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**CAREER IN FOCUS**

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# INDIA'S TRANSITION TO A DEVELOPED NATION



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*LISAS : A 31 year Saga of Success*

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## ***Message from the Editor***



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**Dear students,**

**“LISAS CAREER IN FOCUS”** aims at improving your skills to master different areas of general knowledge which is an important requirement for your success in all the competitive examinations. It contains important information on the recent events.

In order to achieve success you need to be focused, hardworking and determined. You must polish your skills and try to improve yourself. You must give more time and attention to those subjects in which you are weak and at the same time do not ignore the other subjects.

**Dr. Linu Chayani**

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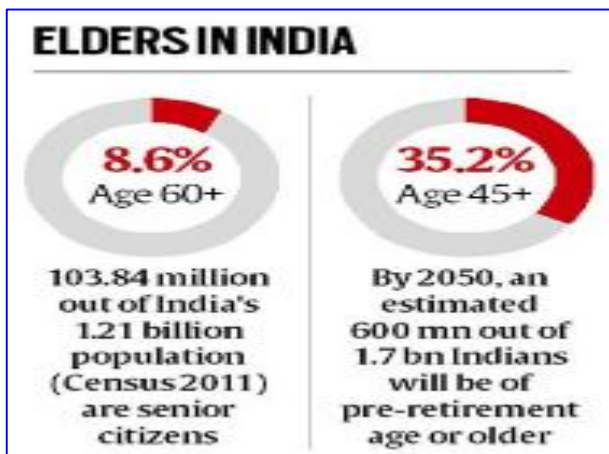
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# ISSUES OF THE MONTH

## AGEING POPULATION IN INDIA

The phenomenon of ageing stands out as one of the most significant experiences of this century, marked by remarkable advancements in human longevity alongside historically low levels of reproduction.

According to Census 2011, India has 104 million older people (60+years), constituting 8.6% of total population. Amongst the elderly (60+), females outnumber males. It is expected that the country will have 193 million



elderly persons, constituting about 13% of the total population by 2030. As per UNFPA Report 2023, the percentage of elderly population in the country projected to double to over 20% of total population by 2050.

Although the increasing number of elderly people may seem concerning, it is essential to understand the associated challenges posed by longer lifespans and emerging vulnerabilities for developing effective policies and programs to support an ageing population.

Who are Elder?

- The WHO defines those aged 60 -74 years as elderly. In 1980 the UN recommended 60 years as the age of transition for the elderly segment of the population, and has been categorized as follows:
  - **Young Old:** between the ages of 60-75 years.
  - **Old-Old:** between the ages of 75-85 years.
  - **Very Old :** 85 years and above
- **World Population Data Sheet-2002** considers aged population as population in the age group of 65+ as old.
- In the Indian context, the age of 60 years has been adopted by the census of India for the purpose of classifying a person as old, which coincides with the age of retirement in government sector.

### Primary Factors Contributing to the Ageing Phenomenon in India

- **Increased Longevity :** One of the primary drivers of increased longevity in India is the remarkable improvement in healthcare services.

According to the World Health Organization, life expectancy in India has improved by 5.2 years from 62.1 years in 2000 to 67.3 years in 2021.

- **Improved Living Conditions:** Better living conditions, including access to clean water, sanitation, and improved nutrition, have also contributed to longer lifespans. The Swachh Bharat Abhiyan has significantly increased sanitation



coverage, reducing the prevalence of waterborne diseases.

- **Decreased Fertility Rates** : India has implemented various family planning programs aimed at controlling population growth, which have been successful in reducing fertility rates.

As per the fifth round of NFHS conducted during the year 2019-21, the Total Fertility Rate (TFR) has declined to 2.0 children per woman less than the replacement level of fertility, which is 2.1 children per woman

- **Socio-Economic Changes** : Socio-economic changes, such as increased female education and workforce participation, have also played a role in lowering fertility rates and increased

Kerala, known for its high literacy rates and advanced healthcare, Kerala has one of the highest life expectancies and lowest fertility rates in India. The state serves as a model for other regions in managing the ageing population.

#### **Legal Provisions Related to Elderly Population**

- Article 41 and Article 46 are the constitutional provisions for elderly persons. Although directive principles are not enforceable under the law, but it creates a positive obligation towards the state while making any law.
- Section 20 of Hindu Marriage and Adoption Act, 1956 makes it obligatory provisions to maintain an aged parents.
- Under Section 125 of Criminal Procedure Code, the elder parents can claim maintenance from their children.
- The Maintenance and Welfare of Parents and Senior Citizens Act, 2007, seeks to make it legal for the children or heirs to maintain their parents or senior citizens of the family.

#### **Various Challenges Associated with Elderly Population in India**

- **Restrictions in Activities of Daily Living (ADL)** : About 20% of the elderly experience restrictions in activities of daily living, which include basic self-care activities like bathing, dressing, eating, and mobility.
- **Multi-Morbidity** : The Longitudinal Ageing Survey of India (LASI) reports that 75% of the elderly population suffer from one or more chronic diseases, such as hypertension, diabetes, arthritis, and cardiovascular diseases.
- **Poverty** : Economic vulnerability is a significant concern for the elderly, particularly those without stable sources of income which affect their quality of life and healthcare utilisation.

More than 40% of the elderly in India are in the poorest wealth quintile, with about 18.7% of them living without an income. (India Ageing Report, 2023)

- **Changing Healthcare Needs**: In a demographic where the growth rate of elders far exceeds that of the young, the biggest challenge is to provide a range of quality, affordable, and accessible health and care services to the elderly.

They require an array of specialised medical services at home including tele or home consultations, physiotherapy and rehabilitation services, mental health counselling and treatment, as well as pharmaceutical and diagnostic services.

- **Social Issues**: Factors such as familial neglect, low education levels, socio-cultural beliefs and stigma, low trust on institutionalised health-care services etc. exacerbate the situation for the elders.
- **‘Inherently gendered’**: One of the emerging issues of population ageing is the “Feminization of Ageing”, that is many

more women than men reaching older ages.

**Census of India** shows that the sex ratio of the elderly was considerably high (1028) in 1951 and subsequently dropped to about 938 in 1971, but finally increased up to 1033 in 2011.

- **Inadequate Welfare Schemes:** Despite **Ayushman Bharat** and public health insurance schemes, a **NITI Aayog** report indicates that 400 million Indians do not have any financial cover for health expenses.

Despite the presence of pension schemes at centre and state level, a mere pittance as low as ₹350 to ₹400 a month is provided in some states which too is not universal.

#### **Various Initiatives Taken for the Welfare of Elderly Population**

- **Initiatives Taken at Global Level:**
  - Vienna International Plan of Action
  - United Nations Principles for Older Persons
  - 2021-2030 as the 'Decade of Healthy Ageing
  - The 2030 Agenda for Sustainable Development calls for leaving no one behind and for ensuring that the Sustainable Development Goals (SDGs) are met for all segments of society, at all ages, with a particular focus on the most vulnerable—including older persons.
- **Initiatives Taken by Indian Government:**
  - SACRED Portal
  - SAGE (Senior care Aging Growth Engine)
  - Elder Line
  - Integrated Programme for Older Persons (IPOP)
  - Rashtriya Vayoshri Yojana (RVY)
  - Indira Gandhi National Old Age Pension Scheme (IGNOAPS)
  - The Pradhan Mantri Vaya Vandana Yojana
  - Vayoshreshtha Samman

- Maintenance and Welfare of Parents and Senior Citizens (MWPSA) Act, 2007

#### **Steps Should be Taken to Empower the Elderly Population in India**

- **Protection from Destitution:** The first step towards a dignified life for the elderly is to protect them from destitution and all the deprivations that may come with it. Cash in the form of a pension can help to cope with many health issues and avoid loneliness as well. That is why old-age pensions are a vital part of social security systems around the world.

Another critical area would be bringing reforms in the social security pensions. They also need other support and facilities such as health care, disability aids, assistance with daily tasks, recreation opportunities and a good social life.

- **Emulating the Frontrunners:** The southern States and India's poorer States such as Odisha and Rajasthan have achieved near-universal social security pensions. Their actions are worth emulating. It would be much easier for all States to do the same if the central government were to revamp the **National Social Assistance Programme (NSAP)**.
- **Recognising Concerns of Elderly Women:** The policy should also take cognisance of the fact that women, in India, on average outlive men by three years. The sex ratio of older people is projected to increase to 1060 by 2026. Since women in India are usually younger than their husbands, they often spend their later years as widows.

Therefore, the policy should particularly cater to the more vulnerable and dependent older single women so that they can live respectable and independent lives.

- **Passing Maintenance and Welfare of Parents and Senior Citizens**

**(Amendment) Bill, 2019:** The Ministry of Health and Family Welfare (MoHFW), Ministry of Social Justice and Empowerment (MSJE) and Ministry of Skill Development and Entrepreneurship (MSDE) have a pivotal role to play in the matter. Greater collaboration between them could get the ball rolling on the required reforms.

- **The Maintenance and Welfare of Parents and Senior Citizens (Amendment) Bill, 2019,** seeks to regulate home-based care for older people. It proposes the registration of institutions providing home care services and prescribing minimum standards for them. However, it has not been passed since being introduced in Parliament in 2019.
- **Building Elderly Inclusive Society:** One of the effective ways of ensuring proper health facilities to all the elderly in the Old-Age-Homes (OAHs) is to ensure a lesser number of the elderly people in these homes. Elderly are an asset to the society and not a liability, the best way of taking advantage of this asset is by assimilating them into the mainstream population rather than isolating them in old age homes.
- **Transforming the Perception of the Elderly:** The perception of the elderly as

liabilities can be transformed by innovative institutions and social agencies that empower them and integrate them into productive societal roles.

By leveraging their experience, skills, and wisdom, society can benefit from the active participation of older adults.

The University of the Third Age (U3A) is an international movement that offers lifelong learning opportunities to retired and semi-retired individuals. It encourages continuous education in various subjects, from technology to arts.

The Senior Employment Scheme in Singapore helps match elderly job seekers with employers who value their experience and reliability.

#### Conclusion

Innovative institutions and social agencies play a crucial role in transforming the perception of the elderly from liabilities to assets. By providing opportunities for education, employment, volunteering, health and wellness, and social inclusion, policy initiatives should empower the elderly and integrate them into productive societal roles.

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# INDIA'S TRANSITION TO A DEVELOPED ECONOMY

India's impressive economic growth has kindled hopes of it attaining developed country status by 2047, the centenary year of its independence. However, this aspiration demands an arduous journey of raising the country's per capita income by more than five times, from the current USD 2,600 to USD 10,205, within the next 25 years. Achieving this ambitious target effectively translates into sustaining a per capita income growth rate of 7.5% annually and an aggregate GDP growth rate of 9% over this period.

Merely accelerating growth is insufficient; inclusivity is equally crucial. The daunting challenges include creating jobs for the four million individuals entering the workforce annually. Therefore, India's journey towards becoming a developed nation requires a multi-pronged approach. Addressing fiscal and structural challenges, while fostering inclusive growth and a robust export sector, will pave the way for this ambitious goal.

## Characteristics of a Developed Country

A developed country refers to a nation with a mature and advanced economy, characterized by high levels of industrialization, technological infrastructure, and overall societal well-being.

The term "developed" is used to distinguish these countries from "developing" or "underdeveloped" nations, which are still in the process of economic and social growth.

India, which is the world's fifth largest economy with a GDP of 3.42 Lakh Crores USD, is currently classified as a developing nation.

### ▪ Key Characteristics of Developed Countries:

#### ○ Economic Factors

High per capita income (typically above USD 12,000 to USD 25,000 or more)



- Diversified and advanced industrial and service sectors
- Robust infrastructure, including transportation, communication, and utilities
- Stable and efficient financial markets
- **Social and Human Development Factors**
- High levels of education and literacy
- Access to quality healthcare and social services
- Low infant mortality and high life expectancy rates
- Robust legal and political institutions, with democratic governance
- **Technological and Innovation**
- Advanced technological infrastructure and capabilities
- Strong emphasis on research and development (R&D)
- High levels of innovation and productivity
- **Measurements and Indicators:**
- **Per Capita Income:** One of the primary indicators used to determine a country's development status
- **Human Development Index (HDI):** A composite index used by the United Nations to measure a country's overall well-being
- Factors include life expectancy, education levels, and standard of living
- Countries with an HDI score above 0.8 are generally considered developed

### ▪ **Examples of Developed Countries:**

According to the International Monetary Fund (IMF), some developed countries include the United States, Canada, Japan, Australia, New Zealand. Other examples include Singapore, South Korea and Hong Kong in Asia.

Major Growth Drivers Propelling India Towards a Developed Economy

### ▪ **Rise of the Services Sector:**

India's services sector is experiencing rapid growth, accounting for over 50% of GDP. This sector offers high-value jobs and attracts foreign investment.

**Example:** The IT and Business Process Outsourcing (BPO) industries in India have become global leaders, providing services to international clients.

▪ **Demographic Dividend:** India has a young and growing population, with a median age of 28.2 years (2023). This vast pool of human capital can fuel economic growth if properly skilled and employed.

▪ **Government Initiatives for Infrastructure Development:** The Indian government is actively investing in infrastructure development projects through initiatives like The PradhanMantriGati Shakti National Master Plan.

○ This will enhance efficiency and boost economic activity across sectors.

▪ **Digital Transformation and Startup Ecosystem:** India is witnessing a digital revolution through Digital India Initiative and democratization of Unified Payment Interface, with increasing internet penetration ( 8% year-on-year basis growth in 2023).

▪ **Economic Resilience Despite Global Slowdown:** Despite global economic uncertainties, geopolitical tensions such as the Russia-Ukraine War, disruptions in supply chains like the Red Sea and

Panama Canal Crisis, and tightening financial conditions in major economies like the US, India's domestic demand has shown relative resilience.

○ The Reserve Bank of India expects India's real GDP to grow by 7% in 2024-25.

▪ **Innovation and Entrepreneurship:** India is fostering a culture of innovation and entrepreneurship.

○ This is evident in the growing number of startups (1,12,718 DPIIT-recognized startups across 763 districts) and research institutions focused on developing new technologies and solutions.

○ This technological prowess can lead to advancements in various sectors and attract global collaborations.

### **Major Roadblocks to India's Goal of Developed Economy**

▪ **Jobless Growth:** While India boasts impressive economic growth of 7.8% in the 2023–24 fiscal year (FY) it has not translated into sufficient job creation.

○ Millions remain trapped in low-productivity agriculture (nearly 15% GDP contribution but employing 44% of the workforce).

○ India needs to create 115 million (11.5 crore) jobs by 2030 to meet its rising workforce.

▪ **Poverty-Education-Skill Trap:** Poor quality primary and secondary education limits cognitive development and reduces the potential benefits of higher education.

○ This creates a workforce less prepared for higher-skilled jobs (shortage of 150 million skilled workers).

○ Education system in India despite National Education Policy is not adapting quickly enough to changing industry demands.

○ This leads to graduates lacking the specific skills sought by employers, further hindering employment opportunities (The India Skills Report 2021 argues that

nearly half of India's graduates are unemployable).

- **High Public Debt:** India's public debt stands at 81.9 % of GDP raising concerns about fiscal sustainability. This high debt burden necessitates high-interest rates, crowding out private investment and hindering economic growth.
- **Vast Income Inequality:** India has a high level of income inequality, with a substantial portion of the population living in poverty.
  - In 2022-23, 22.6% of national income went to just the top 1%. This income disparity hinders inclusive growth and access to basic services for a significant portion of the population.
  - India's HDI score in 2022 was 0.644, placing it at 134th out of 192 countries ranked by the United Nations Development Programme (UNDP).
- **Rural-Urban Divide and Unbalanced Development:** While India's urban centers have experienced economic growth, rural areas remain mired in poverty, lack of infrastructure, and limited access to basic services.
  - Neglecting rural development and failing to bridge this divide could lead to social unrest, hampering overall progress.
- **Climate Change Vulnerabilities:** India's rapid industrialization and urbanization have come at the cost of environmental degradation, including air and water pollution, deforestation, and biodiversity loss.
  - This not only impacts public health and quality of life but also undermines the sustainability of economic growth.
  - The economic and social costs of climate change could derail India's development trajectory if adaptation and mitigation measures are not prioritised.

- The Reserve Bank of India suggests that up to 4.5% of India's GDP could be at risk by 2030,

- **Infrastructure Deficit and Financing Challenges:** India's infrastructure gap, particularly in sectors like transportation, power, and urban infrastructure, acts as a bottleneck to economic growth and development.

- India's infrastructure gap is estimated to be around USD 1.5 trillion (World Bank)
- The challenges of land acquisition, environmental clearances, and regulatory hurdles further compound the issue, leading to project delays and cost overruns.

### **Measures can India Adopt to Accelerate Progression Towards a Developed Economy**

- **Leveraging Demographic Dividend through Skill Development:** India needs to invest heavily in vocational education, skill development programs, and apprenticeship initiatives to create a globally competitive and employable workforce.
  - Collaborating with industry partners to design curricula aligning with market demands and emerging technologies like AI, robotics, and renewable energy (India can learn from Norway Model in this regard).

- **Balanced Regional Development and Rural Transformation:** Prioritizing investment in rural infrastructure, including roads, electrification, healthcare facilities, and digital connectivity, to bridge the rural-urban divide.
  - Incentivizing the establishment of agro-processing units and manufacturing hubs in rural areas to create non-farm employment opportunities.



- Promoting sustainable agriculture practices, precision farming techniques, and access to institutional credit and insurance to enhance rural incomes and food security.
  - **Preventive and Affordable Healthcare:** Healthy population is the fundamental requirement in the push towards the country becoming a developed country by 2047, (Chief Economic Adviser V. AnanthaNageswaran).
  - Increasing public spending on healthcare to at least 2.5% of GDP, as recommended by the National Health Policy 2017, to strengthen the public healthcare system and perform better in Human Development Index parameters.
  - Promoting preventive healthcare through awareness campaigns, early detection, and lifestyle interventions to reduce the burden of non-communicable diseases.
  - Leverage digital technologies like telemedicine and e-health initiatives to improve access to quality healthcare in remote areas and reduce costs.
  - **Innovative Infrastructure Financing and Public-Private Partnerships:** Exploring innovative financing models like asset monetization, securitization of infrastructure assets, and tapping into global capital markets to bridge the infrastructure deficit.
  - Promoting infrastructure investment trusts (InvITs) and real estate investment trusts (REITs) to attract long-term institutional investors and unlock capital for infrastructure projects.
  - **Fostering Innovation and Technological Advancement:** Increasing investment in research and development (R&D) to at least 2% of GDP, in line with the target set by the Science, Technology, and Innovation Policy 2020.
  - Establishing clean technology parks, incubation centres, and circular-economy zones to attract global technology leaders and foster a vibrant innovation ecosystem.
  - **Unlocking the Potential of the Blue Economy:** Harnessing India's vast coastline and marine resources through sustainable maritime activities like coastal shipping, marine tourism, offshore wind energy, and deep-sea mining.
  - **Formalising Informals and Startup Hubs Beyond Metros:** Implementing a portable social security system that allows informal sector workers to carry their benefits across different jobs, incentivizing formalisation.
  - Create a network of well-funded startup hubs in Tier-2 and Tier-3 cities to nurture disruptive innovation across diverse sectors beyond major metropolitan areas.
  - MSMEs, the backbone of India's economy also needs a forward push by better financing and marketing schemes.
  - **Green Collar Jobs Revolution:** India can Implement green jobs training programs with industry partnerships to equip the workforce with skills required for renewable energy sectors, waste management, and sustainable infrastructure development.
- Provide tax breaks and subsidies to companies that hire and train workers in green sectors, stimulating green job creation and workforce transition.

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# FORGING THE FUTURE OF FEDERALISM IN INDIA

The resurgence of coalition politics at the central level has elevated regional parties to key power broker status, countering the trend of centralized policy decision-making.

In recent years, the government has placed increased emphasis on both cooperative and competitive federalism through institutions like the National Institution for Transforming India (NITI) Aayog. However, numerous state governments have raised concerns about the Union government's alleged withholding of Goods and Services Tax (GST) compensation funds, leading to instances of confrontational federalism.

Furthermore, the ruling vision of "one nation, one election" and the idea of "one nation with one flag and one Constitution" to streamline governance and promote national unity, have elicited varied reactions from different states, reflecting the complexities of federalism in India.

Thus, governing within a coalition framework presents an opportunity to reset trust and restore balance in Centre-state relations.

What is Federalism?

- Federalism involves the distribution of powers and responsibilities between the central government and state governments. It aims to maintain unity while allowing for regional self-governance.
- Federalism allows for the accommodation of diversity and regional autonomy within a larger political unit.

## ▪ Features of Federalism:

- **Division of Powers:** Powers are divided between the central government (Union) and state governments.
- **Written Constitution:** A written constitution delineates the powers of different levels of government.

- **Supremacy of Constitution:** The Constitution is supreme and governs the relationship between the Union and states.
- **Independent Judiciary:** An independent judiciary interprets and enforces the Constitution to resolve disputes between different levels of government.
- **Dual Government:** Both the central and state governments have their own spheres of influence and authority.
- **Rigid Constitution:** The Constitution is not easy to amend and provides for clear procedures for changes.

## ▪ Types :

- **Holding Together Federation:** In this type, powers are shared between various constituent parts to accommodate the diversity in the whole entity. Here, powers are generally tilted towards the central authority.

- **Example:** India, Spain, Belgium.

- **Coming Together Federation:** In this type, independent states come together to form a larger unit. Here, states enjoy more autonomy as compared to the holding together kind of federation.

- **Example:** USA, Australia, Switzerland.

- **Asymmetrical Federation:** In this type, some constituent units have more powers or special status than others due to historical or cultural reasons.

- **Example:** Canada, Russia, Ethiopia.

## ▪ Nature of Indian Federalism :

- The Indian Constitution establishes a federal system with a strong Union. Because of It, Indian Federalism is sometimes referred by various terms:
- KC Wheare called it "Quasi-federal".



- Granville Austin called it “Cooperative federalism” (need for national integrity and unity).
- Morris Jones defined it as 'Bargaining Federalism'.
- Ivor Jennings termed it as 'Federalism with Centralizing tendency'.
- The Constitution specifies the distribution of legislative, administrative and executive powers between the union government and the state government
- **Constitutional Provisions:**
- **Seventh Schedule:** Divides powers between the Union and states through three lists – Union List, State List, and Concurrent List.
- **Article 1:** Defines India as a Union of States.
- **Article 245:** Grants Parliament and state legislatures the power to make laws within their respective jurisdictions.
- **Article 246:** Enumerates the subject matters on which Parliament and state legislatures can legislate.
- **Article 263:** Provides for the establishment of an Inter-State Council to promote cooperative federalism.
- **Article 279-A :** Empowers the President to constitute a GST Council.

How the Concept of Federalism Evolved in India?

- **Inner-Party Federalism(1950-67):**
- During the first phase of federalism, major disputes between the federal government and the states were resolved in Congress party forums, or what political scientist Rajni Kothari called the “Congress System”.
- This helped contain or prevent major federal conflicts and create a consensus-based form of “inner-party federalism”.
- **Expressive Federalism(1967-89) :**

- In the second phase from 1967 onwards, the Congress party was still in power at the Centre but lost power in many states where many regional party-led and anti-Congress coalition governments were formed.
- This phase marked the emergence of an era of “expressive” and more direct conflictual federal dynamics between the Congress-led Centre and the opposition parties-led state governments.
- **Multi-Party Federalism (1990-2014):**
- The 1990s saw the coalition period, also known as multi-party federalism, in which national parties were not able to win a majority in parliament. National coalitions maintained influence in the union with the help of regional powers.
- This period saw a decline in the intensity of Center-state confrontations as well as in the Center’s arbitrary use of Article 356 to topple state administrations.
- A 1994 Supreme Court ruling (SR Bommai v. Union of India case verdict) that questioned the Center’s arbitrary use of the provision is partly responsible for this.
- **Confrontational Federalism (2014-2024):**
- Federalism under the “dominant party” reemerged with the single-party majority in the Lok Sabha elections of 2014. Concurrently, the ruling party solidified its grip on power by taking over several states.
- This period saw the rise of confrontational federalism, marked by significant disputes between opposition-led states and the center.

Why is there a Need to Strengthen Federalism in India?

- **Diverse Demographics and Cultures :**
- **Linguistic Diversity:** India is home to numerous languages and dialects. Strengthening federalism ensures that the

linguistic and cultural identities of different regions are preserved and respected.

- **Cultural Plurality:** Regional autonomy allows for the celebration and preservation of unique cultural practices, festivals, and traditions, fostering a sense of pride and unity within diversity.
- **Avoiding Central Overreach :**
- **Safeguarding Rights of State:** Federalism is needed to safeguard and enhance the autonomy and rights of the states and other sub-national units in the face of increasing centralization and interference from the Centre or other external forces.
- **Accommodating Regional Aspirations** A robust federal system can address and accommodate the political aspirations of various regions, reducing the chances of separatist movements and promoting national unity.
- **Empowering Local Bodies:**
- **Panchayati Raj Institutions:** Strengthening federalism involves empowering local self-governance through Panchayati Raj institutions, which play a critical role in grassroots democracy and development.
- **Women's Participation:** Enhanced federalism supports initiatives like the reservation of seats for women in local bodies, promoting gender equality and empowering women in rural areas.
- **Fiscal Federalism :**
- **Fair Revenue Distribution:** Strengthening fiscal federalism ensures a more equitable distribution of financial resources between the Centre and states, enabling better funding for state-specific projects and initiatives.
- **State Autonomy in Spending:** Allowing states greater control over their finances

can lead to more effective and contextually appropriate utilization of funds.

### **Key Challenges to Federalism in India**

- **Balancing Centralization and Regionalism:**
- India walks a tightrope between central authority for national unity and state autonomy for regional needs. Strong central governments can be seen as overstepping, while strong regional movements can threaten national cohesion.
- South Indian states have distinct Dravidian languages and cultures that are central to their identity. The imposition of Hindi as a national language has led to protests, especially in southern states like Tamil Nadu.
- The abrogation of Article 370 of the Constitution, granting special status to Jammu and Kashmir, in 2019, was done by the central government without consulting the state legislature. This move has been criticized for undermining federal principles.
- **Regional Discontent:**
- Regionalism establishes itself through demands for autonomy on the grounds of language and culture. The nation thus faces the challenge of internal security in the form of insurgency and this causes upheavals in the basic notion of Indian federation.
- The Bodos, a major tribe in Assam, have a long-standing demand for a separate Bodoland state.
- The Gorkhas, an ethnic group concentrated in Darjeeling hills of West Bengal, have a long-standing demand for a separate Gorkhaland state.
- **Disputes in Division of Powers:**
- The Constitution divides powers between the Centre and states (Union List, State List, Concurrent List). However, this

division can be blurry, leading to conflicts over jurisdiction, especially on issues like agriculture or education in the Concurrent List.

- The three farm laws passed by the central government in 2020 were challenged by states like Punjab on the grounds that agriculture is a State List subject. This highlights the ongoing disputes over interpretation of power division.

- **Misuse of Governor's Office :**

- The misuse of the Governor's office has increasingly become a matter of concern, particularly in matters related to the arbitrary dismissal of state governments, manipulation in government formation, withholding assent to bills, and frequent transfers and appointments, often directed by the central ruling party.
- In Arunachal Pradesh (2016), the Governor's recommendation led to the imposition of President's Rule despite the ruling government having majority support, later quashed by the Supreme Court.

- **Misuse of Article 356 :**

- **Article 356**, also known as the President's Rule, is designed to be invoked when a state cannot function constitutionally. It grants the Union Cabinet power to dismiss democratically elected state governments and dissolve legislative assemblies
- Historically, Article 356 has been used to impose President's Rule over 100 times until 2000, disrupting state autonomy. Although its usage has decreased, its potential misuse remains a concern.
- In 1988 the Sarkaria Commission found that at least a third of all Article 356 impositions were politically motivated.

- **Fiscal Imbalances:**

- **Unequal Revenue Distribution:** The 15<sup>th</sup> Finance Commission recommended a higher share of central taxes for states,

increasing it from 32% to 41%. However, states often complain that the funds are insufficient and not disbursed timely, leading to fiscal stress.

- Furthermore, the southern states frequently complain about receiving fewer funds despite contributing more in taxes compared to the northern states, attributing this disparity to their lower population.

- **GST Compensation Issues:** States like West Bengal and Kerala have expressed concerns about delayed GST compensation, which they argue hampers their financial planning and development activities.

- **Asymmetric Representation in Parliament:**

- In Lok Sabha, representation is based on population, with larger states having more seats. However, smaller states argue this dilutes their voice in national politics.

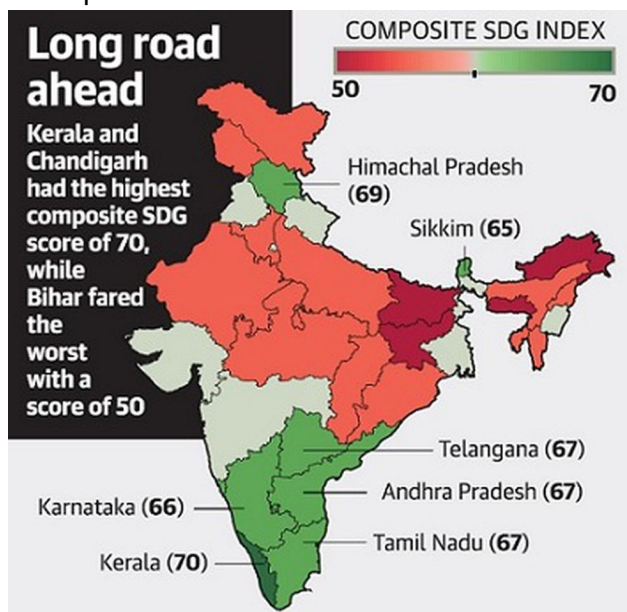
- **Example: Uttar Pradesh**, the most populous state, has 80 Lok Sabha seats, while **Sikkim**, the least populous, has only 1.

- **Inter-State Disputes:**

- Inter-state disputes in India encompass a range of issues, including water sharing, boundary disagreements, and resource allocation.
- These disputes, if unresolved, can strain the federal structure by fostering mistrust and hampering cooperative governance.
- Between Tamil Nadu and Karnataka, this longstanding conflict revolves around the sharing of the Cauvery River waters. The dispute has seen multiple legal battles, violent protests, and political standoffs.
- Such issues not only hamper governance but also they carry a very high economic cost as well.
- For example, the States of Maharashtra and Karnataka also have a longstanding

Belagavi (Belgaon) border dispute over the administration of Belagavi region.

- To fight this case in the Supreme Court, the Karnataka government paid more than 50 lakh rs/day.
- **Economic Disparities:**
  - **Competition for Investment:** States often compete for foreign direct investment (FDI), which can lead to imbalances.
  - For instance, Maharashtra and Gujarat attract substantial FDI, while northeastern states receive minimal investment, exacerbating regional inequalities.
  - **Regional Inequality:** According to the NITI Aayog's SDG India Index 2020-21, states like Kerala and Himachal Pradesh score high on sustainable development goals, whereas Bihar and Jharkhand lag significantly, showcasing stark economic disparities.



### Federal Demands Could Arise with the Return of Coalition Politics in India

- **Pending Exercise of Delimitation :**
  - Several South Indian states, with controlled population growth, are demanding that the

pending delimitation exercise in India be carried out swiftly.

- Southern states feel that their efforts in implementing effective population control measures should be rewarded through increased or proportionate representation. Delaying the delimitation process seems to penalize these states for their successful initiatives.
- **Legitimacy of the Redistributive Model :**
  - Southern states, which generally have more robust economies and contribute significantly to the national GDP, feel that the GST model disproportionately benefits less economically developed states.
  - They demand a more equitable and balanced approach to GST redistribution that recognizes their higher contributions, addresses revenue shortfalls, and supports their developmental needs.
- **Demand for Special Category Status :**
  - Regional parties in the national coalition government from Bihar and Andhra Pradesh see Special Category Status as a critical tool to address their unique developmental challenges and to secure additional central support necessary for sustainable growth and development.
  - One of the biggest benefits for states classified as a special category earlier was that 90% of funds under centrally sponsored schemes was contributed by the Centre, with only 10 % being the state contribution.
- **Divergence from “One Nation, One Election” Vision:**
  - Some states argue that simultaneous elections undermine the federal structure of India by prioritizing uniformity over the unique political and social contexts of individual states.

- States might lose some of their autonomy in determining their election schedules based on local needs and circumstances.

### **Steps Are Necessary to Strengthen India's Federal Framework**

#### **▪ Enhancing Devolution of Powers:**

- Federalism can be strengthened by enhancing devolution of powers and resources to states and local bodies by revising the constitutional lists, increasing the share of states in central taxes, giving more fiscal autonomy and flexibility to states, etc.

- **The Sarkaria Commission (1988)** advocated for greater autonomy for states in areas listed in the State List of the Seventh Schedule of the Constitution.

- Furthermore, A recent World Bank working paper has called for granting greater authority to Panchayats while strengthening local fiscal capacity to offset what it identified as “recentralisation” resulting from the widespread adoption of online payment systems, MIS-based beneficiary selection, and digital beneficiary tracking.

- “Delegating more authority to Panchayats, rather than stripping them of power, is crucial in ensuring effective local governance.

#### **▪ Ensuring Equitable Development:**

- **Resource Sharing Formula:** Develop a transparent and objective formula for distributing central funds to states, considering factors like population, poverty levels, and infrastructure needs.

- **The RaghuramRajan Committee (2017)** advocated for a formula-based devolution of central funds to states based on objective criteria.

- **Addressing Regional Disparities:** Address regional imbalances and inequalities by providing special assistance

and support to backward and disadvantaged regions or groups.

- The Punchhi Commission suggested increasing the share of states in central taxes and enhancing their fiscal autonomy.

- The 15th Finance Commission recommended allocating more state-specific grants alongside the creation of high-level committees within each state to review and monitor utilisation of state-specific and sector-specific grants.

- The Commission also identified areas like power sector efficiency, adoption of Direct Benefit Transfer (DBT) schemes, and solid waste management for potential performance incentives.

#### **▪ Strengthening Inter-governmental Institutions:**

- **Revitalizing the Inter-State Council (ISC):** Make the ISC a more effective forum for resolving inter-state disputes and fostering cooperation on national issues. This could involve giving it more power to evolve common policies.

- On the recommendation of Sarkaria Commission the government has established a permanent inter state council but it hasn't fully lived up to the Sarkaria Commission's vision.

- The ISC should meet at least thrice a year as suggested by the TamilNadu CM MK Stalin.

- The Council has met only once in the last 8 years — and that there has been no meeting since July 2016.

- Since its inception in 1990, the ISC has met only 11 times.

- **Enhancing Communication and Coordination:** Establish regular channels of communication between the Centre and States to ensure smoother policy implementation and address regional concerns.



- Punchhi Commission proposed the creation of a superseding structure, the 'National Integration Council,' for matters related to internal security, enhancing coordination and effectiveness.
- **Fostering Cooperative and Competitive Federalism:**
  - In **cooperative federalism**, the centre and states work together on issues of national importance like national security, disaster management, and economic development. This ensures a unified approach to achieving common goals.
- For instance, establishing the GST Council and approving the Finance Commission's suggestion to raise the states' funding share.
- In competitive federalism, states compete for investments and talent by improving infrastructure, public services, and regulatory frameworks. This fosters innovation and better governance practices across the country.
- NITI Aayog acts as a catalyst for a more robust and competitive federal system in India through various indices that rank states on specific parameters such as School Education Quality Index (SEI), State Health Index (SHI), Composite Water Management Index (CWMI), etc.
- **Respecting Federal Principles and Spirit:**
  - **Minimizing Central Intervention:** The Centre should avoid excessive use of its powers under Articles 355 and 356 of the Constitution, which allow for imposition of

President's rule in states. This ensures greater autonomy for states.

- The Sarkaria Commission suggested Article 356 (President's Rule) should be used very sparingly, in extreme cases as a last resort when all the available alternatives fail.
- **Ensuring Greater Representation and Participation:** Increased participation from state representatives ensures their concerns and priorities are heard at the national level.
- For Example, the appointment of Governor should be more transparent and consultative.
- Punchhi Commission recommends the Chief Minister's involvement in Governor appointments.

#### Conclusion

The evolving political landscape, marked by the resurgence of coalition politics and the increasing influence of regional parties, offers a unique opportunity to redefine and strengthen the federal structure. A forward-looking approach to federalism in India will be one that celebrates its diversity, fosters cooperation and builds a harmonious and prosperous future for all its citizens. This is not just a political necessity but a testament to the resilience and unity that defines the Indian Republic.

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# DISMANTLING THE ROOTS OF TERRORISM

The specter of terrorism continues to cast a long shadow across the globe. From coordinated attacks targeting civilians to targeted assassinations, terrorist groups employ violence and fear to achieve their political goals. While the international



community has made strides in countering terrorism, its reach and tactics remain fluid, demanding constant vigilance and adaptation.

India, a nation with a long history of grappling with terrorism, faces a unique set of challenges. This is particularly evident in the restive region of Jammu and Kashmir, where incidents like a recent attack on pilgrims in Reasi, a district with minimal prior militancy, exposes the fragility of peace.

India's fight against terrorism necessitates a multi-pronged approach. Stringent security measures are crucial to deter infiltration attempts and disrupt terror networks. Only through a comprehensive strategy that combines robust security measures with efforts to address underlying grievances can India hope to achieve lasting peace and security for its citizens.

## Framework Related To Terrorism in India

Terrorism is the deliberate and unlawful use of violence and intimidation, especially against civilians, to instill fear and achieve political, religious, or ideological goals.

It seeks to influence governments or societies by creating a climate of fear, disruption, and uncertainty. India maintains a strong stance against terrorism with a "zero tolerance" policy.

However, there are no universally accepted definitions of terrorism, making it difficult to classify specific activities as terrorist acts.

This ambiguity gives terrorists an advantage and enables some countries to remain silent and veto actions in global institutions.

### ▪ Domestic Laws:

- **Unlawful Activities (Prevention) Act (UAPA) 1967:** Designates terrorist organizations or individuals, criminalizes terrorist activities, and empowers authorities for investigation and prosecution.

- **National Investigation Agency (NIA) Act, 2008:** Establishes a central agency for investigating and prosecuting terror-related offenses.

### ▪ Institutional Framework:

- **National Security Council Secretariat (NSCS):** Oversees and coordinates national security strategy, including counter-terrorism efforts.

- **Ministry of Home Affairs (MHA):** Leads domestic counter-terrorism operations and intelligence gathering.

- **National Investigation Agency (NIA):** Investigates and prosecutes major terror-related cases.

- **International Agreements:** India is a signatory to various UN conventions against terrorism, including:

- Convention on the Prevention and Punishment of Offences against Internationally Protected Persons, including Diplomatic Agents (1973)

- International Convention against the Taking of Hostages (1979)

- International Convention for the Suppression of the Financing of Terrorism (1999)

## Various Emerging Forms of Terrorism

- **Lone Wolf Attacks:** The rise of self-radicalized individuals carrying out attacks without being part of a larger group poses a significant challenge for intelligence agencies.

These "lone wolf" terrorists are harder to detect and can strike with little to no warning.

- **Bioterrorism Risks:** The Covid-19 pandemic has sparked the potential consequences of a bioterror attack involving the weaponization of viruses, bacteria or other biological toxins as an instrument of mass disruption.

The illicit procurement and deployment of such agents by non-state actors with catastrophic intentions remains a looming danger that requires constant vigilance.

- **Unmanned/Drone Threats:** The rapid proliferation of advanced yet inexpensive commercial drone technologies has opened a new threat vector that terrorists could exploit for purposes like intelligence gathering, targeted strikes, or as delivery platforms for explosives/chemical dispersion devices, presenting a formidable new security challenge.

For example, India witnessed a significant drone attack at the Air Force Station in Jammu in June, 2021. The airbase, which is 14 km away from the India-Pakistan border, was attacked by low-flying drones that dropped two improvised explosive devices (IEDs).

- **Terrorist Safe Havens:** Prolonged conflicts and fragile regions with limited governance in parts of Africa and the Middle East provide fertile territories for terrorist groups to establish safe havens, training infrastructures, and a foothold to export violence across borders, making

these unstable zones an enabler for transnational terror.

- **Terror-Crime Nexus:** The deepening convergence between terrorist entities and transnational organized criminal syndicates, combining their illicit financial resources (through cryptocurrency), distribution networks (like case of Drug supplies in Punjab )and expertise in areas like weapons procurement and human trafficking, has emerged as a potent threat multiplier that demands sustained counterterror operations.

- **Terrorism Driven by Emerging Technologies:** Terrorist entities are actively seeking to exploit cutting-edge technologies like encrypted communications and dark web to amplify their capabilities across all phases - recruitment, radicalization, operational planning, and attack execution.

Staying ahead of this technological curve remains an ongoing cat-and-mouse battle for counterterrorism forces.

## Major Terrorism Related Challenges that India Faces

- **Cross-border terrorism:** India has been grappling with cross-border terrorism emanating from neighbouring countries, particularly Pakistan.
  - Recent examples include the 2019 Pulwama attack, where a suicide bomber from the Pakistan-based terrorist group targeted a convoy of Indian security personnel.
  - Also, recent attacks like the one in Reasi (June 2024) suggest that increased security pressure in traditionally militant-affected districts like Rajouri and Poonch might be pushing them towards more peripheral areas.
- **Left-Wing Extremism (LWE):** The LWE movement, also known as the Naxalite



insurgency, has been a persistent challenge for India.

- Maoist rebel groups have been active in several states like Chhattisgarh and Jharkhand, engaging in violence, extortion, and disrupting development projects.
- The number of LWE related violent incidents have come down by 76% in 2022 in comparison to 2010.
- However, the issue is still persistent, highlighted by a recent incident in Narayanpur District of Chhattisgarh.

▪ **Separatist Movements and Militancy:** India has faced separatist movements and militancy in various regions, including the Northeast, and Punjab.

- The issue of militancy in Jammu and Kashmir has been particularly complex, with Pakistan-based terrorist groups like Lashkar-e-Taiba (LeT) and Jaish-e-Mohammed (JeM) fuelling the insurgency.

▪ **Radicalization and Online Propaganda:** The rise of radicalization, particularly among the youth, and the spread of extremist ideologies through online platforms and social media, pose a significant challenge.

- India has witnessed instances of youth being radicalized through methods like Honey trapping (like the recent instance of trapping Former BrahMos engineer) and recruited by terrorist organizations, both domestically and internationally.

- In February 2024, 4 were arrested by the National Investigation Agency in connection with radicalisation of youths to carry out terror attacks.

▪ **Cyber Terrorism:** The increasing reliance on digital infrastructure and the potential for cyber attacks by terrorist groups or state-

sponsored actors is an emerging concern for India.

- Cyber terrorism could target critical infrastructure, financial systems, and sensitive data, causing significant disruption and economic damage.

- A recent report has stated that a Chinese firm breached nearly 100 gigabytes of Indian immigration data.

▪ **Pakistan Exiting FATF Grey List:** With Pakistan out of the **grey list**, India's claims about Pakistan's lack of action against terror groups might hold less weight internationally.

- The Financial Action Task Force (FATF) listing served as a form of validation of India's concerns.

- Also, in this case China Factor comes into picture that is highlighted by China blocking India's demand to declare Hafiz Saeed a terrorist

**Measures can India Adopt to Curb the Menace of Terrorism**

▪ **Focus on Rehabilitation, Not Just Punishment:** Developing de radicalization programs for individuals caught in the early stages of radicalization.

- These programs should address the root causes of radicalization and provide participants with opportunities for rehabilitation and reintegration into society.

▪ **Establishing a National Counter-Terrorism Database:** Developing a centralized and secure database that integrates intelligence from various agencies, including law enforcement, intelligence agencies, and financial institutions.

- Leveraging advanced data analytics and machine learning techniques to identify patterns, connections, and potential threats, enabling proactive action.

- **Enhancing Physical Security Measures:** Improving physical security measures at critical infrastructure, public spaces, and potential high-risk targets, including surveillance systems, access control, and perimeter security.
  - Conducting regular security audits and vulnerability assessments to identify and address potential weaknesses.
  - Implementing robust crisis management protocols and evacuation plans in case of terrorist attacks.
- **Open-Source Intelligence Training for Police:** Training police forces in open-source intelligence (OSINT) techniques to analyze publicly available data on social media and online forums to identify potential threats and track terrorist activities.
- **Strengthening Cyber security and Online Counterterrorism Capabilities:** Investing in developing advanced cyber security measures to protect critical infrastructure and online systems from cyber attacks and digital espionage by terrorist organizations.
- **Empowering Communities, Not Just Security Forces:** There is a need to educate communities, particularly in vulnerable regions, about early signs of radicalization and how to report suspicious activity.

- Address socio-economic grievances in areas susceptible to extremist influence. Improve education, healthcare, and livelihood opportunities to create a sense of hope and discourage radicalization.
- The Himayat and UMEED Scheme in Jammu and Kashmir is a significant step in this direction.
- Khelo India Centres could be established in areas prone to radicalization as a means of redirecting the youth.
- Mainstreaming terrorism prone areas as highlighted by India during its G20 Presidency meetings in Jammu and Kashmir and thereby Winning their Hearts and Minds.
- It's the high time for promoting national security as a shared responsibility.
- **Weakening the Financial Lifeline of Terror:** Exploring the use of block chain technology to track financial transactions and identify suspicious patterns associated with terror funding.

The transparency and immutability of block chain can make it harder for terrorists to move funds.

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# NAVIGATING THE INDIA-WEST DIPLOMATIC NEXUS

India's diplomatic landscape is increasingly becoming complex, with the nation needing to manage its conflicts with China and cooperation with Russia while simultaneously expanding ties with the West. This balancing act is particularly challenging amid the escalating Russia-Ukraine conflict and growing military tensions between China and its neighbours in the Western Pacific.

As a frequent participant in G7 gatherings, India has a vested interest in deepening collaboration with the "collective West." With the West also keen on drawing India into global governance structures, the G7 summit (Italy as host), presents a prime opportunity for India to reboot its ties with the Western nations.

What is G-7?

- The G7 is an informal bloc of industrialized democracies, the United States, Canada, France, Germany, Italy, Japan, and the United Kingdom (UK), that meets annually to discuss issues such as global economic governance, international security, and, most recently, artificial intelligence (AI).
- **History:** The United States, France, Italy, Japan, the UK, and West Germany formed the Group of Six in 1975 to provide a venue for non communist powers to address pressing economic concerns, which included inflation and a recession sparked by the Organization of the Petroleum Exporting Countries (OPEC) oil embargo.
  - Canada joined in 1976.
  - The European Union (EU) has participated fully in the G7 since 1981 as a "non enumerated" member.

- Russia belonged to the forum from 1998 through 2014, when the bloc was known as the Group of Eight (G8), but the country was suspended following its annexation of Ukraine's Crimea region.
- Secretariat: The G7 does not have a formal charter or a secretariat.
- The presidency, which rotates among member countries each year, is in charge of setting the agenda.
- The 50<sup>th</sup> G7 Summit was held from 13<sup>th</sup> June to 15<sup>th</sup> June 2024 in the city of Fasano in Apulia, Italy (India is invited).

What Constitutes the West in Geopolitical Context?



- **Geographic Scope:** Traditionally, the West referred to **Western Europe** and the areas it colonized, primarily **North America and Australasia**.
  - Debate exists regarding Eastern Europe's inclusion, with some considering it part of the former Soviet sphere of influence.
  - However, the definition is not so clear-cut anymore. The growing interconnectedness of the world challenges the clear-cut distinction between "West" and "East."

- **Cultural Features:**

- **Greco-Roman Legacy:** Western culture draws heavily on the philosophical and political traditions of ancient Greece and Rome, emphasizing reason, logic, and individual rights.
- **Christianity:** While religious practices have become more diverse, Christianity, particularly Catholicism and Protestantism, has significantly shaped Western values and institutions.

- **Political and Economic Systems:**

- **Democracy:** The concept of representative government with individual freedoms and liberties is a cornerstone of Western political systems.
- **Capitalism:** Free-market economies with private ownership and competition define most Western economies.
- **Rule of Law:** The West emphasizes a legal system based on established laws and procedures, ensuring fairness and accountability.

Why Does India Need to Reboot Its Relations with the West?

- **Managing the China Challenge:** China's rising assertiveness in the Indo-Pacific and its border tensions with India pose a significant challenge.
  - The West, particularly the U.S., views China as a strategic competitor.
  - Improved India-West relations would allow for better coordination in managing the multi-faceted China challenge through economic, diplomatic, and military means.
  - India and the US have recently conducted joint military exercise Tiger Triumph 2024, demonstrating a willingness to collaborate on security issues.
- **Balancing Relations Alongside Russia:** India's historical ties with Russia, including defense cooperation, have been a point of friction with the West, especially in the

wake of the Ukraine conflict where India significantly increased its imports of Russian crude oil despite Western sanctions.

- Rebooting relations would help India better explain its stance while finding common ground on issues like energy security and regional stability.
- **Managing the US-China Technological Decoupling:** The intensifying US-China tech wars and the bifurcation of technologies like AI, and 5G pose a significant challenge for India.
  - Remaining non-aligned in this realm could hamper India's technological aspirations and economic growth.
  - A reboot would enable India to seek a balanced approach, accessing US and Western technologies while leveraging its market size to negotiate favourable terms and safeguard its strategic autonomy.
- **Reshaping the Global Trade Architecture:** With the WTO's challenges and the rise of plurilateral arrangements like Indo-Pacific Economic Framework for Prosperity, the global trade order is undergoing a seismic shift.
  - As the West aims to create a rules-based framework aligned with its interests, India must proactively engage to ensure its concerns around issues like data localization, e-commerce, and digital taxation are addressed.
  - A reboot could position India as a pivotal player in reshaping trade rules for the digital era.
- **Navigating the Geopolitics of Climate Change and Energy Transition:** Climate change is becoming an arena of strategic competition, with the West pushing for an accelerated transition towards renewable energy, and the potential weaponization of technologies like green hydrogen and carbon capture.

- India's energy security imperatives and its leadership in initiatives like the **International Solar Alliance (alongside France)** make it a crucial partner.
- A revamped partnership could facilitate climate finance, technology transfers, and a balanced approach to energy transition.

- **Collaborating on Regional Connectivity:** India's vision for an integrated regional connectivity framework, whether through initiatives like India-Middle East-Europe Corridor requires Western cooperation for financing, capacity-building, and aligning with the broader rules-based order.

#### **Friction Points Between India and West**

- **Differences on Global Governance and Reforms:** India has long sought reforms in global governance institutions like the UN Security Council and the World Bank to reflect the changing power dynamics.
- However, parts of the West have been reluctant to support reforms that would dilute its influence in these bodies, creating friction with India's aspirations for a greater global role.
- **Intellectual Property Rights and Technology Transfers:** India's stance on intellectual property rights (IPR) and its efforts to produce affordable generic drugs have often led to tensions with Western pharmaceutical companies and governments.
- The West has also been cautious about transferring sensitive technologies to India due to concerns over potential diversion or leakage.
- **Strategic Autonomy vs. Alignment Expectations:** India's pursuit of strategic autonomy, rooted in its non-aligned legacy, often clashes with Western expectations of closer alignment on issues like Russia-Ukraine War.
- The West perceives India's multi-alignment approach as a reluctance to take sides, while

India sees it as a pragmatic foreign policy of all-alignment that preserves its leverage and negotiating power.

- **Divergent Approaches to Regional Security:** India's approach to regional security issues, particularly in its neighbourhood, has sometimes diverged from Western perspectives.
- For instance, India's reluctance to intervene in Myanmar's political crisis or its cautious stance on the Taliban's takeover of Afghanistan has created friction with Western policies and expectations.
- **The Khalistan Issue:** The resurgence of the Khalistan movement, fuelled by some elements within the Indian diaspora in Western countries like Canada and the UK has become a significant source of friction.
- India has accused these nations of providing a platform for anti-India activities and harbouring pro-Khalistan elements, straining bilateral relations.
- **Defence Cooperation and Arms Exports:** India's defence cooperation with Russia and its procurement of Russian weapons systems like the S-400 missile defence system have been a source of friction with the West, particularly the United States.
- The West, especially the United States, has expressed concerns over this issue. Although India was granted a waiver under CAATSA (Countering America's Adversaries Through Sanctions Act), recently concerns have been resurfaced.

#### **India and the West Reconcile Their Differences**

- **Establish a Plurilateral Tech Alliance:** India and the West could explore establishing a plurilateral technology alliance focused on developing and setting standards for critical and emerging technologies like AI, quantum computing, and cyber security.

- This alliance could facilitate joint research, knowledge sharing, and the co-development of niche technologies while ensuring a level playing field and safeguarding the participants' strategic interests.
  - **Create a Renewable Energy and Climate Innovation Fund:** To address the friction over climate change and energy transition, India and the West could jointly create a dedicated fund to finance and accelerate research, development, and deployment of clean energy solutions.
  - This fund could support projects in areas like green hydrogen, carbon capture, sustainable aviation fuels, and climate-resilient infrastructure, fostering collaboration and mitigating concerns over technology transfers and climate finance.
  - **Joint Framework for Responsible Space Exploration:** As space exploration and commercialization accelerate, India and the West could develop a joint framework for responsible space exploration and governance.
  - This framework could address issues like the sustainable utilization of space resources, the prevention of space debris, and the peaceful use of space, fostering cooperation while respecting each partner's strategic interests.
  - **Focus on Regional Trade Agreements:** While finalizing a **pan-India-EU FTA** might be challenging, India can explore smaller regional trade agreements with specific countries like the recent TEPA with European Free Trade Association.
  - This allows for faster progress and caters to diverse economic interests.
  - **Issue-Based Alignment:** India needs to develop an "issue-based alignment" framework for certain domains that allows for cooperation on areas of mutual concern while respecting India's independent stance on other matters.
- Establishing dialogue mechanisms to address misperceptions and concerns about India's strategic autonomy, ensuring transparency and open communication.

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# WATER MANAGEMENT: FROM SCARCITY TO SUSTAINABILITY

India is staring at an impending water catastrophe, with large swathes of the country reeling under acute water scarcity. The unrelenting heat waves and erratic rainfall have exacerbated the crisis, depleting rivers and aquifers at an alarming rate.

Reduced water flow in rivers and falling groundwater levels have made this



summer extremely difficult. In cities like Bengaluru, taps have run dry, leading to disputes between states over sharing of river waters. Providing tap water connections alone is not enough to tackle this crisis. India needs a long-term policy focused on conserving resources, and ensuring fair distribution and adopting a holistic strategy for sustainable water management.

Structure of Water Management in India

## ▪ Central Level:

- **Ministry of Jal Shakti (MoJS):** Established in May 2019, it is the apex body responsible for formulating national water policies and overseeing water resource management activities across the country.
- **Central Water Commission (CWC):** A technical organization under MoJS that provides technical guidance on water resource development projects and river basin planning.

- **Central Groundwater Board (CGWB):** Responsible for assessing, monitoring, and managing groundwater resources in India.

- **Central Pollution Control Board (CPCB):** The CPCB's principal function, as defined in the Water Act of 1974 is to promote the cleanliness of streams and wells across states by preventing, controlling, and reducing water pollution.

## ▪ State Level:

- **State Water Resources Departments:** Responsible for implementing water policies and managing water resources within their respective states.

- **Irrigation Departments:** Focus on managing irrigation systems and ensuring water distribution for agricultural purposes.

- **State Pollution Control Boards (SPCBs):** Responsible for monitoring and controlling water pollution.

## ▪ Local Level:

- **Panchayats (Village Councils):** Play a crucial role in managing water resources at the village level, including promoting water conservation and ensuring equitable distribution.

- **Municipalities:** Responsible for managing water supply and sanitation in urban areas.

- **Water User Associations (WUAs):** Groups of farmers formed to manage and maintain irrigation systems at the local level.

## Constitutional Provisions Related to Water

- **Fundamental Right:** Water, essential for human survival, is encompassed within the

right to life under Article 21 of the Indian Constitution.

- **Entry 56 of Union List:** The central government is authorized to regulate and develop inter-state rivers and river valleys as deemed necessary by Parliament for the public interest.
- **Entry 17 of State List:** This entry pertains to water supply, irrigation, canals, drainage, embankments, water storage, and water power.
- **Article 262:** In cases of water-related disputes, Parliament can legislate to resolve issues regarding the use, distribution, or control of inter-state rivers or river valleys.
  - Additionally, Parliament may enact laws to exclude such disputes from the jurisdiction of any court, including the Supreme Court.

#### **Major Factors Driving Water Crisis in India**

- **Rapidly Depleting Groundwater Resources:** India is the largest extractor of groundwater globally, accounting for around 25% of the world's groundwater extraction (World Bank). Excessive withdrawal has led to alarming depletion of aquifers.
- **Increasing Water Demand from Agriculture:** Agriculture accounts for around 78% of India's freshwater usage (virtual water).
  - The Green Revolution led to the over-exploitation of groundwater for irrigation, with states like Punjab and Haryana experiencing a drastic drop in water tables. Flood irrigation, a highly inefficient method, is still widely practiced, leading to significant water losses.
  - About 74% area under wheat cultivation and 65% area under rice cultivation faces extreme levels of water scarcity (NITI Aayog).

- **Inadequate Water Infrastructure:** India's water infrastructure is plagued by aging systems, poor maintenance, and significant losses due to leakages and theft.
  - Mumbai loses around 700 million liters of water daily due to leakages. A report by the NITI Aayog stated that around 2 lakh people die in India every year due to inadequate water supply.
- **Urban Sprawl and Industrial Growth:** Rapid urbanization and industrialization have increased water demand, while also contributing to water pollution.
  - According to the NITI Aayog, 5 of the world's 20 largest cities under water stress are in India and about 70% of India's surface water resources are polluted.
- **Sand Mining:** Unregulated sand mining from riverbeds disrupts river ecology and reduces their water carrying capacity.
  - This not only impacts downstream water availability but also increases the risk of flash floods and riverbank erosion. The rampant sand mining in the Yamuna river is a case in point.
- **Fragmented Governance:** Water management in India is often fragmented across different ministries and departments at the central and state levels.
  - This lack of coordination leads to duplication of efforts, inefficient resource allocation, and conflicting policies.
  - The ongoing Cauvery water dispute between Karnataka and Tamil Nadu is a result of such fragmentation.
- **Inadequate Focus on Demand-Side Management:** India's water policies have primarily focused on increasing supply through large infrastructure projects, neglecting demand-side management.



- Measures like water-efficient technologies and recycling have received limited attention.
- Only 30% of India's wastewater is recycled, compared to 89-90% in Israel.
- **Sea Level Rise and Salinization:** Rising sea levels due to climate change threaten coastal aquifers with saltwater intrusion.
- This salinization renders freshwater sources unusable for agriculture and drinking, posing a significant threat to coastal communities.
- The increasing salinity of groundwater in parts of Gujarat and Andhra Pradesh is a worrying trend.

### Major Consequences of the Water Crisis

- **Hindering Human Capital Development:** The time burden of water collection, particularly on girls, often forces them to miss school, hindering their education and long-term opportunities.
- Also, waterborne illnesses and malnutrition caused by water scarcity can lead to cognitive impairment among children.
- **Long-Term Economic Risks:** The World Bank estimates that water scarcity could cost India up to 6% of its GDP by 2050 if left unaddressed. This can significantly hamper economic growth and development.
- Water scarcity can deter businesses from investing in water-intensive industries, impacting job creation and economic opportunities.
- **Rise of Water Mafias:** In water-stressed cities like Bangalore, informal water markets have emerged, with "water mafias" controlling access to water tankers and charging exorbitant prices.
- This exacerbates social and economic inequalities and creates a black market for a basic necessity.

- **Impact on Transboundary Water Disputes:** Water scarcity can exacerbate existing tensions between India and its neighbouring countries like Pakistan and Bangladesh, which share river basins.
- This could lead to regional instability and increased conflict over water resources.
- **Threat to Biodiversity:** Depleting water levels and pollution threaten the survival of freshwater fish, amphibians, and reptiles.
- The endangered Ganges River Dolphin faces habitat loss due to declining river flows.

### Government Initiatives to tackle the Water Crisis in India

- National Water Policy, 2012
- Pradhan Mantri Krishi Sinchayee Yojana
- Jal Shakti Abhiyan- Catch the Rain Campaign
- Atal Bhujal Yojana
- Jal Jeevan Mission (JJM)
- National Mission for Clean Ganga (NMCG)

### Measures can be Adopted to Tackle Water Crisis

- **Transforming Fallow Land into Recharging Units:** Converting underutilized land into strategically designed "water parks" dedicated to groundwater recharge.
- These parks can incorporate bio swales, constructed wetlands, and rainwater harvesting structures, creating appealing spaces that actively replenish aquifers.
- **Desalination Powered by Renewable Energy and Waste:** Developing large-scale desalination plants fuelled by a combination of renewable energy sources and waste-to-energy technology.
- Desalination plants not only generate clean water but also transform waste into a valuable resource, creating a sustainable and self-sufficient water production system.

- **Urban Rainwater Harvesting Systems:** Mandating the installation of rainwater harvesting systems in all new buildings and retrofitting existing structures.
  - This can be coupled with green roofs that capture and retain rainwater, replenishing groundwater and reducing stormwater runoff.
  - 900 rainwater harvesting pits to be installed at Regional Rapid Transit System, to promote sustainable public transport options in the National Capital Region.
- **Promoting Drip Irrigation and Aquaponics:** Encouraging the widespread adoption of drip irrigation systems that deliver water directly to plant roots, minimizing evaporation losses.
  - Additionally, support the development of aquaponics farms, which combine aquaculture (fish farming) with hydroponics (growing plants in water) in a closed-loop system, reducing water consumption.
- **Smart Water Grids:** Developing smart water grids that integrate sensors and real-time monitoring systems throughout the water distribution network.
  - This allows for early detection of leaks, optimal pressure management, and improved overall efficiency.
- **Fog Harvesting:** Exploring fog harvesting technologies in hilly regions. Specialized mesh structures capture moisture droplets from fog, providing a valuable water source in areas with limited rainfall.

- India can learn from successful fog harvesting projects that have been implemented in countries like Chile, Morocco, and Peru.
- **Decentralized Water Management:** There is a need to drive a decentralized, community-driven approach to rural water supply and sanitation like the Uttarakhand's Swajal project.
  - Also, promoting decentralized wastewater treatment systems at the community or building level.
  - These compact systems treat wastewater for reuse in non-potable applications, reducing the burden on centralized treatment plants and saving freshwater.
- **Public-Private Partnerships (PPPs) for Water Infrastructure:** Encouraging public-private partnerships for developing and maintaining water infrastructure projects.
  - This can leverage private sector expertise and financing to bridge the gap in water infrastructure development.
- **Zero Liquid Discharge for Industries:** Mandate the adoption of zero liquid discharge (ZLD) systems for water-intensive industries, where wastewater is treated and recycled for reuse.

Encouraging the development of eco-industrial parks, where industries can share and reuse water resources, reducing freshwater demand and pollution.

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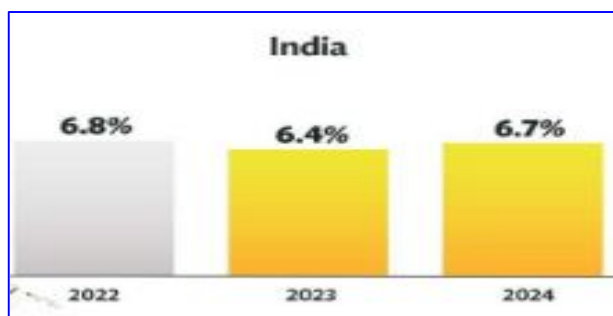
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# INDIA'S ECONOMIC GROWTH OUTLOOK

India's economic growth trajectory has garnered global attention as the renowned ratings agency S&P Global has revised its outlook on the country from stable to positive. This development reflects the agency's assessment that policy stability, deepening economic reforms, and robust infrastructure investment will sustain India's long-term growth prospects.

With public investment and consumer momentum being the key drivers of near-term growth, targeted economic policies are required to shape India's trajectory toward achieving its aspirations of being the third largest economy by 2027 and securing



sustainable economic growth.

India's Recent Economic Growth Projections

- **IMF Projection (World Economic Outlook, April 2024):** IMF raised India's GDP growth forecast for FY 2024-25 to **6.8%**, up 0.3 percentage points from its January 2024 projection.
  - For FY 2025-26, the IMF forecasts India's GDP growth at 6.5%.
- **United Nations Projection (World Economic Situation and Prospects, mid-2024):** India's economy is projected to grow by 6.9% in 2024 and 6.6% in 2025.
  - The 6.9% growth forecast for 2024 is an upward revision from the

earlier 6.2% projection made in January 2024.

- **Reserve Bank of India:** The Reserve Bank of India expects India's real GDP to grow by 7% in 2024-25.
  - The GDP growth is pegged at 7.2% in the June 2024 quarter, and is expected to moderate to 6.8% in the September 2024 quarter

## Major Factors Propelling Economic Growth in India

- **Strong Domestic Demand:** Robust private consumption growth, driven by rising incomes and an expanding middle class. Private consumption expenditure grew by 3.5% year-over-year in Q3 of FY 2024, according to Deloitte.
  - Also, demand for luxury and premium goods and services is growing faster than demand for basic goods.
- **Robust Investment Activity:** Private investment grew by **10.6% year-over-year** in Q3 of FY 2024, indicating a strong revival in the private capital expenditure cycle.
  - Initiatives like the National Monetization Pipeline aim to unlock value in Brownfield infrastructure assets and attract private investment.
  - The IMF suggests that reforms to liberalize foreign investment and boost exports could further support growth.
  - Moreover, the Budgeted expenditure classified by the government as capex is projected to increase to about ₹11 trillion in 2024-25, almost 4.5 times the level in 2014-15.
- **Moderating Inflation:** Inflation has been on a downward trajectory, with retail inflation at 4.83% in April 2024.

- This provides a stable environment for businesses and consumers, encouraging spending and investment.
- **Manufacturing Resurgence:** The manufacturing sector grew by 11.6% year-over-year in Q3 of FY 2024, driven by initiatives like the Make in India program and PLI schemes.
- The government's push towards self-reliance (Aatmanirbhar Bharat) is boosting domestic manufacturing capabilities.
- **Services Sector Resilience:** The services sector, which accounts for a significant share of India's GDP, grew by 7% year-over-year in Q3 of FY 2024.
- The IT and IT-enabled services sector continues to drive growth, supported by rising global demand for digital solutions.
- With the easing of Covid-19 restrictions, contact-intensive services like tourism, hospitality, and entertainment have witnessed a strong recovery.
- The travel market in India is projected to reach USD 125 Billion by financial year 2027.
- **Resilience to Global Headwinds:** Despite global economic uncertainties, geopolitical tensions (Russia-Ukraine War), disruption in supply chains (Red Sea Crisis) and tightening financial conditions in major economies like the US, India's domestic demand has remained relatively resilient.
- In 2023, world food prices dropped significantly from their 2022 highs. However, India's food inflation remained high at 9.5% in December 2023, contrasting with global deflation of -10.1%.
- This insulation from external shocks has helped sustain growth, even as major economies face slowdowns or recessions.
- **Supply Chain Diversification:** Amid global supply chain disruptions, India has

emerged as an attractive alternative destination for manufacturing investments, particularly in sectors like electronics and pharmaceuticals.

- Trade agreements like India-UAE Comprehensive Economic Partnership Agreement (CEPA) have facilitated this supply chain diversification.

### **Current Major Challenges in India's Economic Growth**

- **Employment Challenges:** Despite steady GDP growth over the past decade, the lack of substantial employment generation (jobless growth) has remained a key policy challenge facing the government.
- Unemployment rate in India was 8.1% in April 2024, according to CMIE's Consumer Pyramids Household Survey.
- **Export Competitiveness Challenges:** Despite policy incentives, India's exports shrink 3% in FY24.
- The merchandise trade deficit stood at USD 19.1 billion during April 2024, up from USD 14.44 billion during April 2023.
- **Potential Fiscal Slippage Risks:** The general government fiscal deficit, while declining, is still projected at 6.8% of GDP by FY28 as per S&P Global.
- Any deviation from the fiscal consolidation path could impact India's credit ratings and borrowing costs.
- **Skill Mismatch and Labour Quality:** India faces a skills mismatch between the available workforce and the requirements of the industry, hindering productivity and job creation.
- A new study suggests that only 45% of Indian graduates who apply for jobs are employable, with the skills to meet the industry's rapidly-changing demands.
- **Income Inequality:** The gap between rich and poor in India remains wide. The Gini

coefficient, a measure of income inequality, stood at 0.4197 in 2022-23.

- India's wealth inequality is at a six-decade high with the top 1% owning 40.1% of wealth.
- This means a large portion of the population has limited disposable income, hindering overall consumption growth.
- **Informal Sector Dominance:** A significant portion of India's workforce is employed in the informal sector, characterized by low wages, minimal social security benefits, and limited productivity gains.
- In terms of employment share the unorganized sector employs 83% of the work force and 17% in the organized sector (IMF).
- This informality hinders economic growth as it limits tax revenue and restricts formalization of the economy.
- **Infrastructure Bottlenecks:** Despite recent efforts, India's infrastructure deficit persists in areas like power, transportation, and logistics.
- The NITI Aayog estimates that India needs to spend USD 4.5 trillion on infrastructure by 2040 to sustain its growth momentum.

### **Measures can India Adopt to Accelerate Economic Growth**

- **Expanding Manufacturing Sector:** India needs to boost the manufacturing sector, creating more job opportunities to absorb the workforce transitioning from agriculture.
- This can be facilitated by providing targeted training programs and incentives for industries to hire and skill agricultural workers, ensuring a smooth transition and boosting overall productivity.
- Additionally, promoting food processing industries to expand income opportunities for farmers.
- **Gig Economy Skilling:** Partner with online platforms like Uber and Meesho to develop

targeted micro-skilling programs relevant to the gig economy.

- This equips youth with in-demand skills for immediate job opportunities.
- Create a national online marketplace for freelance work, connecting skilled individuals with businesses across India. This empowers entrepreneurs and facilitates flexible work arrangements.
- **Export Processing Zones (EPZs) 2.0:** Establish new-age EPZs with a focus on sustainability and technology. Offering tax breaks and streamlined regulations to attract green technology and high-value manufacturing companies.
- Providing financial incentives and training programs to equip small and medium enterprises (SMEs) for e-commerce exports.
- **Smart Taxation and Revamped PPP:** Leverage technology for "smart taxation" to fill the loopholes in existing taxation systems and widening the tax base.
- Partnering with fintech companies for innovative tax collection solutions.
- Develop a new generation of PPPs with a focus on risk-sharing and performance-based incentives.
- This attracts private capital for infrastructure projects while ensuring value for money.
- **Industry-Academia Collaboration:** Fostering stronger collaboration between universities and industries to develop curriculum aligned with industry needs.
- Introducing a system of micro-credentials and stackable certifications that recognize specific skills.
- This allows individuals to continuously upskill and adapt to changing job demands.
- India can take inspiration from Ireland's market-driven industry-academic



partnerships, which have effectively prepared the country's workforce for the emerging technologies.

- **Formalization Incentives:** Offering tax breaks and easier access to credit for informal businesses that transition to the formal sector. This incentivizes formalization and increases tax revenue.
- Utilizing digital technologies to expand financial inclusion, providing access to bank accounts, micro-loans, and financial literacy programs for informal workers.

- **Green Infrastructure Bonds:** Issue green infrastructure bonds to attract private capital for sustainable infrastructure projects like renewable energy and public transportation.

Utilizing big data analytics and artificial intelligence to identify critical infrastructure gaps and optimize resource allocation for project development.

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# SECURING INDIA'S NUCLEAR FUTURE

The world is witnessing a resurgence of nuclear anxieties. The Russia-Ukraine war and China's assertiveness are prompting a rethink on nuclear deterrence strategies. In Europe, talk of strengthening NATO's nuclear forces and collaboration between France and Britain is gaining ground. Similarly, anxieties about Iran's nuclear program are pushing Arab nations towards acquiring atomic capabilities. Meanwhile, the rise of Artificial intelligence and robotic weapons raises concerns about the automation of nuclear decision-making.

For India, while Pakistan's nuclear arsenal remains a concern, a bigger threat is emerging from China's rapidly expanding nuclear program. India needs to prioritize modernizing its nuclear arsenal and civilian nuclear energy program to counter these challenges.

## Nuclear Landscape Evolving Globally

- **Russia-Ukraine War:** Russia's veiled threats of using nuclear weapons during the Ukraine conflict have shattered Europe's sense of security.
  - This has led to discussions within NATO about strengthening its nuclear forces and potential collaboration between France and Britain on their nuclear arsenals.
  - Russia has also withdrawn from ratification of the Comprehensive Nuclear Test Ban Treaty.
- **China's Nuclear Expansion:** China is rapidly expanding its nuclear arsenal, with estimates suggesting a potential tenfold increase by 2035.

- This significant build-up, coupled with China's assertive territorial claims in Asia, is prompting anxieties amongst its neighbours.
- Countries like Japan and South Korea are re-evaluating their reliance on the US "nuclear umbrella" and considering potential nuclear programs of their own.
- **Iran's Nuclear Program:** Iran's ongoing nuclear program, despite international



efforts to curb it, continues to be a source of concern for the Middle East.

- This has intensified fears of a regional nuclear arms race as Arab nations like Saudi Arabia reportedly are exploring options for acquiring nuclear capabilities to counterbalance Iran's potential.
- **North Korea's Nuclear Activity:** North Korea's continued development and testing of ballistic missiles and nuclear weapons remains a major security threat in East Asia.
  - This has led to increased tensions with South Korea and heightened anxieties in the region.
- **Modernization of Nuclear Arsenals:** Even established nuclear powers like the US and Russia are modernizing their nuclear arsenals, raising concerns about a potential arms race and lowering the threshold for nuclear use.

- **Erosion of Arms Control Treaties:** The breakdown of key arms control treaties, like the Intermediate-Range Nuclear Forces Treaty between US and Russia (erstwhile Soviet Union), has weakened international frameworks for managing nuclear stockpiles and fostering nuclear disarmament efforts.

### India's Historic Stance on Nuclear Energy and Usage of Nuclear Weapons

- **1948:** The Atomic Energy Commission is established, with Homi J. Bhabha as its chairman, to spearhead India's nuclear program.
- **1956:** India's first nuclear reactor, Apsara, becomes operational, marking the beginning of its nuclear research program.
  - This was not only first in India but was also the first reactor in whole of Asia
- **1968:** India refused to sign the Nuclear Non-Proliferation Treaty.
- **1969:** India's first commercial nuclear power plant, Tarapur Atomic Power Station, under the agreement between India, the United States, and the International Atomic Energy Agency (IAEA)
- **1974:** India conducts its first underground nuclear test, codenamed "Smiling Buddha," at Pokhran, officially labeling it a peaceful nuclear explosion.
- **1995-1996:** India opposed the indefinite extension of the NPT and also refused to sign the Comprehensive Test Ban Treaty (CTBT).
- **1998:** India carries out a series of nuclear tests at Pokhran codenamed Operation Shakti, declaring itself a nuclear-armed state.
  - India adhered to a self-imposed commitment to 'No First Use' (NFU) of nuclear weapons on another country.

- **2003:** India and Pakistan agree to a ceasefire along the Line of Control in Kashmir, reducing the risk of nuclear escalation.
- **2005:** The United States and India reach a landmark civil nuclear agreement, paving the way for nuclear cooperation and fuel supplies.
- **2008:** The Nuclear Suppliers Group (NSG) grants India a waiver, allowing it to engage in nuclear trade despite its non-NPT status.
- **2016:** India gains entry into the Missile Technology Control Regime (MTCR).
- **2019:** India successfully tests its anti-satellite missile capability, demonstrating its ability to shoot down low-orbit satellites.
- **2024:** India initiated the core loading of India's Prototype Fast Breeder Reactor (PFBR) at Kalpakkam, Tamil Nadu marking a significant milestone in India's nuclear program.
  - The PFBR is part of India's three-stage plan to harness its thorium reserves for sustainable nuclear energy.

Why did India not Sign NPT and CTBT?

- **Nuclear Non-Proliferation Treaty (NPT):** India views the NPT as discriminatory as it categorizes states as "nuclear weapon states" (NWS) and "non-nuclear weapon states" (NNWS).
  - NWS like the US, Russia, UK, France, and China can retain their nuclear arsenals, while NNWS are obligated to give up pursuit of nuclear weapons.
  - India perceives this as unfair and hindering its right to self-defense.
  - India remains committed to the goal of universal, non-discriminatory and verifiable nuclear disarmament, which the NPT does not explicitly call for.

- **Comprehensive Test Ban Treaty (CTBT):** India emphasizes the importance of maintaining a credible minimum nuclear deterrent against potential threats, particularly from neighbouring Pakistan and China.
- Signing the CTBT, which bans all nuclear explosions for military or civilian purposes, could limit India's ability to further develop and refine its nuclear arsenal.

### Current Nuclear Threats that India Faces

- **India's Neighbourhood Nuclear Threats:** Pakistan possesses a substantial nuclear arsenal, estimated to be around 170 warheads. The long-standing tensions between India and Pakistan over issues such as Kashmir and cross-border terrorism raise the risk of nuclear escalation in the event of a conflict.
- China's construction of numerous missile silos and the deployment of road-mobile intercontinental ballistic missiles (ICBMs) have raised concerns in India about the shifting nuclear balance in the region.
- **Command and Control Vulnerabilities:** The safety and security of nuclear command and control systems are critical, and any vulnerabilities or potential for unauthorized access or cyberattacks could have severe consequences.
- Example: The 2019 alleged cyberattack on one of India's Kudankulam Nuclear power plant, although denied by officials, highlighted the need for robust cybersecurity measures in the nuclear realm.
- **Environmental and Health Risks:** The risks associated with nuclear accidents, radioactive contamination, and long-term environmental and health impacts pose

challenges for India's expanding nuclear energy program.

- **Example:** The 2011 Fukushima nuclear disaster in Japan underscored the need for stringent safety protocols and emergency preparedness measures for nuclear facilities.
- **Emerging Technologies and Regional Arm Race:** The rapid development of hypersonic missiles, autonomous weapons systems, and artificial intelligence (AI) raises new challenges for nuclear deterrence strategies.
- India's development of its own hypersonic missile capabilities, while aimed at deterrence, could contribute to a regional arms race.

### Measures Should India Adopt to Strengthen its Nuclear Program

- **Pursue Responsible Nuclear Modernization:** While maintaining a credible minimum deterrence, India should focus on responsible nuclear modernization.
- This involves developing advanced delivery systems, improving the survivability and reliability of its nuclear forces, and exploring emerging technologies such as directed energy systems.
- **Enhance Nuclear Risk Reduction Measures:** India should actively engage in nuclear risk reduction measures with neighboring nuclear-armed states, particularly Pakistan and China.
- This can involve confidence-building measures, crisis communication mechanisms, and agreements to prevent inadvertent escalation or misunderstandings during crises.
- **Invest in Advanced Nuclear Technologies:** India should continue to

invest in advanced nuclear technologies, such as thorium-based reactors, small modular reactors, and next-generation nuclear power plant designs.

- This can help address India's long-term energy needs while minimizing environmental and safety risks.
- **Enhance Civilian Nuclear Cooperation:** India should seek to expand civilian nuclear cooperation with like-minded countries and organizations.
- This can involve joint research and development projects, technology sharing, and collaboration in areas such as nuclear waste management, nuclear medicine, and

peaceful applications of nuclear technology.

- **Participate in Global Nuclear Governance Initiatives:** India should actively participate in global nuclear governance initiatives, such as the Nuclear Security Summits and Global Initiative to Combat Nuclear Terrorism (GICNT).

This would demonstrate India's commitment to nuclear non-proliferation and the peaceful use of nuclear technology.

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# WORLD AFFAIRS

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## **Earth Care satellite launched by ESA to study the impact of clouds on climate change**

The European Space Agency (ESA) and Japan's JAXA collaborated on a new satellite mission aimed at studying climate change.



Launched from Vandenberg Space Force Base in California via a SpaceX Falcon 9 rocket, the satellite

named EarthCARE will focus on how clouds and aerosol density impact Earth's temperature. Airbus and 75 subcontractors developed EarthCARE, which aims to provide crucial data on atmospheric dynamics.

## **Pakistan, Denmark, Greece, Panama, and Somalia have been elected non-permanent UN Security Council members**

Denmark, Greece, Pakistan, Panama, and Somalia are elected to the UN Security Council. These five countries' terms will start on January 1, 2025. They have been elected by a secret ballot in the UN General Assembly. These five countries will replace Mozambique, Japan, Ecuador, Malta, and Switzerland. Pakistan has been elected for the 8th time as a non-permanent member. Somalia got 179 votes, and Pakistan got 182 seats in the two seats reserved for African and Asia-Pacific countries. In the Latin American and Caribbean States, Panama got 183 votes, while in the Western European and other States, Denmark got 184 votes and Greece got 182. The United States, Russia, China, the United Kingdom, and France are the five

permanent members of the UNSC. Algeria, Guyana, South Korea, Sierra Leone, and Slovenia were elected non-permanent members in 2023.

## **For the first time, King Charles currency notes enter circulation**

The Bank of England has announced the release of new banknotes featuring King Charles III, following the passing of Queen Elizabeth II in September 2022. People are encouraged to exchange old banknotes bearing Queen Elizabeth II's image for the new ones. The old notes will remain valid and continue to circulate alongside the new ones. The exchange period for old notes runs from June 5 to June 30, with individuals able to exchange up to £300 worth of old notes for new ones during this time.

## **In the first-ever crewed flight, Sunita Williams and Butch Wilmore are the first people to fly to space in a Boeing Starliner**

Indian-origin NASA astronaut Sunita Williams became the first female pilot of a newly developed spacecraft. She launched from Cape Canaveral, Florida, aboard an Atlas V rocket by United Launch Alliance. Initially scheduled for May 7, the launch was postponed twice due to technical issues. Williams, serving as pilot, along with Commander Butch, will spend nearly a week at the International Space Station before returning to Earth aboard the reusable spacecraft. Their mission aims to support upcoming NASA missions by transporting supplies and crew to low Earth orbit and beyond.



### **NASA and the European Space Agency (ESA) are collaborating to develop a standardized time system for the moon**

Under the Artemis program, NASA and the European Space Agency (ESA) are working together to create a standardized time system for the moon. These efforts will be crucial for the success of the Artemis program and future lunar exploration. Its main aim is to coordinate lunar missions from various countries and private entities. The establishment of a lunar time zone is a significant step towards fostering international collaboration and ensuring the success of multi-national lunar missions. The development of a lunar time zone will require addressing several unique challenges. The moon's day-night cycle is about 29.5 Earth days. Earth's time zones are based on its rotation and are divided into 24 hours. The communication delay between Earth and the moon is about 1.28 seconds.

### **Pig liver transplanted into a living cancer patient for the first time in China**

For the first time in the world, the liver of a person suffering from severe liver cancer was transplanted with the liver of a pig. A 71-year-old man in China is the fifth person known to have received a pig organ and became the first alive person to have a liver transplant from a genetically modified pig. Chinese doctors said they transplanted a gene-edited pig's liver into a living person. This has been considered a turning point in the xenotransplantation procedure, which involves transplanting animals into humans. The pig's liver weighed 514 grams and had 10 gene edits to prevent organ rejection and dysfunction. Sun Beicheng, a surgeon at the First Affiliated Hospital of Anhui Medical University in China who led the transplant, said that more than two weeks after the surgery, the man is "doing very well".

### **Donald Trump became the first former U.S. President to get convicted for the crime**

Former US president Donald Trump has been convicted of a crime. A New York jury found him guilty on all 34 charges in a scheme to illegally influence the 2016 election through hush money payments to a porn actor. Trump is expected to appeal the verdict quickly. The conviction in a case will not bar Trump from participating in the election of president. Trump also faces federal and state charges of conspiring to overturn the results of the 2020 election won by Biden.

### **Spain becomes the 99th member of the International Solar Alliance (ISA)**

Meeting of Ambassador José María Ridao Domínguez of Spain was held with the Head of Depository, Joint Secretary in the



External Affairs Ministry Abhishek Singh in New Delhi. During the meeting, Spain handed over the International

Solar Alliance Instrument of Ratification. ISA was conceptualized on the sidelines of the 21st Conference of Parties (COP21) to the United Nations Framework Convention on Climate Change held in Paris in 2015. India and France jointly launched the International Solar Alliance (ISA) on 30 November 2015 at COP21 in Paris, France. ISA is an intergovernmental organization whose headquarters is located in Gurugram, Haryana. International Solar Alliance is working to increase access to affordable solar energy for communities around the world.

### **Vietnam's parliament elected public security minister To Lam as the country's President**

Lam replaced Vo Van Thuong, who resigned in March following a major anti-corruption campaign. Lam got 472 out of 473 votes. The



election of Lam followed the appointment of former deputy Tran Thanh Man as the new chairman of Vietnam's National Assembly on May 20. Led by the General Secretary of the Communist Party, Vietnam has a four-person leadership structure that also includes the President, the Prime Minister, and the head of the National Assembly. Lam has been minister of public security since 2016 and has taken a tough stance on human rights movements in the communist country. The National Assembly elects the President by secret ballot, after which delegates approve the results.

### **Spain, Norway and Ireland have decided to recognize Palestine as a separate state**

The formal recognition of Palestine state by Ireland, Norway, and Spain will come into



force on May 28. Israel accused these nations of “rewarding” Hamas for its brutal attack on October 7. Palestinian statehood

has been recognized by more than 130 member states of the United Nations. The formal recognition of Palestine is a step towards a two-state solution and will ensure peace for both the Israeli and Palestinian people. More than 35,000 Palestinians have been killed and nearly 80,000 wounded during the Israeli assault on Gaza. The Palestine Liberation Organization (PLO), the main representative of the Palestinians, was the first to declare the establishment of the State of Palestine in 1988.

### **Armenia and Azerbaijan agreed to settle disputed parts of their shared border**

Armenia and Azerbaijan agreed to a deal on disputed parts of their shared border, a new step toward normalizing relations between the historical rivals. The agreement between the two former Soviet republics, includes the return to Azerbaijan of four border villages

seized by Armenia in the 1990s. The move will bring four border villages – BaghanisAyrum, AsshaghiAskipara, Khairimli and Ghizilahajili – back under Azerbaijani control. It comes after Azerbaijan in 2023 recaptured its breakaway region of Nagorno-Karabakh, which was controlled by Armenian separatists for decades. An anti-government protest in Armenia has been triggered due to this premier's decision. The Nagorno-Karabakh conflict was an ethnic and territorial conflict between Armenia and Azerbaijan over the region of NagornoKarabakh.

### **William Lai Ching-te has become the new President of Taiwan**

William Lai Ching-te won the presidential election in January. New Vice President Hsia Bi-khim also took the oath of office along with Lai on 20 May 2024 in a ceremony in Taipei. During the ceremony, outgoing President Tsai Ing-wen also bid farewell. During the last four years of the second term of outgoing President Tsai Ing-wen, Lai has held the office of Vice President. Taiwan is a country in East Asia. It is officially called the Republic of China. Taipei is its capital. The type of government is Unitary semi-presidential republic. The main island of Taiwan is also known as Formosa.

### **Vladimir Putin and Xi Jinping agreed to deepen their "strategic partnership"**

Russian President Vladimir Putin and Chinese President Xi Jinping agreed on "the deepening of the comprehensive partnership and strategic cooperation entering a new era" statement. Russia and China are committed to defending their legitimate rights and interests. Russia affirmed its commitment to the principle of 'One China'. It recognised that Taiwan is an integral part of China. They agreed to enhance cooperation in information and communication technologies, including artificial intelligence, communications,

software, the Internet of Things, etc. Under this statement, they will deepen their partnership in peaceful nuclear energy. They also discussed striving for the stability and sustainability of the global energy market. They will cooperate in civil aircraft construction, shipbuilding, carmakers, machine tool industry, electronics industry, etc. Russian President Vladimir Putin was on a two-day visit to China.

### **Venezuela has become the first country to lose all its glaciers**

According to the latest developments, Venezuela has reached a critical milestone in the fight against climate change. The disappearance of Venezuela's last glacier made it the first country to witness the complete melting of all its ice formations. In 1910, Venezuela had six glaciers covering an impressive 1,000 square kilometers. Today, these remain mere remnants of ice that no longer meet the criteria for glacier classification. The five out of six Venezuela's glaciers had disappeared by 2011, with only the Humboldt Glacier, also known as La Corona, in the Sierra Nevada National Park struggling for survival. Research conducted over the past five years has shown that glacier coverage in Venezuela has declined by a staggering 98% from 1953 to 2019. The rate of ice loss increased rapidly after 1998, reaching a peak of about 17% per year since 2016.

### **About 60% of the world's coral reefs have bleached in the past year**

The U.S. National Oceanic and Atmospheric Administration (NOAA) reported that around two-thirds of the world's coral reefs experienced severe heat stress leading to bleaching over the past year. This marks the fourth mass bleaching event affecting coral

reefs globally, exacerbated by climate change and the El Niño climate pattern causing record-high ocean temperatures. Coral bleaching occurs when corals expel algae, making them pale and vulnerable to starvation and disease. The phenomenon has been observed in at least 62 countries, with severe impacts noted in the Atlantic Ocean and predictions of further bleaching in the Southern Caribbean, around Florida, and at the Mesoamerican Barrier Reef.

### **Second dengue vaccine has been prequalified by WHO**

The World Health Organization (WHO) has prequalified TAK-003, a second dengue



vaccine developed by Takeda Pharmaceuticals of Japan. TAK-003 is a live-attenuated vaccine containing weakened forms of four types of the dengue

virus. WHO's prequalification means the vaccine meets standards for quality, safety, and effectiveness. It is recommended for children aged 6 to 16 years, who are at higher risk of dengue exposure. The vaccine is administered in two doses, three months apart. Dengue, a mosquito-borne disease, is a significant health threat globally, with up to 400 million cases reported annually across Asia, Africa, and the Americas.

### **Blue Residency Visa for Environmental Champions has been launched by the UAE**

The 10-year Blue Residency Visa has been launched by the UAE to attract and retain global leaders in environmental research, activism, and technological solutions. Blue Residency Visa will offer long-term residency to individuals who contribute to environmental protection and sustainability efforts. Members of international environmental organizations,

award-winning researchers, and distinguished activists can apply for this visa. UAE's Golden Visa offer a decade-long residency to investors, entrepreneurs, and specialists. UAE is also observing 2024 as the 'Year of Sustainability', which is focused on environmental initiatives. Recently, UAE also hosted COP28, the UN Climate Change Conference held in Dubai.

### Japan unveiled the world's first 6G device

A Japanese consortium has released the world's first high-speed 6G prototype device. It will be 20 times faster than 5G and transmit data at a whopping 100 gigabits per second (Gbps). This 6G prototype device is a result of a collaboration of leading companies, including DOCOMO, NTT Corporation, NEC Corporation, and Fujitsu. These tests were conducted over a distance of 328 feet (100 meters). At present, 5G has a theoretical maximum speed of 10 GB/s. Its average speed is around 200 megabits per second (Mbps) for T-Mobile users in the US.

### NASA is planning to build the first railway station system on the moon

National Aeronautics and Space Administration (NASA) announced its plans to build a robot train on the moon. The Flexible Levitation on a Track (FLOAT) project will create the first lunar railway system to provide reliable, autonomous, and efficient transportation on the moon. It will be very critical for the daily operations of a sustainable lunar base. NASA would use unpowered magnetic robots under the FLOAT project. These robots would levitate a three-layer flexible film track to prevent abrasion from the lunar surface's dust. The graphite layer will let robots float over tracks using diamagnetic levitation passively. The flex-circuit layer generates electromagnetic thrust to propel robots along tracks controllably. These robots will be used to carry and bring about 100 tonnes of construction material to NASA's lunar base.

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# NATIONAL AFFAIRS

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## **ICDK Water Challenge 4.0 has been presented by the Atal Innovation Mission and NITI Aayog**

Atal Innovation Mission (AIM) and NITI Aayog have launched the 'AIM – ICDK Water Challenge 4.0' along with the fifth edition of the 'Innovations for You' handbook, which highlights SDG



entrepreneurs in India. This initiative, in collaboration with Innovation Centre Denmark (ICDK), invites Indian teams to participate in a global innovation program focusing on water solutions. Participants, including students and young entrepreneurs under 35, will engage in a hybrid innovation journey featuring group work, boot camps, mentoring, and more. The challenge aims to foster sustainability, digital solutions, and inclusive design principles. Applications are open until June 20, 2024.

## **Under the PradhanMantriAwasYojana, the government will provide assistance for the construction of 3 crore rural and urban houses**

It was announced in the first cabinet meeting of the newly formed NDA government in New Delhi. The Government of India has been implementing the Pradhan Mantri Awas Yojana (PMAY) since the year 2015-16. Its objective is to provide assistance to eligible rural and urban families in building houses equipped with basic amenities. Under the housing schemes under PMAY, a total of 4.21 crore houses have been constructed for eligible poor families during the last 10 years.

All the houses constructed under PMAY are provided with other basic amenities like household toilet, LPG connection, electricity connections, active household tap connection etc. by merging with other schemes of Central Government and State Governments.

## **Indian Army recommends major changes to the Agnipath Scheme**

The Indian Army has reviewed the Agnipath scheme and made several recommendations. The Indian Army suggested increasing the service period from 4 to 7-8 years. They also recommended increasing the entry age for Agniveers in the technical field to 23 years. It is also recommended that ex-gratia be provided for disabilities during training and that exit management should be handled by a professional agency. It recommended that if an Agniveer dies in war, their family should receive a subsistence allowance.

## **The world's first EV battery passport will be issued by Volvo ahead of EU regulations**

Volvo Cars, in collaboration with UK startup Circular, is launching the world's first EV battery passport for its EX90 SUV. This passport uses blockchain technology to trace the origin of raw materials, components, recycled content, and carbon footprint. It aims to provide transparency to consumers ahead of EU regulations mandating such passports for EVs from February 2027. Volvo plans to start production of the EX90 SUV with Battery Passport soon in South Carolina and deliver it

to customers in Europe and North America starting from the second half of this year.

### **PM Modi launched 'EkPedMaaKeNaam' Campaign on World Environment Day**

To celebrate World Environment Day, the 'EkPedMaaKeNaam' Campaign has been launched by Prime Minister Narendra Modi. PM Modi planted a peepal tree sapling at Buddha Jayanti Park in Delhi. He has also urged all to contribute to making our planet better and more informed. This campaign urged people to plant a tree as a tribute to their mother. India has lost approx 2.33 million hectares of tree cover since 2000. Madhya Pradesh has the highest forest cover by area followed by Arunachal Pradesh. Mizoram has the highest forest cover in terms of percentage of total geographical area. As per the latest ISFR 2021, the total forest cover of the country is 7,13,789 square kilometres. It is 21.71% of the geographical area of the country.

### **India's first biosphere within a tiger reserve has been created in the Rajaji National Park**

Jai Dhar Gupta and Vijay Dhasmana have been working on a project to create India's first biosphere within a tiger reserve. RajajiRaghati Biosphere (RRB) is a 35-acre private forest within the Rajaji National Park in Uttarakhand. Jai Dhar Gupta and Vijay Dhasmana and their team conducted extensive surveys to identify suitable native plant species, especially those rare or disappearing in the region. The first phase of the plantation was started in 2023 with approximately 80 species. In the upcoming monsoon season, an additional 35 to 40 new species in the biosphere will be planted. Jai and Vijay are also working on creating a second biosphere in Western Ghats.

### **A directive issued by FSSAI to all FBOs mandates the removal of any claim of 100% fruit juice from the label**

A directive issued by the Food Safety and Standards Authority of India (FSSAI) mandates all food business operators (FBOs) to remove any claim of 100% fruit juices from the labels and advertisements of reconstituted fruit juices with immediate effect. All FBOs have also been directed by FSSAI to phase out all existing pre-printed packaging material before September 1, 2024. Recently, the Ministry of Health and Family Welfare said in a statement that several FBOs are falsely marketing various reconstituted fruit juices with the false claim of being 100% pure. According to the Food Safety and Standards (Advertising and Claims) Regulations, there is no provision for making 100% claims. The FBO must comply with the fruit juice standards under the Food Safety and Standards Regulations.

### **The National Coordination Committee started work on the world's largest grain storage Plan**



The National Level Coordination Committee (NLCC) held its inaugural meeting in New Delhi to oversee the implementation of a large-scale grain storage plan. Launched initially in 11 states in 2023, the plan aims to enhance agricultural infrastructure at Primary Agricultural Cooperative Societies (PACS). This includes facilities like warehouses, processing units, and fair price shops. The initiative integrates various government schemes such as the Agriculture Infrastructure Fund (AIF), Agricultural Marketing Infrastructure Scheme (AMI), and others. Implemented by the



National Cooperative Development Corporation (NCDC), with support from agencies like NABARD and FCI, the pilot project will expand to 500 more PACS in collaboration with states, NCCF, and NBCC.

### **India's core sector growth increased 6.2% in April**

India's index of eight core sectors saw a 6.6% growth in March. It was 4.6% in April 2023. Positive growth was seen in the production of electricity, natural gas, coal, steel, refinery products, crude oil, and cement in April. In April, The coal sector output declined by 7.5% YoY. In March 2024, coal sector output was recorded at 8.7%. Crude oil sector recorded 1.6% growth in April. In March 2024, crude oil output was recorded at 2%. Natural Gas output increased by 8.6 per cent in April 2024. The output of Refinery products increased 3.9% in April 2024. Fertilizers sector declined by 0.8% in April 2024. Cement and steel sectors increased only by 0.6 per cent and 7.1 per cent in April 2024.

### **TIME magazine has named Reliance Industries Limited (RIL) as one of the World's Most Influential Companies**

Reliance Industries Limited (RIL) has earned its second appearance on TIME magazine's



TIME 100 list, recognized in the Titans category for its significant influence across various sectors

in India and globally. RIL is the only Indian company to feature twice in this prestigious list. Previously, its subsidiary Jio Platforms was included in TIME's inaugural 100 Most Influential Companies list in 2021, hailed as India's Juggernaut. TIME acknowledges Reliance as India's most valuable company, valued at over \$200 billion. Other Indian

companies on TIME's 2024 list include Tata Group in the Titans category and Serum Institute of India in the Pioneers category, known for its pioneering role in vaccine manufacturing. The TIME 100 Most Influential Companies list celebrates businesses worldwide making exceptional impacts.

### **As per ILO, the Global unemployment rate is expected to fall slightly to 4.9% in 2024**

The global unemployment rate is expected to fall from 5.0% in 2023 to 4.9% in 2024. In January, the ILO estimated that unemployment would remain at 5.2%, driven by expected increases in unemployment in advanced economies. ILO lowered its unemployment rate due to lower-than-expected unemployment rates in China, India, and high-income countries. According to ILO, the unemployment rate will remain at 4.9% in 2025. The report found that 183 million people remain unemployed. The number of people without a job, who wanted to work stood at 402 million. For high-income countries, the rate stood at 9.7% for women and 7.3% for men. The report estimated that 45.6% of women of working age were employed in 2024.

### **An MoU signed by MEA, MeitY and CSC e-Governance Services India Ltd to provide eMigrate services through CSC**

The Ministry of External Affairs, Ministry of Electronics and Information Technology, and CSC e-Governance Services India Limited signed a memorandum of understanding (MoU) during the National Workshop on "Powering Transformation through UI/UX for Digital Governance". The MoU aims to collaborate on the e-Migrate project through Common Service Centres (CSCs) across India. This initiative is designed to facilitate online emigration services for blue-collar



workers heading to Emigration Check Required (ECR) countries. The project aims to streamline the emigration process, ensuring safety and legality for workers by bringing together foreign employers, registered recruitment agents, and insurance companies on a unified platform. CSCs play a crucial role in Digital India, providing over 700 digital services through more than 5.50 lakh centres, particularly benefiting citizens in rural and remote areas.

### **Summer Fiesta 2024 inaugurated**

The Ministry of Education inaugurated the month-long "Summer Fiesta 2024" at the National BalBhavan. Summer Fiesta is a month-long camp with more than 30 types of different activities for children aged between 5 to 16 years. Summer Fiesta 2024 will be organized from May 29 to June 28, 2024. During the Summer Fiesta, special workshops and programs will be conducted weekly. Sessions on Odissi dance, Yoga, Calligraphy, Music recitals, Games etc. will also be organized. The National BalBhavan is an autonomous body under the Department of School Education and Literacy. It was established in 1956 with a vision to foster learning through thinking, imagination, creativity, and entertaining activities for children.

### **S&P Global Ratings has kept India's sovereign rating at "BBB-"**

S&P has upgraded India's sovereign rating outlook from "stable" to "positive," citing strong economic growth and improved government spending quality. This change reflects India's commitment to fiscal consolidation despite historical fiscal challenges. The upgrade led to a decrease in the 10-year bond yield and appreciation of the Indian rupee. S&P projects India's general

government deficit to decline to 6.8% of GDP by fiscal 2028 from 7.9% in fiscal 2025, supported by anticipated annual economic growth of around 7%. This growth is expected to moderate the government debt-to-GDP ratio, which S&P forecasts to decrease from 85% to 81% by fiscal 2028.

### **"PRAGATI-2024", an initiative to shape the future of Ayurveda, launched by the CCRAS**

"PRAGATI-2024" (Pharma Research in AyurGyanAnd Techno Innovation) was launched by the Central Council for Research in Ayurvedic Sciences (CCRAS) in New Delhi. CCRAS is an autonomous body under the Ministry of AYUSH, Government of India. This provides a very useful opportunity for collaborative research in the field of Ayurveda. On May 28, a meeting was also held with the aim to explore research opportunities and promote collaboration between CCRAS and the Ayurveda pharmaceutical industry. Representatives of 35 pharmaceutical companies of the country took part in this program. The Pragati-2024 initiative is an important step in the development of the Ayurveda industry in India. It is expected to provide a platform for collaboration and research that will ultimately drive the growth and advancement of the field.

### **IOC signed an MoU with the Indian Army to promote Hydrogen and fuel cell technology**



Indian Oil handed over a hydrogen fuel cell bus to the Indian Army to promote hydrogen and fuel cell technology for heavy-duty e-mobility. Indian Oil also signed a Memorandum of Understanding (MoU) with the Indian Army to deploy hydrogen fuel cell

technology for heavyduty e-mobility. The handing over and signing ceremony was held in the presence of General Manoj Pande, Chief of Army Staff. This project will evaluate the performance of fuel-cell electric buses for public transit in the Delhi NCR region. It will also analyse the impact of local fuel and air quality on the performance of fuel cell systems and vehicles. It will also evaluate the effectiveness, longevity, and operational reliability of hydrogen fuel cell buses.

#### **A new vaccine candidate against malaria have been developed by JNU scientists**

Jawaharlal Nehru University (JNU) scientists have identified a promising vaccine candidate against malaria. It would help in more effective prevention and treatment strategies against malaria. Scientists have identified a novel PHB2-Hsp70A1A receptor ligand pair. The parasite protein PHB2 is therefore a potent vaccine candidate. The presence of PfPHB2 antibodies was detected in active malaria patient from the Tripura region. The PfPHB2 antibodies will be a turning point towards malaria therapeutic development. The scientists have found that PfPHB2 protein which is found on the merozoite surface. It will interact with the red blood cell surface heat-shock protein Hsp70A1A. Prohibitins are a family of proteins that will play important role in various cellular processes. This research has been published in the iScience journal by Cell Press.

#### **In India, the world's first 100% biodegradable pen has been launched**

Saurabh H. Mehta from New Delhi introduced the world's first 100% biodegradable pen through his company bioQ. Branded as NOTE (No Offence to Earth), these pens use non-toxic ink and refills made of



recycled paper. The exterior options include bamboo, paper, or metal. Each pen undergoes a rigorous four-month accelerated ageing test to ensure an 18-month shelf life, achieved using a vegetable oil-based solution. This innovation includes a coating inside the refill that breaks down organically after use, addressing environmental concerns associated with traditional plastic pens.

#### **The Food and Nutrition Board (FNB) has been formally dissolved by the Women and Child Development (WCD) Ministry**

It was the ministry's technical branch, with its main office at the Center in Delhi. It was in charge of giving community nutrition programs logistical and technical support. The FNB maintained quality control labs and four regional offices in Chennai, Faridabad, Mumbai, and Kolkata. Following suggestions from the Principal Economic Adviser's report on the rationalization of government bodies, the decision was made following a Cabinet meeting in April of last year. The cabinet had approved the ministry's suggestions during the meeting to rationalize and close the FNB, RashtriyaMahilaKosh, and the Central Social Welfare Board. The FNB was originally set up under the agriculture ministry. It was later moved to the Women and Child Development (WCD) ministry in 1993.

#### **Ministry of Road Transport and Highways has announced new driving licence rules**

From June 1, 2024, new driving rules in India simplify the process of obtaining a driving licence. Applicants no longer need to take a driving test at Regional Transport Offices (RTOs); instead, they can take the test at accredited private driving schools. These schools must have at least one acre of land. If applicants pass the test, they receive a certificate to apply for their licence at the RTO.

The penalty for driving without a valid licence has increased to ₹2,000. Minors caught driving face a fine of ₹25,000, their parents face legal action, and the vehicle's registration can be cancelled. Additionally, the government plans to phase out 9,000 outdated government vehicles and enforce stricter emission standards to reduce pollution and promote electric vehicles (EVs).

### **JyotiRatre has become oldest Indian woman to climb Mount Everest**

JyotiRatre, a 55-year-old entrepreneur from Madhya Pradesh, successfully climbed Mount Everest on her second attempt. She was supported by climbing guides LakpaNuru Sherpa, Ming Nuru Sherpa, and PasangTenzing Sherpa. Previously, in 2023, she had to turn back from 8,160 meters due to bad weather. This year, she faced high winds and spent four nights at Lhotse Camp at 7,800 meters before reaching the summit. Ratre achieved this feat as part of a 15-member expedition team from 8K Expeditions, led by Bolivian climber David Hugo AyaviriQuispe. Six years earlier, she became India's oldest woman to summit Mount Everest at the age of 53. Her climbing accomplishments also include reaching the highest peaks on five continents: Island Peak, Elbrus, Kilimanjaro, Mount Aconcagua, and Kosciuszko. Her future goals are to conquer Mount Vinson in Antarctica and Denali (Mount McKinley) in North America to complete the Seven Summits challenge.

### **Between 2018 and 2022, more than 5 million large farmland trees vanished in India**

Large farmland trees in India have drastically decreased from 2018 to 2022 due to changes in farming methods. Traditional agroforestry practices, where mature trees were integrated

with crops, have been replaced by block plantations in states like Telangana, Haryana, and Maharashtra. This shift aims to enhance crop yields by expanding paddy fields but reduces the ecological benefits provided by trees. Researchers from the University of Copenhagen highlighted that trees were removed primarily due to their shading effects and limited economic returns. Agroforestry is crucial for India's landscape, offering both socio-ecological benefits and serving as a natural climate solution.

### **Indian Institute of Petroleum & Energy discovered an eco-friendly solution for treating muddy river water**

Researchers from the Indian Institute of Petroleum & Energy (IIPe), along with Assam Science and Technology University and the Institute of Advanced Study in Science and Technology, have developed an eco-friendly solution for treating muddy river water. Known as the 'Surface Modification Technique of Membrane', this method is published in the Nature Scientific Reports journal. It aims to address water pollution issues in both rural and urban areas by improving water treatment processes. The technique uses non-toxic gases and minimizes the use of chemicals or solvents, making it suitable for industries like pharmaceuticals, food processing, textiles, and biotechnology.

### **ManikaBatra became the first Indian women's table tennis player to enter in Top 25 ranking**

India's women's table tennis player



ManikaBatra became the first Indian woman to enter the top 25 of the world women's singles rankings. After the success of the Saudi Smash, ManikaBatra

rose to her career-best ranking of 24. She also equalled G. Sathyan's five-year-old record for the highest rank achieved by an Indian in singles table tennis. She won three medals at the 2015 Commonwealth Table Tennis Championships. ManikaBatra had won the gold medal at the 2018 Commonwealth Games in individual and team categories. She was awarded the Major Dhyan Chand KhelRatna in 2020.

## STATE NEWS

### **MaharanaPratap Tourist Circuit is being developed by the Rajasthan government**

Rajasthan Government is developing MaharanaPratap Tourist Circuit at Rs 100 crore. Rajasthan Chief Minister BhajanLal Sharma said this while inaugurating the MaharanaPratapJayanti celebrations. MaharanaPratap is a source of inspiration not only for Rajasthan and India but for the whole world.

### **Fire rescue assistive drone has been developed by IIT Dharwad**

A team from IIT Dharwad led by Professors SudhirSiddapureddy and AmeerMulla has developed a fire rescue assistive drone funded by Tihan Foundation and IIT Hyderabad. Unveiled during a workshop on drone design and autonomous navigation in fire rescue, the drone is designed to assist in fire safety management in indoor spaces like railway stations, malls, and pilgrimage sites. This initiative aims to address the challenges of operating in high-temperature environments and crowded areas.

### **A project worth Rs 10,000 crore will be launched by the Haryana government to tackle air pollution**

Haryana Chief Secretary T V S N Prasad said the state government would soon launch aRs 10,000 crore World Bank-funded project to

tackle air pollution. Haryana Clean Air Project for Sustainable Development will be implemented in a phased manner in the state. Its first phase will be implemented in the



districts falling in the National Capital Region (NCR) and later it will be implemented in the entire state. This ten-

year comprehensive project will be funded by the World Bank. Under this project, efforts will be made to eliminate the problem of air pollution. The initial phase involves improving Haryana's air quality monitoring infrastructure. This includes setting up of a state-of-the-art laboratory and modernisation of four existing laboratories. Additionally, a dedicated programme management unit will be set up to monitor the implementation of the project.

### **NOTA created a new record in Indore, Madhya Pradesh**

For the first time in the electoral history of the country, NOTA has received 2 lakh 18 thousand votes. BJP candidate Shankar Lalwani from Indore created history by winning by about 7 lakh votes. Of the total voters, 14 per cent opted for 'None of the Above'. In 2019, Bihar's Gopalganj had created a record of 51,660 NOTA voters. In the 2019 general elections, 65,14,558 (1.06 per cent) of the total 61,31,33,300 votes were polled for NOTA. After the order of the Supreme Court, NOTA was introduced in 2013.

### **Hyderabad is not a joint capital of Andhra Pradesh, Telangana**

Hyderabad served as the joint capital of Telangana and Andhra Pradesh following the bifurcation of Andhra Pradesh in 2014. As per the Andhra Pradesh Reorganisation Act 2014, Hyderabad's status as the common capital

ceased on 2 June 2024. Now, Hyderabad remains the capital of Telangana alone, as stipulated for a period of ten years after the formation of Telangana. Andhra Pradesh has yet to establish a permanent capital, with disputes regarding Amaravati and Visakhapatnam currently unresolved in courts.

#### **46th Antarctic Treaty meeting concluded in Kochi**

The 46th Antarctic Treaty Consultative Meeting (ATCM-46) and the 26th Committee on Environmental Protection (CEP-26) concluded in Kochi, Kerala. Over 400 delegates from 56 countries attended the meetings, which started on May 20. Discussions covered Antarctic science, policy, governance, environmental protection, and tourism management. Hosted by the Ministry of Earth Sciences through the National Centre for Polar and Ocean Research (NCPOR), the meetings were themed “Vasudhaiva Kutumbakam” (One Earth, One Family, One Future). Key outcomes included reaffirmation of the Antarctic Treaty and Madrid Protocol. India announced plans for a new Antarctic research station, Maitri-II. CEP-26 focused on sea ice changes, environmental assessments, emperor penguin conservation, and global environmental monitoring frameworks.

#### **Rajasthan High Court wants the heat wave to be declared a national calamity**

Justice Anoop Kumar Dhand's single-judge bench said that heat and cold waves should be declared national disasters. Rajasthan High Court directed the state government to provide compensation to the dependents of people who died due to heatwave. The court also directed the state government to develop the 'Heat Action Plan' in Rajasthan. The Rajasthan High Court directed the chief secretary of Rajasthan to constitute

committees of various departments to implement this plan. However, the court said that the death tolls from heatwaves are very difficult to estimate.

#### **India's first semiconductor chip imaging tool will be jointly developed by TCS and IIT Bombay**

Tata Consultancy Services (TCS) has teamed up with Indian Institute of Technology-Bombay to create India's first quantum diamond microchip imager. This device aims to enhance semiconductor chip testing accuracy, reduce failures, and boost energy efficiency in electronics. Over two years, TCS and Dr.KasturiSaha from IIT-Bombay will develop the imager. It utilizes diamond defects called nitrogen-vacancy (NV) centers to map magnetic fields in semiconductor chips non-invasively, akin to MRI scans in hospitals.

#### **A new plant species has been discovered from Kerala's Edamalayar forest range**

A new plant species named *Emblicachakrabartyi* has been discovered in Kerala's Edamalayar forest range. It belongs to the gooseberry family (Phyllanthaceae) and is named after Tapas Chakrabarty for his contributions to studying this plant family. The plant grows up to two meters tall with large, shiny leaves up to 13 cm long. Its fruiting and flowering season spans from December to June. Female flowers grow alone on leaf axils, while male flowers form clusters. The ripe fruits turn from brown to black and contain black seeds about 8–9 mm in diameter.

#### **Saga Dawa Festival is celebrated in Sikkim**

Sikkim celebrates Saga Dawa Festival on the 15th day of the fourth month of the Northern Buddhist Calendar. Saga Dawa is considered the most sacred Buddhist festival. On this occasion, the birth, enlightenment, and Mahaparinirvana (passing away) of Buddha



are celebrated. This day is also known as the 'Triple Blessed Occasion'. Saga Dawa holds great significance for the Buddhist community and its celebration shows the deep spiritual and cultural heritage of Sikkim.

### **BHISHM Portable Hospital tested in Agra for airdrop from aircraft by the Indian Air Force**

The Indian Air Force recently conducted its first test of BHISHM Portable Cubes, part of "Project BHISHM". These portable hospitals are designed to quickly treat up to 200 casualties during emergencies. They include innovative tools, data analytics, and AI for efficient medical management and real-time monitoring. The unit comprises 72 easily transportable components, offering flexibility

for deployment by hand, bicycle, or drone to any location in need.

### **AIIMS New Delhi and University of Bolton Institute of Medicine have signed a Memorandum of Understanding (MoU)**

The two institutes have signed MoU to collaborate in the field of medical research, education and innovation. Executives from both institutions signed the MoU through a virtual event. The partnership will include staff and student exchange, educational conferences and collaborative degree programmes.

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# INDIA AND THE WORLD

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## Major advancements in India-UAE digital payments revealed at Dubai Conclave

The Indian Business and Professional Council (IBPC) in Dubai, together with NPCI and RBI



representatives, highlighted advancements in digital payments and currency settlement

mechanisms at a conclave held at Taj Dubai. The focus was on the Local Currency Settlement (LCS) framework, a result of Prime Minister Narendra Modi's recent visit to the UAE. This mechanism, using the Indian Rupee and advanced digital technologies, aims to lower transaction costs, increase financial transparency, and improve convenience for cross-border transactions. It promotes economic cooperation and deeper ties between India and the UAE, with RuPay cards and UPI payments now accessible through UAE platforms.

## Information about India-France Trishna mission provided by ISRO

ISRO and CNES are collaborating on the TRISHNA mission, which stands for "Thermal Infrared Imaging Satellite for High-resolution Natural Resources Assessment." This mission aims to monitor Earth's surface temperature, emissivity, and other variables crucial for assessing natural resources and managing water and food security. TRISHNA will help in understanding the impacts of climate change and improving water resource management by monitoring evapotranspiration. It will also observe water quality, urban heat islands, and thermal anomalies related to volcanic and geothermal activities.

## US and Indo-Pacific partners held talks in Singapore on Clean Energy

The Indo-Pacific Economic Framework (IPEF) ministerial meeting in Singapore marked the first in-person session since finalizing the Clean Economy and Fair Economy Agreements in San Francisco. The meeting included major U.S. companies like Amazon, Google, Microsoft, and BlackRock, focusing on clean economy projects such as solar and wind energy across countries like Thailand and Malaysia. Participants from Australia, India, Japan, South Korea, and others aim to achieve climate goals and develop regional infrastructure through multibillion-dollar investments.

## Government of India has launched BIMReN initiative for PhD students

It is a joint initiative of the Ministry of External Affairs and the Bay of Bengal Programme-Inter Governmental Organization (BOBP-IGO). It will facilitate the sustainable development of the blue economy by networking with researchers and research institutions in BIMSTEC countries. It will enable PhD students from BIMSTEC countries to conduct doctoral research in India. Researchers and academic institutions involved in fisheries, marine or ocean sciences from across the BIMSTEC countries will get benefit from this program.

## The 6th meeting of the Joint Working Group on Counter-Terrorism between India and Japan held in New Delhi

During their meeting, the Indian Ministry of External Affairs and Japanese delegation, led by Mr. KD Dewal and Ambassador Hiroyuki Minami respectively, discussed terrorist

threats in their regions. They focused on state-sponsored cross-border terrorism in South Asia, Southeast Asia, East Asia, and the Middle East, including activities in Afghanistan and Pakistan. Both sides addressed challenges such as terrorist use of technology, internet misuse, radicalization, and terrorism financing. They emphasized the importance of information sharing, capacity building, training, and cooperation in international forums like the UN, FATF, and Quad to combat terrorism. The next Joint Working Group on Counter-Terrorism will convene in Tokyo.

#### **India assumed the chairmanship of the “Colombo Process” for 2024-26**

This is the first time India has assumed the chairmanship of the Colombo Process since its inception. India wishes to promote safe, orderly and legal migration. The Colombo Process is a regional consultative process of migrant worker origin countries in South and Southeast Asia. It serves as a platform for exchange of best practices regarding employment abroad. India has been a member of the Colombo Process since its inception in 2003. The Colombo Process involves 12 Member States from Asian countries of origin of migrant workers and provides an important forum for consultation on the management of foreign employment and contract labour. The process is coordinated through the Permanent Missions of Member States to the United Nations in Geneva.

#### **National Archives of India carries out first overseas digitization of diaspora records in Oman**

The National Archives of India (NAI) and the Indian Embassy in Muscat collaborated on a unique project called "The Oman Collection – Archival Heritage of the Indian Community in Oman." From May 19 to 27, 2024, they

digitized historical records of 32 prominent Indian families from Gujarat, who have been in Oman for 250 years. This marks NAI's first international effort to digitize diaspora documents. The project included digitizing 7,000 documents in Hindi, Gujarati, English, and Arabic, which will be accessible on NAI's online portal “AbhilekhPatal”. Oral histories from elders were also recorded. The initiative was supported by Oman’s National Records and Archives Authority (NRAA).

#### **After the implementation of the Charter, BIMSTEC acquired 'legal personality'**

The BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation)



recently saw its Charter come into effect on May 20, marking a significant milestone since

its formation in 1997. The Charter grants BIMSTEC a 'legal personality' and enables it to engage in formal diplomatic relations with other countries and international organizations. The seven member countries – Bangladesh, Bhutan, Sri Lanka, Nepal, Thailand, Myanmar, and India – reached consensus on the Charter after years of discussions. It outlines their commitment to enhancing regional cooperation across various sectors including security, connectivity, trade, agriculture, environment, science and technology, and people-to-people exchanges.

#### **16 Joint Working Group meeting between India and UK on Counter Terrorism held in New Delhi**

The meeting was led by the Joint Secretary for Counter-Terrorism in the Ministry of External Affairs, K D Dewal and Head of Counter Terrorism Network for Asia and

Oceania, Government of United Kingdom Chris Felton. During the meeting they discussed the ongoing anti-terrorism cooperation between the two countries. Both countries stressed the need to strengthen international cooperation to combat terrorism in a comprehensive and sustained manner. Both sides shared their assessments of terrorist and extremist threats in their respective areas and regions, including threats posed by globally recognized terrorist entities and individuals. The 17th Joint Working Group meeting between India and UK on Counter Terrorism will be held in UK.

### **Over 7,000 cyber crime complaints reported in India in 2024, with key locations identified in South East Asia**

India is facing a surge in cyber crime, with an average of more than 7,000 complaints



registered daily by May 2024.

Indian Cyber Crime

Coordination Center (I4C) CEO

Rajesh Kumar highlighted that many cyber fraudsters targeting India are operating from key locations in Southeast Asia. It includes Pursat, Koh Kong, Sihanoukville, Kandal, Bavet, and Poipet in Cambodia, and Myawaddy and ShweKokko in Myanmar. The increasing trend in cyber crime is clear, with complaints increasing by 113.7% from 2021 to 2022 and 60.9% from 2022 to 2023.

### **To Mark the 250 Birth Anniversary of Fakir Lalon Shah, the Indo-Bangla Baul music festival inaugurated**

To commemorate the 250th birth anniversary of mystic saint and humanist scholar Fakir Lalan Shah, the nine-day Indo-Bangla Baul Music Festival began from Dhaka. LalanBiswasSangh is organizing the event. This Sangh is a cultural and research

organization working to popularize and promote research on the work of Lalan Fakir. Lalan is revered as a great mystic saint, philosopher and social reformer of his time. He is considered the most prominent figure of the Baul tradition of Bangladesh and India. In 1774, he was born in Horishpur in Jhenaidah district of modern Bangladesh. He had inspired and influenced people like Rabindranath Tagore, KaziNazrul Islam and American poet Allen Ginsberg.

### **12 India-Mongolia Joint Working Group meeting held in Ulaanbaatar**

The 12th Joint Working Group (JWG) meeting between the Defence Ministries of India and Mongolia was held on May 16-17, 2024. During the meeting, both sides expressed satisfaction at the ongoing defence cooperation between the two countries. Both sides reviewed the progress on various bilateral defence cooperation initiatives. They also identified means to further enhance cooperation and exchanged views on the current geopolitical situation. Both sides also acknowledged the growing ties between the two countries. India and Mongolia enjoy age-old historical, cultural, and civilizational ties. In the last 27 years, the exports of India to Mongolia have increased at an annualized rate of 14.1%, from \$2.03M in 1995 to \$71.3M in 2022.

### **Cross-border UPI payments launched in Sri Lanka by PhonePe**

PhonePe, an Indian digital payments and financial services portal, has been launched in Sri Lanka. India's High Commissioner to Sri Lanka SantoshJha said the launch of UPI and subsequently the launch of PhonePe today is part of the broader agenda of connectivity. Digital transformation has been a key element in the ongoing transformation in India and

India is hoping to bring a similar transformation in Sri Lanka. Along with bringing a digital identity project to Sri Lanka, India is also working on expanding comprehensive digital public infrastructure in the island nation.

**The second round of the India-US Dialogue on Africa held in Washington**

It was led by ShriPuneet R. Kundal, Additional Secretary for Economic and Southern African Affairs (AS E&SA) from the Indian side. Its objective is to exchange thoughts and

viewpoints while exploring ways to create bilateral, institutional, and technical synergies for collaboration in Africa. It also aims to identify cooperative programmes and developmental projects throughout Africa. This is 1st such dialogue on Africa between US and India after the addition of the African Union (AU) as a permanent member of the G20 during India's presidency.

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## CONGRATULATES

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## OMAS - 2021

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# BUSINESS AND ECONOMY

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## **Asian Banker awarded SEBI the "Best Conduct of Business Regulator" title**



SEBI received the "Best Conduct of Business Regulator" award in Asia Pacific from The Asian Banker for its contributions to strengthening India's securities market regulation. Kamlesh Chandra Varshney, a Whole-time Member of SEBI, accepted the award in Hong Kong. SEBI introduced T+1 settlement in 2021, fully implemented by January 2023, allowing faster access to funds and improving market efficiency and liquidity. SEBI's stringent enforcement and innovative regulatory practices have enhanced market integrity and consumer fairness. The Asian Banker fosters community among financial services players and publishes rankings to set high standards in the industry.

## **A Digital Payments Intelligence Platform will be set up by RBI to tackle digital payments frauds**

Governor Shaktikanta Das announced during the Monetary Policy Committee meeting that the RBI is addressing the rise in digital payment fraud with a comprehensive system-wide approach. To enhance security and maintain consumer confidence, the RBI will establish a Payments Intelligence Platform for network-level intelligence and real-time data sharing to detect and respond to fraud quickly. A committee led by former NPCI MD and CEO AP Hota will examine various aspects of setting up the platform to ensure it effectively secures the digital payments ecosystem.

## **Defence Accounts Department has signed MoUs with four banks**

These four banks are Bank of India, Canara Bank, Central Bank of India and Utkarsh Small Finance Bank. Defence Accounts Department, Ministry of Defence will onboard them as System for Pension Administration Raksha (SPARSH) Service Centres. The MoUs will provide last-mile connectivity to pensioners. The MoUs will provide connectivity especially in remote areas where they do not have technical wherewithal to log on to SPARSH. These Service Centres will become an interface for pensioners for SPARSH. SPARSH is an initiative of the Ministry of Defence. It aims to provide comprehensive solution to the defence pensioners.

## **Indian economy grows at 8.2% in FY24: NSO**

According to the provisional estimates of gross domestic product (GDP) growth released by the National Statistical Office (NSO), India's economy grew by 7.8 per cent in the March quarter. As per the data, the Indian economy has grown by 8.2 per cent in 2023-24 as compared to 7 per cent in 2022-23. The growth in the January-March period was lower than the 8.6 per cent expansion in the December quarter. Government expenditure continued to support growth. It has increased 0.9 per cent year-on-year in Q4. Manufacturing, construction, public administration, defence and other services sectors have also increased and supported the growth. In FY24, capital formation recorded a growth rate of 9 per cent, while government expenditure grew 2.5 per cent.



China has registered an economic growth of 5.3 per cent in the first three months of 2024.

### **India's fiscal deficit was at Rs 16.54 lakh crore in FY24**

The budgetary target for fiscal deficit was Rs 17.86 lakh crore. According to the data from the Comptroller General of Accounts, the fiscal gap is now 95.3% of the budgetary target. In FY24, central government's fiscal deficit was at 5.6% of GDP. This was below the revised estimate of 5.8%. For FY24, net tax receipts of the centre were higher than projected at Rs 23.27 lakh crore. Net tax receipts of the centre stood at 100.1% of the year's target. Total expenditure stood at Rs 44.43 lakh crore, or 99% of the targeted expenditure for FY24. The government's capital expenditure on infrastructure projects was Rs 9.49 lakh crore. Fiscal deficit for April 2024 stood at Rs 2.1 lakh crore, or 12.5% of the FY24 target.

### **RBI transferred 100 tonnes of gold from the UK to its domestic vaults in India**

For the first time since 1991, the RBI relocated over 1 lakh kilograms of gold from the UK to India for logistical and storage reasons, aiming to save on storage costs paid to the Bank of England. The gold is stored in vaults at the RBI's Mumbai and Nagpur offices. As of March 31, 2024, the RBI held 822.10 metric tonnes of gold. In August 1990, 20 tonnes of gold were sent abroad for emergency use due to India's foreign debt of around USD 72 billion. The RBI purchased 27.5 metric tonnes of gold in the last financial year.

### **FY24 income of RBI has increased 17% to ₹2,75,572.32 crore**

RBI's FY24 income spending has declined by 56.3% to ₹64,694.33 crore from ₹1,48,037.04 crore in FY23. RBI's annual report showed that the size of its balance sheet increased by 11% (₹7,02,946.97 crore)

to ₹70,47,703.21 crore from ₹63,44,756.24 crore in FY23. On the asset side, the increase was because of rise in foreign investments, gold, and loans and advances by 13.9%, 18.26% and 30.05%, respectively. The increase on liabilities side was because of rise in notes issued, deposits and other liabilities by 3.88%, 27% and 92.57%, respectively. Domestic assets formed 23.31% in FY24. Foreign currency assets, gold and loans and advances to financial institutions outside India formed 76.69% of total assets in FY24. ₹42,819.91 crore was transferred to the Contingency Fund. No provision was made for Asset Development Fund (ADF). RBI projected real GDP growth for 2024-25 at 7%, with risks evenly balanced.

### **Unclaimed deposits with banks have increased 26 percent to Rs 78,213 crore**

As per the RBI Annual Report, unclaimed deposits with banks have increased 26% year



on year at the end of March 2024. At the end of March 2023, the amount with Depositor Education

and Awareness Fund stood at Rs 62,225 crore. Banks transfer deposits to RBI's Depositor Education and Awareness (DEA) Fund that have been unclaimed by account holders for ten years or more. Reserve Bank earlier launched a centralised web portal UDGAM - Unclaimed Deposits Gateway to Access information. This was launched to facilitate the depositors to find out the unclaimed deposits across multiple banks at one place.

### **A penalty of Rs 36.38 lakh was imposed on HSBC by RBI for violation of FEMA rules**

On May 29, a penalty of Rs 36.38 lakh imposed on foreign lender HSBC by the Reserve Bank of India for violations of the Foreign Exchange Management Act (FEMA). The central bank said HSBC did not comply



with the reporting requirements under the Liberalised Remittance Scheme of FEMA, 1999. A show cause notice was issued to HSBC by the RBI, in response to which the bank filed a written reply and also gave oral submissions. After considering the facts of the case and the bank's reply, the Reserve Bank of India concluded that the violations were substantiated and the imposition of penalty was justified.

### **IRDAI has made major revisions to health insurance norms**

IRDAI has streamlined health insurance regulations by repealing 55 circulars and



introducing a comprehensive Master Circular on Health Insurance Products. This centralizes policyholder

entitlements, ensuring insurers offer more choices and transparency. Insurers must provide a Customer Information Sheet with every policy, allowing customers to select riders and products based on their needs and medical conditions. Policies are renewable and cannot be denied based solely on past claims, except in cases of fraud or misinformation. Insurers may offer a No-Claim Bonus, increasing sum insured or discounting premiums for claim-free years. Cashless claims must be processed within one hour, with final authorization within three hours of discharge from hospital. Non-compliance with ombudsman awards within 30 days mandates insurers to pay Rs 5,000 per day to the policyholder.

### **Indian economy is likely to grow at 7% in the FY25: RBI Annual Report**

The RBI's annual report projects India's GDP growth rate for 2024-25 at 7.0%, following robust growth of 7.6% in 2023-24, marking the third consecutive year of strong growth above 7%. The economy is supported by healthy

balance sheets of banks and corporates, with the government focusing on capital expenditure and sound monetary, regulatory, and fiscal policies. However, risks include geopolitical tensions, global financial market volatility, and challenges from AI/ML adoption. The report covers RBI's activities from April 2023 to March 2024.

### **According to SBI report, India's Q4 FY24 GDP growth is likely to be 7.4%**

The SBI Ecowrap report predicts India's GDP growth rate for FY24 at 8%, citing a strong global economy, moderate inflation, and robust performance by over 2,400 listed Indian companies in Q4 FY24. These firms saw a 9% increase in top-line growth and a 21% rise in EBITDA. However, profit after tax (PAT) growth slowed to around 12% from higher levels in previous quarters. Corporate Gross Value Added (GVA) rose by 18% in Q4 FY24. Global inflation is expected to decline from 6.8% in 2023 to 5.9% in 2024 and further to 4.5% in 2025, as per IMF estimates.

### **Four European banks seek RBI approval for a third-party transaction model**

European banks including Credit Agricole, Societe Generale, Deutsche Bank, and BNP Paribas have requested RBI approval for a third-party transaction model. This request aims to resolve a deadlock between European regulators and Indian authorities concerning audit oversight of the Clearing Corp of India (CCIL). European Securities and Markets Authority (ESMA) de-recognized CCIL in 2022, affecting trading in Indian government bonds and derivatives for European banks. They face a deadline until October 2024 to cease transactions with CCIL unless a resolution is reached or an alternative clearing mechanism is approved by RBI.

### **Airbus Helicopters and Small Industries Development Bank of India (SIDBI) have signed MoU**

The MoU is for financing the purchase of Airbus' helicopters in India. As part of the

MoU, potential civil helicopter operators having interest in financing solutions for purchasing the helicopters would be identified by the Airbus Helicopters and SIDBI. Airbus would be responsible for providing the technical and helicopter-industry knowledge. SIDBI would evaluate the prospects and finance them exclusively for Airbus. This collaboration marks the entry of SIDBI into helicopter financing. This collaboration also marks the entry of SIDBI into meeting the financial and development needs of rotary wing sector of India.

### **RBI will transfer Rs 2.11 lakh crore (Rs 2,10,874 crore) surplus to government for 2023-24**

This transfer is 141% more over the Rs 87,416 crore, which was the last year's (2022-23) dividend. The 608th meeting of the Central Board of Directors of Reserve Bank of India was held at Mumbai and this decision to surplus transfer was taken during the meeting. The government planned to provide for a dividend of Rs 1.02 lakh crore from the central bank, state-run banks, and other financial institutions in the interim budget projections for the fiscal year 2024–2025. The Reserve Bank of India (RBI) often uses its excess revenue from assets, valuation adjustments on its dollar holdings, and currency printing fees to distribute dividends.

### **According to a government survey, the unemployment rate in urban areas fell to 6.7% in the March quarter**

According to the 22nd Periodic Labor Force Survey (PLFS), the unemployment rate for people aged 15 and above in urban areas declined to 6.7% in the January-March period from 6.8% a year ago. In April 2017, PLFS was launched by the National Sample Survey Office (NSSO). Unemployment, or unemployment rate, is defined as the percentage of unemployed people in the

labour force. In the March quarter of FY 2023, the unemployment rate was 6.8%, while it was 6.6% in April-June as well as the third quarter (July-September 2023) of the last financial year. The unemployment rate was 6.5% in October-December 2023.

### **In the fiscal year 2023–2024, India's exports reached a record USD 778 billion**

The total value of exported goods and services was USD 776.3 billion in the fiscal year 2022–2023. Services exports rose from



USD 325.3 billion to USD 341.1 billion in 2023–2024. In 2023–2024, merchandise exports decreased

slightly from USD 451.1 billion to USD 437.1 billion. India's exports to many nations, including China, Russia, Iraq, the United Arab Emirates, and Singapore, have increased significantly in the fiscal year 2023–2024. The UK, Australia, Saudi Arabia, the Netherlands, and South Africa are the other nations included in the top 10 list. Total imports decreased from USD 898.0 billion in 2022–2023 to USD 853.8 billion in 2023–2024. The trade deficit declined from USD 121.6 billion in 2022-23 to USD 75.6 billion in 2023-24.

### **Moody's expects India to achieve growth of 6.6% in the financial year 2024-25**

Moody's Ratings forecasts India's economy to grow by 6.6% in the fiscal year 2024-25, driven by strong credit demand supporting Non-Banking Financial Companies (NBFCs). This projection is lower than the RBI's estimate of 7%. For the following year, 2025-26, Moody's predicts India's GDP growth at 6.2%. India recorded a robust GDP growth of 8.4% in the October-December quarter of fiscal year 2023-24, maintaining its status as the fastest-growing major economy. The IMF

has raised India's growth forecast for 2024 to 6.8%. Currently, India ranks as the world's 5th largest economy, surpassing the UK in 2022, with an estimated GDP of around US\$3.7 trillion.

### **SBI becomes the first bank as a trading and clearing member of IIBX**

The State Bank of India (SBI) has announced that it has become the first trading-cum-clearing member of the India International Bullion Exchange (IIBX). India International Bullion Exchange (IIBX) is India's first bullion

exchange in GIFT City, Gandhinagar. Now, SBI's IFSC Banking Unit (IBU) will be able to trade on the IIBX platform. Recently, RBI has permitted IBUs to act as trading members and clearing members at IIBX as special category clients (SCCs) to import gold through the bullion exchange. With the entry of SBI, the trading volume at IIBX will get a boost.

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# SCIENCE AND TECHNOLOGY

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## **Omega-3 therapy reduced brain damage in newborn rodents**

Researchers at Columbia University have developed an injectable emulsion containing omega-3 fatty acids found in fish oil. This treatment has shown promise in reducing brain damage in newborn rodents caused by insufficient oxygen flow during birth. The therapy prevented



brain cell death and preserved neurological function, improving motor coordination and reflexes in treated animals. Clinical trials in human newborns are expected to begin within two years to further evaluate its effectiveness in preventing central nervous system damage.

## **Air Quality Monitoring System and Air-Pravah App have been launched by the government**

Secretary MeitY S. Krishnan inaugurated the Indigenous Air Quality Monitoring System (AQ-AIMS) and launched the 'Air-Pravah' App on World Environment Day. Developed by C-DAC Kolkata with collaboration from TeXMIN and J M Envirolab Pvt Ltd, AQ-AIMS monitors pollutants like PM 2.5, PM 10, SO<sub>2</sub>, NO<sub>2</sub>, O<sub>3</sub>, CO, and CO<sub>2</sub>. It supports environmental clearances and is part of the 'AgriEnIcs' initiative. The 'Air-Pravah' app provides real-time Air Quality Index (AQI) updates and is essential for monitoring air quality across India.

## **ISRO developed PraVaHa software for aerodynamic design and analysis**

ISRO's Vikram Sarabhai Space Centre (VSSC) developed the PraVaHa software, aimed at simulating aerodynamic flows for aerospace vehicles. It analyzes both external

and internal flows for launch vehicles, re-entry vehicles, and Crew Modules (CM). PraVaHa supports simulations under both Perfect Gas and Real Gas conditions, crucial for designing vehicle shapes and Thermal Protection Systems (TPS). It is expected to replace traditional CFD methods and has been integral to aerodynamic studies in ISRO's Gaganyaan program for human-rated launch vehicles.

## **Armed Forces Medical Services & IIT Hyderabad joined hands for collaborative research and training**

For collaboration on research and training, the Armed Forces Medical Services (AFMS) have signed a Memorandum of Understanding (MoU) with the Indian Institute of Technology (IIT) Hyderabad. The MoU was signed by Director General of Armed Forces Medical Services Lt Gen Daljit Singh, and Director of IIT Hyderabad Prof B S Murty. Its main aim is to foster innovation and research in developing novel medical devices. The MoU will facilitate student exchange programs, short-term courses for undergraduates, and faculty exchange initiatives. Drone-based patient transport, telemedicine innovations, the application of Artificial Intelligence in the medical field, and advancements in nanotechnology will be the main areas of collaboration. IIT Hyderabad's departments of Biotechnology, Biomedical Engineering, and Bioinformatics will provide the necessary technical expertise.

## **Indian Air Force contingent reached Alaska to participate in Red Flag 24 Multi-National Exercise**

Indian Air Force contingent reached the Eielson Air Force Base in Alaska to participate



in the multi-national exercise Red Flag 24. IL-78 air-to-air refuellers, IAF Rafale fighters and the C-17 transport aircraft will participate in the exercise. Red Flag 24 Multi-National Exercise is scheduled to be organized from May 30 to June 14. Exercise Red Flag is a two-week advanced aerial combat training exercise. Its main aim is to integrate aircrew in a multinational environment, providing invaluable training opportunities for enhancing combat readiness and interoperability. Earlier, in the Indo-US joint working group meeting both countries agreed to enhance defence collaboration.

### **Agnikul Cosmos successfully launched Agnibaan's sub-orbital rocket**

Agnikul Cosmos, a space start-up incubated at IIT-Madras, successfully launched its Agnibaan rocket from its private launchpad at the SatishDhawan Space Centre. This launch follows several previous unsuccessful attempts. The Agnibaan rocket, powered by the world's first single-piece 3D-printed semi-cryogenic Agnilet engine, is designed as a sub-orbital technology demonstrator (SOrTeD). It can carry payloads up to 300 kg to orbits around 700 km above Earth. This engine uses a mix of liquid and gas propellants, a technology distinct from ISRO's rockets. Established in 2017 by SrinathRavichandran, Moin SPM, and IIT-Madras faculty member Sathyanarayan R Chakravarthy, Agnikul Cosmos became the first Indian company to sign an agreement with ISRO in December 2020.

### **DRDO carried out successful flight test of the RudraM-II air-to-surface missile**

India successfully test-fired the RudraM-II missile from a Su-30 MK-I aircraft off the coast of Odisha. The missile, developed by DRDO, met all trial objectives and its performance was validated through data. RudraM-II is a solid-propelled air-launched missile designed

for air-to-surface operations, specifically targeting enemy ground radars and communication stations in SEAD missions. It is the latest version of the indigenously developed Rudram series, aimed to replace the Russian Kh-31 anti-radiation missile currently in use by India.

### **CDS Gen Anil Chauhan attended 'Exercise Cyber Suraksha – 2024'**

Chief of Defence Staff (CDS) Gen Anil Chauhan attended 'Exercise Cyber Suraksha – 2024' on May 22, 2024. 'Exercise Cyber Suraksha – 2024' was conducted from 20-24 May 2024. Its main aim is to further develop Cyber



Defence Capability of all Cyber security organizations and promote synergy amongst all stakeholders. Its main focus is on enhancing collaboration and integration among participants from various military and prominent national organizations. Exercise Cyber Suraksha – 2024 aim is to empower participants by enhancing their cyber defence skills, techniques and capabilities. It will promote jointmanship and synergy in the planning and preparation of a Cyber Defence Framework.

### **India's AstroSat made a fascinating discovery about a black hole system**

Using the AstroSat space observatory, scientists discovered unusual high-energy X-ray activity from the black hole system Swift J1727.8-1613. This finding, reported in the Monthly Notices of the Royal Astronomical Society, observed aperiodic modulation during a rare outburst, marking the first such observation in this system. Black holes form when massive stars collapse under gravity, creating regions in space where even light cannot escape. In the Swift J1727.8-1613 system, a black hole and its companion star



are gravitationally linked, known as a black hole X-ray binary system (BH-XRB).

**Igla-S air defence system, partially assembled in India, will soon be provided to the Army**

The Indian Army is set to receive a new batch of Russian Igla-S air defence systems by late May or early June. This delivery addresses a critical gap in the Army's air defence capabilities, which had faced delays due to payment issues between India and Russia. The Igla-S systems were procured under Emergency Procurement in 2023, with assembly in India facilitated by Adani Defence Systems and Technologies Limited (ADSTL) under a technology transfer agreement. Additionally, the Army will soon receive the first of two Israeli Hermes-900 UAVs assembled in Hyderabad.

**Indian Army sets up one of the world's highest tank repair facilities at an altitude of 14,500 feet**

Indian Army has established two armoured vehicle maintenance and repair facilities near the China border in Nyoma. These facilities will keep the combat fleet operationally ready, even in rugged terrain and challenging weather. The new facilities will promote enhanced serviceability and mission reliability of tanks and infantry combat vehicles. It has around 500 tanks and infantry combat vehicles in Eastern Ladakh. After the stand-off between India and China started in April-May 2020, a large number of tanks and BMP combat vehicles have been deployed in Eastern Ladakh. Indian Army is creating infrastructure for its tanks, including the T-90 and T-72, the BMPs, and the K-9Vajra self-propelled Howitzers, in high-altitude areas, where temperatures are extremely low.

**After 140 years, researchers rediscovered a rare tree species in Wagamon**

A rare and endangered tree species, *Uniyalamultibracteata* (locally known as Kattupoovamkurunnila), has been

rediscovered after a gap of 140 years. Kattupoovamkurunnila is endemic to Wagamon, Memala, and Elappara areas. This species was originally discovered from Peerumade in 1880 by R.H. Beddome. Its height is about 2 to 5 meters and its leaves are covered with cottony hairs. It is found in evergreen forests and rocky grasslands on 1,200 metres above sea level. The presence of this rare species in Wagamon shows the presence of rich biodiversity outside the protected area in the Western Ghats. This shows the importance of conservation in the non-protected forests in the Western Ghats. The rediscovery of Kattupoovamkurunnilahas been published in a recent issue of the Wildlife Information Liaison Development Society journal, Journal of Threatened Taxa.

**In a study, twelve breast cancer genes were found in women with African ancestry**

Recent research focusing on genetic factors associated with breast cancer risk among women of African ancestry found significant variations compared to previous studies primarily involving women of European descent. The study analyzed data from over 40,000 African-American women across Barbados, Africa, and the United States, including 18,034 with breast cancer. It identified six specific genetic mutations associated with a significantly higher risk of triple-negative breast cancer, an aggressive subtype. Women possessing all six mutations were found to have a 4.2-fold increased risk of developing triple-negative breast cancer compared to those with fewer mutations. This research highlights the need for more targeted genetic screening and interventions for breast cancer in populations of African origin, who often face higher mortality rates and earlier onset of the disease compared to white women.

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# SPORTS

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## **PoojaTomar created history by becoming the first Indian to win in UFC**

By defeating Brazil's Rayanne dos Santos, PoojaTomar created history by becoming the first Indian to win a fight in the Ultimate Fighting Championship (UFC) at UFC Louisville 2024. Pooja, a resident of Muzaffarnagar in Uttar Pradesh, had set a new record in 2023 by becoming the first Indian woman to get a UFC contract. In her first debut fight in the women's strawweight division, she won via split decision with scores of 30–27, 27–30, and 29–28. India has a long tradition of women excelling in combat sports, and since 2013 the UFC has been a platform for women to shine.

## **International Olympic Committee (IOC) has launched 'Let's Move India'**

This is an initiative to motivate the public to celebrate the athletes taking part in the coming Olympic Games in Paris. Through a digital challenge on social media, the campaign invites individuals from all around the nation to join. Young people can participate in a number of regional school events in honour of Olympic Day on June 23. People are urged to either design their own festivities or emulate their favourite athlete's celebrations as of right now. From July 26, Olympians will represent their 1.4 billion fellow citizens. AbhinavBindra, the first individual Olympic gold medallist from India and a member of the IOC Athletes' Commission, has partnered with the IOC. As part of the Olympic Values Education Programme, they will collaborate to invite educational institutions all throughout the country to become a part of the movement.

## **PreetismitaBhoi has become India's first lifter to win a title with a clean and jerk world record**

She won the title in the women's 40kg in the World youth championships in Lima (Peru).

Preetismita hails from Odisha. Preetismita lifted 57kg in snatch and 76kg in clean and jerk. This was 1kg better than the earlier world record of 75kg set five years ago. She won the women's 40kg crown with a total of 133kg. She won three gold medals for her snatch, clean and jerk and total performances. JyoshnaSabar won silver with an aggregate of 125kg (56kg, 69kg). JyoshnaSabar also hails from Odisha. Payal (women's 45kg) also won a silver with an aggregate of 147kg. BabulalHembrom (men's 49kg) won bronze with 193kg. Indian lifters won three gold, three silver and five bronze medals. This includes their performances in snatch and clean and jerk.

## **SatwiksairajRankireddy and ChiragShetty won the men's doubles final at Thailand Open 2024**

They defeated the Chinese pair of Chen Bo Yang and Liu Yi in the Badminton final. In 2019, Satwik and Chirag had won the title for their first Superseries/Super 500 level. After this win, Satwik-Chirag are also set to regain the world No. 1 ranking. This is Satwik and Chirag's second title of 2024 after winning the French Open in March.

## **Brazil to host 2027 Women's World Cup**

At the annual FIFA Congress, Brazil won the bid to host the 2027 Women's World Cup. Brazil will be the first South American country to host the tournament. Brazil beat the bid of Belgium, Netherlands, and Germany. Brazil won with 119 votes versus 78 for the joint European entry. Brazil scored 4.0 out of 5 compared to 3.7 for Belgium-Netherlands-Germany in the FIFA evaluation. The FIFA assessment scored on criteria ranging from commercial viability, team facilities, and accommodation, to broadcast sites, stadiums, and fan festival venues.

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# AWARDS

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## **C-DOT won United Nations WSIS 2024 "Champion" Award**

The Centre for Development of Telematics (C-DOT) received the United Nations WSIS



2024 "Champion" award for its project

"Mobile-enabled

Disaster Resilience

through Cell Broadcast Emergency Alerting."

This project, recognized under the AI and e-Environment category, provides an end-to-end solution for delivering emergency alerts to mobile phones via cellular networks. The system is low-cost, automated, and supports geo-targeted, multi-language alerts, enhancing disaster risk management. The award was presented at the WSIS+20 Forum 2024 in Geneva, Switzerland.

## **NIMHANS Bengaluru has won the Nelson Mandela Award for Health Promotion for 2024**

World Health Organization (WHO) honoured National Institute of Mental Health & Neuro Sciences (NIMHANS) with this award. Union Health Minister Dr. Mansukh Mandaviya congratulated NIMHANS. He called the award a recognition of India's efforts in inclusive healthcare. The award has come at a time when NIMHANS is celebrating its 50th anniversary. NIMHANS is also celebrating the 70th anniversary of its predecessor, the All India Institute of Mental Health (AIIMH). Nelson Mandela Award for Health Promotion was established by WHO in 2019. It recognizes individuals, institutions, and organizations that have made significant contributions to health promotion. This year, NIMHANS has been recognized for its work in mental health.

## **'Sustainability Champion – Editor's Choice Award' presented to REC Limited at Outlook Planet Sustainability Summit & Awards 2024**

Additionally, the "Corporate Social Responsibility Champion Award" presented to Power Finance Corporation Ltd. (PFC) in the NF (NonFossil Fuel) business category. The Outlook Planet Sustainability Summit & Awards 2024, was held in Goa. Rural Electrification Corporation (REC) Limited is a Maharatna Central Public Sector Enterprise under the Ministry of Power and a leading NBFC. Outlook Group in collaboration with the Indian Institute of Technology (IIT) Goa organised this awards ceremony. This award recognizes REC's commitment to sustainability initiatives and its efforts to drive progress towards a greener future. The Outlook Planet Sustainability Summit & Awards is a premier platform that brings together industry leaders, policy makers and sustainability advocates to promote excellence in sustainable practices.

## **A film by FTII students has won 'La Cinef' award at 77th Cannes Film Festival in France**

"Sunflowers Were the First Ones to Know" is a film by FTII Pune student Chidanand S Naik, directed by Naik and shot by Suraj Thakur, with editing by Manoj V. The film is based on a Kannada folktale about an old woman who steals a rooster, causing the sun not to rise. This recognition follows four years after another FTII student film, "CATDOG," won an award at Cannes. Other winners include "The Chaos She Left Behind" by Nikos Kolioukos and "Out the Window Through the Wall" by AsyaSegalovich

(second place), and MansiMaheshwari's "Bunnyhood" (third place). The first prize winner receives a €15,000 grant from the Festival de Cannes.

### **A UP woman received the Amal Clooney Women's Empowerment Award in London**

An 18-year-old rickshaw driver, Arti, received the Amal Clooney Women's Empowerment Award. She was honoured for inspiring other young girls through her work under the government's Pink e-rickshaw initiative. Under the Project Lehar, Prince's Trust International and the Aga Khan Foundation (AKF) introduced Arti to the Indian government's Pink ERickshaw scheme. Under this initiative, pink e-rickshaws were provided by the Bahraich district administration with a subsidy for women drivers. She also met King Charles III at Buckingham Palace in London. The Prince's Trust International was founded by King Charles III when he was the Prince of Wales.

### **Indian Embassy, Consulates honoured at MOFA Excellence Awards by UAE**

India's diplomatic missions in the UAE were honoured at the 5th Minister of Foreign Affairs Excellence Awards for their exceptional work. The Indian Embassy in Abu Dhabi and the Consulate General in Dubai received the prestigious Shield of Honour, making India the only nation to receive two honours. The awards were presented by Sheikh Abdullah bin Zayed Al Nahyan, UAE's Minister of Foreign Affairs, to Sanjay Sudhir, Indian Ambassador to the UAE, and Satish Kumar Sivan, Consul General in Dubai. The recognition was for strengthening UAE-India bilateral relations. Other diplomatic missions, including those from the US, Vietnam, Italy, and others, were also honoured for their contributions.

### **International Booker Prize 2024 awarded to Jenny Erpenbach's 'Kairos'**

German author Jenny Erpenbeck and translator Michael Hofmann won the International Booker Prize for fiction for "Kairos," a story about a love affair during the final years of East Germany. They will share the £50,000 prize equally. The winners were announced at an event sponsored by Maison Valentino at the Tate Modern in London. Erpenbeck is the first German author to win, and Hofmann is the first male translator to win since the prize's current format started in 2016. In 2023, GeorgiGospodinov and Angela Rodel won the prize for "Time Shelter." The International Booker Prize, previously known as the Man Booker International Prize, is awarded for a book translated into English.

### **POWERGRID received ATD BEST Awards 2024 for the third time**

A Maharatna Central Public Sector Enterprise, Power Grid Corporation of India



Limited (POWERGRID), has been conferred the prestigious ATD BEST Awards 2024. It has

received the ATD BEST Awards 2024 for its strategic approach to talent development, driving business results. It is the third time that POWERGRID has received the ATD BEST Award. Earlier, it was conferred the ATD BEST Awards in 2021 and 2023. The award was received by Director (Personnel), Dr YatindraDwivedi and CGM (HRD), ShriBipinKishorMundu, on behalf of POWERGRID. NTPC has achieved a milestone by securing the 3rd rank globally at the ATD BEST Awards 2024. NTPC becomes the only PSU to receive the award seven times in the last eight years.

## Indian-Origin US Scientist Shrinivas R Kulkarni wins Prestigious Shaw Prize

Indian-origin professor of astronomy, Shrinivas R Kulkarni, wins Shaw Prize. Shaw Prize in Astronomy has been given to him for his ground-breaking discoveries about millisecond pulsars, gamma-ray bursts, and supernova. Shrinivas R Kulkarni has done MS from the Indian Institute of Technology in 1978 and PHD from University of California in 1983. He was also the director of Caltech Optical Observatories from 2006 till 2018. The Shaw Prize is given in three fields: Astronomy, Life sciences and Medicine, and Mathematical Sciences. The award comprise a monetary award of USD 1.2 million.

### **The portal for nominations for the National Award to Teachers (Higher Education) 2024 launched**

Shri Sanjay Murthy, Secretary, Department of Higher Education, and Shri T. G. Sitaram, Chairman of AICTE, launched the National Award to Teachers 2024. This award will honour exemplary faculty members from technical, non-technical, and polytechnic institutions. There are three sub-categories

based on topics like Engineering & Technology, Pure Sciences, Medicine, Pharmacy, Arts, Social Sciences, Humanities, Languages, Legal Studies, Commerce, and Management. Nominations are open until June 20, 2024, and winners will be honoured on September 5th, Teacher's Day, to commemorate Dr.SarvepalliRadhakrishnan. The award recognizes outstanding contributions to teaching and pedagogy in higher education.

### **ChandrakantSatija has been honoured with Global Excellence Award 2024 for outstanding contributions in Education**

ChandrakantSatija has won the Global Excellence Award 2024 for being the "Most Trusted Admission Consultant in Vidarbha Region". Famous Bollywood actress ShilpaShettyKundra presented the award to him on May 12th. ChandrakantSatija is the Founder and CEO of Chandra Admission Consultants. His company, Chandra Admission Consultants, assists applicants in securing admissions into prominent universities in India and abroad.

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# MISCELLANEOUS

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## APPOINTMENT

### **Kamal Kishore Soan took over the additional charge of Director General of Employees' State Insurance Corporation (ESIC)**

Kamal Kishore Soan is an IAS officer from Jharkhand cadre. Kamal Kishore Soan is



currently serving as an Additional Secretary and Director General, Labour Welfare in the Ministry of Labour & Employment.

### **Sushil Kumar Singh has been appointed Chairman of Deendayal Port Authority (formerly known as Kandla Port) by the government**

He is the Joint Secretary looking after Ports/PPP and PHRD in the Ministry of Ports, Shipping and Waterways. He replaced S. K. Mehta, who stepped down in April after completing a five-year tenure. The appointment of Singh will last until January 31, 2027, or until further orders. Sushil Singh is a 1993 batch officer of the Indian Railway Service of Mechanical Engineering (IRSME), one of the Group 'A' Central Engineering Services of the Indian Railways. Deendayal Port Authority operates India's second largest government-owned commercial port in terms of operations.

### **Apurva Chandra has been appointed as the chairperson of the Committee A at 77th World Health Assembly (WHA)**

Apurva Chandra is the Union health secretary, Government of India. The

Committee A of WHA is chaired by India. It is the event being held from May 27 to June 1 at Geneva. Committee A is tasked with facilitating crucial discussions on a range of programmatic topics. The World Health Assembly features sessions from three main committees. These are Plenary, Committee A, and Committee B.

### **Indian-origin lawyer Jaya Badiga has been appointed as a judge in the US County Superior Court**

Jaya Badiga, an Indian-American lawyer, has been appointed as a judge in the Sacramento County Superior Court in California, replacing the retired Judge Robert S. Lapham. Badiga is a certified family law specialist with over ten years of experience. She has worked as Chief Assistant City Attorney in Fresno since 2022, and previously served at the California Department of Health Care Services and the California Governor's Office of Emergency Services. She is the first Telugu woman appointed as a judge in the US, beginning her legal career in 2009 after passing the California State Bar Examination.

### **Senior IPS officer A.Y.V. Krishna has been appointed additional director in the Central Bureau of Investigation (CBI)**

Senior IPS officer N. VenuGopal has been appointed additional director in the CBI. A.Y.V. Krishna is a 1995-batch Indian Police Service (IPS) officer of the Assam-Meghalaya cadre. He is presently working as Inspector General in the Central Reserve Police Force (CRPF). His tenure as the additional director of CBI will be up to August

6, 2028. Mr.VenuGopal is an officer of Himachal Pradesh cadre. Mr.VenuGopal is currently working as a joint director in the CBI. His tenure as the additional director of CBI will be up to May 24, 2027.

### **KapilSibal became president of the Supreme Court Bar Association**

Senior advocate KapilSibal has been elected as the president of the Supreme Court Bar Association (SCBA). He will serve as president of the SCBA for the fourth time. KapilSibal secured 1,066 votes and defeated his nearest rival and senior advocate, PradeepRai. The other contenders were PriyaHingorani, Tripurari Ray, and NeerajSrivastava. Advocate Vikrant Yadav has been elected SCBA secretary. Sibal was the additional solicitor general of India during 1989-90. He became a senior advocate in 1983. Supreme Court has directed to reserve some posts in the executive committee of the SCBA for women.

## **OBITUARIES**

### **Ramoji Film City founder and media baron RamojiRao passed away at the age of 87**

RamojiRao was a prominent figure in media known for his significant contributions to journalism and the film industry. He played a crucial role in shaping public opinion through his newspaper Eenadu, particularly during NandamuriTaraka Rama Rao's rise with the Telugu Desam Party in 1982. Rao's leadership expanded Eenadu into a major force in Telugu media, alongside establishing the renowned Ramoji Film City. His media empire also included the ETV network and film production ventures. In recognition of his

achievements, he received the Padma Vibhushan, India's second-highest civilian award, in 2016.

### **AJT Johnsingh passed away in Bengaluru**

He is a renowned wildlife field biologist and one of India's first wildlife conservationists. His groundbreaking research on elephants in the early 1980s had a key role in the development of Project Elephant by the Indian government. Additionally, he had organised a global symposium that brought experts on elephants from all over the world to Tamil Nadu's Mudhumalai Wildlife Sanctuary. In addition, he was a member of the Tiger Conservation Authority and the National Wild Life Board. He was an Indian vertebrate ecologist from Tamil Nadu.

### **Iran's President EbrahimRaisi dies in helicopter crash**

The helicopter crash occurred near Jolfa. It is a city on the border with Azerbaijan. It is located in the northwest of the Iran's capital,



Tehran. Iranian foreign minister Hossein Amir Abdollahian have also died in same helicopter crash. Some called the helicopter crash was

caused by heavy rains, fog, and wind. Some called it as a "hard landing." The helicopter crashed while en route to Tabriz (an Iranian city) after the inauguration of the QizQalasi Dam on the Iranian-Azerbaijani border. Bell 212 helicopter was carrying Iran's president and foreign minister. After Raisi's death, Vice President of Iran Mohammad Mokhber is serving as the acting President of Iran. In April 2024, Iran under Mr.Raisi and Supreme Leader Ayatollah Ali Khamenei launched a

drone-and-missile attack on Israel, which was unprecedented.

### **Nobel Prize-winning author Alice Munro died at the age of 92**

Alice Munro, first Canadian author to win the Nobel Prize in literature, has died at the age of 92 in Ontario. Her collections of short stories represent complexity and authenticity. She is one of the most renowned writers in Canada. She received the Nobel Prize in Literature in 2013. Her last work title was "Dear Life", which is a collection of short stories. Alice Munro was born on July 10, 1931 in Ontario. Alice Munro devoted herself to writing by the end of the 1960s.

## **BOOKS**

### **The prestigious SahityaAkademi Fellowship awarded to eminent English author Ruskin Bond**

Bond was named the recipient of the academy's highest honor. His notable works include "Vagrants in the Valley", "Once Upon a Monsoon Time", "Angry River", "Strangers in the Night", "All Roads Lead to Ganga", "Tales of Fostergeranj", and "Leopard on the Mountain". His many other works include over 300 short stories, essays and novellas and over 30 books for children. Among other prestigious awards, he received the SahityaAkademi Award in 1992, the SahityaAkademi's Children's Literature Award in 2012, the Padma Shri in 1999, and the Padma Bhushan in 2019.

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# MATCH POINT

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- Indira Gandhi National Center for the Arts signed an agreement with this company to promote Indian art and culture- **Sansad TV**
- India has sent humanitarian aid of this amount to disaster-hit Papua New Guinea- **1 million US dollar**
- This personality has recently been re-appointed as the Principal Secretary to Prime Minister NarendraModi- **Dr.Pramod Kumar Mishra**
- AjiDoval is the longest serving person in this post- **National Security Advisor**
- India's rank in the Global Gender Gap Index 2024 is - **129**
- G7 summit 2024 was organized in - **Italy**
- Recently the Container Port Performance Index 2024 was released by- **World Economic Forum**
- NASA is working with this IIT in India to research multidrug-resistant pathogens- **IIT Madras**
- PemaKhandu has taken oath as the Chief Minister of which state- **Arunachal Pradesh**
- This country has achieved the first rank in the Global Gender Gap Index 2024- **Iceland**
- Visakhapatnam Port Authority achieved this rank in the Container Port Performance Index 2024 – **18<sup>th</sup>**
- This personality has been named as the next Chief of the Indian Army- **Lieutenant General UpendraDwivedi**
- New Chief Minister of Odisha- **Mohan CharanMajhi**
- New Chief Minister of Andhra Pradesh- **Chandrababu Naidu**
- Suhelwa Wildlife Sanctuary is in news recently, it is in - **Uttar Pradesh**
- In this country the FIH Hockey Men's Junior World Cup 2025 will be organized- **India**
- Carlos Alcaraz is the player of this country who won the title of French Open 2024- **Spain**
- New Deputy Chief Minister of Andhra Pradesh- **PawanKalyan**
- New Deputy Chief Ministers of Odisha- **KanakVardhan Singh Dev and ParvatiParida**
- Prem Singh Tamang has recently taken oath as Chief Minister of - **Sikkim**
- NarendraModi took oath as the PM of India for the third consecutive time, he won from this Lok Sabha constituency- **Varanasi**
- This country has recently been added by the UN to the global list of criminals committing crimes against children- **Israel**
- IgaSwiatek, who won the French Open 2024 women's title, is a player of - **Polan**
- Recently, two wetlands of this state have been included in the list of 'Ramsar sites'- **Bihar**
- In this state plastic waste management and recycling plant was inaugurated recently- **Sikkim**
- Bharat Heavy Electricals Limited has secured an order for a thermal power project from this company- **Adani Power Limited**
- Mobile app 'Sarathi 2.0' was recently launched by- **SEBI**
- Recently in news 'Sparrsh' service is related to - **Defence Ministry**
- Recently this country has officially recognized Palestine- **Slovenia**
- Recently this state has signed an agreement with the World Bank to tackle air pollution- **Haryana**
- New Crown Prince by the Emir of Kuwait- **Sheikh Sabah**
- NPCI International has recently signed an agreement with this country for UPI payment- **Peru**

- This country has recently officially launched its space agency- **South Korea**
- Claudia Sheinbaum has become the first woman elected president of country- **Mexico**
- Recently a new species of blue ant has been discovered in - **Arunachal Pradesh**
- Recently this country has banned the entry of Israeli passport holders- **Maldives**
- This personality is India's first female permanent representative to the United Nations who recently retired - **Ruchira Kamboj**
- This state recently received central approval for the establishment of an IIM- **Assam**
- This country will host the next annual general meeting of the International Air Transport Association- **India**
- This country recently sent the Chang'e-6 mission to the Moon - **China**
- DRDO recently successfully tested Rudram-II missile, Type of missile is - **Air to Surface**
- the Antarctic Treaty Consultative Meeting was held in - **Kochi**
- In this country is the multi-national military exercise 'Red Flag 24' being organized- **USA**
- The recently occurred cyclone 'Remal' has been named by - **Oman**
- Recently this state government has imposed a one year ban on guthka and pan masala- **Telangana**
- International Conference on Nuclear Security (ICONS-2024) was recently held in - **Vienna**
- Theme of World Hunger Day 2024- **'Thriving mothers, thriving world'. Thriving world)**
- This team won the title of IPL 2024- **Kolkata Knight Riders (KKR)**
- This country will host the AFC Women's Asia Cup 2026- **Australia**
- The President of the United Arab Emirates awarded the First Class Independence Medal to the ambassador of - **Paraguay**
- The oldest Indian woman to conquer Mount Everest recently- **Jyoti Ratre**
- Recently this Indian origin professor was awarded the prestigious Shaw Prize in Astronomy- **Srinivas R. Kulkarni**
- General Tu Lam was recently elected the new President of - **Vietnam**
- This country will host the AFC Women's Asia Cup 2029- **Uzbekistan**
- Travel and Tourism Development Index 2024 was recently released by - **World Economic Forum**
- Recently this institute has presented a research report on 'Air Pollution and Health Effects in North India'- **IIT Jaipur**
- This medal India's Deepti Jeevanji won in the World Para Athletics Championship- **Gold**
- Recently this European country has given the status of country to Palestine- **Norway, Ireland and Spain**
- With this organisation the Department of Animal Husbandry and Dairying, Government of India has signed an agreement for vaccine cold chain management- **UNDP-India**
- Ibrahim Raisi was the President of this country who recently died in a helicopter crash- **Iran**
- This female tennis player won the Italian Open title- **Iga Switek**
- Neeraj Chopra won the gold medal in Federation Cup 2024, where it was organized- **Bhubaneswar**
- PhonePe has recently launched UPI services in - **Sri Lanka**
- Indian Air Force airdrop-tested the indigenous mobile hospital 'Bhishma' cube in – **Agra**
- This organisation has appointed David Salvagnini as its first Chief AI Officer- **NASA**

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# MCQ ON CURRENT AFFAIRS

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1. The JIMEX 2024 bilateral military exercise, is conducted between India and:
  - (a) Japan
  - (b) Singapore
  - (c) Thailand
  - (d) Malaysia
2. With reference to the Technology Development Fund (TDF), consider the following statements:
  1. It is a scheme executed by the Defence Research and Development Organization (DRDO).
  2. It grants aid for defence and dual-use technology development.Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
3. Digital Health Incentive Scheme (DHIS) was launched under which one of the following initiatives?
  - (a) Ayushman Bharat Digital Mission
  - (b) National Disease Control Programme
  - (c) PradhanMantriSurakshaBimaYojana
  - (d) Swachh Bharat Abhiyan
4. "Planet Nine", recently seen in the news, refers to:
  - (a) a newly discovered moon of Jupiter
  - (b) a dwarf planet in the asteroid belt
  - (c) a hypothetical planet in the outer region of the solar system
  - (d) an exoplanet in the Proxima Centauri system
5. Mitigation Work Programme (MWP), which aims to help countries scale up their mitigation ambition and implementation to achieve the 1.5°C goal of the Paris Agreement was established by?
  - (a) Intergovernmental Panel on Climate Change (IPCC)
  - (b) United Nations Framework Convention on Climate Change (UNFCCC)
  - (c) World Bank
  - (d) United Nations Development Programme (UNDP)
6. Consider the following statements about death penalty
  1. The Supreme Court of India in Mohini Jain v. State of Karnataka held that the death penalty should only be awarded in the "rarest of the rare" cases where the alternative option is unquestionably foreclosed.
  2. The death sentence pronounced by a trial court must be confirmed by the High Court.
  3. The Terrorist and Disruptive Activities (Prevention) Act (TADA) and POCSO Act prescribe the death penalty for specific crimes.Select the correct statement(s)
  - (a) 1 and 2 only
  - (b) 1 and 3 only
  - (c) All three
  - (d) 2 and 3 only
7. Consider the following statements about Olympus Mons
  1. It is a shield volcano located in Moon's southern hemisphere.

2. It is the largest known volcano in the solar system.

Choose the incorrect statements:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

8. Consider the following statements about PM AwasYojana:

- 1. PMAY was launched by the Ministry of Housing and Urban Affairs.
- 2. PMAY includes both urban and rural housing schemes.
- 3. The scheme provides interest subsidies on home loans.

How many of the above statements is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

9. The President of India has the power to grant pardons under Article 72 of the Constitution. Which of the following statements about this power is/are correct?

- 1. The power to pardon is exercised by the President on the advice of the Council of Ministers.
- 2. The President's power to pardon is absolute and not subject to judicial review.
- 3. The President can pardon punishments awarded by court-martial as well as punishments awarded by ordinary courts.

Select the correct answer using the code below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) All of the above
- (d) 1 and 3 only

10. Consider the following statements:

- 1. It is a high-altitude mountain pass located in Uttarakhand.
- 2. It lies near the trijunction of India, Nepal, and China.
- 3. It is the first Indian border post opened for trade with China.

The above statements describe which one of the following mountain passes?

- (a) Shipki La
- (b) Nathu La
- (c) Diphu
- (d) Lipulekh

11. The term "Nagastra", recently seen in the news, refers to:

- (a) a newly developed anti-tank guided missile
- (b) an advanced weather satellite
- (c) a next-generation ballistic missile defense system
- (d) the first indigenous man-portable suicide drone

12. "Rarest of the Rare Doctrine" applied in the death sentence was established in which one of the following cases by Supreme Court of India?

- (a) Bachan Singh v. State of Punjab (1980)
- (b) Dhananjoy Chatterjee v. State of West Bengal (1994)
- (c) Kehar Singh v. Union of India (1989)
- (d) State of Tamil Nadu v. Nalini (1999)

13. "Kavli Prizes", recently seen in the news, are awarded for?

- (a) Literature, peace and economics
- (b) Environmental science, public health and engineering
- (c) Astrophysics, nanoscience and neuroscience
- (d) Mathematics, computer science and biology

14. Consider the following statements about Global Gender Gap Report 2024

1. It is an annual report produced by the World Economic Forum (WEF).
2. Economic participation and Educational attainment are the key parameters of the index.
3. It ranks countries on a scale from 0 to 1, with a score of 1 indicating that a country has achieved complete gender equality.

How many of the statements given above are correct?

- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None of the above
15. Global Economic Prospects Report is released by?
- (a) World Bank
  - (b) International Monetary Fund
  - (c) World Economic Forum
  - (d) UN Trade and Development organization
16. "Raising Ambition, Accelerating Action: Towards Enhanced NDCs for Forests" report published by the
- (a) IPCC
  - (b) UNEP
  - (c) UNFCCC
  - (d) UNCCD
17. Consider the following statements regarding the National Disaster Response Fund (NDRF).
1. NDRF is located in the "Public Accounts" of Government of India under "Reserve Funds not bearing interest".
  2. The relief activities for all the calamities are monitored by the Ministry of Home Affairs.
  3. NDRF amount can be spent only towards meeting the expenses for emergency response, relief and rehabilitation.

How many of the above statements given is/are correct?

- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None
18. Consider the following statements regarding the State Disaster Response Fund (SDRF).
1. SDRF was constituted based on the recommendations of the 14th Finance Commission.
  2. The Central Government contributes 50% to SDRF and the remaining 50% is provided by the State Government.
  3. A State Government may use the funds available under the SDRF for providing immediate relief to the victims of natural disasters that they consider to be 'disasters' within the local context in the State.

How many of the above statements given is/are incorrect?

- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None
19. Consider the following statements about General Anti-Avoidance Rules (GAAR):
1. GAAR is designed to prevent taxpayers from exploiting loopholes in tax laws to avoid paying taxes.
  2. GAAR allows tax authorities to disregard or recharacterize transactions that have no substantial economic purpose other than to gain a tax advantage.

3. GAAR applies only to individual taxpayers and not to corporations.  
Select the correct statement(s)  
(a) 1 and 2 only  
(b) 1 and 3 only  
(c) All three  
(d) 2 and 3 only
20. Which of the following statements is true about the Kunming-Montreal Global Biodiversity Framework (KMGBF)?  
(a) The framework was established to address climate change through a global carbon trading system.  
(b) The KMGBF aims to halt and reverse biodiversity loss by 2030, with specific targets such as conserving 30% of the world's land and oceans.  
(c) The framework primarily focuses on economic development in developing countries with no specific targets for biodiversity.  
(d) The KMGBF includes a single target of planting 1 trillion trees worldwide by 2050.
21. Consider the following statements about POSHAN Abhiyaan:  
1. It is a flagship programme of the Ministry of Women and Child Development.  
2. The programme seeks to improve nutritional outcomes for children, pregnant women and lactating mothers.  
Which of the given above statements is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
22. With reference to the National Testing Agency (NTA), consider the following statements:  
1. It was established in 2017 by the Ministry of Education.  
2. It conduct entrance examinations for admission/fellowship in higher educational institutions.  
Which of the statements given above is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
23. "Starship" is a spacecraft designed to be fully reusable for missions to various destinations in space, is built by:  
(a) Blue Origin  
(b) SpaceX  
(c) Boeing  
(d) NASA
24. Green Strategic Partnership (GSP), seen in the news recently, is an initiative of?  
(a) India and USA  
(b) India and EU  
(c) India and Denmark  
(d) India and Sweden
25. The Intergovernmental Negotiating Committee (INC) was set up for:  
(a) Addressing Palestine humanitarian crises  
(b) Negotiating treaties related to environmental issues  
(c) Managing international trade disputes  
(d) Developing global education standards
26. New Caledonia is an overseas territory of which one of the following countries?  
(a) France  
(b) United Kingdom  
(c) Germany  
(d) Portugal

27. AIM – ICDK Water Challenge 4.0 is an initiative under which one of the following?
- Central Water Commission (CWC)
  - Ministry of Environment, Forest and Climate Change
  - Department of Drinking Water and Sanitation
  - NITI Aayog
28. NataPratha is an illegal and unethical practice where girls are sold by their family members under the guise of marriage. It is usually practiced by one of the largest tribes in South Asia. Who among the following tribal group mainly practices NataPratha?
- Bhils
  - Koraga
  - Kol
  - Chenchu
29. Consider the following statements about Bureau of Indian Standards (BIS):
- BIS is responsible for the formulation and implementation of standards for products, services, and systems in India.
  - BIS operates only in the industrial sector, with no role in the agricultural or consumer sectors.
- Which of the statements given above is/are correct?
- 1 only
  - 2 only
  - Both 1 and 2
  - Neither 1 nor 2
30. The term 'Base Erosion and Profit Shifting' is sometimes seen in the news in the context of
- mining operation by multinational companies in resource-rich but backward areas
  - curbing of the tax evasion by multinational companies
  - exploitation of genetic resources of a country by multinational companies
  - lack of consideration of environmental costs in the planning and implementation of developmental projects
31. Which one of the following is the theme for the World Oceans Day 2024?
- Save Our Seas
  - Blue Planet, Green Future
  - Ocean Conservation for All
  - Awaken New Depth
32. With reference to Quantum Data, consider the following statements:
- It refers to information that is stored and processed using the principles of quantum mechanics.
  - Unlike classical data, which is represented by binary states (0s and 1s), quantum data is represented by quantum bits or qubits.
- Which of the statements given above is/are correct?
- 1 only
  - 2 only
  - Both 1 and 2
  - Neither 1 nor 2
33. Consider the following statements about Sticky Inflation
- It refers to a phenomenon where prices do not adjust quickly to changes in supply and demand, leading to persistent inflation.
  - To address sticky inflation, central banks usually lower the interest rates.
- Choose the incorrect statements:
- 1 only
  - 2 only
  - Both 1 and 2



- (d) Neither 1 nor 2
34. Consider the following statements about Biopharmaceutical Alliance
1. The alliance was inaugurated in San Diego during the Bio International Convention 2024.
  2. It is an alliance of India, South Korea, Japan, the US, and the European Union.
  3. It aims to put joint efforts into building a resilient supply chain in the biopharmaceutical sector.
- How many of the statements given above are correct?
- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None of the above
35. Which organization recently released the 'Child Nutrition Report 2024'?
- (a) UNDP
  - (b) WEF
  - (c) UNESCO
  - (d) UNICEF
36. With reference to the Child Nutrition Report 2024, consider the following statements:
1. It is released by UNICEF and examines the status and drivers of child food poverty in early childhood.
  2. One in four children under the age of five around the world is experiencing severe food poverty.
  3. Over two-thirds of the children under the age of five living in severe food poverty live in South Asia and sub-Saharan Africa.
- How many of the statements given above are correct?
- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None
37. Consider the following statements with reference to the UN High Sea Treaty:
1. It is also known as the agreement on Biodiversity Beyond National Jurisdiction.
  2. It is a non legally binding treaty.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
38. Consider the following statements with reference to the National Health Claim Exchange:
1. It is a digital platform which will bring together insurance companies and healthcare sector service providers.
  2. It aligns with the goals of the Ayushman Bharat Digital Mission, which aims to simplify the health insurance claims procedure.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
39. Consider the following statements with reference to the Strategic Interventions for Green Hydrogen Transition (SIGHT):
1. It is a subcomponent of the National Green Hydrogen Mission.
  2. National Green Tribunal is responsible for executing the scheme.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2

- (d) Neither 1 nor 2
40. Which one of the following is the theme of World Environment Day 2024?
- Beat Plastic Pollution
  - Clean Seas: Turning the Tide on Plastic
  - Land restoration, desertification, and drought resilience
  - Connecting People to Nature
41. Consider the following statements with reference to the Arun-III Hydro Power Project:
- It is a run-of-the-river hydropower project being constructed on the Arun River in Nepal with Indian assistance.
  - The entire amount of electricity generated by the project will be sold to India.
- Which of the statements given above is/are correct?
- 1 only
  - 2 only
  - Both 1 and 2
  - Neither 1 nor 2
42. With reference to Pump and Dump Scheme in Stock Market, consider the following statements:
- It involves artificially inflating the price of a stock through misleading information, only to sell the stock at the inflated price.
  - It is particularly prevalent in large-cap stocks.
  - Under the SEBI guidelines, pump and dump schemes are completely banned in India.
- How many of the statements given above are correct?
- Only one
  - Only two
  - All three
  - None
43. Consider the following statements with reference to the GNSS-based Electronic Toll Collection (ETC) system:
- It tracks vehicles and calculates tolls based on the distance travelled on tolled highways.
  - It has been rolled out in India from June 1.
- Which of the statements given above is/are correct?
- 1 only
  - 2 only
  - Both 1 and 2
  - Neither 1 nor 2
44. Which of the following are the features of Capital Account Convertibility?
- Freedom to conduct investment transactions without constraints
  - No limits on converting rupees to foreign currency for asset acquisition
  - No limits on NRIs bringing in foreign currency to acquire assets in India
  - Freedom to convert rupees to other currencies for payments without restrictions
- Select the correct answer using the code given below:
- 1, 2 and 3 only
  - 2, 3 and 4 only
  - 1 and 4 only
  - 1, 2, 3 and 4
45. Consider the following statements about Onge tribe
- They are a semi-nomadic group and are dependent on the ocean and the forest for sustenance.
  - They are inhabitants of Great Nicobar Island, the most southerly island in the Andaman archipelago.

3. They are one of the six aboriginal tribes of Andaman and Nicobar Islands.

Select the correct statement(s)

- (a) 1 and 2 only  
(b) 1 and 3 only  
(c) All three  
(d) 2 and 3 only
46. The “World of Debt Report” is published by which of the following organizations?  
(a) International Monetary Fund (IMF)  
(b) World Bank  
(c) UN Trade and Development (UNCTAD)  
(d) Bank for International Settlements (BIS)
47. The United States–India Initiative on Critical and Emerging Technology (iCET) aims to strengthen strategic partnerships in:  
(a) Military training programs  
(b) Healthcare research  
(c) Joint space exploration missions  
(d) Artificial intelligence and quantum computing
48. Consider the following statements about Boeing Starliner
1. The Starliner is a next-generation space capsule that will take people to and from low-Earth orbit.
  2. It is designed to be fully autonomous and reusable.
- Choose the correct statements:  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
49. Consider the following statements with reference to the Tele-MANAS:
1. It is an initiative of the Ministry of Health and Family Welfare, Government of India.

2. It aims to improve access to maternal and child health services through telemedicine.

Which of the statements given above is/are correct?

- (a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
50. Consider the following statements with reference to the PraVaHa Software:
1. It is a Computational Fluid Dynamics (CFD) software developed by the Defence Research and Development Organisation (DRDO).
  2. It can simulate external and internal flows on launch vehicles, winged and non-winged re-entry vehicles.
- Which of the statements given above is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
51. Which one of the following best describes ‘Musankwasanyatiensis’, recently seen in the news?  
(a) A species of flowering plant endemic to Amazon forests  
(b) A dwarf planet located in the Kuiper Belt  
(c) A dinosaur species identified recently  
(d) None of the above.
52. Consider the following statements about Direct Seeded Rice (DSR)
1. It is the process of growing rice from seeds sown in the ground as opposed to transplanting seedlings from a nursery.
  2. Unlike puddled transplanted rice (PTR) method, DSR delivers

faster planting and maturing, conserves scarce resources like water and labour.

Choose the correct statements:

- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
53. Consider the following statements about the World Health Assembly (WHA):
- 1. It is the decision-making body of the World Health Organization (WHO).
  - 2. It meets twice a year to discuss global health issues.
  - 3. It consists of representatives from all WHO member states.
- Select the correct statement(s)
- (a) 1 and 2 only
  - (b) 1 and 3 only
  - (c) All three
  - (d) 2 and 3 only
54. Mount Kanlaon, recently seen in the news, is located in which one of the following countries?
- (a) Chile
  - (b) Indonesia
  - (c) Philippines
  - (d) Ethiopia
55. The term " Parengyodontium album", recently seen in the news, refers to:
- (a) A newly discovered species of deep-sea fish
  - (b) A marine fungus that can break down plastic polyethylene
  - (c) A rare mineral found in volcanic ash
  - (d) A type of bacterium used in biotechnology for gene editing
56. With reference to the Zircon mineral, consider the following statements:
- 1. It is a mineral belonging to the group of nesosilicates.

2. It is characterized by its high refractive indices and strong lustre.

3. It is used for radiometric dating due to its trace uranium content.

How many of the statements given above are correct?

- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None
57. With reference to the blaze star, consider the following statements:
- 1. It is a dim star located 3,000 light-years away from our solar system.
  - 2. It is found in the constellation Corona Borealis.
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
58. Biocover can refer to a few different things. Select the answer that best describes the use of biocover in landfills:
- (a) A plastic sheet placed on top of landfill waste to prevent rainwater from entering.
  - (b) A layer of compost placed on top of a landfill to capture and neutralize methane gas emissions.
  - (c) A hydraulically applied cover made from wood fibers used as an alternative to daily soil cover.
  - (d) A special type of plant-based fabric used for weed and erosion control in landscaping.
59. Consider the following statements with reference to the United Nations Global Supply Chain Forum:

1. The inaugural edition of the forum was held in New Delhi.
2. It was convened to tackle the pressing issues of global disruptions, climate change, and the COVID-19 pandemic and their impact on global trade.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

60. With reference to Ahilya Bai Holkar, consider the following statements:

1. She was the Holkar Queen of the Maratha Malwa kingdom during the 18th century.
2. She was instrumental in spreading the message of dharma and propagating industrialization.
3. She earned a reputation for administering justice fairly during her rule, without partiality or partisanship.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

61. With reference to the 'Phenome India' Project, consider the following statements:

1. It is an initiative by the Council of Scientific and Industrial Research (CSIR).
2. It aims to develop India-specific risk prediction models for cardio-metabolic diseases.

Which of the statements given above is/are correct?

- (a) 1 only

- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

62. Consider the following statements with reference to the Direct Seeded Rice (DSR):

1. It is a modern rice cultivation technique where rice seeds are directly sown into the field.
2. It is an efficient and sustainable method of rice cultivation.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

63. Consider the following statements with reference to the European Parliament:

1. It is the directly elected legislative body of the European Union (EU).
2. The Parliament is headquartered in Paris, France.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

64. Consider the following statements with reference to the Votes Counting Process:

1. It is carried out under the supervision and direction of Returning Officer (RO).
2. Postal ballots are counted first, followed by EVM counting.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2



65. Consider the following statements about Virus-like Particles (VLPs)

1. VLPs are molecules that resemble viruses but lack infectivity.
2. VLPs lack viral genetic material in them.
3. Introducing a VLP into the body will trigger an immune response, but a person will not experience any symptoms.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None of the above

66. Consider the following statements about PLEASE project

1. Funded by the World Bank, the project aims to catalyze actions that reduce the flow of plastic pollution into South Asian Seas.
2. The South Asia Co-operative Environment Programme (SACEP) is the implementing agency for this project.
3. India is not the part of PLEASE project.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

67. Who is awarded the Dag Hammarskjöld Medal?

- (a) Military personnel from any nation
- (b) UN peacekeepers
- (c) Nobel Peace Prize laureates
- (d) Diplomats from the United Nations

68. With reference to the Convention on International Trade in Endangered

Species of Wild Fauna and Flora (CITES), consider the following statements:

1. It aims to ensure that international trade in wild animals and plants does not threaten the survival of the species.
2. India has been a CITES Party since 1976.
3. All import and export of species covered under CITES must be authorized through a permit system.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

69. Which one of the following best describes the term Greedflation refers to:

- (a) A price rise because input costs have increased
- (b) A scenario where inflation in an economy is driven by corporate greed to make a profit
- (c) An increase in the production costs for goods and services
- (d) An increase in the money supply in an economy when there is more money in circulation

70. Which of the following statements about Pampa Lake

1. It is located to the south of the Pennar River.
2. It is one of the five sacred lakes known as Panch-Sarovar in Hindu mythology.

Choose the correct statements:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

71. Hunar Se Rozgar is a skill development Initiative of
- Ministry of Tourism
  - Ministry of Micro, Small and Medium Enterprises
  - Ministry of Rural Development
  - Ministry of Panchayati Raj
72. The mid-year climate conference, also known as the 60th Meeting of the Subsidiary Bodies (SB60), brings together countries that are signatories to the:
- United Nations Framework Convention on Climate Change (UNFCCC)
  - International Union for Conservation of Nature (IUCN)
  - United Nations (UN)
  - Intergovernmental Panel on Climate Change (IPCC)
73. Consider the following statements with reference to the interim bail:
- It is a short-term temporary relief to individuals entangled in legal proceedings before the hearing for the grant of regular or anticipatory bail.
  - The period for interim bail cannot be extended at any cost.
  - It can be granted if a clear case for custodial interrogation is not made out.
- How many of the above statements are correct?
- Only one
  - Only two
  - All three
  - None
74. With reference to the Purana Qila, consider the following statements:
- It was built on the banks of river Yamuna.
  - It was believed to have been built under Humayun and Afghan Sher Shah Suri.
  - It was inspired by Jama Masjid, which was established 15 years before the reconstruction of Qila.
- How many of the above statements are correct?
- Only one
  - Only two
  - All three
  - None
75. With reference to the exit poll, consider the following statements:
- It can be released by media houses only after the voting ends for an election.
  - It is regulated under the Representation of the People Act, 1951.
- Which of the statements given above is/are correct?
- 1 only
  - 2 only
  - Both 1 and 2
  - Neither 1 nor 2
76. The Member States of the World Health Organization celebrate World No Tobacco Day, every year on:
- 31 May
  - 1 December
  - 14 June
  - 28 July
77. In which of the following pair of states do the Koya tribe predominantly live?
- Maharashtra, Karnataka, Tamil Nadu and Kerala
  - Andhra Pradesh, Telangana, Chhattisgarh and Odisha
  - Gujarat, Rajasthan, Punjab and Haryana
  - Bihar, West Bengal, Assam and Jharkhand

78. Consider the following statements about External Commercial Borrowings (ECBs)

1. ECB is subject to regulatory oversight by the RBI.
2. All entities except a Limited Liability Partnership are allowed to raise ECBs.
3. ECBs cannot be used for the purpose of repayment of existing debt of a company.

Select the correct statement(s)

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) All three
- (d) 2 and 3 only

79. Consider the following statements:

1. LignoSat is a satellite developed by a collaboration between India and UNESCO.
2. It aims to reduce space debris by burning up completely upon re-entry into Earth's atmosphere.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

80. Consider the following statements:

1. RudraM-II is an air-to-surface missile developed by the Defence Research and Development Organisation (DRDO) of India.
2. It is designed to target and destroy enemy bunkers, runways, and other fortified structures.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

81. Consider the following statements with reference to the Red Flag 24 Exercise, recently seen in the news:

1. It is an advanced aerial combat training exercise between members of the Shanghai Cooperation Organisation (SCO).
2. It is designed to replicate a realistic and challenging environment, bringing together aircrew and equipment from different nations and services.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

82. Which one of the following best describes the term 'Cryonics', recently seen in the news?

- (a) The practice of placing individuals in a medically induced coma
- (b) The process in which a gene of interest is cloned out of DNA extracted from an organism.
- (c) The practice of preserving an individual who has died, with the objective of reviving them in the future.
- (d) The preservation of organs for the purpose of transplantation in future

83. With reference to External Commercial Borrowings (ECBs), consider the following statements:

1. They refer to the borrowing of funds by Indian companies from foreign sources in the form of loans, bonds, or other financial instruments.
2. They can be obtained from a variety of sources, including foreign banks, international

financial institutions and foreign subsidiaries of Indian companies.

3. They can be in the form of rupee-denominated loans, which are repaid in Indian rupees, or foreign currency-denominated loans, which are repaid in a foreign currency.

How many of the above given statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

84. Consider the following statements about Infrastructure Investment Trusts (InvITs)

- 1. It is collective Investment Scheme, which enables direct investment from individual in infrastructure projects.
- 2. InvITs can invest in both operational and under-construction infrastructure projects.
- 3. They are regulated by the Securities and Exchange Board of India (SEBI).

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None of the above

85. Which space agency launched the Magellan Mission?

- (a) European Space Agency (ESA)
- (b) National Aeronautics and Space Administration (NASA)
- (c) Russian Federal Space Agency (Roscosmos)
- (d) Japan Aerospace Exploration Agency (JAXA)

86. Consider the following statements about "Jumping Genes":

- 1. Jumping genes are sequences of DNA that can move or transpose themselves to new positions within the genome of a single cell.
- 2. Transposable elements can create mutations and alter the cell's genetic identity.
- 3. Transposable elements were first discovered by Barbara McClintock in maize (corn).

How many of the above statements is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

87. 'K-9 Vajra', recently seen in the news is a/an:

- (a) Advanced missile defense system
- (b) Multi-role combat helicopter
- (c) Self-propelled artillery system
- (d) High-speed attack submarine

88. Consider the following statements with reference to the RudraM-II missile:

- 1. It is an indigenously developed solid-propelled air-launched missile system.
- 2. It has a strike range of almost 3500-km.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

89. PRAGATI- 2024, is an initiative recently launched by:

- (a) NITI Aayog
- (b) DRDO
- (c) Reserve Bank of India
- (d) Central Council for Research in Ayurvedic Sciences

90. Consider the following statements about Minor Forest Produce

1. The Forest Rights Act (FRA), 2006 defines 'minor forest produce' as any non-timber forest product of plant origin.
2. Minimum Support Price for the MFP scheme is Centrally Sponsored scheme started in the year 2008.
3. Ministry of Tribal Affairs is the Nodal Ministry for implementation of the MSP for MFP scheme.

Select the correct statement(s)

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) All three
- (d) 2 and 3 only

91. Consider the following statements with reference to the Vivekananda Rock Memorial:

1. It is built on a small island off Tamil Nadu in honour of Swami Vivekananda.
2. It is surrounded by the Laccadive Sea.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

92. What was the primary objective of NASA's Magellan Mission, recently seen in the news?

- (a) To study the atmosphere of Mars
- (b) To study the asteroids
- (c) To explore the outer solar system
- (d) To map the surface of Venus

93. Consider the following:

1. Honey
2. Kendu leaf
3. Cocoons
4. Timber

How many of the above are included as Minor Forest produce under the Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

94. Consider the following statements:

1. The Global Biodiversity Framework was adopted during the 15th meeting of the Conference of the Parties (COP15) to the Convention on Biological Diversity (CBD).
2. The framework includes specific targets related to the protection of at least 30% of the planet's land and ocean areas by 2030.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

95. CampiFlegrei, recently seen in the news, is an active volcanic area located in which one of the following countries?

- (a) Chile
- (b) Philippines
- (c) Italy
- (d) United States of America

96. Consider the following statements with reference to the Election Petitions in India:

1. The Constitution of India empowers the High Courts to hear and decide election petitions.
2. A decision in such petitions can be challenged in the Supreme Court (SC).



Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

97. Consider the following statements with reference to the ZiG currency:

1. It is a new gold backed currency launched by the Reserve Bank of Zimbabwe.
2. It is launched with an aim to prevent currency devaluation.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

98. INS Kiltan, recently seen in news, belongs to:

- (a) Delhi class
- (b) Kamorta-class
- (c) Kalavari class
- (d) Arihant class

99. Consider the following statements about Virupaksha Temple

1. Virupaksha Temple is the 7<sup>th</sup> century Vishnu temple in Hampi, Central Karnataka.
2. The temple is located on the south bank of the river Tungabhadra.
3. Krishnadevaraya was instrumental in building the central pillared hall (RangaMandapa) in 1510 AD in the temple.

Select the correct statement(s)

- (a) 1 only
- (b) 1 and 3 only
- (c) All three
- (d) 2 and 3 only

100. The 'Global Climate Risk Index', which evaluates the impact of extreme weather events on countries and quantifies their vulnerability to climate change, is published by which organization?

- (a) Intergovernmental Panel on Climate Change (IPCC)
- (b) World Bank
- (c) Germanwatch
- (d) United Nations Environment Programme (UNEP)

101. Consider the following statements about 'Electronically Transmitted Postal Ballot System' (ETPBS):

1. ETPBS is designed for use only by overseas citizens of the country.
2. ETPBS allows eligible voters to receive their postal ballots electronically and return them via postal mail.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

102. Nyishi Tribe is the largest ethnic group of which one of the following States?

- (a) Odisha
- (b) Tripura
- (c) Sikkim
- (d) Arunachal Pradesh

103. Consider the following statements with reference to the AI Krish and AI Bhoomi:

1. These are Artificial Intelligence anchors launched by the Door DarshanKisan TV.
2. They provide information related to agriculture to school going students.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

104. Consider the following statements about Joint Parliamentary Committee (JPC)

1. The JPC is an ad-hoc Committee, established by the Parliament to conduct a thorough examination of a specific subject or Bill.
2. President determines the composition of the JPC, and there is no set limit on the number of members.
3. The committee's recommendations are mandatory for the government to follow.

Select the correct statement(s)

- (a) 1 only
- (b) 1 and 3 only
- (c) All three
- (d) 2 and 3 only

105. The "Zero Debris Charter" is related to:

- (a) A global initiative to reduce plastic waste in oceans
- (b) A corporate policy focusing on workplace cleanliness
- (c) An aviation industry commitment to minimize space debris
- (d) A government mandate on urban waste management

106. Consider the following statements with reference to the Cost Inflation Index:

1. It is notified under the Income-tax Act, 1961 every year.
2. It is used to calculate long-term capital gains from house property and land.

Which of the statements given above is/are correct?

- (a) 1 only

- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

107. Consider the following statements with reference to the World Intellectual Property Organization (WIPO):

1. It is a specialized agency of the United Nations.
2. It aims to lead the development of a balanced and effective international intellectual property (IP) system.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

108. Consider the following statements with reference to Gliese 12b:

1. It is a newly discovered, temperate, Earth-sized exoplanet.
2. It was discovered using data from India's CartoSat series of satellites.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

109. What is the primary objective of the AstroSat mission?

- (a) To explore the Moon's surface
- (b) To study celestial sources in multiple spectral bands simultaneously
- (c) To monitor the Earth's atmospheric changes
- (d) To track space debris in Earth's orbit

110. Consider the following statements with reference to the Food Irradiation:

1. It is a technology that improves the safety and extends the shelf life of foods.
2. It uses X-rays and electron beams for the process of irradiation.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

111. Consider the following statements with reference to the Shallow Aquifer Management Project:

1. It is a sustainable urban water management technique to address issues of groundwater depletion.
2. It is part of Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme of the Ministry of Housing and Urban Affairs.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

112. Consider the following statements about eVTOL

1. They are electric aircraft powered by electric motors and batteries rather than fossil fuels.
2. They can take off and land vertically without needing a runway.

Choose the correct statements:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

113. Consider the following statements about Furlough

1. It is an interim release and a basic right of a prisoner.
2. Both Furlough & Parole are granted based on application of the prisoner.

Choose the incorrect statements:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

114. Consider the following statements about Kumaon Himalayas

1. It extends from the Sutlej River to the Kali River.
2. In India, it lies largely within the state of Uttarakhand.
3. The range's highest peak is Nanda Devi in the state of Himachal Pradesh.

Select the correct statement(s)

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) All three
- (d) 2 and 3 only

115. GSAP SKILLS Platform, aims to facilitate global collaboration and partnership, connecting decision makers, species conservation practitioners and experts at all levels. Which of the following organization launched GSAP SKILLS Platform?

- (a) International Union for Conservation of Nature
- (b) United Nations Environment Programme
- (c) World Wide Fund for Nature
- (d) Climate Action Network

116. Consider the following statements:

1. India is the world's largest producer of natural graphite.
2. Graphite is among 30 critical minerals declared by India.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

117. Consider the following statements regarding Preeclampsia:

1. It is a serious condition that can happen during the later stages of pregnancy.
2. Most people who have preeclampsia have dangerously low blood pressure.
3. World Preeclampsia Day, observed annually on May 22nd

Select the correct statement(s)

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) All three
- (d) 2 and 3 only

118. Consider the following statements regarding Project Udbhav:

1. It is an initiative by the Indian Army and the United Service Institution of India.
2. It aims to bridge the gap between ancient techniques and contemporary military education.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

119. Which of the following statements correctly distinguish between biohydrogen and green hydrogen?

- (a) Bio hydrogen is produced through electrolysis of water using renewable energy sources, while green hydrogen is generated from biomass.

(b) Bio hydrogen is obtained from biological processes involving microorganisms, whereas green hydrogen is produced by splitting water using renewable energy sources like solar or wind power.

(c) Both bio hydrogen and green hydrogen are produced using fossil fuels but with different technological processes.

(d) Bio hydrogen and green hydrogen are terms used interchangeably for hydrogen produced from any renewable source

120. 'Water For Shared Prosperity' is released by

- (a) UNESCO
- (b) World Bank
- (c) UN Water
- (d) UNEP

121. Consider the following statements with reference to the Foreigners Tribunal (FT):

1. At present, only the Central Government can establish FTs in a State.
2. The decision of the FTs regarding the nationality of a person will be binding.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

122. Consider the following statements with reference to the electric vertical take-off and landing (eVTOL) aircraft:

1. It is a low-altitude urban air mobility aircraft capable of intra and inter city transportation.
2. It works based on the distributed electric propulsion technology.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

123. With reference to AI agents, consider the following statements:

1. They are systems that can engage in real-time, multi-modal interactions with humans.
2. They are able to understand and learn from the context of interactions.
3. They can perform complex tasks autonomously like coding and data analysis.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

124. Consider the following statements with reference to the Planetary alignments:

1. It is the positioning of planets in the solar system which appears to be in a straight line.
2. The planets visibility during this rare event is impacted by the moon.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

125. The PM-WANI Scheme, recently seen in the news primarily aims to:

- (a) Establish fiber optic networks across the country
- (b) Encourage the use of digital payments and e-commerce in rural markets

- (c) Provide affordable and high-speed internet connectivity to the public in remote areas
- (d) Develop a centralized digital infrastructure for public services

126. Consider the following statements with reference to the Section 436A of the Code of Criminal Procedure (CrPC):

1. No person, in any case, shall be detained as an undertrial for more than the maximum period of imprisonment provided for the said offence under that law.
2. A person who has spent one third of the maximum period of the prescribed sentence as an under trial shall be released on bail.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

127. Consider the following statements with reference to the International Booker Prize:

1. It is awarded annually for the finest single work of fiction from around the world translated into English and published in the United Kingdom.
2. It is awarded only to the authors who belong to the United Kingdom.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

128. Consider the following statements about India-Middle East-Europe Economic Corridor (IMEEC)



1. The project was signed between the European Union and seven other countries on the sidelines of the G20 meeting in New Delhi.
  2. India, the US, Saudi Arabia, the United Arab Emirates and Italy are part of IMECC.
  3. The corridor will provide a reliable cross-border ship-to-rail transit network to supplement existing maritime routes.
- How many of the statements given above are correct?
- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None of the above
129. Which of the following countries are the members of Eurasian Economic Union (EAEU)
- (a) India, Russia, Mongolia and Kazakhstan
  - (b) India, Georgia, Armenia and Russia
  - (c) Russia, India, Iran and Kazakhstan
  - (d) Russia, Armenia, Belarus and Kazakhstan
130. Consider the following statements about Members of Parliament Local Area Development Scheme
1. It is an on-going Central Sector Scheme which was launched in 1993-94.
  2. Ministry of Finance has been responsible for the policy formulation and release of funds.
  3. Upon approval, funds are released to the district administration, which oversees project implementation.
- Select the correct statement(s)
- (a) 1 and 2 only
  - (b) 1 and 3 only
  - (c) 2 and 3 only
  - (d) All three
131. R21/Matrix-M vaccine, recently seen in the news, is developed for the prevention of which one of the following diseases?
- (a) Mumps
  - (b) Measles
  - (c) Diphtheria
  - (d) Malaria
132. Consider the following statements with reference to the Small Industries Development Bank of India (SIDBI):
1. It is the principal financial institution for promotion, financing and development of the Micro, Small and Medium Enterprise (MSME) sector in India.
  2. At present, it is a wholly owned subsidiary of the Industrial Development Bank of India (IDBI).
- Which of the statements given above is/are correct?
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
133. With reference to the Copernicus Emergency Management Service (EMS) Programme, consider the following statements:
1. It provides environment related information to address issues related to climate change, disaster management and agriculture, among other uses.
  2. It uses a group of satellites called the Sentinels, complemented by a ground segment which includes in-situ sensors that provide access to the Sentinels.

3. Data from the Copernicus programme is freely available and accessible to all.

How many of the above given statements are correct?

- (a) One Only
- (b) Two only
- (c) All three
- (d) None

134. Consider the following statements with reference to the Manipuri Pony:

- 1. It is one of the horse breed which has great adaptability to harsh geoclimatic conditions.
- 2. It is used in traditional events like Lai haraoba and also in sports like polo.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

135. Consider the following statements with reference to the Critical Tiger Habitats:

- 1. These are identified under the Wild Life Protection Act (WLPA), 1972.
- 2. These are notified by the central government in consultation with the expert committee.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

136. Consider the following statements with reference to the Port of Call:

- 1. It is an intermediate stop for a ship on its scheduled journey for cargo operation.
- 2. Aden and Honolulu ports are the examples of Ports of Call.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

137. Consider the following statements about Lunar Polar Exploration Mission (LUPEX)

- 1. It is a collaborative endeavor between ISRO and Japan Aerospace Exploration Agency (JAXA).
- 2. It aims explore the moon's southern polar region, investigating the presence of water.
- 3. While ISRO is responsible for developing and operating the rover, JAXA is responsible developing and operating the lander.

Select the correct statement(s)

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) All three

138. Consider the following statements about New Caledonia

- 1. It is a French overseas located in the south-western Pacific Ocean.
- 2. It is an ancient fragment of the Gondwana supercontinent.
- 3. It is a part of the EU and the Euro zone.
- 4. It is the seat of the Secretariat of the Pacific Community, formed in 1947.

Select the correct statement(s)

- (a) 1, 2, 4 only
- (b) 1, 2, 3 only
- (c) All four
- (d) 2, 3, 4 only

139. Scheme for Care and Support to Victims, recently seen in news is a scheme implemented by which of the following ministry?

- (a) Ministry of Women and Child Development
- (b) Ministry of Health and Family Welfare
- (c) Ministry of Social Justice and Empowerment
- (d) Ministry of Law and Justice

140. Consider the following statements:

- 1. The Muria Tribe is predominantly found in the Indian state of Chhattisgarh.
- 2. The Muria people are known for their unique Ghotul system, which is a traditional youth dormitory.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

141. Consider the following statements with reference to the Commission on Crime Prevention and Criminal Justice (CCPCJ):

- 1. It is a commission of the United Nations Economic and Social Council (ECOSOC).
- 2. It functions as a governing body of the United Nations Office on Drugs and Crime (UNODC).

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

142. Consider the following statements with reference to the Lunar Polar Exploration Mission (LUPEX):

- 1. It is a collaborative endeavor between ISRO and NASA.
- 2. It aims to explore the moon's southern polar region and investigate the presence of water and other elements.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

143. With reference to Generalized System of Preferences (GSP), consider the following statements:

- 1. It was instituted under the aegis of the United Nations Conference on Trade and Development (UNCTAD).
- 2. It is a voluntary trade measure implemented by developed countries that provides preferential tariff treatment to imports from developing countries.
- 3. Each of these developed countries has its own regulatory framework under which it provides the GSP tariff preferences.

How many of the above given statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

144. Project Astra, a multimodal AI agent, recently in news is developed by:

- (a) Google
- (b) OpenAI
- (c) C-DAC
- (d) IndiaAI

145. Consider the following statements with reference to Synuclein alpha (SNCA) protein:

1. It is a protein present in healthy cells of human body.
2. It is involved in the age-related neurodegenerative diseases.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

146. Consider the following statements with reference to the Summer solstice:

1. It is an annual phenomenon that brings the longest day of the year.
2. The earth receives a greater amount of energy from the Sun during this time.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

147. Consider the following statements about International Telecommunication Union :

1. It is the United Nations specialized agency.
2. It is the oldest of the UN's 15 specialized agencies.
3. It allocates global radio spectrum and satellite orbits.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

148. Which of the following statements correctly describes the difference between a white hole and a black hole?

- (a) A black hole emits light and other forms of radiation, while a white hole absorbs all light and matter that comes near it.
- (b) A black hole is a region of space where nothing, not even light, can escape due to strong gravitational pull, while a white hole is a theoretical region of space where matter and light can only exit, but nothing can enter.
- (c) Both black holes and white holes absorb all matter and light that come near them, but black holes are formed from the collapse of massive stars, while white holes are formed from the expansion of space.
- (d) Black holes and white holes are both theoretical constructs; neither exists in the observable universe.

149. Which one of the following is the primary objective of SPECULOOS Project, recently seen in the news?

- (a) To study the atmospheres of gas giants
- (b) To investigate the potential for life on Mars
- (c) To search for exoplanets orbiting ultra-cool dwarf stars
- (d) None of the above

150. Consider the following countries:

1. Russia
2. Kazakhstan
3. Belarus
4. Iran

How many of the above are the members of the Eurasian Economic Union (EAEU)?

- (a) Only one

- (b) Only two  
(c) Only three  
(d) All four
151. In which one of the following Wildlife Sanctuary, Sri Lankan golden-backed frog was recently rediscovered?  
(a) Talley Valley Wildlife Sanctuary  
(b) Kamlang Wildlife Sanctuary  
(c) Nilgiri Wildlife Sanctuary  
(d) Koundinya Wildlife Sanctuary
152. Consider the following statements with reference to the National Endangered Species Day:  
1. It is observed every year on the third Friday of the May month.  
2. The theme for the year 2024 was Celebrate Saving Species.  
Which of the statements given above is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Neither 1 nor 2  
(d) Both 1 and 2
153. Which of the following best describes the term Vishing, recently seen in the news?  
(a) It is new method to analyse the protein content in humans  
(b) It is a type of phishing carried out through a call on a mobile phone or landline  
(c) It is new crypto currency mining technique  
(d) It is a traditional rice cultivation method practiced in South America
154. With reference to Calcium carbide, consider the following statements:  
1. It is commonly used for ripening of fruits.  
2. It is a highly reactive compound and releases acetylene gas.
3. It causes serious health issues such as dizziness and frequent thirst.
- How many of the above given statements are correct?  
(a) One Only  
(b) Two only  
(c) All three  
(d) None
155. With reference to National Savings Certificate (NSC), consider the following statements:  
1. It aims at encouraging users, who are primarily low- to mid-income investors, to invest as well as save taxes.  
2. NSC certificates are accepted as collateral or security for secured loans in banks and NBFCs.  
3. Non-resident Indians (NRIs) are not eligible to invest in NSC.  
How many of the above given statements are correct?  
(a) Only one  
(b) Only two  
(c) All three  
(d) None
156. MATES Migration Scheme, is a bilateral framework that supports and promotes two-way migration and mobility between India and which one of the following countries?  
(a) Australia  
(b) United Kingdom  
(c) Japan  
(d) France
157. RoseTTAFold, recently seen in the news, is a:  
(a) Dwarf planet  
(b) New variant of SARS-CoV-2  
(c) Newly discovered asteroid  
(d) AI-based prediction tool used for drug development



158. Consider the following statements with reference to the Materiovigilance Programme of India (MvPI) platform:

1. It is launched to monitor the safety of medical devices.
2. The Indian Pharmacopoeia Commission functions as National Coordination Centre.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

159. Consider the following statements about Semal Tree (*Bombaxceiba*)

1. Semal Tree is a large deciduous tree native to the Indian subcontinent and is also called as red silk cotton tree.
2. All parts of the tree such as roots, bark, gum, leaves, flowers, fruits and seeds have traditional medicinal uses.

Choose the correct statements:

- (a) 1 only
- (b) 2 only
- (c) Neither 1 nor 2
- (d) Both 1 and 2

160. Consider the following statements:

1. Inflation occurs when there is an overall increase in the price level of goods and services in an economy over a period of time.
2. Hyperinflation is a term used to describe extremely high and typically accelerating inflation, often exceeding 50% per month.
3. Deflation is the opposite of inflation and occurs when the price level of goods and services decreases over time.

4. The Consumer Price Index (CPI) and the Producer Price Index (PPI) are two measures used to gauge inflation.

How many of the above statements is/are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

161. Which one of the following statements best describes the Deda method, recently seen in the news?

- (a) A traditional method to cure Tuberculosis
- (b) A method of preserving seeds by the Muria tribal farmers
- (c) A rice cultivation method practiced in Western Ghats region
- (d) An ancient irrigation method practiced in the Deccan region

162. Consider the following statements with reference to the Swachhata Pakhwada:

1. It is an initiative launched under the Swachh Bharat Mission in 2016.
2. It is monitored closely using the online monitoring system of Swachhata Samiksha.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

163. The term Digital arrest, recently seen in the news, is a:

- (a) Method to file a First Investigation Report digitally and arrest a person
- (b) Theory explained regarding children getting addicted to mobile phones











- (c) New way of delivering essential medicines to the elderly population
- (d) Tactic employed by cybercriminals to defraud gullible victims and extort money
164. With reference to PREFIRE Polar Mission, consider the following statements:
1. It is developed by the NASA.
  2. It reveals the full spectrum of heat loss from Earth's polar regions.
  3. It helps in assessing how efficiently far-infrared heat is emitted by snow and sea ice.
- How many of the above statements are correct?
- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None
165. Consider the following statements about Kadars
1. They are Particularly Vulnerable Tribal Group (PVTG) of Kerala state.
  2. They are traditional forest dwellers and practice shifting cultivation.
  3. They speak the Dravidian languages of Tamil and Kannada.
- Select the correct statement(s)
- (a) 1 and 2 only
  - (b) 1 and 3 only
  - (c) 2 and 3 only
  - (d) All three
166. Consider the following statements about Kanwar lake
1. It is Asia's largest freshwater oxbow lake.
  2. It is formed due to the meandering of Gandakriver, a tributary of Ganga.
  3. The critically endangered red-headed vulture and Indian vulture inhabit in this wetland.
- How many of the statements given above are correct?
- (a) Only one
  - (b) Only two
  - (c) All three
  - (d) None of the above
167. Consider the following statements:
1. GPT-4o is an AI model developed by OpenAI for natural language processing tasks.
  2. GPT-4o is specifically designed for image recognition tasks.
- Which of the above statements is/are correct?
- (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
168. What is 'Ligdusgarvale', recently seen in the news?
- (a) A type of medicinal herb found in the Himalayas.
  - (b) A pioneering environmental conservation project.
  - (c) A rare geological formation discovered in northeast India.
  - (d) A new species of jumping spider.

## ANSWER KEYS

1	A	51	C	101	B	151	D
2	C	52	C	102	D	152	D
3	A	53	B	103	A	153	B
4	C	54	C	104	A	154	C
5	B	55	B	105	C	155	C
6	D	56	C	106	C	156	A
7	A	57	C	107	C	157	D
8	C	58	B	108	A	158	C
9	D	59	B	109	B	159	D
10	D	60	C	110	C	160	D
11	D	61	C	111	C	161	B
12	A	62	C	112	C	162	C
13	C	63	A	113	B	163	D
14	C	64	C	114	A	164	C
15	A	65	C	115	A	165	B
16	B	66	A	116	B	166	C
17	B	67	B	117	B	167	A
18	A	68	D	118	C	168	D
19	A	69	B	119	B		
20	B	70	B	120	B		
21	C	71	A	121	B		
22	C	72	A	122	C		
23	B	73	B	123	C		
24	C	74	C	124	C		
25	B	75	C	125	C		
26	A	76	A	126	A		
27	D	77	B	127	A		
28	A	78	A	128	C		
29	A	79	B	129	D		
30	B	80	C	130	B		
31	D	81	B	131	D		
32	C	82	C	132	A		
33	B	83	C	133	C		
34	C	84	C	134	C		
35	D	85	B	135	A		
36	C	86	C	136	C		
37	A	87	C	137	A		
38	C	88	A	138	A		
39	A	89	D	139	A		
40	C	90	B	140	C		
41	A	91	C	141	C		
42	B	92	D	142	B		
43	A	93	C	143	C		
44	A	94	C	144	A		
45	B	95	C	145	C		
46	C	96	B	146	C		
47	D	97	C	147	C		
48	C	98	B	148	B		
49	A	99	D	149	C		
50	B	100	C	150	C		

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