior nuclear scientist **Vivek Bhasin has taken charge as the director of Bhabha Atomic Research Centre (BARC), succeeding Ajit Kumar Mohanty.**
- **Santiniketan, founded by Rabindranath Tagore, has been included in UNESCO's World Heritage List, acknowledging its global cultural and historical importance.**
- Starting from October 1, all births and deaths reported in the country will undergo digital registration through the Centre's portal.
- **The Vice President of India conferred the Sangeet Natak Akademi Amrit Awards upon 84 artists** in different performing arts disciplines, recognizing those aged over 75 without previous national honours, as a national tribute to performing artists, educators, and scholars in the field.
- Tungreshwar Wildlife Sanctuary also known as Tungreshwar National Park is **located on a plateau east of Vasai and Virar in Palghar district, north of Mumbai in Maharashtra.**
- The Defence Ministry has cleared the proposal of buying a regiment of Pralay tactical ballistic missiles for the Indian Army.
- Six hundred indigenously-manufactured self-neutralizing anti-tank mines, known as "Vibhav", have been inducted into the Army.
- The Parliament passed the women's Reservation bill, which seeks to reserve 33% of seats in Parliament and legislative Assemblies for women.
- **Sacred Ensembles of the Hoysalas are the 42nd UNESCO World Heritage List in India.** The three temples that make up the Sacred

Ensembles are all located in the state of Karnataka.

- The Kisan Rin Portal was launched recently, it is a digital platform aimed at helping farmers avail subsidised loans under the Kisan Credit Card (KCC) scheme. The launch event was attended by the Union Finance Minister and Union Agriculture Minister.
- **On September 16, World Ozone Day 2023 focuses on the theme "Montreal Protocol: fixing the ozone layer and reducing climate change."**
- The Matsya 6000, developed by the National Institute of Ocean Technology (NIOT) in Chennai, is a manned submersible created for the Samudrayaan program, enabling deep-sea mineral resource exploration and placing India among the six countries with crewed undersea expeditions exceeding 5,000 meters.
- The Bima Sugam platform aims to simplify the process of buying insurance policies and accessing insurance-related services by offering a one-stop solution for consumers and industry stakeholders.
- **The Indian Coast Guard carried out 'Operation Sajag,' a coastal security drill conducted along the Western Coast.**
- Germany pledged to contribute 40 million euros to the Global Biodiversity Framework Fund (GBFF).
- Dhruvastra, formerly Helina, is an indigenous helicopter-launched anti-tank guided missile system developed under the Integrated Guided Missile Development Program (IGMDP) by the Defence Research and Development Organisation (DRDO), recently approved by India's Defence Acquisition Council (DAC).
- Nagorno-Karabakh region has been a longstanding conflict zone between Azerbaijan and Armenia, triggering ongoing violence.
- **The Pandit Deendayal Upadhyay National Welfare Fund for Sportspersons (PDUNWFS) is a government initiative offering financial assistance to outstanding athletes, coaches, and their families, aiding with living conditions, medical expenses, injury rehabilitation, sports equipment, and support for national and international sports participation.**



- The **Weather Information Network Data Systems (WINDS) portal** by the Ministry of Agriculture and Farmers' Welfare, leverages advanced weather data analytics to provide critical weather information.
- Vanadium, a vital raw material for various industrial uses, has been discovered in sediment samples from the Gulf of Khambhat, opening into the Arabian Sea near Alang in Gujarat.
- The 'State of Working India 2023' report, released by Azim Premji University's Centre for Sustainable Employment, presents several key findings regarding India's labour market.
- The 30th edition of SIMBEX, held from 21 to 28 September 2023, emphasises the maritime partnership between Singapore and India.
- The Climate Ambition Summit 2023 was held on 20 September 2023 at the United Nations Headquarters in New York City. The summit was convened by UN Secretary-General António Guterres to accelerate climate action and deliver climate justice in line with his Acceleration Agenda.
- The President of India inaugurated the Annual General Meeting of the Asia Pacific Forum on Human Rights in New Delhi.
- The **Indian Government has introduced the "Rashtriya Vigyan Puraskar" (RVP)**, National Award in Science, Technology, and Innovation, to honour outstanding contributions by scientists, technologists, and innovators, fostering recognition and celebration of achievements in diverse domains of science and technology in India.
- **Swati Nayak, an Indian agriculture scientist known as "Bihana Didi" (Seed Lady) by local communities in Odisha, was awarded the prestigious Norman E Borlaug Award for 2023.**
- The Madhya Pradesh Government announced the establishment of the Veerangana Durgavati Tiger Reserve.
- Discovery of vB_HmeY_H4907, a virus found in the Pacific Ocean's deep trenches between Indonesia and Japan.
- International Day of Sign Languages 2023 was celebrated on September 23rd with the theme "A World Where Deaf People Everywhere Can Sign Anywhere!"
- **108-foot-tall statue of Adi Guru Shankaracharya in Omkareshwar, Khargone district of Madhya Pradesh.**
- The Shore Temple in Mamallapuram, a UNESCO World Heritage Site, has become India's first Green Energy Archaeological Site.
- The Indian Army and the United States Army are jointly hosting the 13th Indo-Pacific Armies Management Seminar (IPAMS) and Senior Enlisted Leaders Forum (SELF) conference with Chiefs of Armies and delegates from 35 countries in New Delhi from September 25th to 27th, 2023.
- PRIP (Promotion of Research and Innovation in Pharma MedTech Sector) scheme aims to transform India's pharmaceutical sector into an innovation-driven industry.
- Veteran actor Waheeda Rehman to receive Dadasaheb Phalke Lifetime Achievement Award for her contribution to Indian cinema.
- The Manipur government has extended the imposition of the Armed Forces (Special Powers) Act (AFSPA) for an additional six months, granting special powers to armed forces in the state.
- The 31st meeting of the Northern Zonal Council, chaired by the Union Home Minister, took place in Amritsar, Punjab, on September 26, 2023.
- **'Nabhmitra' device by ISRO (Indian Space Research Organisation), enables satellite-based two-way messaging for fishers, providing weather warnings** and allowing boats to send distress messages in the local language, enhancing safety at sea.
- The discovery of the low-density exoplanet TOI-1420 b by NASA's Transiting Exoplanet Survey Satellite (TESS) has provided valuable insights into the diversity of exoplanetary systems.
- The United Nations Population Fund (UNFPA) released a report in 2023, titled the "India Ageing Report," which highlights the significant demographic shift India is experiencing with an increasingly ageing population.
- **India secured the 40th position in the Global Innovation Index (GII) 2023, as per the ranking compiled by the World Intellectual Property Organization (WIPO).**



- India will host the first edition of the Global India AI 2023 Conference in October 2023, aiming to gather the world's best and brightest minds under one roof to deliberate the future of AI and its impact across various sectors.
- M. S. Swaminathan, the "Father of India's Green Revolution," passed away on September 28, 2023, at the age of 98, leaving behind a lasting legacy of transformative contributions to Indian agriculture and the welfare of farmers.
- Kongthong – the whistling village of Meghalaya – bagged the Best Tourism Village (Bronze) Award at the National Tourism Awards 2023 which was presented by the Ministry of Tourism.
- 28th September marked the 116th birth anniversary of Bhagat Singh.
- **Tripura introduced an e-cabinet system.** This system aims to make all future cabinet meetings in the state paperless.
- **Dr. Ruixiang Zhang is to receive the 2023 SASTRA Ramanujan Prize** for his exceptional contributions to the field of mathematics.
- **A professor at the University of Calcutta is creating a dictionary for a language spoken by around 1,600 people in parts of West Bengal bordering Bhutan, preserving this endangered linguistic heritage.**
- 'Sankalp Saptaah,' inaugurated by the Prime Minister, is a week-long initiative starting from October 3rd, 2023, aiming to consolidate strategies devised during chintan shivirs under the Aspirational Blocks Programme, focusing on distinct development themes each day.
- The Karnataka government launched the 'Gruha Lakshmi' scheme, providing Rs 2,000 monthly aid to 1.1 crore women heads of families in Mysuru.
- National Nutrition Week 2023, observed from September 1-7, focuses on the theme "Healthy Diet Gaining Affordable for All," promoting accessible nutritious choices for everyone.
- **International Day of Charity was observed on the 5th of September.**
- Every year the 8th of September is observed as World Physical Therapy Day.
- World Literacy Day 2023, celebrated on September 8, focuses on the theme "Promoting literacy for a world in transition: Building the foundation for sustainable and peaceful societies," highlighting the role of literacy in fostering stability and peace globally.
- The International Day of Democracy, observed on September 15 annually, highlights the UN's support for governments in promoting and consolidating new or restored democracies, encouraging efforts to strengthen democratic values worldwide.
- **World Patient Safety Day on September 17, 2023,** focuses on the theme "Engaging patients for patient safety," acknowledging the vital role of patients, families, and caregivers in ensuring the safety of healthcare practices.
- Every year the 18th of September is celebrated as World Bamboo Day.
- The International Day of Peace on September 21 focuses on the theme "Actions for Peace: Our Ambition for the #GlobalGoals," emphasizing the collective efforts towards achieving global peace and sustainable development goals.
- World Alzheimer's Day on September 21, 2023, advocates the theme "Never too early, never too late," emphasizing the importance of timely awareness, diagnosis, and support for individuals affected by Alzheimer's, a progressive brain disorder impacting memory and cognitive abilities.
- The National e-Governance Division (NeGD) aims to enhance the **DIKSHA platform** by integrating Personalised Adaptive Learning (PAL) **to offer personalized e-content for schools** in India.
- The **Pulikkali festival in Kerala** features participants painted as 'human tigers and leopards' in a vibrant and diverse display of colours, celebrating individualistic dance styles and marking the grand finale of Onam celebrations.
- The Kokborok language in Tripura has witnessed ongoing debates and recent controversies concerning its script.
- **Dr. P V Satyanarayana received the 8th Dr. MS Swaminathan Award** for outstanding contributions to agriculture in 2021-2022.
- World Rose Day is observed on 22nd September of every year.
- **India observes Antyodaya Diwas on September 25 every year to commemorate**



the birth anniversary of Pandit Deendayal Upadhyaya, honouring his legacy and contributions.

- **World Tourism Day, observed on September 27,** promotes the significance of tourism economically and socially; the 2023 theme "Tourism and Green Investments" underscores its potential for positive change through alignment with environmental and social sustainability goals.
- **World Environmental Health Day on September 26, 2023,** focuses on the theme "Global Environmental Public Health: Standing up to protect everyone's Health each and every day," highlighting the crucial role of environmental health in safeguarding the well-being of individuals and communities worldwide.
- **World Maritime Day, observed on September 28, 2023,** focuses on the theme "MARPOL at 50 – Our commitment goes on," highlighting the continued dedication to the International Maritime Organization's efforts to prevent marine pollution and promote sustainable practices in the shipping industry.
- **World Rabies Day, observed globally on September 28,** emphasises the theme "All for 1, One Health for All" in its 17th year, promoting awareness and prevention of rabies.
- **World Heart Day, celebrated on September 29, 2023,** promotes cardiovascular health with the theme "Use Heart, Know Heart," emphasizing awareness and understanding of heart health.
- **September 28 marks the 116th anniversary birthday of Shaheed-e-Azam Bhagat Singh,** honouring the legendary Indian freedom fighter's enduring legacy and sacrifice for the nation's independence struggle.
- **Karnam Sekar, Chairman of the National Asset Reconstruction Company of India (NARCL),** also known as the Bad Bank, has resigned citing disagreements over the institution's structure and operations.
- **The Asian Development Bank has approved Rs. 3.32 crores for safe public transport projects in Hyderabad,** demonstrating a significant investment in enhancing the city's public transportation infrastructure and safety measures.
- **The National Payments Corporation of India (NPCI) has launched 'Falcon,'** an open-source project aimed at streamlining the management and utilization of blockchains using 'Hyperledger Fabric'.
- **Reserve Bank of India (RBI) Governor Shaktikanta Das has been honoured with an 'A+' rating in the Global Finance Central Bank Report Card 2023,** recognizing his outstanding performance and contributions in the field of central banking.
- **UPI Transactions in India Surpass 10 Billion Mark for the 1st Time in August 2023.**
- **PhonePe has launched a first-of-its-kind celebrity voice feature on its SmartSpeakers in collaboration with the iconic Indian actor Amitabh Bachchan.** This new feature allows PhonePe SmartSpeakers across India to validate customer payments in Bachchan's distinct voice.
- **The World Bank, in its G20 document, has reported that India achieved financial inclusion targets within 6 years,** a milestone that would typically take at least 47 years, highlighting the nation's rapid progress in promoting financial inclusion and accessibility.
- **The Reserve Bank of India (RBI) has cancelled the license of The Kapol Co-operative Bank over inadequate capital and earning prospects.**
- **The Minister of Civil Aviation inaugurated Utkela Airport and a direct flight between Utkela and Bhubaneswar, owned by the Government of Odisha.**
- **President Draupadi Murmu launched the "Year of Positive Change" in Raipur, Chhattisgarh.**
- **Reliance-backed Viacom18 has secured BCCI TV and digital rights in a five-year deal worth ₹5,963 crores.**
- **Union Health Minister Mansukh Mandaviya inaugurated the Amrita Patel Centre of Public Health in Anand, Gujarat.**
- **India unveiled the world's first portable hospital, the Arogya Maitri Cube, comprising 72 cubes that can be airlifted during disasters.**
- **The Food Safety and Standards Authority of India (FSSAI) has recognized Mithun, a semi-domesticated bovine animal, as a food animal, they are traditionally valued by tribes in**



Arunachal Pradesh, Nagaland, Manipur, and Mizoram.

- **India launched the Global Biofuel Alliance at the G20 Summit**, encouraging member nations to achieve 20% ethanol blending with petrol, aiming to promote sustainable biofuels and reduce greenhouse gas emissions, while India itself has achieved 10% blending and targets 20% by 2025.
- The 3rd All India Official Language Conference was held on September 14-15, 2023 in Pune, India. It was organized by the Department of Official Languages, Ministry of Home Affairs.
- India, as the 13th country globally, can now issue Internationally Accepted OIML Certificates, enabling domestic manufacturers to certify weighing and measuring instruments locally before international market distribution, marking a significant achievement for the country.
- The **Women's Reservation Bill was introduced as the 128th Amendment Bill in 2023**.
- India temporarily suspends visa services including E-visa for Canadian citizens citing security threats.
- Prime Minister Narendra Modi laid the foundation stone of an international cricket stadium in Varanasi, his parliamentary constituency, on September 23, 2023.
- The 14th edition of the Global Skills Summit in Delhi focuses on building skills, empowering youth, and creating a future, aiming to establish a roadmap for a high-quality industry-led skilling ecosystem in India.
- **Around 40% of the electric vehicles sold in India are manufactured in Tamil Nadu**. This makes Tamil Nadu the leading state in India for electric vehicle manufacturing.
- Union Minister of Power, New and Renewable Energy RK Singh inaugurated the 'India Energy Summit 2023' in New Delhi, focusing on the development of an enabling Green Hydrogen ecosystem in the country.
- Petroleum and Natural Gas Minister Hardeep Singh Puri launched a first-of-its-kind Hydrogen Fuel Cell Bus from India Gate in New Delhi.
- Union Minister of Road Transport and Highways, Nitin Gadkari has stated that the government is planning to make an electric highway from Delhi to Jaipur.
- **India's first lighthouse festival opened at Fort Aguada in Goa**, celebrating the nation's maritime heritage and culture.
- Uttar Pradesh Leads in Electric Vehicle Registrations with the Highest Number.
- Indonesia introduced a "golden visa" program on September 3, 2023, to attract foreign investors and boost the national economy. The program offers five- to 10-year resident permits, depending on the value of the investment.
- The African Union (AU) has officially become a member of the G20 group. The G20 is a forum of the world's 20 largest economies, and the AU's membership is a significant development for Africa.
- The World Bank and the United Nations International Children's Emergency Fund (UNICEF) conducted an assessment called "Global Trends in Child Monetary Poverty According to International Poverty Lines."
- Singapore is now the world's freest economy, according to the 2023 Index of Economic Freedom published by the Heritage Foundation.
- The LEAP Membership Card by the Startup Mission is a government-backed initiative in Kerala, India, that provides startups with a range of benefits and support.
- **Himachal Pradesh Chief Minister Sukhvinder Singh Sukhu launched the "Mukhya Mantri Sporting Abilities, Rebuilding Aspirations and Livelihood Scheme" (SABAL)** on September 4, 2023, offering holistic support, including education, healthcare, and vocational training, to specially-abled children in the state.
- On September 6, 2023, the Jharkhand Cabinet approved a proposal to provide a monthly pension of Rs 1000 to transgender people in the state.
- Chandrayaan-3's Pragyan Rover has confirmed the presence of sulphur, oxygen, iron, and titanium on the Moon's south pole.
- **Hyderabad Firm Grene Robotics Introduces India's First AI-Powered Anti-Drone System 'Indrajaal'**.



- Nagaland became the first state in the Northeast to introduce Aadhaar-Linked Birth Registration (ALBR).
- Odisha's 'Koraput Kalajeera Rice' has received Geographical Indications (GI) status.
- Assam's Biswanath Ghat has been selected as India's Best Tourism Village 2023 by the Ministry of Tourism.
- Madhya Pradesh Chief Minister Shivraj Singh Chouhan unveiled a 108-foot-tall statue of the 8th-century spiritual leader Adi Shankaracharya in Omkareshwar town on September 21, 2023. The statue, which is called the "Statue of Oneness," is a symbol of the oneness of all religions and cultures.
- Arunachal Pradesh Chief Minister Pema Khandu announced the launch of the "Chief Minister's Workers Welfare Scheme" (CMWWS) on September 17, 2023.
- Tamil Nadu is planning a Disney-like 100-acre amusement park outside Chennai.
- The Competition Commission of India (CCI) has imposed a penalty of Rs 1 crore on Bharti Airtel for failure to comply with the provisions of the Competition Act 2002.
- Geetika Srivastava made history as the first female Charge d'Affaires (CDA) at the Indian High Commission in Islamabad, Pakistan.
- Former Chief Justice of India (CJI) NV Ramana has been appointed as a member of the prestigious International Mediator Panel of the Singapore International Mediation Centre (SIMC).
- **Tharman Shanmugaratnam has been elected as the 9th President of Singapore.** He is the first president of Singapore of Indian origin.
- The US state of Georgia declares October as 'Hindu Heritage Month'.
- World Suicide Prevention Day (WSPD) is an annual event held on September 10 to raise awareness of suicide and its prevention.
- Manish Desai Takes Office as Principal Director General of the Press Information Bureau (PIB).
- Actor R Madhavan has been appointed as the new president of the Film and Television Institute of India (FTII) and chairman of the governing council.
- Swaraj Tractors Names MS Dhoni as Brand Ambassador.
- IRS officer Rahul Navin was appointed as interim director of the Enforcement Directorate.
- UAE's Etihad Airways Appoints Actress Katrina Kaif as Brand Ambassador.
- Senior Diplomat Santosh Jha Appointed as India's High Commissioner To Sri Lanka.
- Actor Suresh Gopi Nominated as President of Satyajit Ray Film & Television Institute (SRFTI).
- Virat Kohli's wax statue to be inaugurated at Madame Tussauds museum in Singapore.
- **The Border Roads Organisation (BRO) is set to construct the world's highest fighter airfield in the Nyoma region of Ladakh.**
- **'2018-Everyone is a Hero' is India's official entry to the Oscars 2024.**
- India has been ranked first in grassroots crypto adoption in Chainalysis' 2023 Global Crypto Adoption Index.
- Infosys is the only Indian firm in TIME Magazine's top 100 World's Best Companies of 2023. The Bengaluru-based professional services company ranked at the 64th spot out of 750 global companies.
- Actor Michael Gambon, who was best known for his role as Albus Dumbledore in the Harry Potter films, passed away on September 28, 2023 at the age of 82.
- In Football, **Mohun Bagan beat East Bengal 1-0 to lift the Durand Cup 2023** in Kolkata.
- The first-ever 'Climate Cup' Football tournament 2023 begins in Leh, Ladakh.
- Amul to be the official sponsor of Indian Contingent for the Asian Games 2023.
- Virat Kohli became the fastest to reach 13,000 ODI runs.
- **Germany beat Serbia to win the first-ever FIBA Basketball World Cup.**
- India beats Sri Lanka by 10 Wickets in Colombo to win the Asia Cup 2023 title.
- ICC releases the **official Anthem 'Dil Jashn Bole' for the Men's Cricket World Cup** featuring Ranveer Singh and influencers.
- **Harmanpreet and Lovlina were the Flag-Bearers at the Asian Games Opening Ceremony.**
- In Wrestling, India's **Antim Panghal won a bronze medal at the World Championships in Serbia.**



- **Tata Consultancy Services (TCS) is the most valuable Indian brand**, according to the Kantar BrandZ Top 75 Most Valuable Indian Brands Report for 2023.
- **India's first gorilla glass factory will be set up in Telangana.** The factory will be built by Corning, the company that invented Gorilla Glass. The factory is expected to be operational by 2025 and will create over 1,000 jobs.
- **Microsoft was ranked first in TIME magazine's inaugural list of the World's Best Companies for 2023.** The list was compiled using a formula of revenue growth, employee satisfaction, and environmental, social, and governance (ESG) data.
- The **78th session of the United Nations General Assembly (UNGA) opened on September 5, 2023 under the presidency of Dennis Francis of Trinidad and Tobago.** The theme of the session is "Rebuilding trust and reigniting global solidarity: Accelerating action on the 2030 Agenda and its Sustainable Development Goals towards peace, prosperity, progress and sustainability for all."
- 35th Annual Gandhi's walk held at Johannesburg after 3 years.
- International Lawyers Conference 2023 held in New Delhi.
- Google and HP joined hands to make Chromebook.
- **Vasudha Gupta has taken charge of the position of Principal Director General at Akashvani.**
- Rajesh Nambiar has been appointed as the new Chairperson of Nasscom.
- Srinivasan K Swamy is the Chairman of the Audit Bureau of Circulations (ABC) for the year 2023-2024.
- **Divya Deshmukh, India, won the Tata Steel Chess India women's rapid chess tournament** in September 2023. She defeated the reigning world champion, Ju Wenjun of China, in the final round to claim the title.
- **Chennai hosted the "Street 20," a cricket tournament exclusively dedicated to street children**, from September 22 to October 1, 2023. The tournament is organized by Street Child United in partnership with Shree Dayaa Foundation.
- **The 37th National Games will be held in Goa** from October 26 to November 9, 2023.
- **India defeated Bangladesh in the final of the SAFF U-16 Championship 2023** on September 10, 2023, to win the title for the fifth time. India won the match 2-0, with goals from Bharat Lairenjam and Levis Zangminlun.
 - Pramathesh Jawkar is associated with archery.
 - Kiran George defeated Koo Takahashi of Japan to win the Indonesian Badminton Masters title
 - Statue of Oneness 'Ekatma ka Pratima' of Adi Shankaracharya unveiled in Madhya Pradesh.



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To **APTI PLUS**

I would just suggest to **APTI PLUS** to carry on their brilliant efforts on shaping the young mind of our state to be prospective bureaucrats.

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CURRENT ISSUES FOR REPORT WRITING

Central Bank Digital Currency (CBDC): A Transformative Path to Modernized Transactions

- **Kolkata 15th September:** Central Bank Digital Currency (CBDC) stands at the forefront of financial innovation, representing a digital revolution in the world of currency. As a digital form of a nation's fiat currency, CBDC is issued and regulated by central banks, ensuring stability and government backing. CBDCs, stored in digital wallets, facilitate swift, secure transactions, eliminating the need for intermediaries. This digital currency promotes financial inclusion, offering accessible banking solutions to the unbanked population. Payments, both domestic and international, become seamless, fostering economic participation for all. While CBDCs promise efficiency, they also present cybersecurity and privacy challenges. Striking a balance between security and accessibility is crucial. Despite challenges, central banks globally are exploring CBDC implementation, heralding a future where digital transactions redefine financial landscapes.

Committee Headed by Former President Ram Nath Kovind Explores "One Nation, One Election" Concept

- **Kolkata 22nd September:** In a significant move, the Indian government has formed a committee led by former President Ram Nath Kovind to delve into the feasibility of the "one nation, one election" (ONE) concept. ONE, advocating simultaneous elections for the Lok Sabha and state legislative assemblies, is a proposal aimed at streamlining the electoral process. The committee, set to submit its findings within six months, will meticulously study the constitutional, legal, financial, and administrative implications of ONE. Key aspects include its impact on the democratic process and government stability. Proponents argue that ONE would save time, cut costs, and ensure a more stable government. Conversely, concerns linger about potential negligence of state and local issues and a potential advantage for the ruling party. The committee's report holds immense significance, with policymakers and citizens awaiting its recommendations. As India contemplates this transformative electoral reform, balancing efficiency and regional representation will be paramount in shaping the nation's democratic future.

Debates Intensify Over Women's Reservation Bill in Indian Parliament

- **Kolkata 25th September:** The Women's Reservation Bill, proposing a 33% reservation for women in the Lok Sabha and state legislative assemblies, has sparked heated debates in the Indian Parliament. Advocates argue that it would bolster female representation in political spheres, addressing the current gender disparity where women constitute only 14% of the Lok Sabha and 11% of state assemblies. Supporters also emphasize the bill's potential to empower women, breaking gender norms and encouraging their active involvement in politics. However, critics express valid concerns about maintaining merit-based selection and avoiding societal divisions. Striking a balance between ensuring equal opportunities for women and preserving meritocracy remains a complex challenge, highlighting the need for thoughtful deliberation and comprehensive societal education to navigate this crucial issue.

**16****PRACTICE QUESTIONS**

Q1. National Nutrition Week is observed in India from September 1 to September 7 every year to raise awareness about the importance of nutrition and a balanced diet. What is the theme of National Nutrition Week 2023?

- A) Healthy Eating Habits
- B) Affordable Nutrition for Everyone
- C) Balanced Diet for Better Living
- D) Healthy Diet Gaining Affordable for All

Answer: D

Explanation: National Nutrition Week is observed from September 1 to September 7 every year in India. The theme of National Nutrition Week 2023 is "Healthy Diet Gaining Affordable for All". This theme highlights the importance of ensuring that everyone has access to a healthy diet, regardless of their income or social status.

Q2. When is the International Day of Democracy observed every year?

- A) 1st September
- B) 10th September
- C) 15th September
- D) 20th September

Correct Answer: C

Explanation: The International Day of Democracy is observed globally on the 15th of September each year to promote and uphold the principles of democracy and to raise awareness about its importance in ensuring peace, stability, and development in societies.

Q3. Who is the first woman to head the Indian mission in Pakistan?

- A) Priya Sharma
- B) Geetika Srivastava
- C) Anjali Kapoor
- D) Neha Gupta

Correct Answer: B

Explanation: Geetika Srivastava made history by becoming the first woman to head the Indian mission in Pakistan. Her appointment signifies a significant milestone in diplomacy and promotes gender diversity in the Indian diplomatic corps.

Q4. Who has been appointed as the Chairman of the Railway Board?

- A) Rajeev Kumar Gupta
- B) Jaya Varma Sinha
- C) Anil Sharma
- D) Priya Kapoor

Correct Answer: B

Explanation: Jaya Varma Sinha has been appointed as the Chairman of the Railway Board. As the head of the Railway Board, she will be responsible for overseeing and managing the operations of the Indian Railways, one of the largest railway networks in the world.

Q5. Which of the following organizations has built the 'Nabhmitra' device for the safety of fishermen?

- (a) Indian Space Research Organisation (ISRO)
- (b) Defence Research and Development Organisation (DRDO)
- (c) Bharat Heavy Electricals Limited (BHEL)
- (d) Hindustan Aeronautics Limited (HAL)

Answer: A

Explanation: The 'Nabhmitra' device for the safety of fishermen was developed by ISRO (Indian Space Research Organisation). It is a satellite-based communication device that allows fishermen to communicate with each other and with the shore, even when they are far out at sea. Nabhmitra also provides fishermen with weather forecasts, cyclone warnings, and other important information.

Q6. Indian Space Research Organisation (ISRO) recently launched the Aditya L1 mission from the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh. What is the primary focus of the Aditya L1 mission?

- A) Studying the Moon's surface
- B) Exploring Mars' atmosphere
- C) Observing the Sun and its corona
- D) Investigating Saturn's rings

Correct Answer: C

Explanation: The primary focus of the Aditya L1 mission is to observe the Sun and its corona, providing valuable insights



into solar activities, such as solar flares and eruptions, which can impact space weather and communication systems on Earth.

Q7. Which of the following Indians has been appointed as a member of the Singapore International Mediator Panel?

- A) Rajiv Modi
- B) NV Ramana
- C) Arvind Kedia
- D) Arjun Gandhi

Correct Answer: B

Explanation: Former Chief Justice of India (CJI) NV Ramana has been appointed as a member of the prestigious International Mediator Panel of the Singapore International Mediation Centre (SIMC) This appointment signifies his recognition and expertise in mediation on the international stage.

Q8. Which of the following Indians has won the Ramon Magsaysay Award 2023?

- A) Dr. R Ravi Kannan
- B) Dr. Anjali Sharma
- C) Dr. Sanjay Patel
- D) Dr Priya Gupta

Correct Answer: A

Explanation: The Assam-based surgical oncologist, Dr R Ravi Kannan, has been honoured with the prestigious Ramon Magsaysay Award 2023 for his outstanding contributions to the field of healthcare and oncology.

Q9. Every year World Ozone Day is observed on 16 September. What is the theme for World Ozone Day 2023?

- A) Ozone Protection: A Global Responsibility
- B) Healing the Ozone Layer Together
- C) Montreal Protocol: fixing the ozone layer and reducing climate change
- D) Ozone Conservation for Future Generations

Correct Answer: C

Explanation: The theme for World Ozone Day 2023 is "Montreal Protocol: fixing the ozone layer and reducing climate change," highlighting the vital role of the Montreal Protocol in repairing the ozone layer and mitigating climate change effects.

Q10. Which country will host the first edition of the Global India AI 2023 Conference in October 2023?

- (a) India
- (b) Russia
- (c) Japan
- (d) Australia

Answer: A

Explanation: India will host the first edition of the Global India AI 2023 Conference in October 2023. The conference is being organized by the Ministry of Electronics and Information Technology (MeitY) of India. The conference is expected to attract leading AI experts from around the world, including researchers, practitioners, investors, and policymakers. The goal of the conference is to deliberate the future of AI and its impact on various sectors, including healthcare, governance, education, agriculture, and manufacturing.

Q11. Which state government has launched the 'Gruha Lakshmi' women's financial aid scheme?

- A. Maharashtra
- B. Tamil Nadu
- C. Punjab
- D. Karnataka

Answer: D

Explanation: The Karnataka government recently launched the 'Gruha Lakshmi' women's financial aid scheme in Mysuru, providing Rs 2,000 per month to 1.1 crore women heads of family, with a budget of ₹17,500 crore for the current financial year.

Q12. Who is set to become the first transgender individual to play international cricket?

- A) Emma McGahey
- B) Alex Thompson
- C) Jamie Smith
- D) Max Johnson

Correct Answer: A

Explanation: Danielle McGahey of Canada is making history by becoming the first transgender cricketer to play in an international match. The 29-year-old McGahey, an opening batter, has been selected in Canada's women's squad for the qualifying tournament after she fulfilled ICC's eligibility criteria for male-to-female transgender players. Her participation marks a significant step toward inclusivity and diversity in international cricket.

**Q13. When was the Competition Commission of India (CCI) established?**

- A) 1998
- B) 2000
- C) 2002
- D) 2003

Correct Answer: D

Explanation: The Competition Commission of India (CCI) was established in 2003 under the Competition Act, 2002. It is a statutory body within the Ministry of Corporate Affairs and is responsible for enforcing the Competition Act, 2002. It became fully functional in 2009 and serves as the regulatory authority for competition-related matters in India. It is also known as 'Hindu Heritage Month'.

Q14. Who has been named as the chairman of the Film and Television Institute of India (FTII), Pune?

- A) Shah Rukh Khan
- B) R Madhavan
- C) Deepika Padukone
- D) Aamir Khan

Correct Answer: B

Explanation: R Madhavan has been appointed as the chairman of the Film and Television Institute of India (FTII), Pune. As the chairman, he will play a key role in overseeing the institute's activities and contributing to the development of film and television education in India.

Q15. Which of the following options correctly identifies the two volcanic islands in the Indian Territory?

- A) Barren Island and Lakshadweep Island
- B) Andaman Island and Narcondam Island
- C) Barren Island and Narcondam Island
- D) Nicobar Island and Lakshadweep Island

Answer: C

Explanation: Barren Island and Narcondam Island are the sole volcanic islands within India's territory, situated in the Andaman and Nicobar Islands Union Territory. Barren Island is an active volcano, making it the only confirmed active volcano in South Asia, while Narcondam Island is dormant. Both islands are significant geological features in the region, located in the Andaman Sea.

Q16. Which of the following were the major achievements of the Mauryan Empire?

- A. The construction of a vast road network
- B. The development of a strong bureaucracy

- C. The spread of Buddhism
- D. All of the above

Answer: D

Explanation: The Mauryan Empire achieved many great things, including the construction of a vast road network, the development of a strong bureaucracy, and the spread of Buddhism.

Major achievements of the Mauryan Empire:

- **Political unity:** The Mauryan Empire united most of the Indian subcontinent under a single ruler for the first time. This led to a period of peace and prosperity in the region.
- **Strong bureaucracy:** The Mauryan Empire had a strong and efficient bureaucracy. This helped to maintain law and order and to collect taxes effectively.
- **Public works:** The Mauryan Empire built a vast network of roads and canals. This helped to improve trade and transportation within the empire.
- **Spread of Buddhism:** Ashoka the Great converted to Buddhism after the Kalinga War. He then promoted the spread of Buddhism throughout his empire. This helped to make Buddhism the dominant religion in India.
- **Development of art and architecture:** The Mauryan Empire produced some of the finest art and architecture in Indian history. This includes the Ashoka Pillars, which are still standing today.
- **Advances in science and technology:** The Mauryan Empire made significant advances in science and technology. This includes the invention of the decimal system and the development of new medical techniques.
- **Promotion of trade:** The Mauryan Empire promoted trade with other parts of the world. This helped to enrich the empire and spread Indian culture to other parts of the world.

Q17. Which of the following is the state flower of West Bengal?

- A. Rose
- B. Jasmine
- C. Lotus
- D. Hibiscus

Answer: B

Explanation: The jasmine is the state flower of West Bengal. It is a white flower that is known for its sweet fragrance. The jasmine flower is also a symbol of love, purity, and beauty. It is often used in weddings and other celebrations in West Bengal.

Q18. What are the causes of inflation?

- A. Increase in the money supply
- B. Increase in the cost of production



- C. Increase in demand
- D. All of the above.

Answer: D

Explanation: Inflation can be caused by a variety of factors, including an increase in the money supply, an increase in the cost of production, and an increase in demand.

Q19. Which two countries are primarily involved in the Nagorno-Karabakh conflict?

- A. Azerbaijan and Turkey
- B. Armenia and Georgia
- C. Armenia and Azerbaijan
- D. Russia and Iran

Answer: C

Explanation: The Nagorno-Karabakh region is a disputed territory between Azerbaijan and Armenia. The region is located in the South Caucasus mountains and has a population of around 150,000 people, who are mostly ethnic Armenians.

Q20. Which pass connects the Kullu Valley to Lahaul and Spiti Valley in Himachal Pradesh?

- A. Nathu La
- B. Rohtang Pass
- C. Zoji La
- D. Baralacha La

Answer: B

Explanation: The Rohtang Pass connects the Kullu Valley to Lahaul and Spiti Valley in Himachal Pradesh. It is a high mountain pass on the eastern Pir Panjal Range of the Himalayas, located at an altitude of 3979 meters (13,050 feet). The Rohtang Pass is a popular tourist destination, offering stunning views of the surrounding mountains and valleys. It is also a popular trekking route, connecting the villages of Manali and Leh.

Q21. Which ministry has launched the WINDS portal?

- A. Ministry of Finance
- B. Ministry of Health and Family Welfare
- C. Ministry of Agriculture and Farmers' Welfare
- D. Ministry of Education

Answer: C

Explanation: The WINDS portal was launched by the Ministry of Agriculture and Farmers' Welfare in India on July 27, 2023, to serve the agricultural community with weather-related information and advisories. The portal provides farmers with hyper-local weather data, forecasts, and advisories at the block

and gram panchayat levels. This information can help farmers to make informed decisions about their crops and farming practices.

Q22. Who organized the Climate Ambition Summit 2023?

- A. United Nations
- B. Greenpeace
- C. World Wildlife Fund
- D. Climate Action Network

Answer: A

Explanation: The Climate Ambition Summit 2023 was held on September 20, 2023, at the United Nations Headquarters in New York City. The summit was convened by UN Secretary-General António Guterres to accelerate climate action and deliver climate justice in line with his Acceleration Agenda. The summit brought together leaders from government, business, finance, civil society, and youth to discuss and commit to ambitious climate action.

Q23. Which Indian state government announced the establishment of the Veerangana Durgavati Tiger Reserve?

- A. Rajasthan
- B. Madhya Pradesh
- C. Maharashtra
- D. Karnataka

Answer: B

Explanation: The Veerangana Durgavati Tiger Reserve is the seventh tiger reserve in Madhya Pradesh and the 54th in India. It is named after Rani Durgavati, a Gond queen who fought against the Mughal emperor Akbar in the 16th century. The establishment of the Veerangana Durgavati Tiger Reserve is a significant step towards the conservation of tigers in India. Tigers are an endangered species and their population has been declining for decades.

Q24. What was the theme for the International Day of Sign Languages in 2023?

- A. Empowering Deaf Communities
- B. Sign Language for All
- C. A World Where Deaf People Everywhere Can Sign Anywhere!
- D. Breaking the Silence

Answer: C

Explanation: International Day of Sign Languages 2023 was celebrated on September 23rd with the theme "A World Where Deaf People Everywhere Can Sign Anywhere!" This theme is a



call to action to create a more inclusive world for deaf people. It emphasizes the importance of sign language as a way for deaf people to communicate and participate fully in society.

Q25. Which city in West Bengal is known as the "Cultural Capital of India"?

- A. Kolkata
- B. Durgapur
- C. Siliguri
- D. Asansol

Answer: A

Explanation: Kolkata, known as the "Cultural Capital of India," boasts a rich heritage in literature, arts, and music. Home to esteemed institutions like the Indian Museum and the Academy of Fine Arts, the city has nurtured renowned figures like Rabindranath Tagore and Satyajit Ray. Its vibrant cultural scene is highlighted by festivals like Durga Puja and Kali Puja, making Kolkata a hub for diverse artistic expressions and celebrations.

Q26. What historic site in India has recently been recognized as the country's first Green Energy Archaeological Site?

- A. Taj Mahal
- B. Red Fort
- C. Shore Temple in Mamallapuram
- D. Qutub Minar

Answer: C

Explanation: The Shore Temple in Mamallapuram, has been designated as India's first Green Energy Archaeological Site, signifying its transition to sustainable and eco-friendly energy sources. The Shore Temple is a UNESCO World Heritage Site and one of the most popular tourist attractions in India. It is a 7th-century stone temple that is dedicated to Lord Shiva.

Q27. Who is set to receive the Dadasaheb Phalke Lifetime Achievement Award for the year?

- A. Amitabh Bachchan
- B. Waheeda Rehman
- C. Dilip Kumar
- D. Shah Rukh Khan

Answer: B

Explanation: Veteran actor Waheeda Rehman is the recipient of the Dadasaheb Phalke Lifetime Achievement Award. This prestigious award is given to individuals who have made significant contributions to Indian cinema over the years.

Q28. What is the purpose of the Nation First Transit Card?

- (A) To facilitate a seamless and convenient customer commuting experience
- (B) To provide a cashless payment option for public transportation
- (C) To promote digital payments in India
- (D) All of the above

Answer: D

Explanation: The Nation First Transit Card is a RuPay prepaid card that can be used to pay for public transportation, such as buses, metros, and trains. It can also be used to make retail and e-commerce payments. The Nation First Transit Card is a one-of-a-kind card that offers a number of benefits, including a single card that can be used for both public transportation and retail payments. This eliminates the need to carry multiple cards, making it a convenient and hassle-free way to pay. It provides a cashless payment option, which is more convenient and hygienic than carrying cash.

Q29. Which state cabinet has approved a pension of Rs. 1000 per month for the transgender community?

- (A) Jharkhand
- (B) Bihar
- (C) Bengal
- (D) Odisha

Answer: A

Explanation: The Jharkhand Cabinet's approval of a pension of Rs. 1000 per month for the transgender community is a welcome step towards ensuring their social and economic security. Transgender people in India face a number of challenges, including discrimination, unemployment, lack of access to education and healthcare, and social exclusion. This pension scheme will help to alleviate some of these challenges and provide transgender people with a much-needed source of income.

Q30. Which wildlife sanctuary in West Bengal is known for its population of red panda, snow leopards, and various species of birds?

- A. Jaldapara Wildlife Sanctuary
- B. Singalila National Park
- C. Mahananda Wildlife Sanctuary
- D. Buxa Tiger Reserve

Answer: B



Explanation: Singalila National Park in West Bengal is renowned for its rich biodiversity, housing rare species like red pandas and snow leopards. This sanctuary provides a vital habitat for these endangered animals, making it a significant conservation area in the Eastern Himalayas. Alongside these charismatic creatures, the park is also home to various bird species, attracting wildlife enthusiasts. Its picturesque landscapes and diverse flora enhance its appeal, making it a popular destination for nature lovers and researchers alike.

Q31. Which part of the human ear is responsible for detecting sound vibrations?

- A. Cochlea
- B. Eardrum
- C. Auditory canal
- D. Ossicles

Answer: A

Explanation: The part of the human ear that is responsible for detecting sound vibrations is the cochlea. The cochlea is a spiral-shaped organ located in the inner ear. It is filled with fluid and contains thousands of tiny hair cells. When sound waves enter the ear, they travel through the ear canal and cause the eardrum to vibrate. The vibrations of the eardrum are then transmitted to the ossicles, three small bones in the middle ear. The ossicles amplify the vibrations and transmit them to the cochlea.

Q32. Which hormone is responsible for the body's response to stress, often referred to as the "fight-or-flight" response?

- A. Estrogen
- B. Testosterone
- C. Adrenaline
- D. Insulin

Answer: C

Explanation: Adrenaline is a hormone that is produced by the adrenal glands in response to stress. When you are stressed, your body releases adrenaline into your bloodstream. Adrenaline causes a number of changes in your body, including Increased heart rate, Increased blood pressure, Increased breathing rate, Increased blood flow to the muscles, Dilated pupils, Sweating, etc. These changes help your body to prepare to either fight or flee the source of stress.

Q33. What is the role of insulin in the human body?

- A. Regulating blood sugar levels
- B. Aiding digestion
- C. Controlling body temperature

D. Facilitating muscle movement

Answer: A

Explanation: The role of insulin in the human body is to regulate blood sugar levels. Insulin is a peptide hormone secreted by the β cells of the pancreatic islets of Langerhans and maintains normal blood glucose levels by facilitating cellular glucose uptake, regulating carbohydrate, lipid and protein metabolism and promoting cell division and growth through its mitogenic effects. When you eat, your blood sugar levels rise. Insulin triggers the cells in your body to take up glucose from the blood. This lowers your blood sugar levels. Insulin is also important for storing glucose in the liver and muscles. When you don't eat for a while, your blood sugar levels drop. Insulin tells the liver and muscles to release glucose into the blood. This helps to maintain your blood sugar levels within a normal range.

Q34. Which part of the human brain is responsible for regulating basic bodily functions such as breathing and heart rate?

- A. Cerebrum
- B. Cerebellum
- C. Medulla oblongata
- D. Hypothalamus

Answer: C

Explanation: The part of the human brain that is responsible for regulating basic bodily functions such as breathing and heart rate is the medulla oblongata. The medulla oblongata is located at the base of the brain and is responsible for many vital functions, including Breathing, Heart rate, Blood pressure, Swallowing, etc. The medulla oblongata is also responsible for some reflexes, such as the gag reflex and the pupillary reflex.

Q35. Who was the founder of the city of Kolkata (Calcutta)?

- A) Robert Clive
- B) Job Charnock
- C) Warren Hastings
- D) Lord Cornwallis

Answer: B

Explanation: Job Charnock is credited as the founder of the city of Kolkata (Calcutta). He was an English merchant who worked for the English East India Company. In 1690, Charnock established a trading post for the British East India Company on the banks of the Hooghly River, which later grew into the city of Calcutta. Calcutta played a significant role during the British colonial rule in India and was the capital of British India



until 1911. Job Charnock's establishment of the trading post laid the foundation for the city's growth and development under British influence.

Q36. What is the purpose of adding fluoride to public drinking water supplies?

- A. To increase water hardness
- B. To enhance taste
- C. To prevent tooth decay
- D. To disinfect the water

Answer: C

Explanation: The purpose of adding fluoride to public drinking water supplies is to prevent tooth decay. Fluoride is a mineral that helps to strengthen teeth and make them more resistant to decay. It does this by bonding to the tooth enamel and making it more difficult for acids to dissolve it. Fluoride is a very effective way to prevent tooth decay. Studies have shown that fluoride can reduce the risk of tooth decay by up to 60%. This is why fluoride is added to public drinking water supplies in many countries around the world.

Q37. What is the purpose of adding antifreeze chemicals to car radiators?

- A. To prevent rusting
- B. To increase engine power
- C. To lower the freezing point of the coolant
- D. To improve fuel efficiency

Answer: C

Explanation: The purpose of adding antifreeze chemicals in car radiators is to lower the freezing point of the coolant and prevent it from boiling over. This is important because the coolant helps to regulate the temperature of the engine. Antifreeze chemicals are typically made from ethylene glycol or propylene glycol. These chemicals work by lowering the freezing point and raising the boiling point of water. This means that the coolant will not freeze in cold weather or boil over in hot weather.

Q38. Which chemical is used to prevent the growth of algae and other microorganisms in cooling water systems?

- A. Sodium chloride
- B. Copper sulfate
- C. Hydrogen peroxide
- D. Sodium bicarbonate

Answer: B

Explanation: Copper sulfate is a chemical compound that is commonly used to prevent the growth of algae and other

microorganisms in cooling water systems. It is a very effective algacide and is relatively inexpensive. Copper sulfate is typically added to cooling water in the form of a liquid or a powder. When copper sulfate is added to water, it dissociates into copper ions and sulfate ions. The copper ions are toxic to algae and other microorganisms, and they prevent them from growing.

Q39. What is the phenomenon where a wave changes direction as it passes through a different medium at an angle?

- A. Reflection
- B. Refraction
- C. Diffraction
- D. Interference

Answer: B

Explanation: Refraction is the phenomenon where a wave changes direction as it passes through a different medium at an angle. This happens because the wave travels at different speeds in different mediums. For example, light travels faster in air than it does in water. This means that when a light wave enters water at an angle, it will bend towards the normal. The normal is a line that is perpendicular to the surface of the medium. The amount that the wave bends depends on the difference in speed between the two mediums and the angle at which the wave enters the new medium.

Q40. The partition of Bengal was annulled by which British Viceroy in 1911?

- A) Lord Curzon
- B) Lord Dalhousie
- C) Lord Irwin
- D) Lord Hardinge

Answer: D

Explanation: Lord Hardinge was the Viceroy of India from 1910 to 1916. He annulled the partition of Bengal in response to the widespread protests against it, which had led to violence and unrest in the region. The partition of Bengal was a controversial decision taken by the British government in 1905. It divided the province of Bengal into two parts: East Bengal and Assam, and West Bengal. The partition was met with widespread opposition from the Bengali people, who saw it as an attempt to divide and weaken the Bengali nationalist movement. The Swadeshi movement was launched in protest of the partition. The movement was successful in forcing the British government to annul the partition in 1911.



Q41. What does the term 'terminal velocity' refer to?

- A. Maximum speed reached by a falling object
- B. Speed of light in a vacuum
- C. Constant speed maintained by a moving object
- D. Speed of sound in air

Answer: A

Explanation: Terminal velocity is the maximum speed that a falling object can reach in a fluid. It is reached when the drag force on the object is equal to the weight of the object. The drag force is the force that opposes the motion of an object through a fluid. It is caused by the friction between the object and the fluid. The drag force increases with speed, so the faster an object falls, the greater the drag force on it.

Q42. Which law states that the total energy in an isolated system remains constant over time?

- A. Newton's First Law
- B. Law of Conservation of Energy
- C. Second Law of Thermodynamics
- D. Boyle's Law

Answer: B

Explanation: The law of conservation of energy states that the total energy in an isolated system remains constant over time. This means that energy can neither be created nor destroyed but only transformed from one form to another. For example, when you turn on a light switch, electrical energy is transformed into light energy and heat energy. When you throw a ball up in the air, kinetic energy is transformed into potential energy as the ball rises. When the ball falls back down to the ground, the potential energy is transformed back into kinetic energy.

Q43. What does the term 'buoyancy' refer to?

- A. The ability of an object to float in a fluid
- B. The force exerted by a fluid on an object submerged in it
- C. The resistance of an object to changes in motion
- D. The force of gravity acting on an object

Answer: A

Explanation: Buoyancy is the upward force exerted by a fluid that opposes the weight of a partially or fully immersed object. It is caused by the difference in pressure between the top and bottom of the object. The pressure at the bottom of the object is greater than the pressure at the top because there is more water above it. This pressure difference creates an upward force on the object.

Q44. Which city in India was inaugurated as the country's first solar city in September 2023?

- A. Sanchi
- B. Indore
- C. Gwalior
- D. Jabalpur

Answer: A

Explanation: Sanchi in Madhya Pradesh was inaugurated as the country's first solar city on September 6, 2023. This is a significant achievement for India, as it shows the country's commitment to sustainable development. Sanchi is a UNESCO World Heritage Site and a popular tourist destination. Its transition to solar energy will help to reduce its carbon footprint and promote sustainable tourism. Sanchi's solar city project includes a 3 MW solar plant, which is enough to meet the city's energy needs. The city also has a number of rooftop solar panels and solar streetlights.

Q45. When was the state of West Bengal officially formed?

- A) 1947
- B) 1950
- C) 1956
- D) 1960

Answer: C

Explanation: West Bengal was established on November 1, 1956, through the States Reorganization Act, aligning Indian states along linguistic and cultural boundaries. Situated in eastern India, it is known for its rich cultural heritage and historical significance.

Q46. Which metal was not known to the people of the Indus Valley Civilization?

- A) Bronze
- B) Copper
- C) Iron
- D) Silver

Answer: C

Explanation: Iron was not known to the people of the Indus Valley Civilization. The Indus Valley Civilization, which existed around 3300 to 1300 BCE, predates the widespread use of iron in human societies. During this time, people primarily used bronze, made by combining copper with tin, for tools, weapons, and various artefacts. Ironworking became more prevalent in ancient cultures during later periods, such as the Iron Age, which followed the Bronze Age.

Q47. What is the RBI's repo rate?



- A. The rate at which the RBI lends money to commercial banks
- B. The rate at which commercial banks lend money to each other
- C. The rate at which commercial banks lend money to individuals and businesses
- D. None of the above

Answer: A

Explanation: The Reserve Bank of India (RBI) sets the repo rate, which is the rate at which it lends money to commercial banks for a short-term period, typically overnight. Changes in the repo rate influence the lending and borrowing rates of commercial banks in the country. When the RBI decreases the repo rate, borrowing from the RBI becomes cheaper for banks. As a result, banks are more likely to lower their lending rates to customers, encouraging borrowing and spending by businesses and individuals. This can stimulate economic growth.

Q48. Which Bengali scientist and visionary is known for his pioneering work in radio communication and is credited with inventing the first wireless radio receiver?

- A) Satyendra Nath Bose
- B) Jagadish Chandra Bose
- C) C.V. Raman
- D) Meghnad Saha

Answer: B

Explanation: Jagadish Chandra Bose, a renowned Bengali scientist, is known for his pioneering work in the field of radio communication. In 1895, Bose conducted experiments demonstrating the use of radio waves for communication. He invented the Mercury Coherer, which was the first solid-state device for detecting radio waves. This invention is considered the precursor to the modern radio receiver. Bose's work laid the foundation for the development of wireless communication technology and significantly contributed to the advancement of radio science. His experiments and inventions in the field of radio communication are well-recognized in the history of science and technology.

Q49. Which of the following is not a measure to control inflation?

- A. Increasing interest rates
- B. Selling government bonds
- C. Increasing taxes
- D. Reducing government spending

Answer: B

Explanation: Selling government bonds (Option B) doesn't directly impact inflation. The other options—increasing interest rates, increasing taxes, and reducing government spending—directly influence the spending behaviour of individuals and businesses, thus affecting the overall demand in the economy, which is a key factor in controlling inflation.

Q50. Who was the famous social reformer and educator from West Bengal known for advocating widow remarriage and women's rights in the 19th century?

- A) Raja Ram Mohan Roy
- B) Ishwar Chandra Vidyasagar
- C) Swami Vivekananda
- D) Keshab Chandra Sen

Answer: B

Explanation: Ishwar Chandra Vidyasagar was a renowned social reformer and educator from West Bengal who played a key role in advocating for women's rights and widow remarriage in the 19th century. He was a scholar of Sanskrit and Bengali, and he translated many Sanskrit texts into Bengali. He also wrote extensively on social and educational reform.

Vidyasagar was a strong advocate for women's education. He believed that women should have the same educational opportunities as men. He founded several schools for girls and worked to improve the quality of education for all children.

Vidyasagar was also a strong advocate for widow remarriage. He believed that widows should have the right to remarry and that they should not be ostracized by society. He wrote extensively on the issue and campaigned for the legalization of widow remarriage. In 1856, Vidyasagar's efforts were successful when the Hindu Widows' Remarriage Act was passed. This act legalized widow remarriage and was a major victory for the women's rights movement in India.



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