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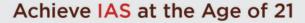
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JOURNALIST A.B.K. PRASAD CHOSEN FOR RAJA RAM MOHAN ROY NATIONAL AWARD

CONTEXT: A.B.K. Prasad, an experienced journalist, has been selected for the esteemed Raja Ram Mohan Roy National Award for outstanding journalism.

BACKGROUND:

The Press Council of India has established National Awards to recognize and appreciate journalists who excel in various fields of print journalism, starting from 2012.

The awards aim to encourage the media to carry out their duties with responsibility, without any bias or fear.

The journalists selected by the Jury/Council for their exceptional work are honored on National Press Day, which is celebrated on November 16th.

Raja Ram Mohan Roy

Social Contribution

Raja Rammohan Roy, a versatile genius, founded the Brahmo Samaj in August 1828 with a long-term agenda of purifying Hinduism and preaching monotheism.

He drew his authority from the Vedas and stressed human dignity, while opposing idolatry and social ills like sati.

Proficient in Persian and Sanskrit, he was a determined crusader against the inhumane practice of Sati.

In his tract titled "A Conference Between an Advocate for and an Opponent of the Practice of Burning Widows," written in 1818, he cited sacred texts to prove that no religion sanctioned the burning of widows alive.

His efforts bore fruit when the East India Company enacted a law in 1829 declaring the practice of Sati a crime.

Educational Contribution

In 1817, he aided David Hare in his endeavor to establish the Hindu College.

Later in 1822, he established a school that focused on English education.

Subsequently, in 1825, he founded the Vedanta College, which offered courses in both Indian knowledge and Western physical and social sciences.

Literary Contribution

Tuhfat-ul-Muwahhiddin (a gift to deists)

Precepts of Jesus

Sambad Kaumudi, a Bengali weekly newspaper

The Brahmanical Magazine

Persian weekly, Mirat-ul-Akbar

Organizations

1814 - Atmiya Sabha

1821 - Calcutta Unitarian Association

1828 - Brahmo Sabha/Brahmo Samaj

Brahmo Samaj

- 1. It denounced polytheism, idol worship, and the faith in divine avatars (incarnations)
- 2. It condemned the caste system, dogmas and superstitions.
- 3. It wanted the abolition of child marriage, purdah system and the practice of sati
- 4. It supported widow remarriage

WALKING PILGRIMAGE THROUGH BUDDHIST CIRCUIT

CONTEXT: As India and South Korea commemorate 50 years of diplomatic ties, the Sangwol Society of South Korea is organizing a walking pilgrimage for 108 Buddhist pilgrims from the Republic of Korea. The pilgrims will embark on a 43-day tour of Buddhist holy sites in India and Nepal, covering a distance of over 1,100 km on foot from 9th February to 23rd March, 2023.

Buddhist Holy sites in India

Bodhgaya, Bihar

Bodhgaya holds the utmost significance for the Buddhists and is considered as the first destination on their pilgrimage to India. It was here that Siddhartha Gautama underwent rigorous penance for 49 days under the sacred Bodhi Tree, attained enlightenment, and transformed into the Perfect One, the Buddha.

Sarnath, Uttar Pradesh

Sarnath holds great significance in Buddhism as it wasthe site of the Buddha's first sermon, known as the Dharmachakraparavartana or Wheel of Law, which he delivered five weeks after attaining enlightenment. It was at this location where he disseminated the fundamental principles of his Dharma, including the Four Noble Truths, the Eight-Fold Path, and the Middle Path.

Kushinagar, Uttar Pradesh

Kushinagar, located in Gorakhpur, Uttar Pradesh, is the site where the Buddha achieved Mahaparinirvana in 486 BC.

Rajgir, Bihar

Rajgir, previously known as Rajagaha, was the capital of Magadha during the reign of King Bimbisara, who was one of the Buddha's most prominent supporters. The Buddha used Rajgir as his monsoon retreat and preached his Dharma in this city.

Sravasti, UP

Located 150 km from Lucknow, the capital of Uttar Pradesh, Sravasti was the largest town in the Gangetic plains during the Buddha's time and served as the capital of the ancient kingdom of Kosala. The Buddha stayed in the Jetvana Vihara, situated in the beautiful Jetvana Gardens, during his time in Sravasti.

Vaishali, Bihar

After five years of his enlightenment at Bodhgaya, the Buddha visited Vaishali, which is renowned as one of the earliest 'republican' states in the world.

Sanchi

Sanchi, situated in Madhya Pradesh, is recognized as a World Heritage site and is particularly renowned for an impressive stupa, which is regarded as the finest model of early Buddhist architecture.



'GAZIANTEP CASTLE'

CONTEXT:: The recent earthquake in Turkey has caused almost complete destruction of the historic 2000-year-old Gaziantep Castle, resulting in one of the most significant cultural losses for the country.

BACKGROUND

Gaziantep Castle, also known as Gaziantep Kalesi, is located in the heart of the eponymous city in the Gaziantep province of Turkey.

It has a rich history spanning several centuries.

The site served as an observation point for the Hittite

Empire as early as the 2nd millennium BC.

During the 2nd and 3rd centuries AD, the Romans constructed a fortification at the same location.

The castle was expanded and renovated by Byzantine Emperor Justinian I in the 6th century.

In 661 AD, the castle was acquired by the Umayyads, followed by the Ayyubids in 1181.

Finally, in 1516, the Ottoman Empire took control of the castle.

1,200 YEAR OLD IDOLS FOUND IN NALANDA

CONTEXT:1,200-year-old idols were found in Nalanda from a nearby pond during its desilting process.

NALANDA UNIVERSITY

Nalanda, located near the town of Bihar Sharif about 95 kilometers southeast of Patna, was a renowned Mahavihara, a large Buddhist monastery, in the ancient kingdom of Magadha in India.

The founder of Nalanda University is believed to be the Gupta emperor, Kumaragupta I, who lived in the 5th century CE.

It served as a center of learning from the 5th century CE until around 1200 CE, attracting scholars and students from far and wide.

Nalanda is recognized as a UNESCO World Heritage Site.

During the fifth and sixth centuries, Nalanda thrived under the protection of the Gupta Empire and later under

Emperor Harsha of Kanauj, benefiting from the empire's liberal cultural traditions.

This brought about a period of prosperity and expansion until the ninth century.

Afterward, the site experienced a gradual decline, during which Buddhism gained popularity in eastern India, supported by the Palas of Bengal.

During its prime, Nalanda University drew the attention of scholars and students from distant lands, including Tibet, China, Korea, and Central Asia.

The archaeological discoveries also revealed the relationship with the Shailendra dynasty of Indonesia, as one of its rulers built a monastery in the complex.

Unfortunately, in approximately 1200 CE, the university was invaded and destroyed by the army of the Mamluk dynasty of the Delhi Sultanate, led by Bakhtiyar Khalji.

VICTORY CITY - VIJAYANAGARA

CONTEXT: "Victory City" by Salman Rushdie is a work of fiction that narrates the story of Vijayanagara, a medieval Indian kingdom known for its wealth and power.

Vijayanagara Empire

In about 1336, Harihara and Bukka, the elder sons of Sangama, who had previously served the Hoysala rulers of Karnataka, declared their independence and established a new kingdom.

This occurred shortly after the Hoysala king Ballala III was killed by the Madurai Sultan.

The initial capital was located in or around Anegondi on the north bank of the Tungabhadra river, but it was later relocated to Hosapattana (near Hampi) on the south bank, a Hoysala town.

The capital was expanded and renamed Vijayanagara, which means "city of victory."

They then declared themselves as rulers of Vijayanagara or Karnataka-Vijayanagara.

In 1346, Harihara was crowned in this city.

Over a span of more than three hundred years, the Vijayanagara kingdom was successively ruled by four

dynasties: the Sangama dynasty (1336–1485), the Saluva dynasty (1485–1505), the Tuluva dynasty (1505–1570), and the Aravidu dynasty (1570–1650).

Krishnadevaraya

Krishnadevaraya is widely regarded as the most outstanding of all the Vijayanagar monarchs.

He attracted some of the most eminent poets to his court, including Allasani Peddana and Nandi Thimmana.

Additionally, he was recognized as a scholar of great distinction and was the author of the renowned literary work, Amuktamalyada, which recounts the tale of Andal.

The Battle of Talikota

The Battle of Talikota in 1565 is widely considered to be the event that led to the downfall of the Vijayanagara Empire.

In this battle, a confederacy of Deccan sultanates (Ahmednagar, Bijapur, Bidar, Golconda, and Berar) joined forces and attacked the Vijayanagara forces led by Rama Raya, the regent of the empire.

The defeat at the Battle of Talikota was a severe blow to the Vijayanagara Empire, and it caused the fragmentation of the empire into smaller, independent states.



LOSAR FESTIVAL IN DHARAMSHALA

CONTEXT: Tibetans began the Losar celebrations, which mark the Tibetan New Year, by offering prayers at the Dalai Lama Temple in McLeodganj. The festivities for Losar 2148, the year of Iron-Ox, lasted from February 12 to 14.

BACKGROUND: The Tibetan New Year, also known as Losar, commences in February or March and is a significant and grand event in Dharamshala. For 15 days, the hill-station is transformed with ornate adornments and vibrant festivities including the Metho ceremony, parades, Tibetan music, and dance.





GURU KRIPA YARA WITH BHARAT GAURAV TRAINS

CONTEXT: The Railways Ministry is showcasing India's cultural and religious heritage through its Bharat Gaurav Tourist Trains, which operate on popular theme-based circuits. These trains aim to promote and highlight India's rich cultural heritage.

BACKGROUND: During the eleven-day sacred journey, pilgrims will have the opportunity to visit the most revered sites of Sikhism, including the five Holy Takhts. The itinerary will encompass visits to prominent Gurudwaras such as Sri Kesgarh Sahib and Virasat-e-Khalsa in Anandpur Sahib, Sri Patalpuri Sahib in Kiratpur Sahib, Sri Fatehgarh Sahib in Sirhind, Sri Akal Takht Sahib and Sri Harmandir Sahib in Amritsar, Sri Damdama Sahib in Bathinda, Takht Sachkhand Sri Hazur Sahib in Nanded, Sri Guru Nanak Jhira Sahib in Bidar, and Sri Harmandarji Sahib in Patna.

KEY WORD

Here are the names of the ten Sikh Gurus in order with the years they served as the leader of the Sikh community:

Guru Nanak Dev - 1469 to 1539

Guru Angad Dev - 1539 to 1552

Guru Amar Das - 1552 to 1574

Guru Ram Das - 1574 to 1581

Guru Arjan Dev - 1581 to 1606 Guru Hargobind - 1606 to 1644

Guru Har Rai - 1644 to 1661

Guru Har Krishan - 1661 to 1664

Guru Tegh Bahadur - 1665 to 1675

Guru Gobind Singh - 1675 to 1708

KHAJURAHO HOSTS FIRST G20 CULTURE WORKING GROUP MEET

CONTEXT: The Culture Working Group conducted its first meeting in Khajuraho, Madhya Pradesh, during India's presidency of G20. The Union Minister for Culture and Tourism chaired the meeting.

BACKGROUND

The Khajuraho Group of Monuments is a testament to the apex of northern Indian temple art and architecture under the rule of the Chandella dynasty during the 10th and 11th centuries CE. These temples, spanning 6 square km in a picturesque landscape, consist of 23 structures (including a partially excavated temple) arranged in western, eastern, and southern clusters. They are a rare surviving example of Nagara-style temple architecture that showcases the originality and superior quality of craftsmanship during this era.

Each temple, constructed in sandstone, features a highly embellished terraced platform (jagati) on which the main structure (jangha) stands, surmounted by a unique Nagarastyle tower (shikhara) that emphasizes the verticality of the principal spire with miniature spires flanking it, symbolizing Mount Kailasa.

The Khajuraho temples are renowned for their seamless integration of sculptures with their architecture. Every surface is intricately carved with both anthropomorphic and non-anthropomorphic motifs depicting religious and









and non-anthropomorphic motifs depicting religious and secular themes. Sculptures depicting acts of worship, lesser deities, and amorous couples reflect sacred beliefs, while other themes include scenes of daily life, such as teachers and disciples, dancers and musicians, and domestic activities

The Khajuraho Group of Monuments is under the ownership of the Indian government and is supervised by the Archaeological Survey of India, as stipulated in the Ancient Monuments and Archaeological Sites and Remains (AMASR) Act (1958) and its corresponding Rules (1959). The AMASR Act also identifies prohibited and regulated areas extending up to 100 meters and 200 meters, respectively, from the designated monument.



ARUNACHAL PRADESH STATEHOOD DAY

CONTEXT: The 37th Statehood Day of Arunachal Pradesh was celebrated, and President Droupadi Murmu attended the event in Itanagar. The State Government hosted a civic reception in her honor during the celebration.

BACKGROUND: Statehood Day in Arunachal Pradesh is a state holiday observed on February 20 in the Northeastern Indian state of Arunachal Pradesh. It is a day to commemorate the granting of statehood to the state which occurred in the year 1987.

Strategic Location

Close to the Himalayas, Arunachal Pradesh is an international border state – bordering China, Myanmar, and Bhutan.



Tribes of Arunachal Pradesh

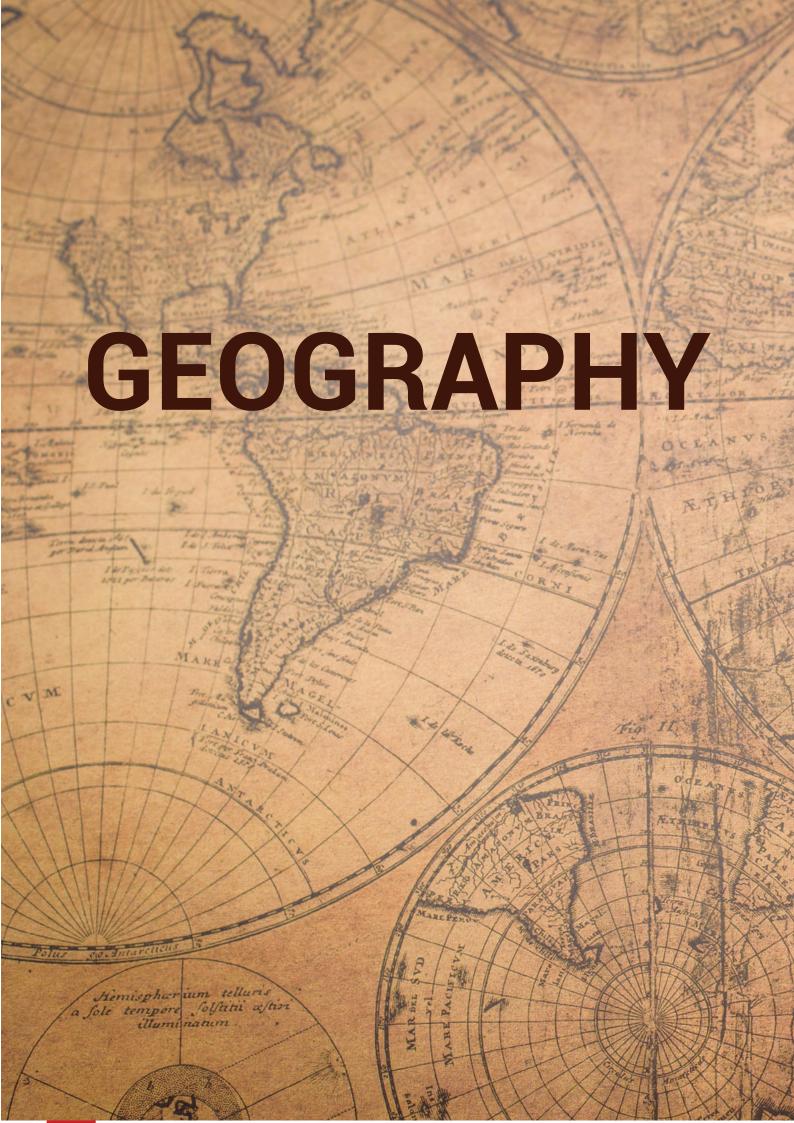
The culture of Arunachal Pradesh is incredibly diverse as the state is home to 26 major tribes along with their subtribes, each possessing their own unique set of traditions and customs. Among these tribes are the Adi, Galo, Aka, Apatani, Nyishi, Tagins, Bori, and Bokar, to name a few. The primary deities of the major tribes, who adhere to the Donyi-Polo religion (which takes its name from the sun and moon), are the sun and moon. The Monpa and Sherdukpen tribes, which are mainly concentrated in the West Kameng and Tawang districts, have been heavily influenced by Tibetan culture. Meanwhile, in the Lohit district, the Khampti and Singpho tribes follow two different sects of Buddhism (Mahayana and Hinayana). The other tribes predominantly follow ancient beliefs, with animal worship being a particularly notable practice.

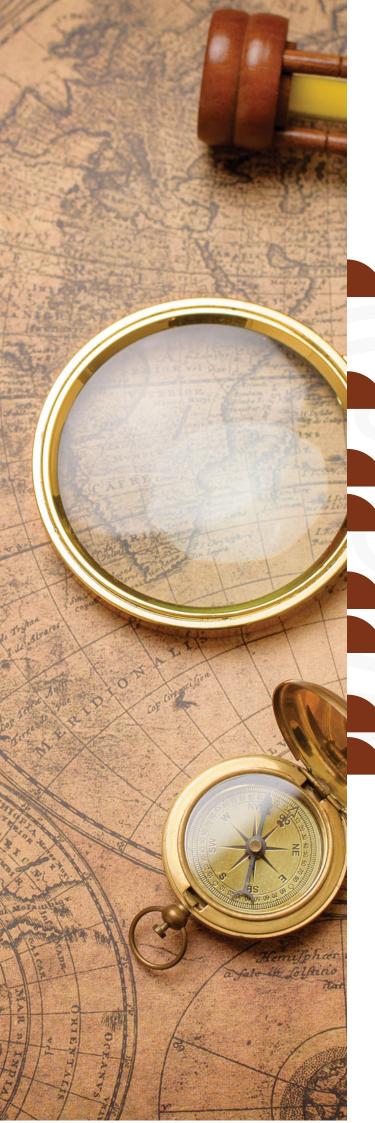


Tawang Monastery

Arunachal Pradesh boasts numerous significant sites that attest to its affluent heritage, and among them is the impressive Tawang Monastery, which measures 113 feet in length and 80 feet in width. Constructed in the 17th century, this monastery is home to Buddhist monks who belong to the Mahayana School of Buddhism, specifically the Gelugpa sect. It houses numerous precious antiques, as well as handwritten and printed books and manuscripts related to Buddhism.









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MAJOR EARTHQUAKE STRUCK TURKEY AND SYRIA & OPERATION DOST

CONTEXT: On February 6, a powerful earthquake measuring 7.8 on the Richter scale hit Turkey and Syria, resulting in the tragic loss of over 46,000 lives.

BACKGROUND

A seismic event of significant magnitude has taken place in southeastern Turkey, near the border with Syria.

Turkey's location at the convergence point of three tectonic plates, namely the Anatolian, Arabian, and African, makes it prone to earthquakes.

The ongoing movement of the Arabian plate towards Europe exerts pressure on the Anatolian plate, causing it to shift towards the west.

This movement results in the buildup of pressure in fault zones at the boundaries of these plates, which, upon sudden release, triggers earthquakes and ground shaking.

Earthquakes

In simple terms, an earthquake refers to the shaking of the earth, which is a natural phenomenon resulting from the sudden release of energy that generates waves traveling in all directions.

The energy is released along a fault, which is a sharp break in the crustal rocks.

Rocks along a fault move in opposite directions and are locked together by friction from the overlying rock strata.

However, their tendency to move apart eventually overcomes the friction, causing deformation and abrupt sliding past one another.

This results in the release of energy, which generates waves traveling in all directions.

The point where the energy is released is called the focus or hypocenter, while the point on the surface nearest to the focus is called the epicenter.

The epicenter is directly above the focus and is the first to experience the waves. All natural earthquakes occur in the lithosphere.

Waves of Earthquake

Two types of waves are generated during an earthquake – body waves and surface waves.

Body waves are produced due to the release of energy at the focus and travel in all directions through the earth's interior.

When the body waves come into contact with the surface rocks, they generate a new set of waves known as surface waves.

These waves propagate along the surface.

Types of Earthquakes

Tectonic earthquakes are the most common type, caused by rocks sliding along a fault plane.

A specific type of tectonic earthquake is known as a volcanic earthquake, but these only occur in regions with active volcanoes.

In areas with intense mining, the roofs of underground mines may collapse, resulting in minor tremors referred to as collapse earthquakes.

Ground shaking may also result from the explosion of



chemical or nuclear devices, called explosion earthquakes. Earthquakes triggered by large reservoirs are known as reservoir-induced earthquakes.

Measuring Earthquakes

The waves that reach the surface during an earthquake are recorded by an instrument known as a seismograph.

The energy released during a quake is expressed on the Richter scale, which is a magnitude scale ranging from 0 to 10.

The magnitude of an earthquake is a measure of the energy it releases.

On the other hand, the intensity of an earthquake, which takes into account the visible damage it causes, is measured using the scale named after Mercalli, an Italian seismologist.

The intensity scale ranges from 1 to 12.

Tectonic Plates

The lithospheric plate, commonly referred to as the tectonic plate, is a solid rock slab with an irregular shape, consisting of both continental and oceanic lithosphere.

These plates move horizontally as rigid units over the asthenosphere. The lithosphere comprises the crust and the top mantle.

Depending on whether the continental or oceanic lithosphere occupies a larger portion of the plate, a plate may be called a continental or oceanic plate.

The theory of plate tectonics suggests that the earth's lithosphere is divided into seven major plates and several minor plates.

Throughout the history of the earth, these plates have been constantly moving across the globe.

There are three types of plate boundaries:

a.Divergent Boundaries: Where new crust is formed as the plates move away from each other.

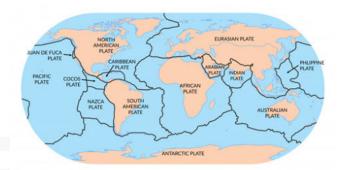
b.Convergent Boundaries: Where one plate sinks beneath another, resulting in the destruction of crust.

c.Transform Boundaries: Where the plates move horizontally past each other, resulting in neither crust formation nor destruction.



Divergent Convergent Transform

Important Major and Minor Plates



OPERATION DOST

Operation Dost was initiated by India to provide assistance in the search-and-rescue operations in Turkey and Syria after the devastating earthquakes on February 6, which have resulted in the loss of over 46,000 lives so far.

JUPITER BECOMES PLANET WITH MOST MOONST

CONTEXT: Surpassing Saturn, Jupiter now holds the record for having the highest number of moons (92).

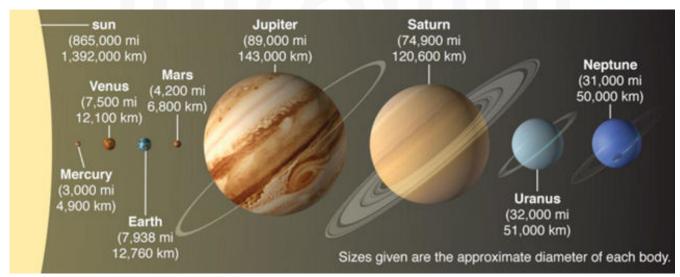
BACKGROUND:

12 additional moons have been found orbiting Jupiter, increasing the total count to 92, surpassing Saturn's confirmed moons of 83.

The International Astronomical Union's Minor Planet Center has recently added these new Jupiter moons to their list.

These discoveries were made using telescopes in Hawaii and Chile in 2021 and 2022.

Subsequent observations confirmed their orbits.



Jupiter

Jupiter, the fifth planet from the sun, is the largest planet in the solar system and is referred to as the 'Giant Gas planet' due to its primarily gaseous composition.

It completes one rotation on its axis in 9 hours and 55 minutes, giving it the shortest day in the solar system, while one revolution around the sun takes 11.86 years.

Jupiter also has a faint ring system mainly composed of dust particles.

The planet's most distinctive feature is the Great Red Spot, a massive storm that is larger than Earth and has been raging for centuries.

Juno Mission: NASA

Juno, a NASA spacecraft powered by solar energy, orbits around Jupiter in long, looping trajectories, with a width equivalent to that of a basketball court.





By investigating beneath the planet's dense clouds, Juno is enhancing our knowledge of the origin and development of Jupiter, and, in turn, the solar system's origins.

Its mission is to provide answers about Jupiter, our solar system, and giant planets across the universe by delving deep into the planet's interior.

Mission Timeline

Launch - August 5, 2011 Deep Space Maneuvers - August/September 2012 Earth flyby gravity assist - October 2013 Jupiter arrival - July 2016 Extended Mission - August 2021 End of Mission - September 2025

MOON VENUS JUPITER CONJUNCTION

CONTEXT: Jupiter and Venus were observed in close proximity to each other in the night sky, as they passed each other in a celestial event called a conjunction.



BACKGROUND: The occurrence of planetary conjunctions is common because the planets orbit the sun in a nearly identical plane and follow comparable paths in the sky.

KEY WORDS

JUPITER

Jupiter, which is fifth in the line of planets from the Sun, holds the distinction of being the largest planet in the solar system. It is more than twice as massive as all the other planets combined. Jupiter's characteristic bands and eddies are composed of frigid, gusty clouds of ammonia and water that drift in an atmosphere consisting of hydrogen and

helium. Jupiter's famous Great Red Spot is a massive storm that has been raging for hundreds of years, and it is larger than Earth itself. NASA's Juno orbiter is currently studying this colossal planet.

VENUS

As the second planet from the Sun, Venus is the closest planetary neighbor of Earth. It is one of the four inner rocky planets, and it is often referred to as Earth's twin due to its comparable size and density. However, Venus has a dense and toxic atmosphere, predominantly consisting of carbon dioxide, which is perpetually veiled by thick, yellowish clouds of sulfuric acid. The clouds trap heat, resulting in a runaway greenhouse effect that makes Venus the hottest planet in our solar system, despite Mercury's proximity to the Sun. The surface of Venus experiences crushing air pressure that exceeds 90 times that of Earth, akin to the pressure you'd encounter a mile below the ocean's surface. Venus rotates on its axis in reverse compared to most other planets in the solar system, causing the Sun to rise in the west and set in the east, which is the opposite of what we witness on Earth. Venus was the first planet that was explored by a spacecraft and was studied intensively early in the history of space exploration. Additionally, it was also the first planet whose surface was reached by a spacecraft launched from Earth.

EARTHQUAKE OF 6.1 MAGNITUDE HITS NEW ZEALANDT

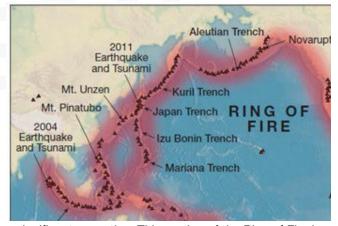
CONTEXT: New Zealand was hit by an earthquake measuring 6.1 on the Richter scale.

BACKGROUND: New Zealand is located on the geologically active "Ring of Fire", belt of underwater trenches and volcanoes that encircles a significant portion of the Pacific Ocean.

KEY WORDS

RING OF FIRE

The Ring of Fire, also known as the Circum-Pacific Belt, is a path surrounding the Pacific Ocean that is recognized for its active volcanoes and frequent earthquakes. The majority of the world's earthquakes and volcanoes occur along this belt. The reason behind the abundance of these geological activities along the Ring of Fire is the considerable movement of tectonic plates in the region. In most parts of the Ring of Fire, the overlapping of plates occurs at convergent boundaries called subduction zones, which leads to an abundance of magma near Earth's surface and conditions favorable for volcanic activity. However, the border between the Pacific and North American Plates is



a significant exception. This portion of the Ring of Fire is a transform boundary where plates move sideways past each other, resulting in a build-up of tension in Earth's crust that is subsequently released, causing a considerable number of earthquakes.



INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



AKSAI CHIN RAILWAY LINE

CONTEXT: A new railway route is under construction by China to connect Tibet and Xinjiang via Aksai Chin, an area also known as 'no-man's land'. This region has been a source of conflict between India and China since the 1950s and was a primary point of contention during the India-China war of 1962.

BACKGROUND: The planned route for the new Xinjiang-Tibet railway largely follows China's G219 national highway. The railway is set to begin in Shigatse, Tibet, and will run alongside the Nepal border before crossing Aksai Chin and concluding in Hotan, Xinjiang. Aksai Chin is claimed by China as part of Xinjiang, and the region was captured and militarily secured by China during the 1950s and the India-China war of 1962.

KEY WORDS

AKSAI CHIN



CYCLONE GABRIELLE HITS NEW ZEALAND

CONTEXT: New Zealand's north has been struck by Cyclone Gabrielle just weeks after record-breaking rainfall and flooding hit Auckland and nearby regions.

BACKGROUND: New Zealand experienced Cyclone Gabrielle as a potent subtropical storm, having transformed from a tropical cyclone. The tropical South Pacific generates an average of 10 tropical cyclones each year from November to April, with roughly one affecting New Zealand as an ex-tropical cyclone, usually occurring in February or March

KEY WORD

An extratropical cyclone is a cyclone that primarily derives its energy from the temperature contrast between warm and cold air masses.

Post-tropical cyclones, or ex-tropical cyclones, are former tropical cyclones that no longer possess enough tropical

characteristics to be considered a tropical cyclone. They can still bring heavy rains and high winds, and may be either fully extratropical or remnant lows.

A subtropical cyclone is a non-frontal, low-pressure system with characteristics of both tropical and extratropical cyclones. They originate over tropical or subtropical waters and have moderate to deep convection, but derive a significant portion of their energy from baroclinic sources. They are generally cold-core in the upper troposphere and have a less symmetric wind field than tropical cyclones.

A tropical cyclone is a warm-core, non-frontal, synopticscale cyclone that originates over tropical or subtropical waters. It has organized deep convection and a closed surface wind circulation around a well-defined center. Tropical cyclones are maintained by heat energy extracted from warm ocean waters, unlike extratropical cyclones that derive their energy from temperature contrasts in the atmosphere.

Talk to yourself once in a day, otherwise you may miss meeting an intelligent person in this world

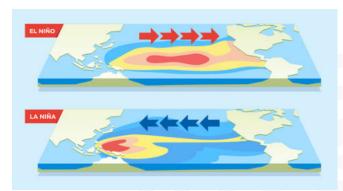




EL NIÑO FORECAST

CONTEXT: India is facing a colder than usual winter due to the north-south winter flow that has been established by the weather phenomenon called La Niña (pronounced "la ninya"). This La Niña has been occurring for an unprecedented third year in a row. According to the latest predictions, there is a more than 50% chance that the companion phenomenon of La Niña, known as El Niño ("el ninyo"), will occur during the fall and winter of 2023.

BACKGROUND: El Niño is a climatic event that causes an anomalous heating of the Pacific Ocean, and has been observed to have adverse impacts on monsoons in India.



KEY WORDS

EL NINO

El Niño and La Niña refer to the warm and cool phases, respectively, of the El Niño-Southern Oscillation (ENSO) climate pattern. El Niño specifically involves the abnormal warming of surface waters in the eastern tropical Pacific Ocean, while La Niña involves the opposite - an unusual cooling of the region's surface waters. The Southern Oscillation, on the other hand, refers to the atmospheric changes that occur in conjunction with ENSO.

The effects of El Niño are far-reaching and can impact ocean temperatures, currents, coastal fisheries, and weather patterns from Australia to South America and beyond. Although El Niño events occur every two to seven years, they are irregular and not as predictable as ocean tides.

GEOMAGNETIC STORM HITS EARTH

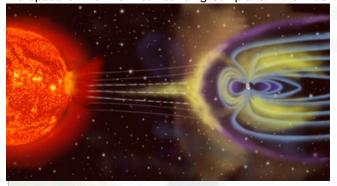
CONTEXT: A potent geomagnetic storm has recently struck the Earth and there is a possibility of further storms occurring in the upcoming days.

BACKGROUND: On September 4, a stream of charged particles, commonly known as solar wind, originating from a hole in the Sun struck the Earth and resulted in a G2-class geomagnetic storm. This was evidenced by the appearance of auroras in various regions of the world. Remarkably, the storm persisted for more than 24 hours.

KEY WORDS

Geomagnetic storms

Geomagnetic storms are significant disruptions in the magnetosphere of Earth that occur when a considerable amount of energy is exchanged from the solar wind into the space environment surrounding our planet. The most



extensive storms associated with these conditions result from coronal mass ejections (CMEs) from the sun, where billions of tons of plasma, with an embedded magnetic field, reach Earth. Although CMEs usually take several days to arrive at Earth, the most intense storms have been observed to arrive in as little as 18 hours.

Effects of Geomagnetic Storms

These storms also create powerful currents in the magnetosphere, alter the radiation belts and ionosphere, and heat the ionosphere and thermosphere, which is the upper atmospheric region. A ring of westward current surrounding Earth in space generates magnetic disturbances on the ground.

During these events, the currents in the ionosphere, combined with the energetic particles that penetrate it, add heat energy that can increase the density and distribution of density in the upper atmosphere, resulting in extra drag on satellites in low-earth orbit. Additionally, local heating generates strong horizontal variations in the ionospheric density, which can modify the path of radio signals and cause errors in GPS positioning information. Although these storms create a stunning aurora, they can disrupt navigation systems like the Global Navigation Satellite System (GNSS) and create harmful geomagnetic induced currents (GICs) in the power grid and pipelines.



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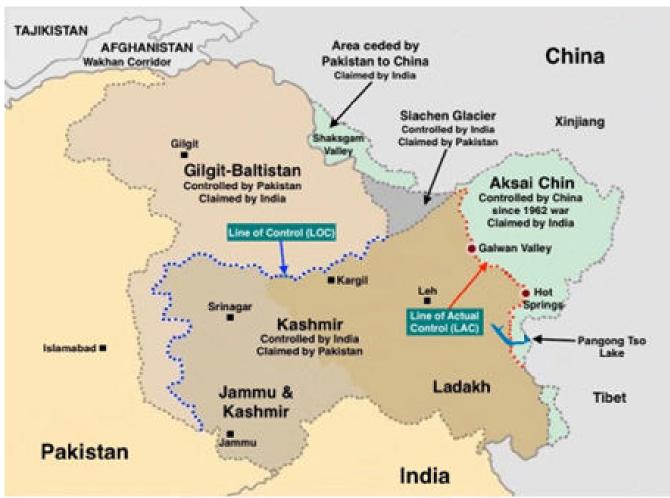
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LADAKH SETS GUINNESS RECORD - PANGONG TSO MARATHON

CONTEXT: UT Ladakh has set a new achievement as the exotic Pangong Frozen Lake Marathon has been officially registered in the Guinness Book of World Records as the World's Highest Frozen Lake Half Marathon.



SPACE FOR ROUGH WORK









MINISTRY OF PANCHAYATI RAJ ORGANIZED MANTHAN: CHARTING NEW PATHS, AN INDUSTRY CONSULTATION ON E-GRAM SWARAJ 2.0

VISAKHAPATNAM TO BE ANDHRA PRADESH'S NEW CAPITAL

ANDHRA'S GUARANTEED PENSION SCHEME

ARTICLE 105 OF CONSTITUTION: THE LIMITS TO FREE SPEECH IN PARLIAMENT

JUDICIAL MAJORITARIANISM

NO JUDICIAL REVIEW OVER DECISION OF COLLEGIUM

ONE CONSTITUENCY ONE CANDIDATE

PUISNE JUDGE

SEALED COVER JURISPRUDENCE

STAGNATION OF URBAN LOCAL BODIES

UNDERMINES LOCAL GOVERNANCE AND DEMOCRACY AT GRASS ROOTS.

TRUST BASED MODELS TO REPLACE TIRESOME RULES



MINISTRY OF PANCHAYATI RAJ ORGANIZED MANTHAN: CHARTING NEW PATHS, AN INDUSTRY CONSULTATION ON E-GRAM SWARAJ 2.0

CONTEXT: Ministry of Panchayati Raj had organised Manthan: charting New Paths, an Industry Consultation on e-Gram Swaraj 2.0 at new Delhi.

BACKGROUND: e-Gram SWARAJ is a digital platform developed and launched by the Ministry of Panchayati Raj(MoPR)), Government of India to provide a range of services to rural citizens. The platform aims to strengthen the foundation of rural areas by providing better transparent decentralised planning with work based accounting, and efficient system of governance with progress reporting mechanism. It was launched on National Panchayati Raj Day, 24th April 2020, and it is a key initiative under the Digital India program.

As a part of **Panchayat Enterprise Suite (PES)** under the **e-Panchayat Mission Mode Project (MMP)**, the portal aims at capacity building of its functionaries using technological interventions.

OBJECTIVE:To support the 'Minimum Government, Maximum Governance' vision at the third tier of Government i.e., Panchayats, by the means of technology and broaden the involvement of industry in Rural development.

To increase the longevity of social, economic, and environmental welfare at the grassroots level by enhancing rural governance through the adoption of Digital tools and Technology

To bring in better transparency and strength of the e-Governance in Panchayati Raj Institutions (PRIs) across the country through decentralized planning, progress reporting, and work-based accounting.

As a part of Panchayat Enterprise Suite (PES) under the



e-Panchayat Mission Mode Project (MMP), the portal aims at capacity building of its functionaries using technological interventions.

This conference was an attempt of the Ministry of Panchayati Raj at broadening the vision and visibility of the State Panchayati Raj Departments on the various technology driven innovations underway in the Government landscape, further fuelling the growing appetite for technological solutions above and beyond the existing e-Gram SWARAJ solution in rural areas. The government expects that this would, in turn, trigger the rural transformation to achieve the vision of Gram Swaraj laid down by Mahatma Gandhi.

OTHER INITIATIVES: The PRIASoft (Panchayati Raj Institutions Accounting Software) is the Online Payment Module whereby Gram Panchayats are carrying out online payments to the vendors and service providers.

VISAKHAPATNAM TO BE ANDHRA PRADESH'S NEW CAPITAL

CONTEXT: Andhra Pradesh government has announced that Visakhapatnam would become the capital of the state soon, even as the matter of developing Amaravati as the capital of Andhra Pradesh lies pending in the Supreme Court.



BACKGROUND: The demand for a new capital for Andhra Pradesh arose after the bifurcation of the state in 2014, which resulted in the creation of Telangana. The then capital city of Hyderabad was shared between the two states for a period of ten years. However, Andhra Pradesh needed a new capital of its own, and this led to the proposal of Amaravati as the new capital.

Visakhapatnam, also known as Vizag, is a port city located on the eastern coast of India, in the state of Andhra Pradesh. It is the largest city in the state after the capital city of Amaravati. In recent years, there has been a growing demand for Vizag to be made the new capital of Andhra Pradesh.

The proposal for Amaravati as the new capital was based on several factors, including its central location in the state, the availability of land for development, and the historical significance of the region. However, the project faced several challenges, including issues related to land acquisition, funding, and environmental concerns.

At the same time there was an attempt to have another capital at Kurnool as The Judicial Capital. The concept of three capitals was to spread the regional development in a more equitable manner.

In 2019, Jagan Mohan Reddy first proposed the idea of "decentralized development" and advocated for the establishment of three capitals in the state- Amaravati (Legislative capital); Visakhapatnam (Executive Capital), and Kurnool (Judicial Capital).

However, the state government later changed its views in 2021.

In March 2022, Andhra Pradesh High Court directed the state government to develop the proposed capital Amaravati.

Andhra Pradesh government challenged the High Court's order in the Supreme Court. The SC stayed the HC order and the matter is in SC currently.



Given these challenges, there has been a growing demand for Vizag to be made the new capital of Andhra Pradesh. Supporters of this proposal argue that Vizag has several advantages over Amaravati. For one, Vizag is already a developed city with world-class infrastructure, including an international airport, a major seaport, and a well-connected railway network. It also has a thriving IT industry and a growing start-up ecosystem.

Furthermore, Vizag is located on the coast, making it an ideal location for the development of the state's tourism industry. The city is home to several beautiful beaches, including the popular RK Beach and the picturesque Yarada Beach. It also has several tourist attractions, such as the Kailasagiri Hill Park, the INS Kurusura Submarine Museum, and the Visakhapatnam Zoo.

Sivaramakrishnan committee constituted by the Union

Government to suggest the place to build the capital city of Andhra Pradesh submitted its report on 27 August 2014 to Home Minister Rajnath Singh in New Delhi.

This committee had also opposed creating a Single 'Super Capita' like Amaravati

INSTA CURIOUS: 13 countries in the world have more than 1 capital. Example – South Africa

In conclusion, while the proposal to make Vizag the new capital of Andhra Pradesh is still in the discussion stage, it has the potential to be a game-changer for the state. With its developed infrastructure, growing industries, and beautiful tourist attractions, Vizag could be the perfect location for the state's new capital. However, the decision to make Vizag the new capital must be made after careful consideration of all the factors involved, including the financial and environmental implications of such a move.

ANDHRA'S GUARANTEED PENSION SCHEME

CONTEXT: there is a debate in the country on the merit of OLD Pension Scheme(OPS) for govt. employees vs the New Pension Scheme(NPS) offered by the Central Govt.

BACKGROUND:

OPS offers pensions to government employees on the basis of their last drawn salary (50% of the last drawn basic monthly salary). The attraction of the Old Pension Scheme lay in its promise of an assured or 'defined' benefit to the retiree. It was hence described as a 'Defined Benefit Scheme'.

Also, like the salaries of government employees, the monthly pay-outs of pensioners also increased with hikes in dearness allowance or DA announced by the government for serving employees.

The OPS was discontinued by the Central government in 2003 from April 1, 2004.

THE MAIN CONCERNS WITH OPS

There was no corpus specifically for the pension which would continue to grow as years pass by. The liability of the Govt. increases as this liability did not have any specific source which would have funded it.

It created inter-generational equity issues. in simple terms the present generation had to bear the cost of financing ever increasing pension liability of the previous generation.

Several states had returned to old pension scheme. They are Himachal Pradesh, Jharkhand, Chhattisgarh, Rajasthan. It was flagged by RBI as a major fiscal concern.

NEW PENSION SCHEME

As a substitute of OPS, the NPS was introduced by the Central government in April, 2004.

This pension programme is open to employees from the public, private and even the unorganised sectors except those from the armed forces.

The scheme encourages people to invest in a pension account at regular intervals during the course of their employment.

After retirement, the subscribers can take out a certain percentage of the corpus. The beneficiary receives the remaining amount as a monthly pension, post-retirement. Pension Fund Regulatory and Development Authority (PFRDA) is the nodal agency.

DIFFERNCE BETWEEN OPS AND NPS

In OPS pension amount is constant and guaranteed. But the national Pension scheme is investment cum pension scheme.

Thus, it is subject to market risks. It means contributions are defined, but benefits depend on market.

ATTRACTION OF ANDHRA PRADESH SCHEME.

In essence it combines the elements of both NPS and OPS. It has defined contributions as well as defined benefits.

It is attractively called the 'Guaranteed Pension Scheme' or the GPS.

Employees can get a guaranteed pension of 33 per cent of their last drawn salary if they contribute 10 per cent of their basic salary every month which is matched by a 10 per cent contribution by the state government.

They can get a guaranteed pension of 40 per cent of their last drawn salary, if they are willing to contribute a higher (14 per cent) of their salary every month. This will be matched by 14 per cent government contribution.

SIGNIFICANCE

Officials in the Union government pointed out that the return under NPS is about 9.5 per cent or so.

Hence, the average monthly pension for government employees under the NPS could be at least 40 per cent of their last drawn salary. While OPS offered 50% of the last drawn salary, this gap of approx. 10% - under NPS - can be addressed innovatively.

The innovation could come in the form of the Central government making up for the 10 per cent gap between the returns. This may also be possible by increasing the quantum of monthly contribution by the government under the New Pension Scheme.



INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



ARTICLE 105 OF CONSTITUTION: THE LIMITS TO FREE SPEECH IN PARLIAMENT

CONTEXT: While protesting against removal of parts of his speech in the Parliament, leader of Opposition cited article 105 of the Constitution.

Article 105 of Constitution mentions that

There are certain powers and privileges to Parliament and member of Parliament and its committees and it has four clauses

There shall be free speech in the Parliament.

No member of Parliament shall be liable -

To any proceedings in any court in respect of anything said or any vote given by him/her in Parliament.

To the publication by or under the authority of either House of Parliament of any report, paper, votes or proceedings.

Parliament may from time to time define such powers, immunities and privileges by law

The above privileges extend to all persons who have a right to speak in parliament or in its committees. Also to Attorney General as well to Ministers who are not yet members of the Parliament.

This means that MPs are exempted from legal liabilities for any speech or action done by them inside the parliament in course of their duty.

These are present to enable MPs to perform their tasks without fear or favour.

Speaker of the House will deal with matter if the action exceeds any limit, unlike the legal courts.

Limit Put by Article 121

It forbids the discussion about a Supreme court / High Court judges conduct except while discussing an impeachment motion against them.

Article 19 and Article 105

Freedom of speech under article 19 is subject reasonable restrictions, but privilege under 105 is an absolute one without other limitations

This privilege applies only within the premises of the Parliament and not outside.

Supreme Court rulings regarding Article 105

The court laid down that ordinary laws would not apply to a MP in case of a bribe while performing actions under Parliamentary proceedings

It further clarified that Article 105(2) will protect an MP from any proceedings with respect to his actions with what is spoken in parliament or vote given by him.

This article enables an MP to work fearlessly in parliamentary debates and motions. To enable such, they require widest possible freedom and protection granted by Article 105.

SIGNIFICANCE

Parliament is the temple of democracy and MPs are to have widest possible sanction under law to fearlessly perform their tasks.

JUDICIAL MAJORITARIANISM

CONTEXT: In January 2023, the Supreme Court upheld the Central government's 2016 decision to demonetise currency notes of Rs 500 and Rs 1,000 by a 4:1 majority.

Justice Nagarathna was the sole dissenting judge in this case.

BACK GROUND

A number of petitions were filed in the Supreme Court challenging central govt's decision demonetising Rs500 and Rs 1000 notes. The Supreme Court had upheld the central govt. decision by a 4:1 majority. This decision of the Supreme Court on such an important issue had raised the concerns around blind acceptance of numerical majority in Judicial decisions.

Normally in the Supreme Court, matters are heard by a division bench consisting of two judges. In the case of special matters concerning very important issues, requiring a substantial interpretation of the Constitution, a special bench is formed. This is known as a Constitutional Bench.

As per Article 145(3), Constitutional Benches usually consist of five, seven, nine, 11 or even 13 judges. Hence, for such benches, numerical majorities are of particular importance. This to facilitate decision-making by ensuring numerical majorities in judicial outcomes.

The requirement for a majority consensus flows from Article 145(5) of the Constitution. It states that no judgment in such cases can be delivered except with the concurrence of a majority of the judges. This article also states that judges are free to deliver dissenting judgments or opinions.

Therefore, to summarise, in a judicial decision too, there can be a majority as well as a minority opinion. But the final verdict is the opinion of the majority of the Judges.

WHAT ARE THE ARGUMENTS SUPPORTING JUDICIAL MAJORITARIANISM?

It helps to increase efficiency through ease of

decision making;

There is objectivity through majority adherence; and Equality through fairness.

Constitution recognises the possibility of a majority and minority in judicial decisions.

WHY JUDICIAL MAJORITARIANISM IS OPPOSED?

Judges are experts of law and the decision should be taken based on facts & figures: As opposed to representatives of the people in legislatures who may act on hunches or popular perception and often play for the galleries, judges are experts of law and are aware of the arguments for and against the impugned matter.

Hence, it's a natural question why the judges too have to resort to head counting in order to resolve disagreements amongst judges?

It also raises another pertinent question as to why numerical majorities of judicial bodies are accepted without any debate while the numerical majorities in representative bodies such as the Lok Sabha are often looked at with suspicion.

It gives scope to Judicial hunches. All judges on a particular Bench give their rulings on the same set of facts, laws, arguments and written submissions. Hence, any differences in judicial decisions can be attributed to a difference in:

Either the methodology adopted and the logic applied by the judges in their interpretation, or

Their own 'judicial hunches' which may be an outcome of their subjective experiences, outlook, perceptions, prejudices and biases.



In such circumstances, it is entirely possible that the majority may fall into either methodological fallacies and errors or be limited by their 'judicial hunch' respectively.

WHY JUDICIAL MAJORITARIANISM IS BAD?

Primarily Meritorious minority decision is the casualty in the case of Judicial Majoritarianism. In case of judicial majoritarianism, a meritorious minority decision, irrespective of the impeccability of its reasoning receives little weightage in terms of its outcomes.

E.g., The dissenting opinion of Justice H.R. Khanna in A.D.M. Jabalpur v. Shivkant Shukla (1976) upholding the Right to Life and personal liberty is a prime example.

Another example is the dissenting opinion of Justice Subba Rao in the Kharak Singh v. State of U.P. (1962) case upholding the right to privacy.

But this view of Right to privacy received the judicial stamp of approval in the K.S. Puttaswamy v. UOI (2017) case.

The rate of dissent itself gets affected. Majoritarianism affects the dissenting voice. A study found that the rate of

dissent where the Chief Justice was a part of the Bench was lower than in those cases where the Chief Justice was not on the Bench.

A POSSIBLE SOLUTION

SENIORITY-BASED ASSESSMENT: Ronald Dworkin proffers a system which may either give more weightage to the vote of senior judges given that they have more experience or to the junior judges as they may represent popular opinion better.

CONCLUSION

The absence of a critical discourse on judicial majoritarianism represents one of the most fundamental gaps in our existing knowledge regarding the functioning of our Supreme Court.

KEY WORDS: methodological fallacies

Judicial Hunches Majoritarianism Critical discourse

NO JUDICIAL REVIEW OVER DECISION OF COLLEGIUM

CONTEXT: Supreme Court rejected petition challenging the appointment of Justice Victoria Gowri as additional judge of Madras High court.

BACKGROUND: Petitioners had challenged the appointment of the judge as an additional Judge of the Madras high Court. At the outset the Bench laid down that the legal issue relates to the "scope and ambit of Judicial Review in the matter of appointment of judges to the High Courts under Article 217 of the Constitution of India. Thereafter, it noted that the issue is settled and is not res integra. The Bench referred to its Constitution Bench judgments in this regard.

The supreme court opined that lack of consultation would attract judicial review, but not the content of the consultation. It further reiterated that there is a rigorous process of consultation including report from Intelligence Bureau along with other opinions and comments that are considered by the Collegium before taking a final call in the process of consultation.

Primacy of the judiciary is itself a sufficient justification for the absence of the need for further judicial review. IB Report and other opinion and comments are considered by the Collegium before taking a final call. Argument that the facts were not known and considered by the Collegium is rejected

Supreme Court, in its judicial side, cannot issue writ to quash the recommendation of the Collegium. It was made clear that the Supreme Court while exercising power under judicial review cannot issue a writ to quash the recommendation of the Collegium or call upon it to reconsider its decision as the same would amount to substituting the views of the Court as that of the Collegium.

JUDICIAL REVIEW

Judicial review in India refers to the power of the Indian courts (SC or HC) to review and potentially invalidate laws and governmental actions that conflict with the Constitution of India.

The power of judicial review in India is derived from the principle of the rule of law and the idea that the Constitution is the supreme law of the land.

In India, the power of judicial review is exercised through writ petitions

Article 13 expressively provides for the doctrine of Judicial Review.

Indian Constitution provides for 'Procedure established by law'

SIGNIFICANCE: Judicial Review of the Collegium decision violates the law as declared, as it would amount to evaluating and substituting the decision of the Collegium, with an individual or personal opinion on the suitability and merits of the person

The role of the Collegium is not subject to Judicial Review.

KEY WORDS

Collegium

Judicial review

Rule of Law

Procedure established by law

Res integra

"Be not afraid of greatness. Some are born great, some achieve greatness, and others have greatness thrust upon them."





ONE CONSTITUENCY ONE CANDIDATE

CONTEXT: Recently the Chief Election Commissioner had asked the Ministry of Law and Justice to limit the seats from which a candidate can contest election to just one. The Govt. of India had declined to do so.

The Supreme Court of India has very recently refused to intervene to set aside the section 33(7) of the Representation of Peoples Act which allowed a candidate to contest from two constituencies on a PIL which had pleaded for the same.

BACK GROUND:

India has successfully conducted many national and state elections in the last 70 years. But there are certain substantial issues which need to be addressed. One of them is the practice of allowing the candidates to contest from more than one constituency.

As per the Section 33(7) of the RPA(Representation of People Act), 1951, one candidate can contest from a maximum of two constituencies. It should be understood here that a candidate could contest from many constituencies until 1996 when the RPA was amended to set the cap at two constituencies.

All political parties have used this provision and have had its leaders contest from more than one constituency. It was used to divide the opponents vote, sometimes to consolidate a party's vote in more than one region, to project party's as well as the leader's image and power across the country and sometimes to cause ripple effects in the region surrounding the constituencies in favour of the candidate's party. Every party has used the provisions of section 33(7).

Many leaders including Indira Gandhi, Atal Bihari Vajpayee, Sonia Gandhi and Narendra Modi have contested from two constituencies in the past. This has allowed political democracy to take deeper roots in our country. It enabled our country to be integrated better by allowing political leadership to emerge which has a pan India outlook and base. This provision may positively enable present day regional parties to emerge as national entities in future especially in the context of looming parochial regionalism.

A PIL was filed in the supreme court challenging the section 33(7) of the Representation of Peoples Act. The Supreme Court has refused to intervene on the matter suggesting that it's a policy question for the Parliament to decide about the nature of Political Democracy. It has upheld the principle of Separation of powers between the various branches of the government.

Election Commission of India had approached the govt. to restrict the number of constituencies a person can contest to one. It had previously suggested this earlier in 2004, 2010, 2016 too.

LEGAL PROVISIONS

Section 33(7) of the Representation of the People Act, 1951, allows a person to contest a general election or a group of bye-elections or biennial elections from two constituencies.

Section 70 of the RPA, specifies that a person who wins on both seats can hold on to one seat only.

Prior to insertion of clause 7 in Section 33 in 1996 it was possible for candidates to contest from several seats and later one person could contest only from two seats.

WHY WE SHOULD CONTINUE TO ALLOW CONTESTING IN TWO CONSTITUENCIES?

The RPA allows a person to contest in more than one constituency and also contest anywhere in the country he/she wishes to. By allowing candidates to contest from anywhere across the country it promotes a better integration of a country with varied heritage and diversities.

Central government is of the opinion that amending section 33 (7) of the RPA, 1951 may cause the infringement of the rights of the candidates contesting elections as well as curtails choice of candidates to the polity.

The provisions in the RPA, 1951 provide for wider choice to the polity as well as the candidate, and are in line with the democratic set up of the country.

Makers of our Constitution would have scrapped the option had they felt it is undemocratic.

The people of both constituencies know that the candidate is contesting in the other seat also. If the people do not like him, they would reject him naturally. If the candidate is elected from both, it shows his wider support and acceptability.

The spirit of RPA gives power to the people and a leader can show that he/she has the support of the people across the country.

Parties often expect that having big names or well-liked leaders contest from more than one seat will convince more people to come out and vote.

WHY THERE SHOULD BE A CAP ON THE NUMBER OF CONSTITUENCY?

'One person, one vote' and 'one candidate, one constituency' is the normal operational dictum of democracy.

Contesting in two constituencies unnecessarily disturbs the democratic process by not allowing another person getting elected from the other constituency. It unnecessarily affects another candidate's winnability as well as the normal routine of the people and administration of the constituency.

When a candidate contests from two seats, it is imperative that he has to vacate one of the two seats, if he wins both.

It is unjust to the voters and a financial burden on the exchequer.

It is a Burden on the government manpower and other resources for holding bye-election against the resultant vacancy. Much time, energy and effort can be directed to other important tasks at hand.

It is an injustice to the voters of the constituency which the candidate is quitting from.

A candidate fighting from two places cannot have his or her mind focused on both.

RECOMMENDATION OF ELECTION COMMISSION OF INDIA

The candidate contesting from two seats should bear the cost of the bye-election to the seat that the contestant decides to vacate.

The Law Commission had also recommended the same change. It had cited expenditure, time, election fatigue and harassment caused to voters as reasons behind the recommendation.

CONCLUSION:

Since Representation of the People Act was enacted by the Parliament, the issue of limiting the choice of the constituencies can be better exercised by the Parliament. The EC has the mandate to conduct the election in a



free and fair manner. It has done so quite admirably too. Over the years electioneering has evolved in India with successive changes in legislation. While it may be so, it is better to leave it to the ingrained wisdom and experience of the Parliament to decide on the nature of political democracy the nation ought to be. But at the same time allowing leaders and candidates to contest from multiple constituencies allows the deepening of the political process and electoral democracy. It helps to integrate a huge nation and strengthen the unity in diversity principle of our country.

So as the Govt. as well as the Supreme Court has left it, let it be decided by the ingrained collective political wisdom of the Parliament of India.

Electioneering may be costly but the Democracy process is priceless!

KEY WORDS: Supreme Court of India

Election Commission of India

Representation of Peoples Act

Ministry of Law & Justice

Public Interest Litigation(PIL)

Parliament of India

Separation of Power

Law Commission of India

Political Democracy

PUISNE JUDGE

CONTEXT: While recommending names for appointment as judges of the Supreme Court, the collegium headed by the Chief Justice of India mentioned that it had taken into consideration the seniority of Chief Justices and senior Puisne Judges

BACKGROUND

The term has its origin in France, where it means younger or later born. The English word means small or undersized. Puisne is almost always used in the context of judges and essentially denotes seniority of rank. The term Puisne judge is used in common law countries to refer to judges who are ranked lower in seniority. That is any judge other than the Chief Justice of that court.

Common law is the body of law created by judges through the written opinions rather than through statutes or constitutions. Common Law which is used interchangeably with the case law is based on judicial precedent. The United Kingdom, Commonwealth including India are known as common law countries.

In India all judges have the same judicial powers as the senior most judge of the court, the Chief Justice has an additional administrative role. In India there is a reference to Puisne judge only when considering the order of seniority for appointments elevation to high courts etc. Still, it does not have a bearing on the exercise of judge's judicial power.

COLLEGIUM STAND ON PUISNE JUDGES

While giving reasons for its recommendation for appointing judges in the Supreme Court, the decision was made taking into consideration the seniority of the chief justices and senior Puisne judge in the respective parent high courts as well as the overall seniority of the High Court judges.

This was done because seniority is one ofthe several criteria that are considered while making appointments to the higher judiciary.

In the third judges case ruling in 1998 the Supreme Court clarified that Chief Justice of India must make a recommendation to appoint a judge of the Supreme Court and to transfer a Chief Justice or a puisne judge of a High Court in consultation with the four senior most Puisne Judges of the Supreme Court.

KEY WORDS

Puisne Judge Collegium Common law countries

SEALED COVER JURISPRUDENCE

CONTEXT: Recently, the Supreme Court (SC) has rejected a "Sealed Cover" suggestion from the Government pertaining to the Adani-Hindenburg issue.

BACKGROUND: Hindenburg Research has alleged that the Adani Group was "engaged in a stock manipulation and accounting fraud". Hindenburg is a US-based investment research firm that specializes in activist Short-Selling.

The Centre Government had earlier proposed the names of members of the committee to assess the market regulatory framework and recommend measures related to the Adani-Hindenburg issue.

But the SC refused to accept any suggestions on names in Sealed Cover in order to maintain transparency.

What is Sealed Cover Jurisprudence?

It is a legal concept that refers to the practice of presenting sensitive or confidential information to a court or tribunal in a sealed envelope or cover. This can be opened and reviewed only by the judge or judges in charge of the case.

Even though there is no specific law to define the idea of sealed cover, the SC derives its power to use it from Rule 7 of order XIII of the Supreme Court Rules 2013 and Section 123 of the Indian Evidence Act of 1872.

The Court can ask for information in a sealed cover in broadly two circumstances:

1) When information is connected to an ongoing investigation,

2) When it involves personal or confidential information whose disclosure may result in violation of an individual's privacy or breach of trust.

WHAT ARE THE ISSUES RELATED TO SEALED COVER JURISPRUDENCE?

DISPARATE ACCESS

It creates unequal playing field, as those who has access to information in sealed cover have an unfair advantage over the other.

LIMITED OPPORTUNITY TO RESPOND

The party not privy to information in sealed cover may not have adequate opportunity to challenge the evidence presented.

AFFECTS TRANSPARENCY

It can limit transparency and accountability in the legal process, as the evidence or arguments presented in the sealed cover are not available to the public or other parties.



It stands against the idea of an open court, where decisions can be subjected to public scrutiny.

ARBITRARY NATURE:

Sealed covers are dependent on individual judges looking to substantiate a point in a particular case rather than common practice. This makes the practice ad-hoc and arbitrary.

INTERFERENCE WITH FAIR TRIAL:

The use of sealed cover jurisprudence can interfere with the right to a fair trial, as the parties may not have access to all the relevant evidence or arguments that are considered in the decision-making process.

CONCLUSION

The use of Sealed Cover Jurisprudence must be carefully balanced with the principles of due process, fair trial, and open justice, and be justified and proportionate to the specific circumstances of the case.

Courts and tribunals should also ensure that the parties who are not privy to the information in the sealed cover are given a fair opportunity to present their case and challenge the evidence or arguments presented in it.

STAGNATION OF URBAN LOCAL BODIES UNDERMINES LOCAL GOVERNANCE AND DEMOCRACY AT GRASS ROOTS.

CONTEXT: Municipal Corporation of Delhi fails to elect a mayor for third time.

BACKGROUND: Elections were held recently to Delhi's urban local body. This has led to spread mandate with no clear candidate securing enough votes in the council to be elected as the mayor. Given Delhi's unique governance structure with a multiplicity of authorities, ideally the state and central governments should be working in harmony. But in times of hyper-competitive politics, such an understanding has remained elusive.

In the absence of the Mayor , Deputy mayor as well as a standing committee, there is a special officer in charge to manage urgent matters. But important policy matters can't be sanctioned by the officer.

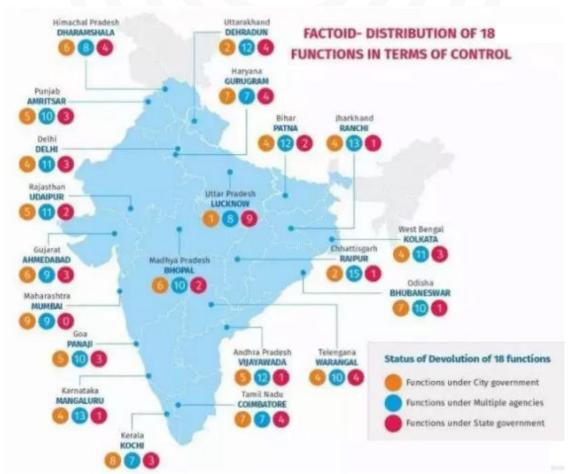
The Constitution (74th Amendment) Act, 1992 has introduced (Part IX A Article 243 P to ZG] and Schedule XII) in the Constitution, which provides for the establishment of urban local bodies (ULBs) as institutions of local self-government.

It has empowered state governments to devolve the responsibility of 18 functions including urban planning, regulation of land use, water supply, etc., and made periodic elections compulsory for them.

Urban governance is part of the state list under the Constitution. Thus, the administrative framework and regulation of ULBs vary across states.

Experts have highlighted that ULBs across India face similar challenges. For instance, lacking autonomy, citylevel functions are managed by parastatals, devolution of powers is incomplete (lacks taxation powers – stressed municipal finances), irregular elections, etc.

These challenges have led to poor service delivery, severely curtailing urban governance at a time when 675 million Indians are slated to live in urban centres by 2035.





ISSUES AND CHALLENGES

Experts have highlighted that ULBs across India face similar challenges. For instance, lacking autonomy, citylevel functions are managed by parastatals, devolution of powers is incomplete (lacks taxation powers – stressed municipal finances), irregular elections, etc.

These challenges have led to poor service delivery, severely curtailing urban governance at a time when 675 million Indians are slated to live in urban centres by 2035.

According to the Reserve Bank of India, financially starved Indian cities are unable to create the resources needed to offer their residents high-quality facilities and services.

As a result, for instance, India's access to basic urban infrastructure falls short of what has been accomplished in the OECD and other BRICS countries.

The transfer of duties from the national and subnational governments to local governments has not always been accompanied by a corresponding transfer of financial authority.

Moreover, municipal corporations in India rely heavily on subsidies from the Central and state governments to cover their spending needs because they have few other sources of income.

Over-reliance on property taxes has prevented local governments from fully utilising other revenue streams

such as trade permits, entertainment taxes, mobile tower taxes, solid waste user fees, water fees, and value capture finance.

According to the report on municipal finances by the Reserve Bank of India, the aggregate budget size of the municipal corporations in India is significantly less than those of the Central and state governments.

INITIATIVES TO IMPROVE CITIES

The Ministry of Housing and Urban Affairs (MoHUA) supports States / Union Territories for formulation of master plans by issuing advisories and design standards, providing schematic interventions and financial assistance, etc.

Under Atal Mission for Rejuvenation and Urban Transformation (AMRUT), a sub-scheme on formulation of Geographical Information System (GIS) based master plans for AMRUT cities is being implemented.

This is a 100% centrally funded scheme with a total outlay of ?515.00 crores.

CONCLUSION

The second generation of urban reforms should further focus on regulation, innovative financing and PPP, and climate change initiative to have a better cities India needs and deserves.

TRUST BASED MODELS TO REPLACE TIRESOME RULES

CONTEXT: Finance Minister Smt. Nirmala Sitaraman had emphasized on trust based models to replace tiresome rule as part of the budget speech.

BACKGROUND: Prime minister had emphasized that there is a need to build trust among all sections of the society and then work with every one as part of the effort of Bharat Jodo Abhiyan. In pursuance of that vision of the Pm, finance minister in the budget speech had emphasized on trust based models of governance replacing tiresome rules and regulations.

There has been a multi-pronged effort to achieve the same.

LEGISLATIVE MEASURES: The government has introduced the Jan Vishwas Bill to amend 42 Central Acts Ease of doing business: The government has proposed to reduce 39,000 compliances and decriminalize 3,400 legal provisions.

E-GOVERNMENT

Third time in a row that the government presented the budget in a paperless form.

Entity Digi Locker: It will be set up for use by MSMEs, large businesses and charitable trusts, to share documents online securely, whenever needed by authorities for regulatory purposes

A permanent Account Number (PAN)will be made a common identifier for all digital systems of specified government agencies.

National Data Governance Policy will be brought out. This will enable access to anonymized data

FINANCING MEASURES:

Result-Based Financing of schemes: To better allocate scarce resources for competing for development needs, the financing of select schemes will be changed, on a pilot basis, from 'input-based' to 'result-based'.

Significance: the idea is to move towards a whole government effort to achieve goals with trust in citizens.

KEY WORDS

Jan vishwas bill Entity Digi Locker Permanent Account Number National data governance policy Result Based Financing



INTERNATIONAL RELATIONS





NATIONAL SECURITY ADVISOR AJIT
DOVAL AND HIS US COUNTERPART
JAKE SULLIVAN FORMALLY LAUNCHED
THE US-INDIA INITIATIVE ON CRITICAL
AND EMERGING TECHNOLOGY (ICET) IN
WASHINGTON.

12 AFRICAN COUNTRIES COMMIT TO ENDING AIDS IN KIDS BY 2030

OPERATION DOST: INDIA'S RELIEF EFFORT
TO HELP TURKEY

PARIS CLUB WILL PROVIDE FINANCIAL
ASSURANCES TO IMF ON SRILANKA
SET UP A RUSSIAN FINANCIAL FIRM IN
INDIA



NATIONAL SECURITY ADVISOR AJIT DOVAL AND HIS US COUNTERPART JAKE SULLIVAN FORMALLY LAUNCHED THE US-INDIA INITIATIVE ON CRITICAL AND EMERGING TECHNOLOGY (ICET) IN WASHINGTON.

CONTEXT: The National Security Adviser of India, Ajit Doval, met his U.S. counterpart, Jake Sullivan, and other senior officials of the US during the inaugural edition of the Initiative on Critical and Emerging Technologies (iCET) dialogue at Washington DC

BACKGROUND: Prime Minister Shri Narendra Modi had a warm and productive meeting with H.E. Mr. Joseph R. Biden, President of the United States of America, on 24 May 2022, in Tokyo. The meeting resulted in substantive outcomes which will add depth and momentum to the bilateral partnership. This meeting marks a continuation of the regular high-level dialogue between the two Leaders who met in-person in September 2021 in Washington D.C.

The India-US Comprehensive Strategic Global Partnership is underpinned by a shared commitment to democratic values, rule of law, and a commitment to uphold a rules based international order. The Leaders expressed happiness with progress made across sectors in the bilateral agenda. The Initiative on Critical and Emerging Technologies (iCET) was announced during the meeting between the Indian Prime Minister and the U.S. President at the Quad meeting held in Tokyo in May 2022.

Both sides launched an India-U.S. Initiative on Critical and Emerging Technologies (iCET) to facilitate outcomeoriented cooperation. Co-led by the National Security Council Secretariat in India and the U.S. National Security Council, iCET would forge closer linkages between government, academia and industry of the two countries in areas such as AI, quantum computing, 5G/6G, biotech, space and semiconductors.

As a continuation of the above mentioned meeting between the President and the Prime Minister of USA and India, first meeting of the National Security Advisers took place in Washington.

Initiative on Critical and Emerging Technologies (iCET)

The iCET dialogue is expected to focus mainly on various means to remove barriers in technology transfers and co-production in the domains of critical and emerging technologies.

Further, the iCET also aims to develop supply chains to increase co-production and co-development between the countries and improve the linkages between the start-up ecosystems of the two countries.

Outcomes from the Inaugural meeting

White House had released a fact sheet after the meeting. It high lighted six areas of cooperation. They are enhancing innovation ecosystems, defence innovation and technology cooperation, developing resilient semiconductor supply chains, space, STEM talent and next-generation telecommunications.

The newly announced programmes include:

Devising a new defence industrial cooperation roadmap

A Research Agency Partnership between the U.S. National Science Foundation and Indian science agencies.

A platform to collaborate on quantum computing that facilitates collaboration with academia and industry.

A mechanism to aid the development of semiconductors in India.

Increasing space cooperation which includes human spaceflight.

Easing exports: The two countries also discussed various means to ease export controls and restrictions.

The White House has released a statement which says that the U.S. administration would come up with ways to lower barriers to U.S. exports to India of High-Performance Computing and source code.

SIGNIFICANCE: the launch of the ICeT dialogue particularly at a time when there has been a growing convergence of Indian and US interests with respect to security, economic, and technological challenges presented due to the rise of China. The iCET dialogue is expected to deepen the U.S.-India strategic relationship. Also important is the recent clashes at the border between both India and China. This is extremely important for the growth and development of the South Asian, Indian Ocean and Indo-Pacific Regions.





12 AFRICAN COUNTRIES COMMIT TO ENDING AIDS IN KIDS BY 2030

CONTEXT: Ministers and representatives from 12 African countries have laid out plans to end acquired immunodeficiency syndrome (AIDS) in children by 2030 through early testing, treatment and prevention programmes.

Human immunodeficiency virus (HIV) attacks the body's immune system. If HIV is not treated, it can lead to AIDS. There is currently no effective cure; once people get HIV, they have it for life. But with proper medical care, HIV can be controlled.

BACKGROUND: The goal was first set in a meeting with representatives from 12 countries from the continent gathered in Tanzania's Dar-es-Salaam, the World Health Organization said in a press note.

The Dar-es-Salaam Declaration on ending AIDS in children was endorsed unanimously. The commitment marks a step up to ensure that all children with HIV have access to life-saving treatment and that mothers living with HIV have babies free from HIV.

Countries with high HIV burdens have joined the alliance in the first phase: Angola, Cameroon, Ivory Coast, the Democratic Republic of the Congo (DRC), Kenya, Mozambique, Nigeria, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.

Currently, a child dies from AIDS-related causes every five minutes globally. Only half (52 per cent) of children living with HIV are on life-saving treatment, far behind adults, of whom 76 per cent are receiving antiretrovirals.

The work will centre on four pillars:

Early testing and optimal treatment and care for infants, children, and adolescents;

Closing the treatment gap for pregnant and breastfeeding women living with HIV to eliminate vertical transmission;

Preventing new HIV infections among pregnant and breastfeeding adolescent girls and women;

Addressing rights, gender equality and the social and structural barriers that hinder access to services.

KEY WORDS

Dar -es - Salaam Declaration

OPERATION DOST: INDIA'S RELIEF EFFORT TO HELP TURKEY

CONTEXT: Under Operation Dost, India has sent search and rescue teams, mainly three teams of the National Disaster Response Force (NDRF), a field hospital, materials, medicines, and equipment to Turkey and Syria

BACKGROUND: severe earthquake has struck turkey and Syria with huge destruction and loss of life.

Under Operation Dost, India has sent search and rescue teams, mainly three teams of the National Disaster Response Force (NDRF), a field hospital, materials, medicines, and equipment to Turkey and Syria. Seven four-wheeled vehicles and trucks, apart from four canines, were sent along with the three teams that were airlifted by an Indian Air Force (IAF) C-17 heavy lift aircraft from the Hindon air base in Ghaziabad to the Adana airport in Turkey.

Prime Minister Narendra Modi said that India firmly stood with the people of Turkey

When asked about sending aid to Syria when the country

has been under US sanctions, Secretary (West) in the MEA Sanjay Verma said that India is following the G20 mantra of 'One Earth, One Family, One Future. Sanctions don't cover such humanitarian assistance.

Significance: Turkey under the present regime was becoming increasingly closer to Pakistan and increasingly hostile to Indian interests across the world. India's prompt action at a time of great need, may probably break a new ground, when Pakistan was not able to provide much needed help at a time of great tragedy. Indian action definitely increased India's image with people of Turkey.

How to build up on this groundswell is the task ahead for Indian Diplomacy.

PARIS CLUB WILL PROVIDE FINANCIAL ASSURANCES TO IMF ON SRILANKA

CONTEXT: The Paris Club, an informal group of creditor nations, will provide financial assurances to the International Monetary Fund on Sri Lanka's debt

An assurance from the Paris Club, as well as other bilateral creditors, is one of the conditions that Sri Lanka has to fulfil for the IMF to begin disbursing a \$2.9 bn bailout package to the beleaguered nation that all but collapsed last year under a severe economic crisis.

BACKGROUND:

The current economic crisis in Sri Lanka is a result of a combination of factors, including high levels of government debt, a large trade deficit, weak foreign exchange reserves, and declining economic growth.

What is PARIS CLUB

An informal grouping of mostly Western countries, the Paris group countries dominated bilateral lending in the last century. Its importance has receded over the last two decades or so, with the emergence of China as the world's biggest bilateral lender.

As noted, they are mostly western creditor countries that grew from a 1956 meeting in which Argentina agreed to meet its public creditors in Paris. Their objective is to find sustainable debt-relief solutions for countries that are unable to repay their bilateral loans. All 22 are members of

the group called Organisation for Economic Co-operation and Development (OECD).

The members are: Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Korea, Netherlands, Norway, Russian Federation, Spain, Sweden, Switzerland, United Kingdom, United States of America

It operates on the principles of consensus and solidarity. Any agreement reached with the debtor country will apply equally to all its Paris Club creditors. A debtor country that signs an agreement with its Paris Club creditors, should not then accept from its non-Paris Club commercial and bilateral creditors such terms of treatment of its debt that are less favourable to the debtor than those agreed with the Paris Club.

Though great players in the last century, their significance has been decreasing since the emergence of China as the



largest bilateral credit giver in the world.

In Sri Lanka's case, for instance, China, Japan and India are the largest bilateral creditors. Sri Lanka's debt to China is 52 per cent of its bilateral debt, 19.5 percent to Japan, and 12 per cent to India. With Japan a member of the Paris Club, Sri Lanka needed assurances from China and India as well.

Delhi launched its own bilateral negotiations with Colombo. Last month, during a visit to Colombo, External Affairs Minister S Jaishankar announced that India had written to the IMF providing the necessary financial assurances, adding that it hoped others would follow suit. But China is yet to come on board.

The reported readiness by the Paris Club comes against this background. That still leaves China, whose Exim Bank offered a two-year moratorium on its loans soon after the Indian announcement.

SET UP A RUSSIAN FINANCIAL FIRM IN INDIA

CONTEXT: Russia has flagged concerns over the lack of "progress" on the setting of a system to transact in local currencies and has proposed radical new initiatives to deepen financial co-operation.

SPACE FOR ROUGH WORK

BACKGROUND

Previously, RBI allowed the opening of nine "Vostro" accounts in two Indian banks to facilitate overseas trade in the rupee with sanctions-hit Russia

PROPOSALS:An "India-based financial institution with Russian ownership" that would not be subject to third-party sanctions. An India-based specialised financial technology company that would enable Indian credit institutions to use Bank of Russia's Financial Messaging System (SPFS) – the Russian financial messaging system which replaced the sanctioned SWIFT.

WHAT IS RUSSIA'S FINANCIAL MESSAGING SYSTEM (SPFS)?

SPFS is a Russian equivalent of the SWIFT financial transfer system, developed by the Central Bank of Russia.

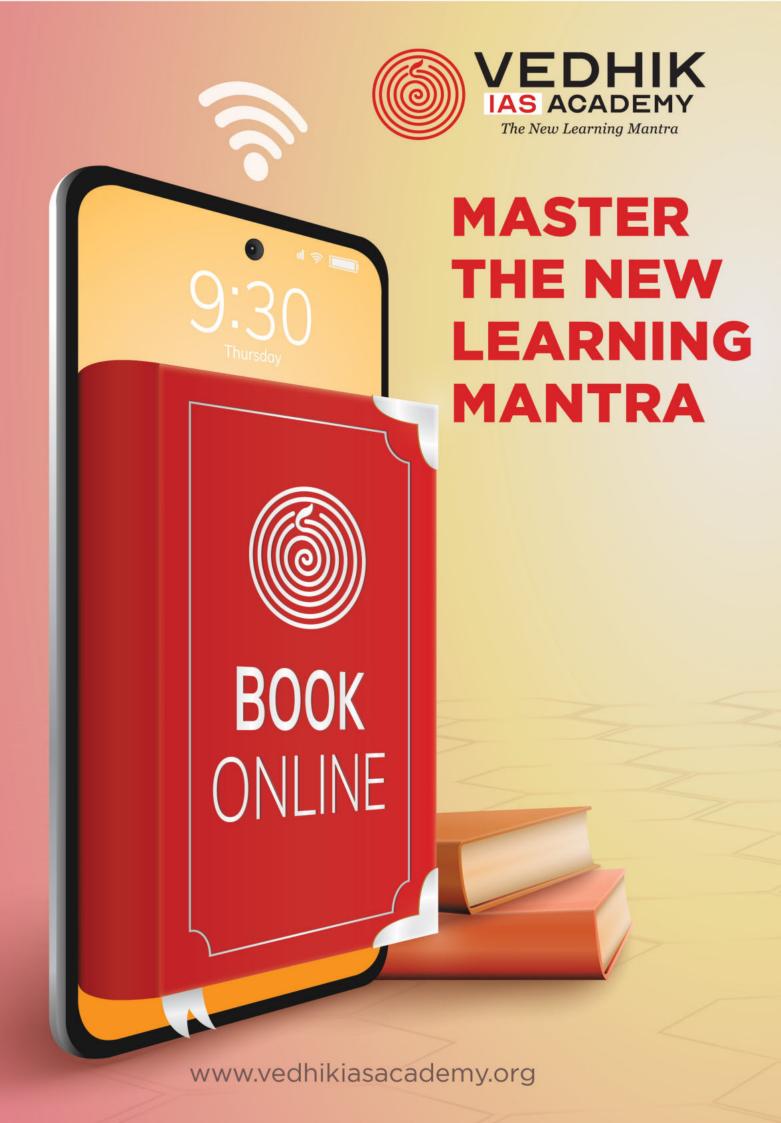
The system has been in development since 2014

20 Russian banks open rupee Vostro accounts for trade with India.

SIGNIFICANCE:

India can import Russian oil at discounted prices. This will help in bringing down our import bill. It would act as an alternate payment mechanism in the situation of increasing sanctions on Russia by European countries, cutting them off from the SWIFT messaging system that connects banks across the globe. It will allow India to pay for Russian oil and fertilizers in rupees. This will help Russian companies to pay for their imports from India or invest in the country.

It is also expected to enable trade with sanction-hit nations such as Russia.









UNION CABINET CLEARS SEVEN ITBP BATTALIONS

UNLAWFUL ACTIVITIES PREVENTION ACT (UAPA)



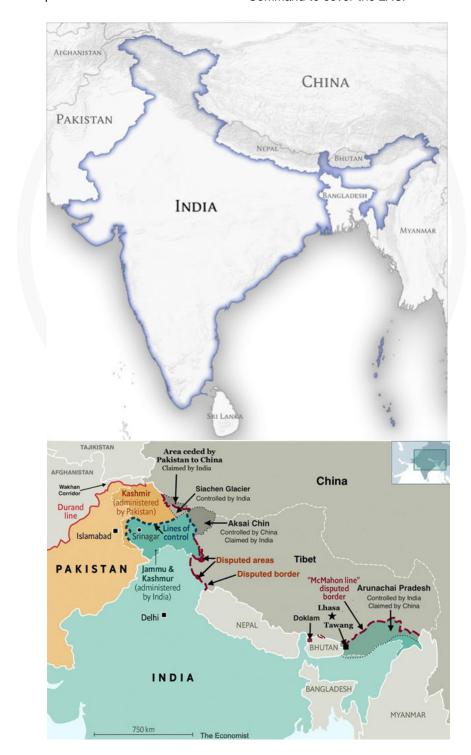
UNION CABINET CLEARS SEVEN ITBP BATTALIONS

CONTEXT: India is raising seven new battalions of the famed patrol force Indo-Tibetan Border Police (ITBP), for 'effective monitoring' of the border region.

NEW BATTALIONS: The Indo-Tibetan Border Police (ITBP) recently raised the strength of battalions in 2011. The strength of the Indo-Tibetan Border Police (ITBP) is set to increase from the current 88,000 to 97,000 by 2025-26, making it the fourth largest Central Armed Police Force (CAPF).

BACKGROUND: The People's Liberation Army's Western Theatre Command is responsible for the defence of China

along the whole Line of Actual Control with India. The Indian Armed Forces has divided the LAC into 3 sectors - the western sector across Ladakh and the Chinese-controlled Aksai Chin, the central sector across Himachal Pradesh and Uttrakhand, and the eastern sector across Sikkim and Arunachal Pradesh. Similarly, the Indian Air force has the Prayagraj-based Western Air Command, Delhi-based Central Air Command, and Shillong-based Eastern Air Command to cover the LAC.





UNLAWFUL ACTIVITIES PREVENTION ACT (UAPA)

CONTEXT: The Union Home Ministry has notified Khalistan Tiger Force (KTF) and Jammu and Kashmir Ghaznavi Force (JKGF) as terrorist organisations under the Unlawful Activities Prevention Act (UAPA). The Union Home Ministry has notified alleged Khalistan operative Harwinder Singh Sandhu alias Rinda belonging to Babbar Khalsa International (BKI) as a "terrorist". There are now a total of 44 designated terrorist organisations under the First Schedule of the Act.

The Parliament of India amended the Unlawful Activities (Prevention) Act, 1967 to effectively prevent unlawful activities associations in India.

SALIENT FACTS

- ~ Both Indian and foreign nationals can be charged.
- ~ Applicable to offenders in the same manner, even if crime is committed on a foreign land, outside India.
- Investigating agency can file a charge sheet in maximum 180 days after the arrests and the duration can be extended further after intimating the court.

SECTION 15 UNLAWFUL ACTIVITIES (PREVENTION) ACT, 1967

Section 15 defines a "terrorist act" as any act committed with intent to threaten or likely to threaten the unity, integrity, security, economic security, or sovereignty of India or with intent to strike terror or likely to strike terror in the people or any section of the people in India or in any foreign country.

UNLAWFUL ACTIVITIES (PREVENTION) (AMENDMENT) ACT, 2019

- ~ Empowers the Director General of National Investigation Agency (NIA) to grant approval of seizure or attachment of property when the case is investigated by the said agency. Earlier, an investigating officer needs to take prior permission of the Director General of Police of a State for conducting raids, and seizing properties that are suspected to be linked to terrorist activities.
- ~ Central agencies such as the Central Bureau of Investigation (CBI) are required to obtain prior permission from the state government since law and order is a state subject under the Constitution.

UNLAWFUL ACTIVITIES (PREVENTION) ACT, 1967

ENACTMENT: 1967

OBJECTIVE: Effective prevention of unlawful activities associations in India.

CRITICISM: Assigns absolute power to the Centre to assign an activity as unlawful via Official Gazette.

PUNISHMENT: Prescribe death penalty and life imprisonment.

GROUNDS FOR DESIGNATION:

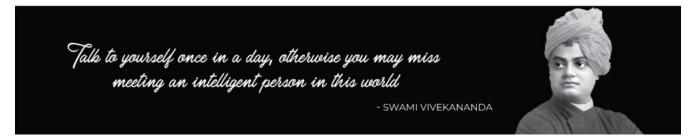
- ~ Commits or participates in acts of terrorism, or
- ~ Prepares for terrorism, or
- ~ Promotes or encourages terrorism
- ~ otherwise involved in terrorism.
- ~ Empowers the officers of the NIA, of the rank of Inspector or above, to investigate cases of terrorism. Earlier, only officers of the rank of Deputy Superintendent or Assistant Commissioner of Police of the NIA shall have the power to investigate offence under the UAPA law.
- ~ Included the provision of designating an individual as a "terrorist" if they are found committing, preparing for, promoting, or involved in an act of terror.
- ~ Empower individual designated as a "terrorist" with the "Right to seek a review" within one month of rejections of the application by the government. The Centre will set up the review committee consisting of a chairperson (a retired / Sitting Judge of a State High Court) and three other members to order the government to delete the name of the individual from the schedule that lists "terrorists", if it considers the order to be flawed.

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ECONOMIC SURVEY 2023

UNION BUDGET 2023-24

PRIMARY AGRICULTURAL CREDIT SOCIETIES (PACs)

ADANI ENTERPRISES LTD FOLLOW-ON PUBLIC OFFERING (FPO)

PROJECTS IN FOREIGN CURRENCY

'TRANSFER PRICING' RULES

SPECIAL RUPEE VOSTRO ACCOUNTS (SRVA)

ANGEL TAX

WINDFALL TAXES

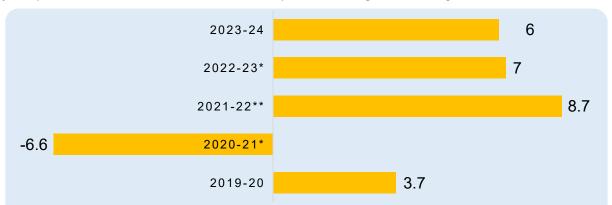
UPI PAYMENT FOR FOREIGN TRAVELLERS
TO INDIA



ECONOMIC SURVEY 2023

CONTEXT: The Union Finance Minister presented Economic Survey 2023 in the Parliament of India. **ECONOMIC SURVEY**

The Economic Division of the Department of Economic Affairs (DEA), Union Ministry of Finance, under the guidance of the Chief Economic Adviser (CEA) prepares the Economic Survey. The Economic Survey gives a detailed report of the state of domestic economy for the current Financial Year with forecasts of the upcoming Financial Year. The first Economic Survey was presented for 1950-51 and until 1964, it was presented along with the Budget.



*1st Revised Estimates **Provisional Estimates #1st Advance Estimates @Projected

India is the 3rd largest economy in the world in Purchasing Power Parity (PPP) terms and the 5th largest in market exchange rates. The Economic Survey 2022-23 forecast a GDP for FY2 4 to be in the range of 6-6.8 %, depending on the trajectory of economic and political developments globally.

ENGINES OF GROWTH:

The CAPEX multiplier effect with higher allocation of capital expenditures in last two budgets and accelerated private capital expenditures is expected to result quadruple domestic economic output.

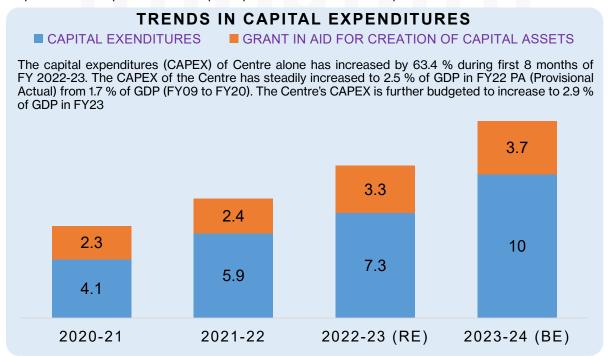


FIGURE: Bar chart representing the trends in capital expenditures (CAPEX). Source: Union Ministry of Finance.

- ~ Long-term interest-free loans and CAPEX-linked additional borrowing provision to boost capital expenditures of the States.
- ~ Emphasis of capex on infrastructure-intensive sectors like roads and Highways, Railways, and Housing and urban affairs.

The Government's Capex-led growth strategy is expected to make large-scale positive implications for medium-term growth. Besides, the CAPEX –led growth strategy will enable India to keep the growth-interest rate differential positive, leading to a sustain-able debt to GDP in the medium run.

REPORT CARD ON GDP GROWTH



Depending on the trajectory of global economic and political developments, the Economic Survey presents a fairly optimistic view of future domestic growth prospects. The Survey projects a GDP growth-rate of 6.0 % – 6.8 % in 2023-24. The higher growth trajectory would be realised by rebound of private consumption, higher capital expenditures (Capex), near-universal vaccination, normalcy in job markets, strengthening of the balance sheets of the Corporates, recapitalised public sector banks etc.

DEFICITS

The resilience of Indian economy witnessed in the post-pandemic period FY23 facilitated by the - recovery in economic activity, buoyancy in revenues from direct taxes and GST, and realistic assumptions in the Budget. Despite the tax buoyancy witnessed across both direct as well as indirect tax regime, the increased capital expenditures to revive the economy has led Centre to skip the deficit targets set under the Fiscal Responsibility and Budgetary Management Act. The Centre is on track to achieve the estimated fiscal deficit target of 5.4 % of GDP for FY 2022-23.

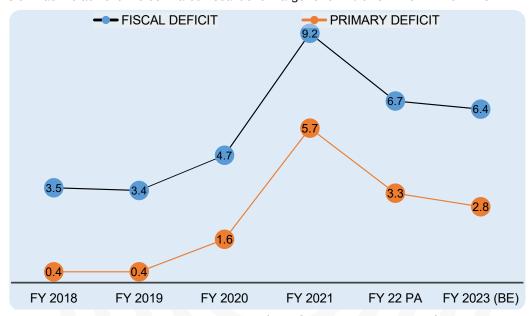


FIGURE: Bar chart representing the trends in budgetary deficits. Source: Union Ministry of Finance.

The PRIVATE CONSUMPTION recorded the highest ever expansion in the first half of FY 23 since FY 15, with economic activities normalisation of relaxation in Covid 19 pandemic restrictions. The increase in consumer demand boosted production activity resulting in enhanced capacity utilisation across sectors.

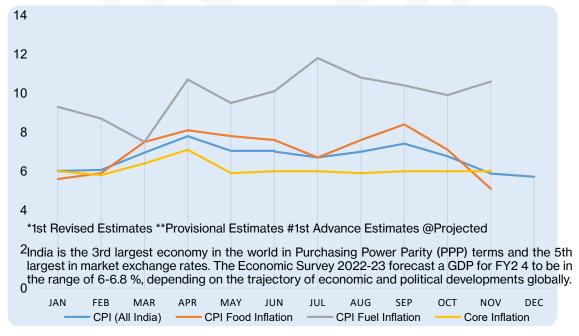


FIGURE: Line chart representing the inflation trends in 2022. Source: National Statistics Office (NSO).



REPORT CARD ON INFLATION

The RBI has projected Headline CPI inflation at 6.8 % in FY23, outside the Flexible Inflation Targeted regime between 2 % - 6 %. The Economic Survey expects the inflation levels not high enough to deter private consumption.

The tax buoyancy in Direct and Indirect tax collections (proportionate increase in tax revenues in response to rise in national income or output)

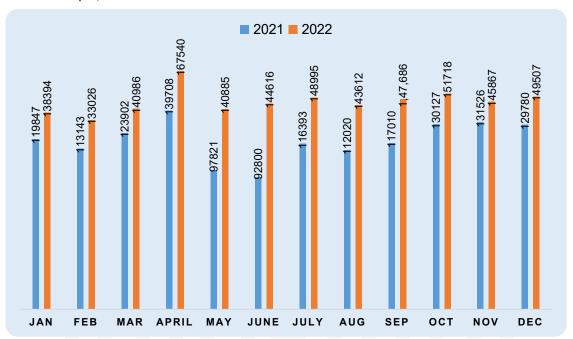


FIGURE: Bar chart representing the monthly Gross Goods and Services Tax (GST) receipts (Cr.). Source: Union Ministry of Finance.

The Economic Survey has noted that GST collections have stabilised and evolved as a vital revenue source for Centre and State Governments, with the gross GST collections reporting an increase of 24.8 % on YoY basis from April to December 2022. The GST collections improved with the nationwide drive against GST evaders and fake bills and systemic changes such as rate rationalisation correcting inverted duty structure. The GST tax payers doubled to 1.4 Cr. in 2022. The Direct tax collections recorded a robust growth at 26 % on a Year on Year basis due to corporate and personal income tax growth. The growth in Gross Tax Revenue of 15.5 % was recorded from April to November 2022 driven by expansion of tax net due to structural reforms like GST, digitalization of economic transactions.

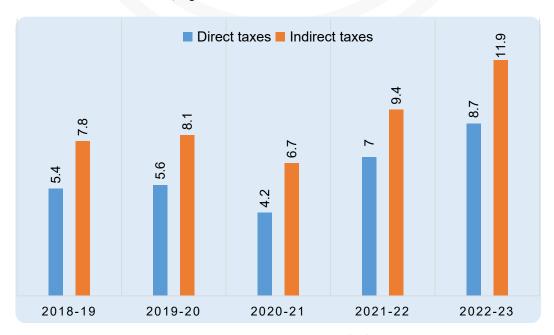


FIGURE: Bar chart representing the Direct and Indirect taxation receipts (Cr.). Source: Controller General of Accounts (CGA).



DOWNSIDE RISKS: The Economic Survey has pointed out challenges faced by the Indian economy over the past fiscal year. **The COVID PANDEMIC LOCKDOWN**: The lockdown from the Covid pandemic drastically affected the consumption power. Besides, the **RUSSIA UKRAINE CONFLICTS** and **UNCOORDINATED MONETARY POLICY** are all expected to create uncertainties in the future economic prospects.

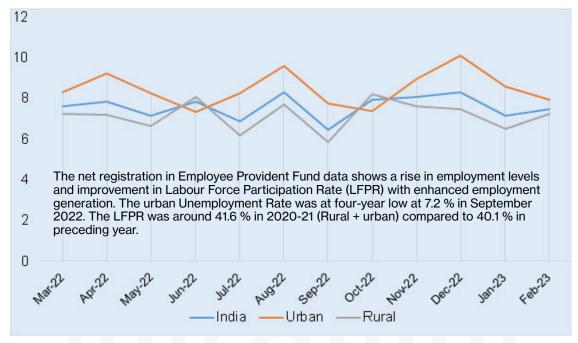


FIGURE: Line chart representing the unemployment rate in FY 2022-23. Source: CMIE.

EMPLOYMENT-UNEMPLOYMENT

The Periodic Labour Force Survey (PLFS) recorded a decline in the urban unemployment rate for people aged 15 years and above from 9.8 % in the Quarter II (July – September) FY 2021 to 7.2% in the Quarter II (July – September) FY 2022. Despite layoffs, the number of direct jobs created by Indian start-ups rose 36 % in 2022.

SECTORIAL GROWTH RATES



FIGURE: Bar chart representing the percentage growth rate of Gross Value Added (GVA) at Basic Prices. Source: Controller General of Accounts (CGA).

AGRICULTURE: The Indian agriculture sector recorded an average annual growth rate of 4.6 % during the last six years. India has also emerged as a major exporter of agricultural products, with an all-time high of US \$ 50.2 billion during 2021-22. The Economic Survey noted a need for "re-orientation" to address challenges like adverse impacts of climate change, fragmented landholdings, and rising input costs. The sector has witnessed accelerated growth with initiative like PM Kisan, PM Fasal Bima Yojana.

INDUSTRY: The sector contributes approximately a third to the GDP and generate direct and indirect employment opportunities for up to 12.1 Cr. people. The sector is set to grow on a sustainable manner with policy push and big ticket investments in physical and digital infrastructure. The vision of the Government for physical infrastructure development –



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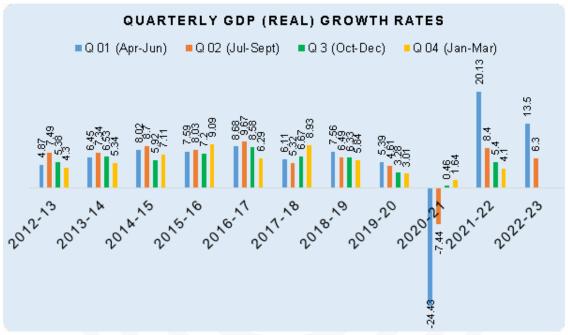


FIGURE: Bar chart representing the Quarterly Real GDP growth rates. Source: State of Economy. Union Ministry of Statistics and Programme Implementation (MoS&PI).



FIGURE: Bar chart representing the Quarterly GVA estimates at Basic Prices. Source: State of Economy. Union Ministry of Statistics and Programme Implementation (MoS&PI).



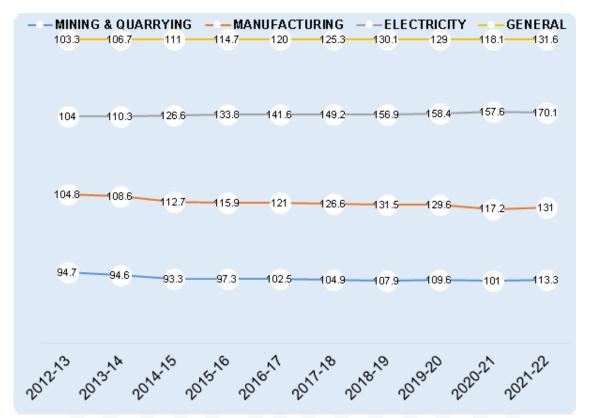


FIGURE: Line chart representing the Index of Industrial Production (IIP). Source: National Statistical Office (NSO), Government of India.

MONETARY DEVELOPMENTS AND LIQUIDITY CONDITIONS

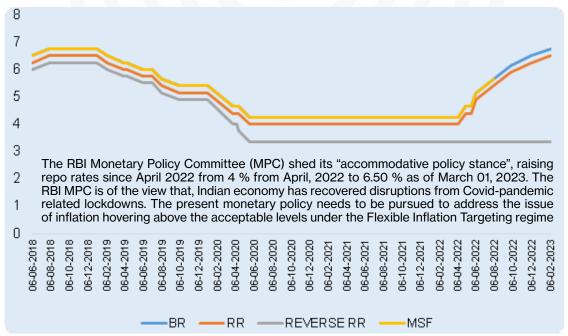


FIGURE: Line chart representing the Liquidity Adjustment Facility (LAF). Source: Reserve Bank of India (RBI) Handbook of Statistics



INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



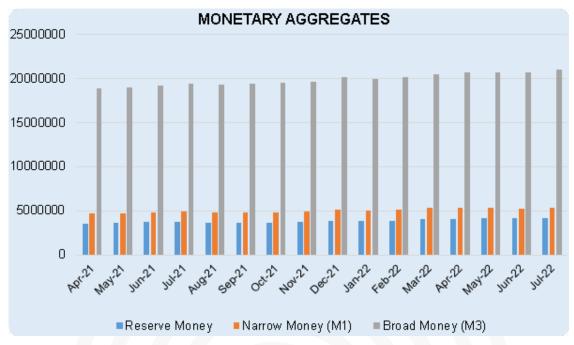


FIGURE: Bar chart representing the Monetary Aggregates. Source: Reserve Bank of India (RBI) Handbook of Statistics There is an increase in Reserve money (M0) and broad money (M3) by 10.3% and 8.7% year-on-year (YoY) respectively, whereas the Money Multiplier has remained stable at an average of 5.1%.

BANKING IN INDIA

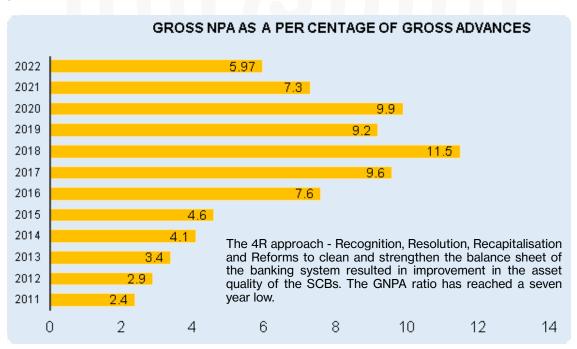
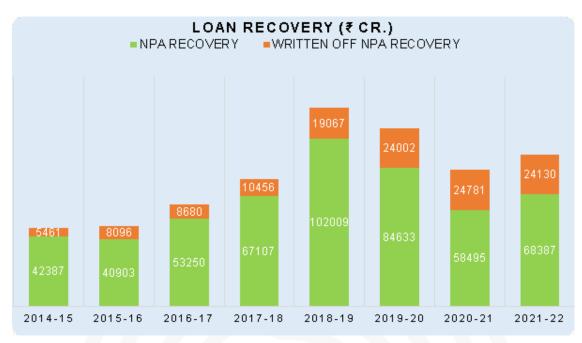


FIGURE: Bar chart representing the Gross NPA as a percentage of Gross Advances Source: Reserve Bank of India (RBI) Handbook of Statistics







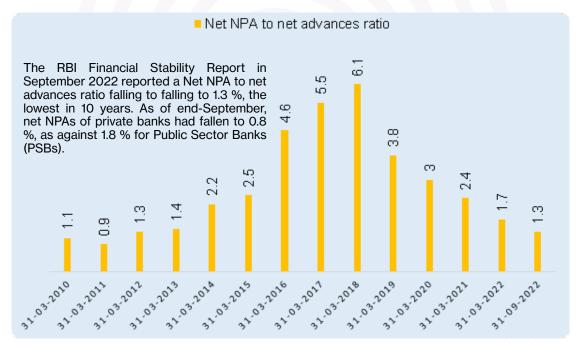


FIGURE: Bar chart representing the Net NPA to net Advances Ratio. Source: Reserve Bank of India (RBI) Handbook of Statistics

BANKING SECTOR:

Credit Growth and Recovery Non-food credit by the Banks has been growing in double digits since April 2022. There is a consistent rise of NBFCs' credit as a proportion to GDP The recovery rate for the Banks through Insolvency and Bankruptcy (IBC) was highest in FY22 compared to other channels.

HEALTH: India's budgeted expenditure on the health sector reached 2.1% of the GDP in the financial year 2023 (BE) and 2.2 % in FY 2022 (RE). The National Health Policy 2017 as well as the 15th Finance Commission recommended 2.5 % by 2025. The expenditure incurred on the National Covid-19 vaccination program, Aatmanirbhar Bharat Abhiyaan, Intensified Mission Indradhanush (MI) program has led to increased expenditures on health.

EDUCATION: The expenditures on education as a share of total GDP, saw only a minimal gain of 0.1 %, from 2.8 % to 2.9 % during the same seven-year period. COVID worsened dropout rates at primary and upper primary school levels Higher education enrolment increased.

The Indian economy is prepared to grow at its potential in the medium term, with domestic growth outlook optimistic than in the pre-pandemic years.

REFORMS:



UNION BUDGET 2023-24

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REFORMS:

Structural and governance reforms based on an inclusive approach - 'Sabka Saath, Sabka Vikaas' emphasised on building partnerships among various stakeholders strengthened the economy's fundamentals by enhancing its overall efficiency UNION BUDGET 2023-24

The Budget 2023-24 hopes to build on the foundation laid in the previous Budget, and the blueprint drawn for India@100, which envisions a prosperous and inclusive India. The economic growth is estimated at 7%, which is the highest among all major economies, despite the massive global slowdown caused by COVID-19 and Russia-Ukraine War.

The total receipts other than borrowings and the total expenditure are estimated at 27.2 lakh Cr. and 45 lakh Cr. respectively. The net tax receipts are estimated at 23.3 lakh Cr. and the fiscal deficit is estimated to be 9 % of GDP. To finance the fiscal deficit in 2023-24, the net market borrowings from dated securities are estimated at 11.8 lakh Cr. The balance financing is expected to come from small savings and other sources. The gross market borrowings are estimated at 15.4 lakh Cr. The capital expenditure by the government has been raised to 10 lakh Cr.

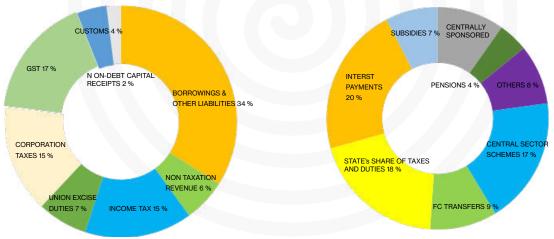


FIGURE: Pie chart representation of (a) Estimated receipts of the Union Government (b) Estimated expenditures of the Union Government.

TAX PROPOSALS IN THE UNION BUDGET 2023-24:

PERSONAL INCOME TAX: The rebate limit in the new tax regime has been increased to 7 lakh, meaning that peons in the new tax regime with income up to 7 lakh will not have to pay any tax. The tax structure in the new personal tax regime has been changed by reducing the number of slabs to five and increasing the tax exemption limit to 3 lakh.

INDIRECT TAX PROPOSALS: It emphasised simplification of tax structure with fewer tax rates so as to help in reducing compliance burden and improving tax administration. The number of basic customs duty rates on goods, other than textiles and agriculture, has been reduced from 21 to 13.

BETTER TARGETING OF TAX CONCESSIONS: For better targeting of tax concessions and exemptions, the deduction from capital gains on investment in residential houses has been capped at 10 Cr.

PROPOSALS RELATING TO MSMEs: Describing MSMEs as growth engines of the Indian economy, the Budget proposes enhanced limits for micro-enterprises and certain professionals for availing the benefit of presumptive taxation.

COOPERATION: New cooperatives that commence manufacturing activities by 31st March next year shall get the benefit of a lower tax rate of 15%.

START-UPS: The Budget proposes to extend the date of incorporation for income tax benefits to start-ups from 31.03.2023 to 31.03.2024.

AMENDMENTS IN CGST ACT: The Budget provides for amending the CGST Act so as to raise the minimum threshold of tax amount for launching prosecution under GST from 1 crore to 2 Cr.



IMPLICATIONS OF TAX CHANGES: The revenue of about 38,000 Cr. will be foregone as a result of these proposals in the direct and indirect taxes, while revenue of about 3,000 Cr. will be additionally mobilised.

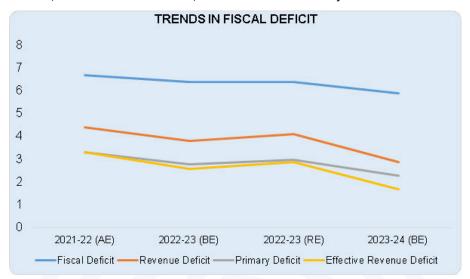


FIGURE: Line chart representing the deficit trends in the Union Budget. Source: Union Ministry of Finance

PRIORITY 1: INCLUSIVE DEVELOPMENT

I AGRICULTURE

AGRICULTURE CREDIT: Set an agriculture credit target to 20 lakh Cr. with a focus on animal husbandry, dairy and fisheries.

- ~ DIGITAL PUBLIC INFRASTRUCTURE FOR AGRICULTURE, an open-source, open-standard and interoperable framework to provide farmers with information services for crop planning and help improve access to farm inputs, credit and insurance.
- ~ ATMANIRBHAR HORTICULTURE CLEAN PLANT PROGRAM to boost the availability of disease-free, quality planting material for high value horticultural crops ¬
- ~ AGRICULTURE ACCELERATOR FUND to encourage setting up of Agriculture start-ups by young entrepreneurs in rural areas
- ~ CLUSTER-BASED AND VALUE CHAIN APPROACH through PPP collaboration between farmers, state and industry for input supplies, extension services, and market linkages to enhance the productivity of extra-long staple cotton.
- ~ GLOBAL HUB FOR MILLETS, the Centre of Excellence for R&D in Millets to be set up by the Indian Institute of Millet Research, Hyderabad to propel India as the largest producer and second largest exporter of millets in the world.
- ~ PM MATSYA SAMPADA YOJANA (NEW SUB-SCHEME) to further enable activities of fishermen, fish vendors, and micro & small enterprises, improve value chain efficiencies and expand the market.

II HEALTH

- ~ Establishing 157 NEW NURSING COLLEGES in co-location with the existing 157 medical colleges.
- ~ SICKLE CELL ANAEMIA ELIMINATION MISSION to eliminate Sickle Cell Anaemia by 2047 to enable awareness, screening of 7 Cr. people (0-40 years age group) and counselling
- ~ PHARMA INNOVATION to promote Research & Development in pharmaceuticals through centres of excellence III EDUCATION
- ~ TEACHERS' TRAINING using innovative pedagogy, curriculum transaction, continuous professional development, dipstick surveys, and ICT implementation
- ~ Develop DISTRICT INSTITUTES OF EDUCATION AND TRAINING (DIET) as vibrant institutes of excellence
- ~ NATIONAL DIGITAL LIBRARY FOR CHILDREN AND ADOLESCENTS for facilitating the availability of quality books with States/Panchayats setting up PHYSICAL LIBRARIES to access digital resources.

PRIORITY 2: REACHING THE LAST MILE

I TRIBAL WELFARE

- ~ ASPIRATIONAL BLOCK PROGRAMME, covering 500 blocks for saturation of essential government services across multiple domains
- ~ PRADHAN MANTRI PVTG DEVELOPMENT MISSION under the Development Action Plan for the Scheduled Tribes to provide PVTG families and habitations with basic facilities such as safe housing, clean drinking water and sanitation, improved access to education, health etc.
- ~ Recruitment of 38,800 teachers and support staff for the 740 EKLAVYA MODEL RESIDENTIAL SCHOOLS, serving 3.5 lakh tribal students.



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II WATER

~ Central assistance will be given to UPPER BHADRA PROJECT to provide sustainable micro irrigation and filling up of surface tanks for drinking water to the drought-prone central region of Karnataka.

III HOUSING

~ Earmarked a financial outlay of 79,000 Cr, increasing the allocation by 66 % for PM AWAS YOJANA

IV LANGUAGES AND INSCRIPTIONS

~ BHARAT SHARED REPOSITORY OF INSCRIPTIONS (BHARAT SHRI), set up in a digital epigraphy museum, with the digitization of 1 lakh ancient inscriptions in the first stage

V CRIMINAL JUSTICE SYSTEM

- ~ FINANCIAL SUPPORT FOR POOR PRISONERS, unable to afford the penalty or the bail amount
- ~ E-COURTS for efficient administration of justice.

PRIORITY 3: INFRASTRUCTURE & INVESTMENT

LINVESTMENTS

- ~ CAPITAL INVESTMENT AS THE DRIVER OF GROWTH AND JOBS, with steep increase in capital investment outlay for the third year in a row by 33 % to 10 lakh Cr. ~ 3.3 % of GDP almost three times that of 2019-20
- GRANT-IN-AID of 13.7 lakh Cr. (4.5 % of GDP) to states for supporting States for capital investments.
- ~ Extension of 50-year INTEREST-FREE LOAN to state Governments by the Centre for one more year



~ Establishing INFRASTRUCTURE FINANCE SECRETARIAT to enhance opportunities for private investment in infrastructure

II INFRASTRUCTURE

- ~ Review of HARMONIZED MASTER LIST OF INFRASTRUCTURE sectors eligible for financial assistance from IIFCL by an expert committee
- ~ Encourage technology-and innovation-driven indigenous production of LAB GROWN DIAMONDS (LGD) to reduce import dependency, a research and development grant will be provided to one of the IITs for five years.

III LIRRANISATION

- ~ Encourage States and cities to make SUSTAINABLE CITIES OF TOMORROW for efficient utilisation of land resources, transit-oriented development, and opportunities for all.
- ~ Establish URBAN INFRASTRUCTURE DEVELOPMENT FUND (UIDF) under the National Housing Bank (NHB) utilising priority sector lending shortfall.
- ~ SCIENTIFIC MANAGEMENT OF DRY AND WET WASTE via universal mechanical desludging of septic tanks and sewers in urban sanitation.

IV LOGISTICS

~ Identified 100 CRITICAL TRANSPORT INFRASTRUCTURE PROJECTS, for last and first-mile connectivity for ports, coal, steel, fertilizer, and food grains sectors

V RAILWAYS

~ Highest-ever capital outlay of 2.40 lakh Cr. for the Railways

VI REGIONAL CONNECTIVITY

~ 50 ADDITIONAL AIRPORTS, HELIPORTS, WATER AERODROMES and revival of advanced landing grounds for improving regional air connectivity.

PRIORITY 4: UNLEASHING THE POTENTIAL

I ARTIFICIAL INTELLIGENCE (AI)

~ Setting up 3 CENTRE OF EXCELLENCE FOR AI in top educational institutions

II GOVERNANCE

- ~ NATIONAL DATA GOVERNANCE POLICY to access anonymised data
- ~ SIMPLIFYING KYC PROCESS, adopting a 'risk-based' instead of a 'one size fits all' approach
- ~ ONE STOP SOLUTION for identity and address updating using Digi Locker service and Aadhaar as a foundational identity and PAN as the common identifier for all digital systems of specified government agencies
- ~ UNIFIED FILING PROCESS for obviating the need for separate submission of the same information to different government agencies
- ~ RESULT BASED FINANCING OF SCHEMES for better allocation of scarce resources for competing for development needs

III DIGITISATION

- ~ Setting up of an ENTITY DIGI LOCKER for MSMEs, large businesses and charitable trusts, to securely share documents online
- ~ Setting up of 100 5G LABS for developing applications using 5G services in engineering institutions

PRIORITY 5: GREEN GROWTH

I ENVIRONMENT CONSERVATION

~ GREEN GROWTH

LiFE, or Lifestyle for Environment (LIFE)

Panchamrit

Net-zero carbon emission by 2070

~ BATTERY ENERGY STORAGE PROJECTS

Viability Gap Funding for 4,000 MWH BATTERY ENERGY STORAGE SYSTEMS.

Formulated a detailed framework for PUMPED STORAGE PROJECTS.

- ~ INTER-STATE TRANSMISSION SYSTEM for evacuation and grid integration of 13 GW of renewable energy from Ladakh
- ~ Notification of GREEN CREDIT PROGRAMME under the Environment (Protection) Act, 1986 for encouraging behavioural change by companies, individuals and local bodies.
- ~ Setting up of 500 NEW 'WASTE TO WEALTH' PLANTS under GOBARdhan (Galvanizing Organic Bio-Agro Resources Dhan) scheme for promoting a circular economy
- ~ Taking up Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) for mangrove plantation along the coastline and on salt pan lands using convergence between MGNREGS, CAMPA Fund and other sources



~ AMRIT DHAROHAR to encourage the optimal use of wetlands, and enhance bio-diversity, carbon stock, eco-tourism opportunities and income generation for local communities for the next 3 years.

AGRICUTLURE

- ~ PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth (PM-PRANAM) to incentivize States and Union Territories to promote alternative fertilizers and balanced use of chemical fertilizers
- ~ Set up 10,000 Bhartiya Prakritik Kheti Bio-Input Resource Centres (Bio-Input Resource Centres), creating a national-level distributed micro-fertilizer and pesticide manufacturing network and help facilitate 1 Cr. farmers to adopt natural farming in the next 3 years.

PRIORITY SECTOR 6 YOUTH AND SKILLING

I SKILLING

- ~ Pradhan Mantri Kaushal Vikas Yojana 4.0 to skill youth in new age courses for Industry4.0 like coding, AI, robotics, mechatronics, IOT, 3D printing, drones, and soft skills
- ~ Setting up 30 Skill India International Centres across different States

II TOURISM

~ Encourage States to set up a Unity Mall in their state capital/important cities or most prominent tourism centre for the promotion and sale of products

PRIORITY SECTOR 7 FINANCIAL SECTOR

I REGULATION

~ Financial sector Regulations

TIME-BOUND RESOLUTION of the applications under various regulations

Setting up of DATA EMBASSIES in GIFT IFSC, Gandhinagar to create a new approach to securing data by leveraging diplomatic agreements bolstered by cloud technology solutions

II BANKING

~ Proposed certain amendments to the Banking Regulation Act, the Banking Companies Act and the Reserve Bank of India Act for improving governance and investor protection in banking sector

III SECURITIES MARKET

- ~ Empower Securities and Exchange Board of India (SEBI) to develop, regulate, maintain and enforce norms and standards for education in the National Institute of Securities Markets and to recognize the award of degrees, diplomas and certificates
- ~ Setting up of CENTRAL DATA PROCESSING CENTRE for faster response to companies through centralized handling of various forms filed with field offices under the Companies Act

IV FINANCIAL SCHEMES

- ~ MAHILA SAMMAN SAVINGS CERTIFICATE a two-year period up to March 2025 offering a deposit facility of up to 2 lakhs in the name of women or girls for a tenor of 2 years at a fixed interest rate of 7.5 % with a partial withdrawal option
- ~ SENIOR CITIZEN SAVINGS SCHEME with a maximum deposit limit for Senior Citizen Savings Scheme will be enhanced from 15 lakh to 30 lakh

SPACE FOR ROUGH WORK

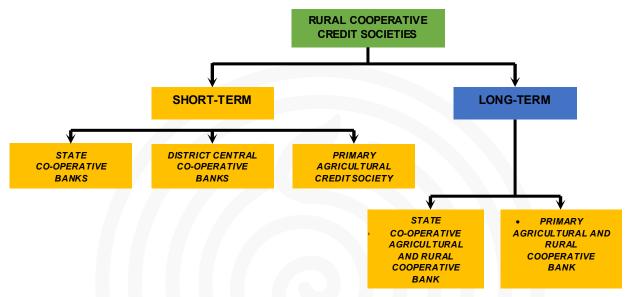


PRIMARY AGRICULTURAL CREDIT SOCIETIES (PACs)

CONTEXT: The Union Ministry of Cooperation concluded a Memorandum of Understanding (MoU) with the Union Ministry of Electronics and Information Technology, NABARD and CSC e-Governance Services India Limited for the Primary Agricultural Credit Societies (PACS) to facilitate services offered by Common Service Centres (CSC).

"a village-level institution that works directly with rural residents that encourages agriculturists to save, accepts deposits from them, makes loans to deserving borrowers, and collects repayments."

PRIMARY AGRICULTURAL CREDIT SOCIETIES (PACS)



BACKGROUND: The Union Ministry of Co-operation is planning to set up 2 lakh multi-purpose Primary Agricultural Credit Society (PACS) in Panchayats over the next 5 years in order to promote various cooperative activities at the grassroots level. The NABARD has already automated and brought top-tiers of Rural Cooperative Credit Societies – State Cooperative Banks (StCB) and District Central Cooperative Banks (DCCB) on Common Banking Software (CBS).

ANALYSIS:

AGENTS OF LAST MILE DELIVERY: Approximately, 50 % of the domestic population is associated with cooperatives. Primary Agricultural Credit Societies (PACS) works directly with rural residents at village level to encourage farmers to save, accepts deposits from them,

makes loans to deserving borrowers, and collects repayments. There are approximately 65,000 active PACS in India. Approximately, 41% of the Kisan Credit Card (KCC) loans are disbursed through Primary Agricultural Credit Societies (PACS) benefitting 3.01 Cr. farmers.

FARM EXTENSION SERVICES: PACS will carry out activities like the sale of gas and petrol and the storage and marketing of dairy and farm products with an aim to alleviate poverty and empower women.

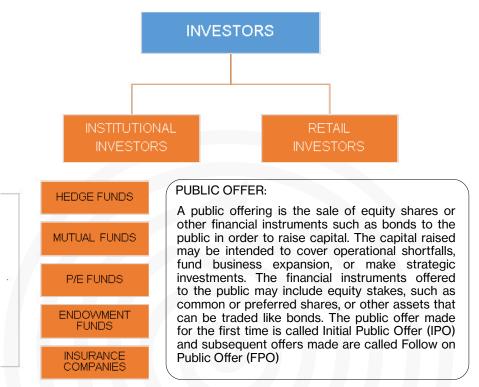
CONCLUSION: Primary Agricultural Credit Societies (PACS) are the soul of cooperatives that would enable 'Sahkar Se Samridhi' for rural development. The expansion of multi-purpose PACSs providing about 20 services of both financial and farm extension services will increase employment opportunities in rural areas





ADANI ENTERPRISES LTD FOLLOW-ON PUBLIC OFFERING (FPO)

CONTEXT: The Follow-on Public Offering (FPO) of Adani Enterprises Ltd was subscribed 1.12 times with Institutional investors and High Net worth Individuals (HNIs) actively participating in the fund raising process.



HIGH NET WORTH INDIVIDUALS (HNIs): Individual investors or institutions (large trusts, big companies, and similar institutions) who are willing to invest more than 2 lakh.

INSTITUTIONAL INVESTORS: Legal entities that accumulates the funds of numerous investors (private investors or other legal entities) to invest in various financial instruments and profit from the process

NATURE: Institutional investor buy assets oriented more on long-term investing. Institutional investors with substantial capital and licensing conduct wholesale transactions of assets - foreign securities, government business loans, changed banking policies, interest rates involving large operational activities.

ROLE: Institutional Investors, also called 'Market Makers'

exert a large influence on the price dynamics of different financial instruments. They are entitled to preferential treatment and lower fees. They are also subject to fewer protective rules because they are more qualified traders than individuals and thus better able to protect themselves.

SIGNIFICANCE: Institutional Investors creates a positive effect on overall economic conditions in the market. The activism of Institutional investors as shareholders improve corporate governance benefits all shareholders.

ISSUES: The non-compliance risks - lack of qualified, experienced appraisers and ambiguity on the payments of dividends expose the shareholders. The client-institution relationship is formal with questionable appraisal models often questioned for its transparency and effectiveness.

QUALIFIED INSTITUTIONAL INVESTORS (QIIs)

The Securities and Exchange Board of India (SEBI) has categorised Institutional Investors - Commercial banks, Mutual Fund Houses, Public Financial Institutions, and Foreign Portfolio Investors generally perceived to possess expertise and the financial muscle to evaluate and invest in the capital markets under clause 2.2.2B (v) of DIP Guidelines as 'Qualified Institutional Buyer':

- Public Financial Institution Sec. 4A Companies Act, 1956.
- Scheduled Commercial Banks.
- Mutual Funds.
- SEBI registered FII.
- Multilateral and bilateral DFIs.
- SEBI registered VCFs (D) and VCFs (F).
- State Industrial Development Corporations.
- IRDA registered Insurance Companies.
- Provident Funds with minimum corpus of .25 Cr.

SEBI has mandated that QIIs cannot be allocated more than 50% of shares. These entities are not required to be registered with SEBI as QIBs. Any entities falling under the categories specified above are considered as QIBs for the purpose of participating in primary issuance process.



CONCLUSION: The Securities and Exchange Board of India (SEBI) has categorised Institutional Investors - Commercial banks, Mutual Fund Houses, Public Financial Institutions, and Foreign Portfolio Investors generally perceived to possess expertise and the financial muscle to evaluate and invest in the capital markets under clause 2.2.2B (v) of

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IREDA TO FINANCE RENEWABLE ENERGY PROJECTS IN FOREIGN CURRENCY

CONTEXT: The India Renewable Energy Development Agency (IREDA) is planning to finance Renewable Energy projects in foreign currency from Gujarat's GIFT City.

BACKGROUND: The first International Financial Service Centre (IFSC) in India has been set up at the Gujarat International Finance Tec-City (GIFT City), a multiservice Special Economic Zone (SEZ) located at Gandhinagar. The SEZ Act, 2005 allows setting up an IFSC in an SEZ or as an SEZ after approval from the Centre. The office of IREDA at GIFT City, Gandhinagar, will be classified as an overseas office, allowing the IREDA to avoid foreign exchange hedging costs.

SIGNIFICANCE: Gandhinagar can emerge as a global financial centre. The IFSC at Gandhinagar provide transborder financial products and services to customers outside the jurisdiction of the domestic economy.

SERVICES OFFERED BY IFSC

Fund-raising services for individuals, corporations and governments.

- Asset management and global portfolio diversification undertaken by pension funds, insurance companies and mutual funds.
- Wealth management.
- Global tax management and cross-border tax liability optimization.
- Global and regional corporate treasury management operations.
- Risk management operations such as insurance and reinsurance.
- Merger and acquisition activities among trans-national corporations.

CONCLUSION: The move is expected to attract foreign investments to the renewable energy sector in India. The increase in the share of the renewable energy in out domestic energy mix is expected to improve The move is expected to attract foreign investments to the renewable

INTERNATIONAL FINANCIAL SERVICES CENTRES AUTHORITY

TYPE: Statutory organisation.

STATUTE: IFSCA Act, 2019. **HEADQUARTERS**: GIFT City.

MANDATE: Develop and regulate financial products, services and institutions in the IFSC in India.

INDIA RENEWABLE ENERGY DEVELOPMENT AGENCY (IREDA)

TYPE: Specialised Non-Banking Finance Agency

CATEGORY: Mini Ratna Company

NODAL MINISTRY: Union Ministry of New and Renewable Energy (MNRE).

MANDATE: IREDA plays a key role in renewable energy project financing which gives confidence to the financial institutions/banks to lend in the sector.

- Financing Renewable energy projects.
- · Supporting green power capacity.
- Financing the setting up of solar manufacturing units

energy sector in India. The increase in the share of the renewable energy in out domestic energy mix is expected to improve The move is expected to attract foreign investments to the renewable energy sector in India. The increase in the share of the renewable energy in out domestic energy mix is expected to improve.





'TRANSFER PRICING' RULES

CONTEXT: The Department of Income Taxes (IT) conducted surveys at the New Delhi office of British Broadcasting Corporation (BBC).

"Tax avoidance practice manipulating prices of transactions or transfers of goods, services and technology between related enterprises or between unrelated parties but controlled by a common entity (Cross selling of goods and services between related legal subsidiaries (entities) within an enterprise in a manipulated manner during the asset transfers) to reduce the overall tax burden of the parent company."

- TRANSFER PRICING

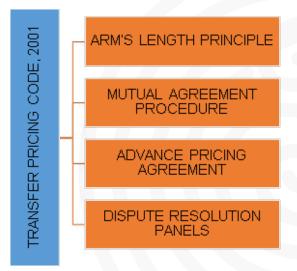
ISSUE: The Department of Income Taxes has charged BBC of "deliberate non-compliance with the transfer pricing rules" and its "vast diversion of profits" not following the "arm's length arrangement" in the allocation of profit.

MEASURES:

INCOME-TAX ACT, 1961: Codification of Transfer pricing laws in India.

TRANSFER PRICING CODE, 2001:

The Centre has introduced a Transfer Pricing Code, 2001 with pillars – Arm's Length Principle, Mutual Agreement Procedure, Advance Pricing Agreement and Dispute Resolution Panels for a non-adversarial tax regime.



ARM'S LENGTH PRINCIPLE: Transaction price of assets between related parties as if they were unrelated so that there is no conflict of interest in the transaction.

ADVANCE PRICING AGREEMENTS: Estimate and ascertain both future as well as the principal of past capital gains tax liabilities between both tax authorities and entities using appropriate transfer pricing methodologies and the Arm's Length Price of international transactions in advance between a taxpayer and the Central Tax Authority (CBDT) for a fixed period.

MULTILATERAL COOPERATION: The Centre has ratified Multilateral Competent Authority Agreement (MCAA) on Automatic Exchange of Financial Account Information (AEOI) for Transfer Pricing Documentation in Master File and Country-by-Country Reporting under the OECD Base Erosion and Profit Shifting (BEPS) Project.

FINANCE ACT, 2012: The Centre introduced the Advanced Pricing Agreement Programme to provide a predictable and non-adversarial tax regime and to reduce litigation in Indian transfer pricing arena.

CONCLUSION: The effect of transfer pricing is that the parent company tends to produce insufficient taxable income or excessive loss on a transaction.

SPECIAL RUPEE VOSTRO ACCOUNTS (SRVA)

CONTEXT: Russian Banks have opened Special Rupee Vostro Accounts (SRVA) with partner banks in India.

BACKGROUND: Currently, the international trade is settled in US Dollars, UK Pound Sterling, Eurozone Euro, Japanese Yen and Chinese Yuan. An importer needs to pay any of these globally acceptable currencies – preferably US Dollars to pay for the import of goods and services. Meanwhile, an exporter needs to convert US Dollars into their domestic currencies for use in their domestic territory.

ISSUE: The unilateral sanctions imposed by United States and European countries attract secondary sanctions upon companies engaged in trade and commerce with listed Russian entities. Many Indian entities, especially in the oil and gas sector engage trade with Russian firms upon specific sectorial waivers extended by US and European countries and are at potential risks of facing secondary sanctions.

RUPEE INTERNATIONAL TRADE SETTLEMENT REGIME - HOW IT WORKS?

VOSTRO ACCOUNT: Account maintained by a foreign bank in a domestic bank in their domestic currencies. For example, an account maintained in Indian Rupees by Sberbank (Russian Bank) in State Bank of India (Domestic Bank) is a VOSTRO ACCOUNT for Sberbank.

NOSTRO ACCOUNT: Account maintained by a domestic bank in a foreign bank in usually in currency of the foreign country. For example, an account maintained in Russian Roubles by State Bank of India (Domestic Bank) in Sberbank (Foreign Bank) is a NOSTRO ACCOUNT for State Bank of India.

SPECIAL RUPEE VOSTRO ACCOUNTS (SRVA): Account that domestic banks hold for foreign banks in the former's domestic currency, the rupee, which allows domestic banks to provide international banking services to their clients who have global banking needs without having to be physically present abroad. The SRVA serve as an additional arrangement to the existing system that uses freely convertible currencies and works as a complimentary system.



ANGEL TAX

CONTEXT: The Finance Bill, 2023 has proposed for extending the scope of payment of Angel taxes to foreign Angel Investors, previously applicable to resident Indian investors only for raising investments for Start Ups.

"High net worth individuals who invest their personal income in business start-ups or small and medium scale companies.

- ANGEL INVESTORS

TIMELINE:

2012: Levied Angel Taxes (formally known as Section 56 (2) (vii b) of the Income Tax Act, 1961) upon Angel Investors on investments in start-ups exceeding their fair market value to check money laundering practices and catch bogus start-ups.

2022: The Department of Income Taxes issued notices to over 2,000 domestic start-ups to pay dues in the Angel Taxes with penalties based on fair market value of start-ups calculated by the Assessing Officer (AO) based upon the 'cash discounted flow' method.

2023: The Finance Bill 2023 proposed an amendment to Section 56(2) VII B of the Income Tax Act, 1961 making equity investments from Angel Investors – both residents foreign investors for the issuance of shares at a price above their Face Value are treated as income for unlisted businesses like start-ups.

SIGNIFICANCE: Angel investors finance small start-ups, providing funds at early stages in exchange or convertible debt or equity ownership, where such start-ups find it difficult to obtain funds from traditional sources of finance such as banks, financial institutions, etc. Foreign investors are a key source of funding for start-ups and have played a big role in increasing the valuation. For instance, Tiger Global has invested in over a third of the start-ups that have turned unicorns. Angel investors provide mentoring to entrepreneurs as well as access to their own business networks, bringing both experience and capital to new ventures. Research shows that angel investors' supported start-ups are more likely to have substantial growth and give a higher rate of return. Angel investors often choose to get an accredited investor status (as per the SEBI AIF Regulations - an individual with a net worth of 7.5 Cr. / whose annual income is 2 Cr.).

NEW RULES:

~ Recognised an eligible start-up as registered entity with the government, incorporated for less than 10 years, and with a turnover having not exceeded 100 Cr. over that period.

- ~ Increased the exemption for start-ups from angel tax with a cumulative turnover from 25 Cr. to 100 Cr.
- ~ Fully exempted tax on investments made by Non-Resident Indians (NRIs) listed start-ups with a net worth of at least 100 Cr. or a total turnover of at least 250 Cr. with retrospective effect.
- ~ Established mechanism of e-verification to resolve the issue of establishing the identity of the investor and source of his funds that would help waive start-ups requiring any kind of scrutiny from the Income Tax Department.
- Start-ups will not be required to present the fair market value of their shares issued to certain investors including Category-I Alternative Investment Funds (AIF).

ANALYSIS:

REGUALTORY CHOLESTROL: Companies need to be registered with the government as start-ups to make use of the latest exemption. A company has to prove certain conditions such as that it hasn't invested in vehicles worth more than 10 lakh, in land unrelated to the business, or in jewellery. Such conditions, probably intended to prevent money-laundering, can lead to a lot of bureaucratic delays as well as rent-seeking.

TAX EXEMPTIONS: The exemptions for NRIs would encourage wealthy individuals to invest in start-ups. The tax exemptions with retrospective effect would relieve start-ups which received notices from the Income Tax Department in the past.

FAIR MARKET VALUE: Angel taxes levied upon market value of a start-up angel based upon 'cash discounted flow' method can choke the flow of funds necessary for bootstrapped start-ups for scaling up. Taxes due are calculated based on the sale price of unlisted shares of a start-up not openly traded in the market can infuse arbitrariness in calculating the fair value of the start-ups. The funding for India's start-ups dropped by 33% to US \$ 24 billion in 2022 as compared to the previous year (PwC India report). The proposed amendment will accelerate flipping overseas, as foreign investors may not want to deal with additional tax liability.

WINDFALL TAXES

India cuts windfall tax on crude oil from 2,100 per tonne to 1,900 per tonne. In July 2022, India imposed windfall profit taxes (higher tax rate on sudden big profits) on high abnormal profits of energy companies. The windfall taxes were levied with windfall gains made by the domestic crude producers and refiners due to high global crude and product prices.





UPI PAYMENT FOR FOREIGN TRAVELLERS TO INDIA

CONTEXT: The Reserve Bank of India (RBI) decided to permit all inbound foreign travellers to use UPI payments for their merchant payments while they are in India. Initially, the facility was limited to travellers from G20 countries arriving at select international airports.

UNIFIED PAYMENTS INTERFACE (UPI): Instant payment system developed by the National Payments Corporation of India (NPCI) built over Immediate Payment Service (IMPS) infrastructure to facilitate instant transfer of money between any two parties' bank accounts. UPI is currently the biggest among the NPCI operated systems including National Automated Clearing House (NACH), Immediate Payment Service (IMPS), Aadhaar enabled Payment System (AePS), Bharat Bill Payment System (BBPS), RuPay etc.

BHIM UPI APP: Domestic digital payment application (app) developed by NPCI in 2016 partnering with the RBI and the Indian Banks Association (IBA), Bharat Interface for Money Unified Payments Interface (BHIM UPI) App works through Unified Payments Interface (UPI), allowing financial transactions from multiple bank accounts via single mobile application.

TOP UPI apps: PhonePe, Paytm, Google Pay, Amazon Pay and BHIM

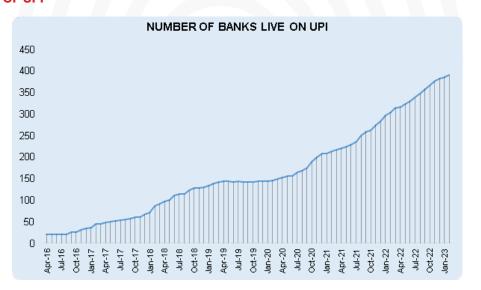
PERFORMANCE OF UPI

FEATURES AND BENEFITS OF UPI:

- ~ Payment transactions / bill payments free of cost
- ~ Payments can be made directly via Virtual Payment Address
- ~ Allow users to make across multiple bank accounts without disclosure of bank details of the payee and beneficiary.
- ~ Payment transactions / bill payments from all bank accounts using a single inter-operable BHIM UPI app.
- Payment transactions / bill payments in real-time round the clock during working and non-working hours.

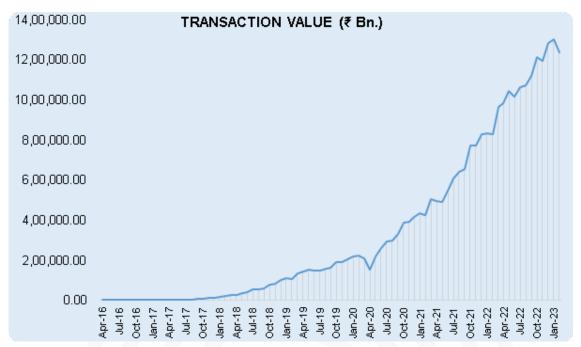
BENEFITS

- ~ Scale up the use of digital payments in India
- ~ Improve their payment experience of foreigners
- ~ Ease the payment process for foreign tourists









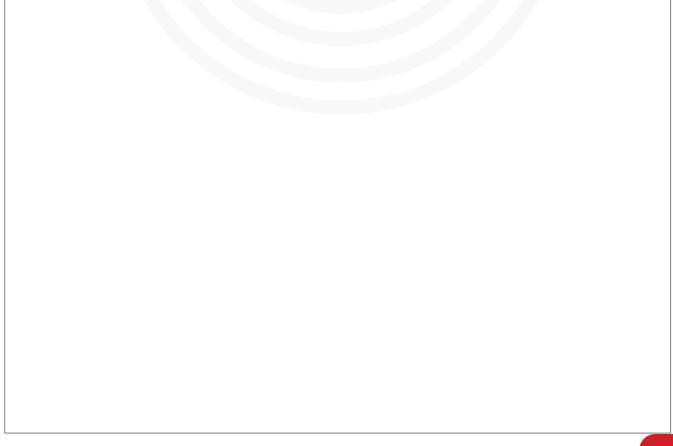
Source: UPI Product Statistics. NPCI

Data excludes the transactions having debit/credit to the same account for the month of August 2018 onwards

DIGITAL PAYMENTS UTSAV

The Union Ministry of Electronics and Information Technolgy (MEiTy) has launched the 'Digital Payments Utsav', a comprehensive campaign aimed at promoting digital payments across India to showcase India's journey of digital transformation, with a series of events and initiatives. Mission Bhashini – National Language Translation Mission and Digital Payments have come together to make UPI 123 Pay available in the local language. This will enable a common person to make payments in her local language interface through voice

SPACE FOR ROUGH WORK



ECOLOGY





MISTHI SCHEME

AMRIT DHAROHAR

PM PRANAM

YAYA TSO LAKE

RED SANDERS

IEA REPORT ON LIFE INITIATIVE OF INDIA

HYDROGEN INTERNAL COMBUSTION ENGINE (H2ICE)

SAVE WETLANDS CAMPAIGN

WETLAND EX-SITU CONSERVATION ESTABLISHMENT

SUNDARBAN TIGER RESERVE (STR)

MARINE SPATIAL PLANNING FRAMEWORK

TAMIL NADU GETS ITS FIRST BIODIVERSITY HERITAGE SITE

EUROPEAN UNION VOTES TO BAN PETROL, DIESEL CAR SALES BY 2035

THWAITES GLACIER

PANGOLIN TRAFFICKING



MISTHI SCHEME

CONTEXT: FM announces MISTHI scheme in Union Budget for mangrove plantations

BACKGROUND: Budget 2023-24 announced that mangrove plantations will be taken up along the country's coastline apart from salt pans, wherever feasible, through the convergence of the job guarantee scheme MGNREGS, the Compensatory Afforestation Fund, and other funding sources.

About Mangroves

In coastal and intertidal areas of tropical and subtropical climes, mangroves are a form of salt-tolerant plants and shrubs. In estuaries, deltas, lagoons, and other shallow coastal environments, where they normally occur, they create dense, complex ecosystems.

Mangroves are able to survive in severe coastal conditions and are vital in preventing erosion, lessening the effects of storms, and providing habitat for a range of species. By removing significant amounts of carbon dioxide from the atmosphere and storing it in their biomass and sediments, they also contribute to the global carbon cycle.

Mangroves come in more than 80 different varieties, with Southeast Asia and the Pacific Islands having the greatest variety of species. The red mangrove, black mangrove, and white mangrove are a few of the most prevalent mangrove species.

Status of Mangroves in India

Mangroves in India are spread over 4,807 square kilometers and are mainly found in the coastal states of Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, West Bengal, Andaman and Nicobar Islands, and Lakshadweep Islands.

Over the years, mangroves in India have faced various threats including deforestation, land conversion for aquaculture, and urbanization. However, in recent years, there has been a concerted effort to protect and conserve mangrove ecosystems in India.

In India, mangrove cover has reportedly increased, according to the India State of Forest Report (ISFR) 2021, which was published in December 2021. The country's mangrove cover has grown by 54 square kilometres, or

1.3%, since the previous assessment in 2019, the research claims. The total area covered by mangroves in the nation is currently 4,870 square kilometres, according to the ISFR 2021. Gujarat increased 37 square kilometres of mangroves since 2019, the state with the biggest growth in mangrove cover. With 2,403 square kilometres of mangroves, the state of Andaman and Nicobar Islands has the greatest mangrove cover in the nation.

Notwithstanding the fact that there has been an increase in mangrove cover, the research also emphasizes the need for ongoing conservation measures. According to the paper, mangroves are threatened by a number of factors, such as habitat loss brought on by coastal development, pollution, and climate change. Thus, ongoing efforts are needed to preserve and safeguard these crucial ecosystems.

Ecological Significance

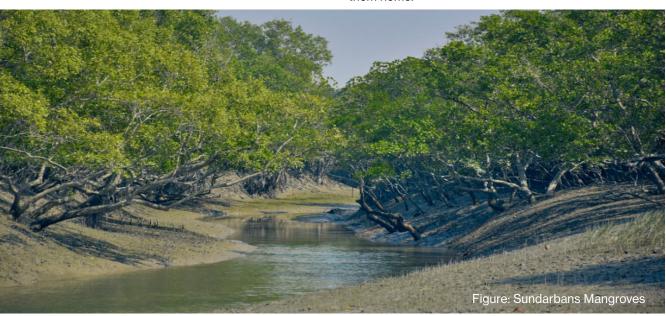
Mangroves serve as a natural Defence against storm surges and coastal erosion. Mangroves' extensive root systems capture silt, assisting in coastline stabilization and wave impact reduction.

Wildlife habitat: Mangroves are home to a wide range of animals, including birds, fish, crabs, and other invertebrates. Mangroves serve as a breeding site, a haven, and a source of food for several animal species.

Mangroves capture significant amounts of carbon dioxide from the atmosphere and store it in their biomass and sediments at high rates of carbon sequestration. By lowering the atmospheric concentration of carbon dioxide, this helps to reduce climate change.

Mangroves can filter out extra nutrients and contaminants from water, purifying it. They serve as organic water filters, keeping contaminants out of coastal waterways and safeguarding coral reefs.

Mangroves are one of the most biodiverse ecosystems on the globe, hosting a variety of plant and animal species. They are a hotspot for biodiversity. The saltwater crocodile, dugong, and numerous species of sea turtles are just a few of the rare and endangered animals that call them home.





AMRIT DHAROHAR

CONTEXT: In her budget speech, FM Nirmala Sitharaman announced multiple schemes towards protection and conservation of India's natural heritage, including mangroves and wetlands.

BACKGROUND:In her budget statement, Minister Nirmala Sitharaman unveiled programmes and policies geared towards ecological preservation. These programmes, which aim to address a variety of problems, offer to protect India's ecological stability. This is a part of a bigger "green push" that emphasises climate change and the environment. The announced plans are listed below. The importance of wetland ecosystems has already been acknowledged by the government, as evidenced by Prime Minister Narendra Modi's statement in Man ki Baat that "Today the total number of Ramsar sites in our country has climbed to 75." Before to 2014, there were just 26..."

About the Scheme

This plan will be put into action over the next three years in order to promote the best possible use of wetlands, improve biodiversity, carbon storage, ecotourism opportunities, and revenue creation for nearby people. Amrit Dharohar will place special emphasis on the value of wetlands and their preservation, with a perspective that recognises local populations as stewards of the ecosystem.

PM PRANAM

CONTEXT: In her budget speech, FM Nirmala Sitharaman announced multiple schemes towards protection and conservation of India's natural heritage, including mangroves and wetlands.

About the Scheme

The PM PRANAM initiative, which stands for the Prime Programme for Restoration, Awareness, Minister Nourishment and Amelioration of Mother Earth, aims to encourage states and union territories to promote alternative fertilisers and the moderate use of chemical fertilisers. The programme intends to finally reduce the government's subsidy burden, which is predicted to increase by 39% from last year's number of Rs 1.62 lakh crore to reach Rs 2.25 lakh crore in 2022-23.

Importance of the Scheme

When they were first used in agriculture, more than 50 years

ago, and chemical fertilisers revolutionised the industry. Yet they also carry a number of hazards, which scientists are beginning to comprehend better. They have a negative effect on groundwater as well as rivers, ponds, and lakes, and are recognised as a significant source of water pollution.

Fish and other aquatic life are doomed by eutrophication, which is brought on by overuse of chemical fertilisers. It frequently covers lakes and ponds with a thick coating of algae and lowers the oxygen level in the water. They may also degrade the soil over time, contributing to acidification and reducing the productivity of the land. Last but not least, research has linked the overuse of chemical fertilisers to an increased risk of cancer among farmers.

YAYA TSO LAKE

CONTEXT: Yaya Tso, known as birds' paradise for its beautiful lake located at an altitude of 4,820 metres, has been proposed as Ladakh's first biodiversity heritage site (BHS).

BACKGROUND: The Chumathang local panchayat, the Biodiversity Management Committee, and SECURE Himalaya Project have decided to recognise Yaya Tso as the first BHS in Ladakh under the Biological Diversity Act. The high-altitude lake and its catchment were designated as a biological heritage site after extensive negotiations between the local stakeholders and SECURE Himalaya project.

SECURE Himalaya Project

In an effort to preserve the high-altitude ecosystems and biodiversity of the Indian Himalayan Area, the Ministry of Environment, Forests, and Climate Change of the Indian Government has initiated the SECURE Himalaya project in partnership with the UNDP (IHR). Using a variety of activities, such as research, capacity building, and policy development, the project aims to boost the conservation efforts of the Himalayan ecosystems

The project's main objectives are to mitigate the effects of climate change on the area, promote sustainable livelihoods for local residents, and conserve and manage high-altitude wildlife sustainably.

The project includes Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh as the five Indian Himalayan states covered. Partnerships with numerous stakeholders, including as state governments, academic institutions, civil society organisations, and local communities, are used to implement it.

The project intends to solve a number of problems that the Himalayan region is now dealing with, including habitat loss, overgrazing, forest fires, and climate change. It aims to strengthen ecosystem resilience to climate change, encourage the use of clean energy sources, and increase local communities' capacity to manage natural resources sustainably.



- A. P. J. ABDUL KALAM



About the Lake

The stunning lake at Lake Yaya Tso, which is situated in Ladakh at an elevation of 4,820 metres, is known as a bird lover's heaven.

Many different birds and animals, including the brahminy duck, black-necked crane, and bar-headed goose, use Yaya Tso as a nesting site.

Moreover, it is one of the highest black-necked crane breeding locations in India.

Following a drive up to the nunnery and a brief mountain pass, the lake could be reached from Mahe monastery on the way to Tsomoriri Lake.



RED SANDERS

CONTEXT: UNEP-managed CITES database reveals red sanders smuggling

BACKGROUND: According to a factsheet created by TRAFFIC, a global organisation that monitors the wildlife trade, there have been 28 instances of Red Sanders being taken, seized, or specimens from the wild being transported from India, according to the CITES trade database. Between 2016 and 2020, these consignments were exported to China (53.5%), Hong Kong (25.0%), Singapore (17.8%), and the United States (3.5%). China continues to be the largest importer of the goods, purchasing more than 13,618 tonnes of them, followed by Hong Kong (5,215 tonnes), Singapore, and other countries, according to a communiqué recently released under the title "RED SANDERS: Factsheet on India's Red Sanders in illegal wildlife trade" (216 tonnes).

About Red Sandalwood

A tree species called Red Sanders, often referred as Red Sandalwood or Pterocarpus santalinus, is indigenous to the southern region of India. The tree is well recognized for its unusual reddish-purple heartwood, which has both decorative and therapeutic uses.

Red Sanders is now listed as an endangered species under the Convention on International Trade in Endangered Species (CITES) because it has been used extensively for its wood for a long period of time. Indian law protects the tree, and there are rigorous guidelines regarding its harvesting, transportation, and sale.

Furniture, musical instruments, and religious icons are just a few examples of the colourful and opulent products that are made from Red Sanders wood. Moreover, it is employed in conventional Indian medicine to cure a variety of illnesses, such as fever, inflammation, and skin problems.

Poachers and smugglers are taking advantage of the tree for its wood because of its high value and scarcity, which has led to a significant problem with the illegal trade in Red Sanders. In order to combat the illegal trade in Red Sanders, the Indian government has implemented a number of initiatives, including stepped-up enforcement measures and community involvement projects that support ethical harvesting methods.

IEA REPORT ON LIFE INITIATIVE OF INDIA

CONTEXT: The 'Lifestyle for Environment' or LiFE initiative of India for the adoption of energy-efficient behaviour can save the world \$440 billion in 2030, according to a report by International Energy Agency (IEA)

BACKGROUND: According to the research titled "LiFE lessons from India," the savings would be comparable to almost 5% of all gasoline purchases made worldwide in that year. According to IEA estimates, LiFE measures would also save consumers around the world \$440 billion in 2030 through a combination of lower consumption and lower costs.

Highlights of the report

The proactive global implementation of LiFE initiatives has the potential to significantly reduce energy consumption disparities, reduce air pollution, save money, and improve wellbeing and health.

Overall, the paper finds that advanced economies have more potential for LiFE strategies to cut emissions and streamline energy use. According to IEA modelling, rich economies will experience three to four time's larger reductions in annual per capita CO2 emissions by 2030 than developing economies.

The paper claims that India's economy already consumes 10% less energy than the average for the G20 and the world



Compared to other major economies, India required less time to transition from partial to full access to electricity.

In 2030, yearly global carbon dioxide (CO2) emissions

would be reduced by more than 2 billion tonnes (Gt) if the types of actions and initiatives proposed by LiFE were widely adopted, including behavioural changes and sustainable consumer choices.

Lifestyle for the Environment (LiFE) Movement

Prime Minister Narendra Modi of India announced the launch of the Lifestyles for Environment (LiFE) initiative, which aims to promote more environmentally responsible consumption and behaviour worldwide.

LiFE puts individual and collective duty on everyone to live a life that is in tune with Earth and does not harm it. Those who practice such a lifestyle are recognised as Pro Planet People under LiFE.

Mission LiFE Objective: To translate the vision of LiFE into measurable impact, Mission LiFE is designed with an objective to mobilise at least one billion Indians and other global citizens to take individual and collective action for protecting and conserving the environment in the period 2022-23 to 2027-28. Within India, at least 80% of all villages and urban local bodies are aimed to become environment-friendly by 2028.

As a global programme, Mission LiFE envisions three core shifts in our collective approach towards sustainability, achieved in a phased manner:

Change in Demand (Phase I): Nudging individuals across the world to practice simple yet effective environment-friendly actions in their daily lives;

Change in Supply (Phase II): Changes in large scale individual-demand is expected to gradually nudge industries and markets to respond and tailor supply & procurement as per the revised market demands;

Change in Policy (Phase III): By influencing the demand and supply dynamics of India and the world, the long-term vision of Mission LiFE is to trigger shifts in largescale industrial policy and government policy that can support both sustainable consumption and production.

HYDROGEN INTERNAL COMBUSTION ENGINE (H2ICE)

CONTEXT: Ashok Leyland & Reliance unveil India's first hydrogen-ICE truck

BACKGROUND: At the India Energy Week in Bangalore, Ashok Leyland and Reliance Industries Limited (RIL) showcased what they claim to be India's first hydrogen internal combustion engine (H2ICE) truck. Hydrogen, a renewable and clean energy source, powers the Ashok Leyland H2-ICE heavy-duty truck line (19-35 Tons). The car's overall design is comparable to that of a traditional diesel-based combustion engine, which facilitates a quicker transition to cleaner energy sources at a relatively smaller cost differential.

About the Engine

Similar to how gasoline or diesel engines function, a hydrogen internal combustion engine (HICE) is an engine that employs hydrogen as a fuel source in an internal combustion process. The key distinction is that an HICE burns hydrogen gas rather than liquid fuels, which produces water vapour instead of greenhouse gases and other harmful emissions when burned.

In an HICE, the hydrogen and air are combined before being injected into the engine cylinder, where a spark plug or compression sets it off. The energy created during combustion is used to propel the car. The primary benefit of an HICE is that it is a clean alternative to conventional gasoline or diesel engines because it generates just water vapour and no harmful pollutants. HICEs do, however, have several shortcomings. The absence of infrastructure for hydrogen fuelling stations, which restricts their adoption, is one of the main problems. In addition, generating hydrogen can be energy-intensive and need a lot of electricity or fossil fuels. Hydrogen is also challenging to store and transport.

Notwithstanding these difficulties, HICEs are being created and put through testing as a replacement for conventional gasoline and diesel engines, especially for heavy-duty vehicles like trucks and buses. For hybrid electric vehicles, HICEs are also being developed as range extenders since they can supply extra power when the battery is running low.

SAVE WETLANDS CAMPAIGN

CONTEXT: Union Minister for Environment, Forest and Climate Change launched the 'Save Wetlands Campaign' in the presence of Chief Minister of Goa.

BACKGROUND: This programme is designed around a "whole of society" approach to wetlands conservation, allowing positive wetlands conservation acts at all levels of society and incorporating all social classes. Throughout the course of the following year, this campaign will involve raising awareness of the importance of wetlands, expanding the reach of wetland mitras, and forming citizen partnerships for wetlands conservation.

Wetland

Land that is continually or occasionally saturated with water is known as a wetland. This type of environment supports a wide variety of plant and animal species. Swamps, marshes, bogs, and fens are examples of wetlands, as are mangroves, estuaries, and tidal flats, which are coastal wetlands.



Wetlands are significant ecosystems that offer several ecological, financial, and social advantages. By the filtration of contaminants and excess nutrients from runoff, they assist in controlling water flow and enhancing water quality. In addition, they serve as habitat for a variety of terrestrial and aquatic animals, including migrating birds and threatened species. Moreover, wetlands can offer chances for outdoor activities including hunting, fishing, and birdwatching.

SIGNIFICANCE

Biodiversity: Many of the plant and animal species that can be found only in wetlands can be found there. They serve as habitat for numerous species of resident and migratory birds, as well as amphibians, reptiles, and mammals.

Wetlands aid in the regulation of water flow in river basins, lowering the likelihood of floods and droughts. They serve as organic sponges, storing and gradually releasing water to help keep the supply steady.

Water purification: By filtering contaminants and extra nutrients from runoff, wetlands contribute to higher water quality. In agricultural areas, where excessive fertilisers and pesticides can contaminate neighbouring water sources, this is especially crucial.

Wetlands regulate the climate by storing a significant quantity of carbon in their soils and vegetation, which is an important part of the global carbon cycle. By releasing methane, a potent greenhouse gas, into the atmosphere at a slower pace than it is created, they also assist in regulating the climate of the planet.

Wetlands offer chances for sports like fishing, hunting, birdwatching, and boating. They also have considerable cultural and recreational value. For numerous indigenous peoples, they also hold significant cultural and spiritual value.

About World Wetlands Day

World Wetlands Day is observed on 2nd February every year worldwide to commemorate the signing of the Ramsar Convention on Wetlands of International Importance in 1971.

India is a party to the Convention since 1982 and has so far declared 75 wetlands as Ramsar sites covering 23 states and Union Territories.

The 2023 theme for World Wetlands Day is 'Wetland Restoration' which highlights the urgent need to prioritize wetland restoration.

It is a call on an entire generation to take proactive action for wetlands, by investing financial, human and political capital to save the wetlands from disappearing and to revive and restore those that have been degraded.

WETLAND EX-SITU CONSERVATION ESTABLISHMENT

CONTEXT: Rajasthan plans zoo for dolphins, rhinos inside Bharatpur sanctuary

BACKGROUND: The Keoladeo National Park, a World Heritage Site also known as the Bharatpur bird sanctuary, is where the Rajasthan state Forest Department has proposed building a zoo to house a variety of wetland species, including as rhinoceros, water buffalo, crocodiles, dolphins, and exotic species.

Bharatpur Bird Sanctuary

A well-known bird sanctuary in Rajasthan, India is the Bharatpur Bird Sanctuary, often referred to as Keoladeo National Park.

It was established as a national park in 1982, and in 1985 it received the UNESCO World Heritage designation.

The sanctuary's 29 square kilometre footprint is made up of wetlands, marshes, and grasslands. More than 370 different bird species, both migratory and resident, call it home.

The refuge is renowned for having a high population of water birds, including cranes, pelicans, ducks, and geese.

According to the Detailed Project Report (DPR) of the Rajasthan Forestry and Biodiversity Development Project (RFBDP), the goal of this zoo, known as Wetland ex-situ Conservation Establishment (WESCE), is to revitalise the bio-diversity of Keoladeo National Park, thereby boosting its exceptional universal values.



SUNDARBAN TIGER RESERVE (STR)

CONTEXT: The first-ever festival was organised by the Sundarban Tiger Reserve (STR) division of West Bengal Forest Department

BACKGROUND: The first-ever festival was organised by the Sundarban Tiger Reserve (STR) division of West Bengal Forest Department, where six teams visited different areas inside the Sundarban Biosphere Reserve. The species recorded during the Bird Festival included 78 forest birds

and 42 species of waders, raptors etc. The two-day exercise which ended on Friday also recorded 12 species of raptors, six species of waterfowl and seven other bird species.

WE AIM TO INSPIRE



SUNDARBANS TIGER RESERVE

In the Sundarbans delta in the Indian state of West Bengal, there is a protected area known as the Sundarbans Tiger Reserve. The greatest number of Bengal tigers in the world may be found in the Sundarbans, a massive mangrove forest that straddles Bangladesh and both India.

In 1973, the Sundarbans Tiger Reserve was formed as a refuge for animals, and in 1984 it was made a national park. Its distinctive and delicate environment, which sustains a variety of plants and fauna, led to its designation as a UNESCO World Heritage Site in 2004.

The Sundarbans Tiger Reserve covers an area of approximately 2,585 square kilometers, and is part of the larger Sundarbans Biosphere Reserve. In addition to the Bengal tiger, the reserve is also home to other endangered species such as the saltwater crocodile, Indian python, and the king cobra.

Protection Status

National Park: The Sundarbans Tiger Reserve was declared a national park in 1984. As a national park, the reserve is protected by law and is managed by the government of West Bengal.

Wildlife Sanctuary: The Sundarbans Wildlife Sanctuary was established in 1977 as a protected area for the conservation of its unique flora and fauna.

Biosphere Reserve: The Sundarbans is a designated UNESCO Biosphere Reserve, which recognizes its unique ecological value and promotes sustainable development in the region.

Ramsar Site: The Sundarbans was designated a Ramsar Site in 2019, recognizing the importance of the wetlands in the delta and the critical role they play in maintaining the region's biodiversity.



MARINE SPATIAL PLANNING FRAMEWORK

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Marine Spatial Planning (MSP)

MSP is a "public process of assessing and assigning the spatial and temporal distribution of human activities in marine areas to fulfil ecological, economic, and social objectives that typically have been set through a political process," according to UNESCO. Ecosystem-based, area-based, integrated, adaptable, strategic, and participatory are traits of marine spatial planning.



An MSP framework typically involves a number of steps, including:

Data gathering and analysis are required in order to identify current and future uses of the marine environment as well as data on the physical, ecological, and socioeconomic aspects of the ocean and coastal areas.

Stakeholder engagement: Working with a variety of stakeholders, such as government organisations, business, non-governmental organizations, and local communities, is a critical component of MSP because it ensures that the needs and interests of all stakeholders are taken into account during the planning process.

An MSP framework often entails mapping and zoning of the maritime environment to identify areas where multiple uses can coexist and places that are best suited for particular activities. This is done based on the data gathered and stakeholder input.

Making decisions and managing plans: Once a plan is created, it needs to be put into action and monitored. This entails establishing choices on the distribution of marine resources, keeping tabs on and assessing the plan's efficacy, and revising the plan as necessary in response to shifting circumstances and new data.

Importance in India

India's marine resources are essential for the country's

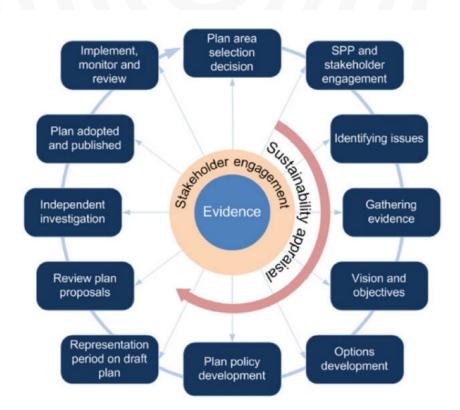
economic development, with sectors including fishing, shipping, oil and gas exploration, and tourism making major contributions to the national economy. MSP can aid in ensuring that these areas are developed in a way that is socially and environmentally appropriate.

Conservation of biodiversity: A wide variety of plant and animal species, many of which are unique to India's marine environment, can be found there. MSP can assist in identifying locations that are essential for the survival of these species and can help make sure that these habitats are safeguarded from any harm.

Climate change adaptation: India's coastal communities are especially susceptible to the effects of climate change, such as rising sea levels, storm surges, and acidity of the oceans. MSP can assist in identifying places that are vulnerable to these effects and can make sure that planning and management of development activities account for these risks.

Regulatory certainty: MSP can offer a transparent and explicit framework for managing conflicting uses of the maritime environment, minimising ambiguity and conflict between various stakeholders.

International obligations: India is a party to several international accords, such as the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea, which demand that the nation safeguard and conserve its maritime resources.



How a marine plan is made: Marine planning process



TAMIL NADU GETS ITS FIRST BIODIVERSITY HERITAGE SITE

CONTEXT: The Tamil Nadu Government issued a notification declaring Arittapatti and Meenakshipuram villages in Madurai district the first biodiversity heritage site in the State.

Significance

The site is the first Biodiversity Heritage Site (BHS) in the state and is located on a 193.21 hectare parcel of land.

Over 72 lakes, 200 natural spring pools, and three check dams are supported by a chain of seven barren granite hillocks that surround and protect Arittapatti village.

One of these is the Anaikondan lake, which was constructed in the 16th century under the Pandiya dynasty.

Around 250 bird species, including the Laggar Falcon (Falco jugger), Shaheen Falcon (Falco peregrinus), and Bonelli's Eagle (Aquila fasciata), as well as wildlife like the Indian Pangolin (Manis crassicaudata), Python (Python molurus), and Slender Loris, make up the village's rich biological and historical significance (Loris spp).

EUROPEAN UNION VOTES TO BAN PETROL, DIESEL CAR SALES BY 2035

CONTEXT: The European Parliament voted to approve a ban on new sales of carbon-emitting petrol and diesel cars by 2035, clearing the final legislative hurdle.

BACKGROUND: Despite resistance from conservative MEPs, the largest party in the parliament, EU member states have previously approved the legislation and will now formally nod it into law. The bill's proponents had maintained that it would provide European automakers a specific deadline by which to transfer manufacturing over to electric vehicles with zero emissions. Opponents, however, countered that the industry is not prepared for such a sharp reduction in internal combustion engine car manufacturing, and that hundreds of thousands of jobs are at jeopardy.

Impact over the world economy

The impact of the ban on petrol and diesel cars in Europe on the world economy is likely to be complex and multifaceted, with both positive and negative effects on various industries and regions. Here are some potential impacts:

Favorable effects

Demand for electric vehicles (EVs) and related technologies will likely increase as a result of the prohibition. This might spur development and investment in EV-related technologies like battery storage and charging infrastructure.

Reducing carbon emissions: Being one of the main contributors to the world's greenhouse gas emissions, the transportation sector, the prohibition represents a significant step towards lowering carbon emissions. The worst effects of climate change might be lessened as a result, which would eventually benefit the world economy.

New work opportunities: The transition to EVs and the corresponding infrastructure may lead to the creation of new jobs in a variety of industries, including manufacturing, technology research, and maintenance.

Adverse effects

Disruption to the traditional auto business: The traditional auto industry may find it difficult to adjust to the switch to EVs as a result of the prohibition. In some areas, this can result in job losses and economic difficulties.

Possible difficulties in the supply chain the transition to EVs will necessitate new supply chains for parts like

batteries and electric motors, which may disrupt particular businesses and geographical areas.

Increasing need for minerals and metals: The manufacture of EVs necessitates large quantities of minerals and metals, frequently imported from developing nations, such as lithium and cobalt. Environmental effect and difficulties to the sustainability of the supply chain could result from this.

Will India affect the ban of petrol and diesel cars in Europe?

Because the European Union (EU) legislators and member states are primarily responsible for this policy choice, India is unlikely to have a direct impact on the ban on gasoline and diesel vehicles in Europe. Yet, a number of factors, such as the following, could have an indirect impact on this prohibition:

Market demand: The demand for electric vehicles in India is rising quickly. India has one of the largest and fastest-growing automotive markets in the world. More automakers may prioritize EV development and production for European countries, where EV adoption rates are already high, as they increase their EV options to satisfy demand in India and other growing markets.

India has made a commitment to reduce its greenhouse gas emissions and is a signatory to the Paris Agreement. India's attempts to decrease its carbon footprint could encourage other nations and areas to follow suit, particularly by enacting restrictions on gasoline and diesel vehicle use. India is a significant player in the global economy.

Technical advancement: India's investments in the research and development of cutting-edge transportation technology could support the worldwide movement towards more environmentally friendly and sustainable modes of transportation. In turn, this might encourage the creation and use of EVs across Europe and other parts of the world.

Thus, even if India's efforts to lower emissions and encourage the adoption of EVs may not directly influence Europe's ban on gasoline and diesel vehicles, they may nonetheless indirectly influence the worldwide movement towards greener transportation.



INDIA'S LARGEST ONLINE IAS COACHING ACADEMY



THWAITES GLACIER

CONTEXT: According to new research, the "Doomsday Glacier" in Antarctica, so named because its collapse could result in a catastrophic rise in sea level, is melting quickly and in unexpected ways.

BACKGROUND: While the rate of melting beneath much of the ice shelf is slower than previously believed, deep fissures and "staircase" forms in the ice are melting significantly faster, according to two studies that were published in the journal Nature. It contributes around 4% of the annual rise in sea level by releasing billions of tonnes of ice into the ocean each year. Because a bigger portion of ice is exposed to relatively warm ocean water, melting occurs more quickly at the glacier's junction with the seafloor, which has receded nearly nine miles (14 kilometres) since the late 1990s.

Thwaites Glacier

One of the glaciers in the world that is now melting the fastest is the Thwaites Glacier, a sizable glacier in West Antarctica. Due to worries about how it can affect the rise of the seas worldwide, the glacier, which is about the size of the state of Florida, is occasionally referred to as the "Doomsday Glacier."

Due to warming ocean currents that are melting the glacier

The glacier is becoming more unstable and prone to collapsing as a result of this. According to scientists, if the entire Thwaites Glacier melted, the global sea level would rise by more than 1.2 metres, which would have a substantial effect on coastal areas all over the world. Scientists and researchers from all over the world are studying the Thwaites Glacier to better understand its behaviour and to create more precise models for projecting its future due to the potential effects of a collapse of the glacier. The International Thwaites Glacier Collaboration (ITGC), a collaboration between various nations to investigate the glacier and its surroundings, is one of many significant research projects that have been initiated in recent years.

In addition to raising concerns about sea level rise, the Thwaites Glacier's demise may also have a substantial effect on global climate and ocean currents. For instance, the enormous inflow of freshwater from the melting glacier may disturb ocean currents, which may then affect global weather patterns.

PANGOLIN TRAFFICKING

CONTEXT: Over 1,000 pangolins poached and trafficked in India between 2018 and 2022

BACKGROUND: A data sheet revealing that 1,203 pangolins were discovered in the illicit wildlife trade in India from 2018 to 2022 was released on the eve of International Pangolin Day, which is commemorated on February 18. The organisation, which works on the worldwide trafficking of animals and plants, is a non-profit. Pangolins and their derivatives have been taken in up to 24 States and one

Union Territory. The most cases were reported from Odisha, when 154 pangolins were taken in 74 seizures. Maharashtra came next with 135 pangolins in 47 seizure occurrences. The article, "India's Pangolins Buried in Illegal Wildlife Traffic," has documented a total of 342 incidences throughout this time. Moreover, eight instances of online trade were noted.

INDIAN PANGOLINS

The Indian pangolin (Manis crassicaudata) is a species of pangolin native to the Indian subcontinent.

They are one of eight species of pangolin found around the world and are the only species of pangolin found in India.

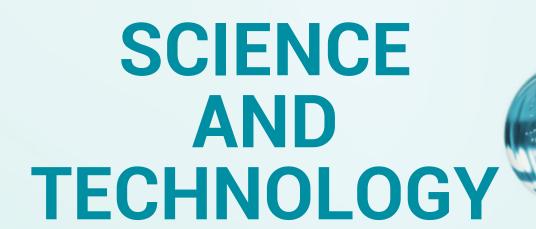
Protection Status

IUCN Red List: Endangered

Schedule 1, Part I of the Wildlife (Protection) Act, 1972.











INITIATIVE ON CRITICAL AND
EMERGING TECHNOLOGY (ICET)
ISRO REPORT ON SSLV MISSION
FAILURE

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LIQUID WINDOW

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AMORPHOUS ICE

CAR T-CELL THERAPY

QUAD CYBER CHALLENGE

SATELLITE-BASED TWO-WAY CAPABLE MESSAGING SOLUTION

INDIA'S FIRST SEMICONDUCTOR
PLANT



INITIATIVE ON CRITICAL AND EMERGING TECHNOLOGY (ICET)

CONTEXT: United States and India Elevate Strategic Partnership with the initiative on Critical and Emerging Technology (iCET).

BACKGROUND: The U.S.-India initiative on Critical and Emerging Technologies (iCET), which was unveiled by President Biden and Prime Minister Modi, aims to advance and broaden strategic technology partnerships and defense industrial cooperation between our two governments, companies, and academic institutions.

The United States and India believe that our shared democratic ideals and respect for all human rights should guide how technology is invented, developed, managed, and used. Both countries are dedicated to developing an open, approachable, secure, and confidence-based digital environment that will support our democratic institutions and ideals.

Regarding Initiative

In accordance with a White House fact sheet, the two leaders feel that as democracies with similar values and a respect for human rights, India and the United States should influence how "technology is designed, developed, governed, and used" in order to promote "an open, accessible, and secure technology ecosystem, based on mutual trust and confidence, that will reinforce our democratic values and democratic institutions."

Defense, semiconductor supply chains, space, and STEM are some of the important technology fields mentioned by the project (science, technology, engineering, and math). Also, the effort targeted fields including biotechnology, sophisticated materials, and technologies for processing rare earths. Via expos, hackathons, and pitch sessions, there is a focus on ways to participate in co-development and co-production while highlighting the significance of "innovation bridges" in the important technological sectors.

In order to optimise the advantages for both nations, legislative obstacles as well as business and talent mobility difficulties can be resolved through the iCET. Strengthening the innovation ecosystems in both India and the US was selected as a key area to work on in order to

make all of this possible.

India- US initiative to promote technology

The India-US initiative to promote technology is a bilateral partnership aimed at promoting collaboration between the two countries in the field of technology. The initiative is driven by the belief that both India and the United States can benefit from sharing expertise, resources, and knowledge to address shared challenges and create new opportunities in the technology sector.

The programme covers a number of crucial topics, including:

- Digital Infrastructure: To support the expansion of the digital economy in both nations, the initiative works to advance the development of digital infrastructure, such as broadband access, data centres, and cloud services.
- Artificial intelligence (AI): The programme hopes to encourage cooperation between Indian and American researchers, businesspeople, and industry leaders in the creation of AI technologies and applications.
- Cybersecurity: The project intends to improve the two nations' cybersecurity collaboration, including the sharing of information, technology, and best practices.
- Collaboration between Indian and American educational institutions is encouraged as part of the endeavor to acquire the skills necessary to support the expansion of the technology sector.
- Entrepreneurship: The project intends to encourage entrepreneurship and innovation by giving Indian and American firms access to funding, mentorship, and other resources.

The India-US technology promotion programme is viewed as an important step towards deepening the strategic cooperation between the two nations and maximizing the potential for shared economic and social benefits.

Keywords: India-US Technology Partnership, Information and Communication Technology, Critical and Emerging Technology (iCET)

ISRO REPORT ON SSLV MISSION FAILURE

CONTEXT: The Indian Space Research Organisation (ISRO) released the failure analysis report of the Small Satellite Launch Vehicle (SSLV-D1), which failed during its maiden launch in August last year.

BACKGROUND: The newly built Small Satellite Launch Vehicle (SSLV) failed to launch satellites into orbit during its inaugural flight, and the Indian Space Research Organisation (ISRO) has now officially explained what went wrong. On August 7, 2022, from Sriharikota, the launch vehicle, which was made public to serve the enormous small satellite launch industry, placed the satellite into an unstable orbit shortly after launch. As it is ready to launch the second demonstration mission of its brand-new launch vehicle, the Indian space agency has now made public the findings of the study into the loss of the first mission.

HIGHLIGHTS: The ISRO claims that a brief vibration disturbance on the Equipment Bay (EB) deck during the second stage separation was the root cause of the anomaly. A thorough examination of the flight's events and observations – including those related to the countdown, liftoff, propulsion performance, stage separations, and

satellite injection—showed that the Inertial Navigation System was affected by a brief vibration disturbance on the Equipment Bay deck during the second stage separation, which led the Fault Detection & Isolation software to declare the sensors to be faulty.

According to the assessment, even though the salvage mode was started with the intention of rescuing the mission, it was unable to place the satellites in a secure orbit. Change in separation system, dynamic characterization and design modification of structures, use of NaVIC data, and use of Velocity Trimming Module (VTM) in loop for salvage mode are only a few of the corrective steps suggested by the failure analysis study.

SLV is a promising addition to ISRO's launch vehicle fleet, providing a dedicated launch platform for small satellites and supporting India's growing space industry.



SSLV'S SECOND DEVELOPMENTAL FLIGHT

CONTEXT: ISRO successfully launches SSLV's second developmental flight with three satellites from Sriharikota

BACKGROUND: Three satellites were successfully launched by the Indian Space Research Organization (ISRO) on its second SSLV-D2 developmental flight and placed in a precise orbit. The three satellites are the Janus-1 from US Company Antaris, the EOS 07 Earth Observation Satellite from ISRO, and the AzaadiSAT-2 from Chennai-based SpaceKidz.

SMALL SATELLITE LAUNCH VEHICLE OF ISRO

Objective: Provide a dedicated launch platform for small satellites.

Payload Capacity: Up to 500 kg to Low Earth Orbits (LEO), making it an ideal launch vehicle for small satellites.

Working mode: Three-stage rocket, with the first stage being a solid rocket motor and the second and third stages being liquid-fueled engines.

Dimension: Length of about 34 meters and a diameter of 2.8 meters.

Significance: Cost-effective launch vehicle, with a modular design that allows for quick turnaround times between launches.

Keywords: Small Satellite Launch Vehicle, Space Technology, Cost-effective launch vehicle

LIQUID WINDOW

CONTEXT: One of Singapore's top engineering research institutions, Nanyang Technological University, has created a special liquid window screen that can block sunlight to control solar transmission into a space.

BACKGROUND: In a recent study, researchers in Singapore created a "smart" liquid window panel that they claim can significantly save energy costs by lowering the demand for air conditioning. Specifically created liquid window panels can be installed in homes and offices to assist minimise power usage as well as to be "smart" enough to control internal temperatures dependent on the weather outside without the use of a gadget.

SIGNIFICANCE: The panel can manage indoor temperature while simultaneously storing thermal heat from sunshine and afterwards releasing it gradually. This window can significantly reduce a building's need for electricity, especially in large office buildings. This liquid window panel not only offers energy efficiency, but also a soundproof atmosphere. According to the study, "smart" liquid windows can save up to 45% of the energy used for heating, ventilation, and air conditioning in buildings when compared to conventional glass windows. This "smart window" not only uses less electricity, but it is also expected to be 30% more energy efficient than commercially available glass and costs less to produce.

Importance: Energy-efficient windows for buildings

While they aid in lowering energy expenditures and consumption, energy-efficient windows are a crucial element of sustainable building design. A considerable percentage of the world's energy is consumed by buildings, and up to 40% of the energy loss from buildings can be attributed to windows.

Windows can be made to be more energy-efficient in a number of ways. Use of double- or triple-glazed windows, which have two or three glass panes separated by an air gap or inert gas, is one strategy. Better insulation and less heat transfer via the windows are the results of

this. By reflecting infrared radiation back into the space, low-emissivity (low-e) coatings can also be put to the glass to further improve insulation.

Several criteria, such as the U-factor, Solar Heat Gain Coefficient (SHGC), and Visible Transmittance, are used to assess the energy efficiency of windows (VT). A lower U-factor indicates better insulation as it evaluates the rate of heat transmission through the window. Lower values of the SHGC indicate less heat gain. It measures the quantity of solar radiation that enters the room through the window. Higher values indicate more natural light. The VT measures the quantity of visible light that passes through the window. Windows that save energy are a crucial component of environmentally friendly building design. Buildings can dramatically minimize energy consumption and expenses by adopting low-e coatings, low-conductivity frames, and double- or triple-glazed windows.

Keywords: Energy Efficiency, Liquid window technology, Smart Windows



Talk to yourself once in a day, otherwise you may miss meeting an intelligent person in this world

- SWAMI VIVEKANANDA



VIHANGAM DRONE TECHNOLOGY

CONTEXT: Mahanadi Coalfields Limited (MCL) has launched a web portal called VIHANGAM coupled with a drone and ground control system to introduce drone technology in coal mines.

BACKGROUND: The leading CPSE within the Ministry of Coal, Mahanadi Coalfields Ltd (MCL), has launched a webbased platform called VIHANGAM combined with a drone and ground control system to introduce drone technology in coal mines. Via a dedicated 40 Mbps internet lease line close to the mines, the portal enables an authorised user to access real-time drone video from the mine.

HIGHLIGHTS: The drone is flown by a control station, and the system is controllable through the portal from any location. The Talcher Coalfields' Bhubaneswari and Lingraj opencast mines are now hosting this trial project. In order to digitalize the mining process, MCL uses drone technology for environmental monitoring, volume measurement, and mine photogrammetric mapping. The apparatus can sprinkle water up to a distance of 70 metres. On a 28 kiloliter water tanker, the nozzle – also known as a swivel

nozzle – is mounted.

Mahanadi Coalfield

The coalfield is a large coal mining area located in the central-eastern state of Odisha in India.

The coalfield covers an area of approximately 1,737 square kilometers and contains estimated coal reserves of over 16 billion tonnes.

The majority of the coal in the Mahanadi coalfield is bituminous, a high-quality coal that is frequently utilised for steel manufacture, power generation, and other industrial uses.

The Talcher coalfield, the largest coalfield in the region, is one of the mines in the coalfield from which the coal is extracted.

MAHANADI COALFIELDS LIMITED (MCL)

The company is a subsidiary of Coal India Limited, which is the largest coal mining company in the world.

MCL is located in the eastern state of Odisha in India and operates several coal mines in the Mahanadi coalfields region.

MCL was established in 1992 with the goal of mining and producing high-quality coal to meet the energy needs of India.

The company is responsible for the extraction of coal from various mines, including the Talcher coalfield, which is one of the largest coalfields in India.

MCL produces a wide range of coal products, including steam coal, metallurgical coal, and low ash metallurgical (LAM) coal, which are used in various industries such as power generation, steel production, and cement manufacturing.

Significance of Drone Use in Coal Mining Area

Drones can be used for exploration and mapping purposes to produce 3D maps and models of the coal mining region, which can give important details on the topography, geology, and other elements of the region. This can assist mining businesses in finding potential mining sites and better organizing their operations.

Environmental monitoring: Drones can be fitted with sensors to keep an eye on the area's wildlife populations, air and water quality, and other environmental factors. By doing this, mining companies can reduce their environmental

impact and meet regulatory standards.

Drones can be used to inspect mining infrastructure, structures, and equipment in order to identify potential safety issues and take preventative measures before accidents happen.

Management of stockpiles: By using drones to precisely measure and map coal stockpiles, mining companies may improve their inventory control and cut waste.

Drones can dramatically increase operational effectiveness, safety, and environmental sustainability in coal mining locations. Drones can assist mining businesses in making educated decisions and reducing their environmental effect by delivering real-time data and imagery. Drone use can also decrease the need for human labour in risky regions, enhancing worker safety and cutting expenses.



VOICE DEEPFAKES

CONTEXT:: Many users of the social networking site 4chan created voice deepfakes of well-known people like Emma Watson, Joe Rogan, and Ben Shapiro using the "speech synthesis" and "voice cloning" services of ElevenLabs.

BACKGROUND: Many users of the social networking site 4chan created voice deepfakes of well-known people like Emma Watson, Joe Rogan, and Ben Shapiro using the "speech synthesis" and "voice cloning" services of ElevenLabs. These deepfake audios contained racial, aggressive, and hateful remarks. Creating deepfake voices to imitate people without their permission is a big concern with potentially disastrous results. ElevenLabs tweeted in response to this misuse of their software, saying, "Although

we see our tech being applied to positive use in a vast majority of cases, we also notice a rising number of voice cloning misuse cases."

CONCEPT: A deepfake voice is one that closely resembles the voice of an actual person. The voice can faithfully reproduce the target person's accent, cadence, tone, and other distinctive features. Such voice clones or synthetic voices are created using Al and powerful computational



power. According to Speechify, a text-to-speech conversion tool, it can often take weeks to create such voices.

High-end PCs with potent graphics cards that make use of cloud computing are required to create deepfakes. Rendering might take hours, days, or even weeks, depending on the procedure; it can be sped up by using powerful processing resources. In addition to specialised equipment and software, training data must be provided to AI models in order to produce deepfakes. Original recordings of the target person's voice frequently make up this data. This information can be used by AI to create a voice that sounds real and can say anything.

Dangers associated with voice use deepfakes

Voice deepfakes can be used to produce convincing fake audio recordings of prominent people, politicians, or celebrities expressing things they did not actually say, which can lead to misinformation and disinformation. This could be used to propagate false or misleading information, thus confusing the public or even swaying public opinion.

Scams and fraud: Vocal deepfakes can be used to pass for someone else in order to acquire private information, swindle people or organisations, or both. For instance, con artists could imitate a bank representative using speech deepfakes to get consumers' sensitive banking information.

Extortion: Criminals could imitate a person by using speech deepfakes to place them in compromising situations, including when they're indulging in illegal acts, and then use the fake audio recording to blackmail the target.

Legal issues: Vocal deepfakes may be used as evidence in court, resulting in erroneous allegations or decisions. Also, it may be challenging to distinguish between real and fraudulent audio evidence, which may undermine the legitimacy of court proceedings.

Violations of privacy: The production and dissemination of vocal deepfakes might jeopardise a person's reputation or employment.

Ways to detect voice deepfakes

Detecting voice deepfakes can be challenging because they can be highly convincing and difficult to distinguish from real audio recordings. However, there are some techniques and tools that can be used to detect voice deepfakes, including:

Analysis of the spectrum: Spectrograms can show hidden patterns and irregularities in audio recordings that might point to a fake. Software such as Sonic Visualizer and Audacity can be used to analyse spectrograms.

Speaker verification technology can be used to check whether the voice in an audio recording is the voice of the intended speaker. Biometric authentication methods, including voice-based user authentication, frequently employ this technique.

Artificial intelligence-based detection: By examining the patterns and discrepancies in the audio recordings, machine learning models can be trained to recognise voice deepfakes. Machine learning is used by a number of tools and platforms, like Sensity's Deeptrace and Google's Assembler, to identify deepfakes.

The process of putting a distinctive identifier into an audio recording is known as audio watermarking. This can be used to check the recording's veracity and determine whether it has been changed or manipulated.

Human expertise: Human experts can use their knowledge and experience to spot minute discrepancies in audio recordings that might be signs of a deepfake, such as forensic audio analyzers.

It's important to note that no single technique can detect all voice deepfakes with 100% accuracy, and a combination of these techniques may be needed to increase the chances of detection.

Voice deepfaking technology, while useful for those with speech problems or in the entertainment sector, can also be abused to fabricate audio recordings of persons saying things they did not actually say. A mix of these strategies may be required to increase the likelihood of detection because no single methodology can reliably identify all speech deepfakes.



Keywords: Voice deepfaking technology, Cyber Security, Individual Privacy

AMORPHOUS ICE

CONTEXT: Scientists have created a new type of ice that matches the density and structure of water, perhaps opening a door to studying water's mysterious properties.

BACKGROUND: A new kind of ice that closely resembles the density and structure of water has been developed by scientists. The version, which has never been seen before, was made by the team behind it, led by Alexander Rosu-Finsen at University College London (UCL), by shaking ordinary ice in a tiny container with centimeter-wide stainless-steel balls at temperatures of (-) 200 °C. The metal balls were adhered to by a white granular powder that resembled ice.

AMORPHOUS SUBSTANCES:

The absence of a long-range organised structure, or the absence of a regular arrangement of atoms or molecules, distinguishes amorphous materials from crystalline ones.

They have a disorganised, haphazard arrangement of particles instead.

Amorphous materials include things like glass, rubber, and some plastics. These substances frequently possess a variety of physical qualities, including low melting points, high ductility, and the capacity to be shaped into intricate shapes.

A melt or vapour is often rapidly cooled to create amorphous substances because this inhibits the particles from forming a regular structure. Amorphous materials are more vulnerable to changes in temperature, pressure, or other external variables because they lack long-range order, which can lead to structural alterations and changes



in their properties. Amorphous materials are used in a variety of industrial processes, such as the creation of optical fibres, solar cells, and medication delivery devices. For researchers and engineers dealing with these materials, their chaotic structure can also make them challenging to understand and regulate.

Expected applications of amorphous ice

Amorphous ice has been utilised in cryopreservation to



protect biological tissues and cells, including organs, embryos, and vaccinations. It is beneficial because it can stop the ice crystals from forming, which could harm the cells during the freezing and thawing process.

Food preservation: The food sector may be able to use amorphous ice to keep food fresh. It can assist in keeping ice crystals from forming during the freezing process and preserving the food's flavour and texture.

Drug delivery methods, such as inhalers, creams, and injectables, can use amorphous ice as a carrier for the drugs. It can boost the drug's stability while being stored and transported and shield it from deterioration.

Water purification: Amorphous ice can be used to clean water by filtering out contaminants. It can freeze contaminants to capture and separate them, making it simple to filter them out.

Materials science: Amorphous ice has applications in materials research, particularly as a model system for investigating the behaviour of water at low temperatures and high pressures. In the creation of novel materials like supercapacitors and hydrogen storage materials, it can also be utilised.

Keywords: Amorphous Ice, Amorphous substances, Chemistry in daily life

CAR T-CELL THERAPY

CONTEXT: Global data on the efficacy of CAR T-cell therapy for cancer looks very good: Dr Siddhartha Mukherjee

BACKGROUND: Physician and cancer researcher Dr. Siddhartha Mukherjee is the author of numerous highly acclaimed books, including The Emperor of All Maladies: A Biography of Cancer (2010), which won the Pulitzer Prize. In this book, he humanised the public discourse on cancer and provided an intriguing look into the future of cancer treatments, giving those trying to understand the illness hope and clarity.

CAR T-cells & Therapy

Immune cells that have been genetically altered to target and combat cancer cells are known as CAR T-cells, or chimeric antigen receptor T-cells. Using a patient's T-cells (a kind of white blood cell), which are engineered to create chimeric antigen receptors (CARs), then reinfusing them back into the patient's body to target cancer cells, is known as CAR T-cell therapy.

The CARs on the CAR T-cells' surfaces are made to identify particular proteins, or antigens, that are found on the surface of cancer cells. The CARs on a CAR T-surface cell's bind to the antigens on the cancer cell when it comes into contact with it, causing the CAR T-cell to release toxins that kill the cancer cell.

CAR T-cell therapy has been particularly effective in treating certain types of blood cancers, such as leukemia and lymphoma, that have few effective treatment options. It has also shown promise in treating some solid tumors, although further research is needed in this area.

Patients who have tumours that have reappeared after an initial successful treatment or that haven't responded to prior chemotherapy or immunotherapy combinations are also currently treated using CAR T-cell therapy.

It responds at varying rates. The efficacy can reach 90% in some leukaemias and lymphomas, although it is much lower in other malignancies.

The potential side-effects are also serious, related with cytokine release syndrome (a widespread activation of the immune system and collateral damage to the body's normal cells) and neurological symptoms (severe confusion, seizures, and speech impairment).

The Indian viewpoint

CAR T-cell therapy is utilized to treat patients with nonlymphoma Hodgkin's and relapsed or resistant acute lymphoblastic leukemia (ALL) in a few hospitals in India (NHL).

Cost and value are the two main obstacles to the introduction of any novel medicine. Opponents claim that building facilities in India may be unnecessary or inappropriate because, even when it becomes more accessible, most Indians will not be able to afford CAR T-cell therapy. Wealthy patients who need the therapy are already getting it elsewhere.

CAR T-cell therapy is a sophisticated and expensive treatment, and its availability in India is limited due to its high cost and the requirement for specialized facilities and experience. Moreover, some CAR T-cell therapy adverse effects, such cytokine release syndrome (CRS), can be severe and necessitate constant observation and management.

Not with standing these difficulties, CAR T-cell therapy is an important development in the field of cancer treatment and has the potential to enhance patient outcomes for some cancers. Our knowledge of this promising therapeutic strategy and its prospective uses in the treatment of cancer in India and other parts of the world will continue to grow as a result of ongoing research and development in this field.

Keywords: CAR T-cell therapy, Treatment of cancer



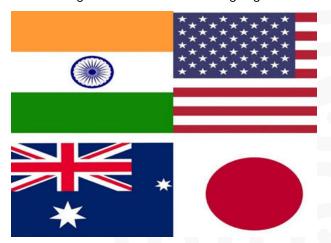
QUAD CYBER CHALLENGE

CONTEXT: Global data on the efficacy of CAR T-cell therapy for cancer looks very good: Dr Siddhartha Mukherjee

Security Dialogue, or Quad, which consists of India, the United States, Japan, and Australia, sponsored the "Quad Cyber Challenge" public campaign. According to a press statement from the National Security Council Secretariat, the Quad has challenged Internet users in the Indo-Pacific region and beyond to participate in the challenge and adopt "safe and responsible cyber behaviours."

About the challenge

The Challenge demonstrates the ongoing efforts of



Significance of the challenge

By giving the Quad nations the chance to exchange best practices, methods, and technology for identifying and countering cyber threats, it might improve their cybersecurity capacities.

By fostering mutual confidence and collaboration among the Quad nations, the cyber issue could aid in promoting regional stability.

The difficulty might have wider effects for global cybersecurity. The economies of the Quad countries are

the Quad states to increase cyber security action and awareness as well as to build a more secure and robust cyber environment for the benefit of economies and users.

The Challenge is a reflection of the ongoing Quad efforts to increase cyber security awareness and action among people and communities as well as to promote a more secure and robust cyber environment for the benefit of all economies and consumers worldwide. The National Security Council Secretariat and the National Cyber Coordinator's office are working together to coordinate the action in India.

Quad Nations

Member countries: United States, Japan, India, and Australia.

Formation: 2017

Objective: Response to the growing economic and military influence of China in the Indo-Pacific region.

Working: Promoting a free and open Indo-Pacific region, which includes freedom of navigation, open markets, and respect for international law.

The Quad countries have pledged to cooperate on various issues, including regional security, counter-terrorism, economic development, infrastructure, and technology.

among the largest in the world, and they possess advanced technological capabilities.

The Quad Cyber Challenge may represent an important step in enhancing cybersecurity throughout the Indo-Pacific and beyond. The Quad states might serve as a role model for the rest of the world in confronting the difficulties of the digital age by fostering cooperation, exchanging knowledge and experience, and exhibiting a commitment to regional stability and global norms.

Keywords: Quad Cyber Challenge, Quad nations

SATELLITE-BASED TWO-WAY CAPABLE MESSAGING SOLUTION

CONTEXT: Snapdragon Satellite, the world's 'first satellite-based, 2-way capable messaging solution' for smartphones

BACKGROUND: At CES 2023, Qualcomm Technologies, Inc. unveiled napdragon Satellite, the first satellite-based two-way messaging system for high-end smartphones. The business disclosed that starting with devices based on the flagship Snapdragon 8 Gen 2 Mobile Platform, the Snapdragon Satellite will provide worldwide access through mobile messaging from all over the world.

Technology:

It was created in accordance with a contract that Qualcomm and Iridium inked in order to provide satellite-based connection for the upcoming high-end Android devices.

Iridium's weather-resistant L-band spectrum is used by Snapdragon Satellite for uplink and downlink, enabling two-way messaging for emergency applications, SMS texting, and a range of additional uses.

According to Qualcomm, the first handsets to use this technology will be those that are built on the premium Snapdragon 8 Gen 2 Mobile platform.

It will be backed by the fully operating Iridium satellite constellation and powered by Snapdragon 5G Modem-RF

Systems.

The second half of 2023 will see the introduction of the latest smartphones, which will feature emergency messaging enabled on Snapdragon Satellite.

Satellite Based Two Way Messaging

Users can send and receive messages through satellite using a communication method called satellite-based two-way messaging. In remote locations or in circumstances when conventional communication channels are not readily available or dependable, this technology is very helpful.

Satellite-based two-way messaging functions by sending messages from a user's device to a central server or other users using satellite communication networks. The user's device may be a satellite phone, a portable radio, or a dedicated messaging device, and the messages may be text-based or multimedia in nature.

Significance of Technology: Some benefits of satellitebased two-way messaging over other forms of communication include:



INDIA'S FIRST SEMICONDUCTOR PLANT

CONTEXT: With a one-of-a-kind investment of Rs.1.54 lakh crore from Taiwanese electronics manufacturing giant Foxconn and mining behemoth Vedanta, India's first semiconductor facility would be constructed in Gujarat.

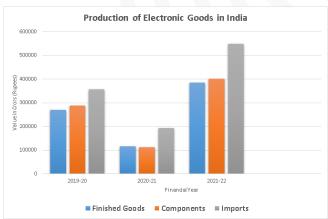
government was signed, and it was stated to the media that the project will start production in two years. Microchips, also known as semiconductor chips, are an essential component of ATM cards, mobile phones, automobiles, and other digital consumer goods. The 60:40 joint venture between Vedanta and Foxconn will construct a semiconductor fabrication unit, a display fabrication unit, and a semiconductor assembling and testing facility on a 1000-acre tract of land in the Ahmedabad region.

Electronics market in India

India's electronics industry is expanding quickly, and it is anticipated that this trend would continue in the years to come. India is a sizable and alluring market for electronics producers and merchants with a population of over 1.3 billion people and an expanding middle class.

Consumer electronics, which includes items like televisions, smartphones, computers, and household appliances, dominate the Indian electronics sector. India is now the second-largest smartphone market in the world after China as a result of recent considerable increase in the smartphone market.

The Indian electronics market is a vibrant, quickly expanding sector with several potential for producers, retailers, and investors. The Indian electronics market is anticipated to increase over the future years as a result of the Indian government's emphasis on boosting electronics production and the growing use of digital technology.



Significance of a semiconductor plant in India

Increasing domestic electronics production: By offering a dependable and economical source of semiconductor chips, an Indian semiconductor plant might contribute to increasing domestic electronics production in the nation. India now relies a lot on imported chips, which can be expensive and susceptible to supply chain problems.

Jobs creation: An Indian semiconductor manufacturing facility would offer employment possibilities to engineers, technicians, and other technical personnel. This might contribute to addressing the nation's unemployment problem, especially among young people.

Growing exports: India may develop into a significant supplier of semiconductor chips to other nations with the construction of a semiconductor facility. The Indian economy may gain a lot of money from this, which would

also assist to close the trade imbalance.

Fostering innovation: By offering a platform for research and development, a semiconductor facility might also contribute to the advancement of innovation in India's electronics sector. This might result in the creation of novel products and technology that would be advantageous to both India and the global electronics market.

Increasing national security: Reliance on foreign semiconductor chips may be injurious to security at home. A semiconductor manufacturing facility in India could serve to lessen this reliance and increase the nation's technological independence.

Steps taken by the Government to promote electronics manufacturing

National Policy on Electronics 2019: The vision of NPE 2019 is to position India as a global hub for Electronics System Design and Manufacturing (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally.

Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing provides an incentive of 4% to 6% to eligible companies on incremental sales (over base year) involved in mobile phone manufacturing and manufacturing of specified electronic components, including Assembly, Testing, Marking and Packaging (ATMP) units.

Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS) provides financial incentive of 25% on capital expenditure for the identified list of electronic goods that comprise downstream value chain of electronic products, i.e., electronic components, semiconductor/ display fabrication units, ATMP units, specialized sub-assemblies and capital goods for manufacture of aforesaid goods.

Modified Electronics Manufacturing Clusters (EMC 2.0) provides support for creation of world class infrastructure along with common facilities and amenities, including Ready Built Factory (RBF) sheds / Plug and Play facilities for attracting major global electronics manufacturers along with their supply chain to set up units in the country. The Scheme provides financial assistance for setting up of both EMC projects and Common Facility Centres (CFCs) across the country.

Production Linked Incentive Scheme (PLI) for IT Hardware provides of 4% to 2% / 1% on net incremental sales (over base year) of goods manufactured in India and covered under the target segment, to eligible companies, for a period of four (4) years.

100% FDI: As per extant Foreign Direct Investment (FDI) policy, FDI up-to 100% under the automatic route is permitted for electronics manufacturing (except from countries sharing land border with India), subject to applicable laws/regulations; security and other conditions.

Electronics Development Fund (EDF): Electronics Development Fund (EDF) has been set up as a "Fund of Funds" to participate in professionally managed "Daughter



Funds" which in turn will provide risk capital to startups and companies developing new technologies in the area of electronics and Information Technology (IT).

India might profit significantly economically, socially, and strategically from the establishment of a semiconductor facility. Yet in order to succeed, it would need to overcome obstacles including competition from established semiconductor-producing nations and supply chain disruptions. It would also need a lot of money, knowledge, and infrastructure.

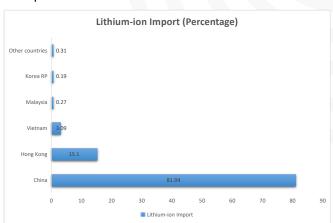
Keywords: Electronics market in India, Steps taken by the Government

LITHIUM DEPOSIT IN INDIA

CONTEXT: The Geological Survey of India (GSI) has established "inferred" lithium resources of 5.9 million tonnes in Salal-Haimana area of Reasi District of Jammu and Kashmir.

BACKGROUND: News of the discovery of "5.9 million tonnes inferred resources of lithium" in the Salal-Haimana area of Reasi district, Jammu & Kashmir, by the Geological Survey of India has been received as a game-changer in India's impending transition to a green economy. The term 'inferred' refers to the 'preliminary exploration stage', the second of a four-step process, according to the Mines and Minerals (Development and Exploration) Act 1957.

Status of use in India: Typically, lithium is employed in the battery sector. The Production Linked Incentive (PLI) Program for the manufacture of Advance Chemistry Cells (ACC) in the nation was approved by the government on May 12, 2021. The plan will cost Rs. 18,100 crores in total during its five-year lifespan. The plan calls for building a competitive ACC battery manufacturing facility in the nation (50 Giga Watt hour-GWh). 5 GWh of specialised ACC technologies are also covered by the programme. The proposed plan calls for a production-related subsidy based on the applicable subsidy per KWh and the percentage of value addition attained on real sales generated by the manufacturers who established production units. The PLI plan will make it easier to lessen the ACC battery's reliance on imports.



Credit: Department of Commerce

Applications: In India, lithium is used for a variety of purposes, principally for electric transportation and energy storage. The following are some of the primary applications for lithium in India:

Lithium is a crucial component of the batteries used in electric vehicles (EVs). Lithium-ion batteries are now essential for powering electric automobiles, buses, and two-wheelers as a result of the Indian government's drive for electric transportation. The demand for lithium-ion batteries for EVs is already being met by a number of Indian businesses, and in the upcoming years, this demand is anticipated to increase significantly.

Energy storage: India also uses lithium-ion batteries for this purpose. Energy storage devices that can store extra energy produced by solar and wind power plants are becoming more and more necessary as the nation places more emphasis on renewable energy sources. Due to their high energy density and lengthy cycle life, lithium-ion batteries are perfect for this use.

Mobile devices, laptops, and tablets all use lithiumion batteries, which are commonly found in consumer electronics. With the increasing ubiquity of smartphones and other electronic gadgets in India, the need for lithiumion batteries is also growing.

Challenges in Extraction:

Insufficient infrastructure is needed to extract lithium, including mining, processing facilities, and transportation networks. The infrastructure required to harvest and process lithium on a big scale is currently lacking in India.

Environmental issues: The extraction of lithium can have a major negative influence on the environment, especially in terms of water use and contamination. Lithium mining businesses will need to make sure that their operations comply with India's stringent environmental requirements.

Geopolitical factors: At the moment, India imports the majority of the lithium it needs, mainly from China and Chile. For India's lithium business, any geopolitical issues that affect these nations' capacity to provide lithium could have substantial effects.

With several uses in numerous industries, lithium is a very important element for the future. In the upcoming years, its significance is only anticipated to increase, particularly in the fields of energy storage, electric transportation, and electronics.

Keywords: Lithium-ion, Electronics Industry in India, Electric Vehicles.







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COMPREHENSION



Passage-1

Private investment in general is volatile. Foreign private investment is more volatile because the available investment avenues are significantly greater (i.e., the entire world). Therefore, the responsibility of providing employment cannot be left to Foreign Direct Investment (FDI). The current FDI inflows are (volatile over time and across sectors and regions, which is a necessary consequence of their search for the highest returns. The adverse consequences are unstable employment and an (accentuation of income and regional inequalities. A probable positive consequence of foreign investment is the inflow of new technology and its subsequent diffusion. However, the technology diffusion is not at all certain because the existing state of physical and human capital in India may prove inadequate for the diffusion.

- 1. With reference to the above passage, the following assumptions have been made:
- 1. Relying on foreign investment in the long run is not an economically sound policy.
- 2. Policies must be undertaken to reduce volatility in foreign private investment.
- 3. Policies must be undertaken to strengthen domestic private investment.
- Public investment should be given priority over private investment.
- Substantial public investment in education and health should be undertaken.

Which of the above assumptions is/are valid?

- (a) 1, 2 and 4
- (b) 1, 3 and 5
- (c) 2, 4 and 5
- (d) 3 only

Passage-2

Many opportunities to harness the highly skewed, seasonal and spatial distribution of monsoon flows, which occur in a four-month period from June to September annually, have been lost. Since these few months account for most of the rainfall and consequent freshwater availability, the need for holding rainwater in reservoirs, for subsequently releasing it for use over the year, is a necessity nobody can afford to overlook. Climate change will continue to affect weather conditions and create water shortages and excesses. While millions suffer from droughts and floods, waters in the country's many rivers flow unutilized, and are discharged into the sea every year.

- 2. With reference to the above passage, which of the following could be the most rational and practical implications for India?
- 1. Inter-linking of rivers should be undertaken.
- 2. A network of dams and canals should be built across the country for proper distribution of water.
- Farmers should be provided easy loans for digging borewells.
- 4. Usage of water for agriculture should be regulated by law.
- 5. Distribution of river water among regions should be regulated by the Union Government.

Select the correct answer using the code given below.

(a) 1 and 2

- (b) 2, 4 and 5
- (c) 1, 3 and 4
- (d) 2, 3 and 5

Passage-3

People will invest in education whenever they are granted the economic freedom to fully enjoy its benefits. Again, this is for the obvious reason that the return on education increases as the level of economic freedom rises. When people, thanks to lower tax rates, are allowed to retain most of the higher income that they gain from each incremental level of education, it makes eminent sense to invest in education. On the other hand, when the government decides to tax the higher income of educated individuals at even higher rates, it makes very little sense to invest in educating oneself further. The same incentives apply to parents who decide on whether to invest in their children's education.

- 3. With reference to the above passage, the following assumptions have been made:
- 1. Lower tax rates in a country invariably translate into greater investments in higher education.
- 2. Investment in the education of children ensures their economic freedom.
- 3. Economic freedom has a positive impact on building up human capital.

Which of the above assumptions is/are valid?

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

Passage-4

Our urban bodies cannot possibly ensure sustainable delivery of water in our cities unless financing mechanisms are put in place. Water delivery requires heavy investment in collecting it from a natural source, treating it to make it potable, and laying a distribution network of pipes for delivery to the users. It also requires investments in sewerage infrastructure and sewage treatment plants so that the sewers can carry the wastewater to these plants to ensure that no untreated sewage is discharged back into natural water bodies. If our cities were rich enough to meet the entire cost, water could be delivered free. They are not.

- 4. What is the most logical and crucial message conveyed by the passage?
- (a) Urban local bodies must recover costs through user charges.
- (b) Urban local bodies are not efficient enough to meet the water requirements of our cities
- (c) Water shortage in our cities is a perennial problem that cannot be solved.
- (d) In view of the water crisis in our cities, there is an urgent need to limit the population of cities by adopting an upper limit of population size.
- 5. With reference to the above passage, the following assumptions have been made:
- 1. Rich cities only can ensure sustainable delivery of water.
- 2. Sustainable delivery of water in cities means much more than supplying water to households.

Which of the above assumptions is/are valid?



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

Passage-5

In India, agriculture still engages about half of its workforce, and about 85 per cent of its farms are small and marginal. Compared to China and Vietnam, which have experienced fast structural and rural transformation, India's story is of slow transformation. As a result, poverty reduction in India was at a much slower pace during 1988-2014, compared to China and Vietnam. India's poverty reduction was slow during 1988-2005, but during 2005-2012, it accelerated dramatically - almost three times faster than during the earlier period. What did India do during this period? Research reveals that the relative price scenario changed significantly (by more than 50%) in favour of agriculture in the wake of rising global prices. This boosted private investments in agriculture by more than 50%. As a result, agri-GDP growth touched 41% during 2007-2012 as against 2.4% during 2002-2007. The net surplus of agri-trade touched \$25 billion in 2013-2014; real farm wages rose by 7% per annum. All this led to unprecedented fall in poverty.

- 6. With reference to the above passage, the following assumptions have been made:
- 1. Structural and rural transformation is impossible when farms are mainly small and marginal.
- 2. A good price incentive can trigger investments in agriculture.
- 3. India needs to build value chains for high-value agriproducts like livestock and horticulture.
- 4. Higher global prices of agricultural commodities are essential for India's poverty reduction.

Which of the above assumptions are valid?

- (a) 1 and 3
- (b) 2 and 4
- (c) 2 and 3
- (d) 3 and 4
- 7. Which one of the following statements best reflects the critical message of the passage?
- (a) India should create large-scale offfarm rural employment to reduce poverty in the near future.
- (b) India should create a large number of farmer producer companies.
- (c) Private investment in agriculture should be given priority over public investment.
- (d) Inclusive agricultural growth is key to reduce poverty in the near future.

Passage-6

In India, the current focus on the right to privacy is based on some new realities of the digital age. A right is a substantive right only if it works in all situations, and for everyone. A right to free expression for an individual about her exploitation, for instance, is meaningless without actual availability of security that guarantees that private force cannot be used to thwart this right. The role of the State, therefore, is not just to abstain from preventing rightful free expression, but also to actively ensure that private parties are not able to block it.

- 9. On the basis of the above passage, the following assumptions have been made:
- 1. State should have some institutions to ensure its appropriate role in a digital society.
- 2. State should ensure that private parties do not violate the citizens' right to privacy.
- 3. Digital economy is not compatible with the idea of not violating the citizens' privacy.

Which of the above assumptions is/are valid?

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

Passage-7

One of the biggest ironies around water is that it comes from rivers and other wetlands. Yet it is seen as divorced from them. While water is used as a resource, public policy does not always grasp that it is a part of the natural ecosystem. Efforts at engineering water systems are thus efforts at augmenting water supply rather than strengthening the capacities of ecological systems.

- 10. Which one of the following is the most logical and rational inference that can be made from the above passage?
- (a) Rivers and other wetlands should be protected under Ramsar Convention.
- (b) Engineering water systems should be modernized and further augmented.
- (c) Wetlands need to be reinforced as more than just open sources of water.
- (d) Water supply should not be free of cost so as to prevent its misuse or overuse.

Passage-8

Asset allocation is the most important investment decision we will ever make and sadly, most of us do not give that decision, the importance it deserves. We are adamant about seeking predictability with our future. We tend to think of investing in risky assets as extremely volatile and value eroding. We also dislike fluctuating returns and the loss of control of investment. We think our money is best left idle, unproductive but safe. There is no asset that is risk-free. We could lose our jobs, our homes can lose value, our banks can go bankrupt, our bonds can default, the government can collapse and companies we chose fondly may cease to exist. But we cannot live life assuming that all these extreme events are waiting to happen, and all at the same time. All these extreme forms of risks we know will not manifest at the same time.

- 11. Which one of the following statements best implies the suggestion given by the author of the passage?
- (a) Distribute your wealth across different kinds of assets so that your risks would be minimized.
- (b) Risk-taking behaviour should be a necessary component of your personality if you want to generate wealth.
- (c) While making investments, find a trustworthy asset management organization which would manage your wealth for you.
- (d) You should know that investing your money is a risky business.



Passage-9

Although most of the Genetically Modified (GM) crops cultivated now are genetically engineered for a single trait, in future, crops genetically engineered for more than one trait will be the norm. Thus, biotechnology's role in agriculture and the regulation of the same cannot be understood solely in the context of the current generation of GM crops. Instead, there is a need to take a comprehensive look, taking into account various aspects, including socioeconomic impacts, so that the potential of the technology can be harnessed while minimizing negative impacts. Given the importance of biotechnology in developing varieties that can help in climate change mitigation and adaptation, not using biotechnology as a part of the climate change action plan cannot be an option. Domestic regulation of biotechnology cannot be viewed in isolation of trade policy and obligations under various international treaties and

- 12. With reference to the above passage, the following assumptions have been made:
- 1. Biotechnology regulation is an evolving process.
- 2. Participation of people is needed in policy decisions regarding biotechnology regulation.
- 3. Biotechnology regulation should take into account socioeconomic aspects in decision-making.
- 4. Wider involvement of political executive in biotechnology regulation improves its effectiveness in dealing with the country's trade policies and international obligations.

Which of the above assumptions are valid?

- (a) 1, 2 and 4 only
- (b) 1 and 3 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4
- 13. Which one of the following statements best implies the crux of the passage?
- (a) Precautionary principle is not given importance in current debate on developing GM crops.
- (b) Biotechnology is not currently used in climate change mitigation and adaptation mechanisms.

- (c) Biotechnology's role is not confined to the current priorities of developing GM crops.
- (d) The negative impacts of biotechnology are not properly understood.

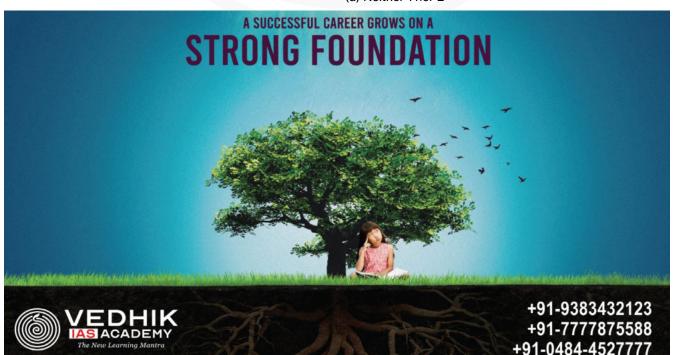
Passage-10

India has tremendous potential for solar energy. We all realize that we have to stop burning fossil fuels to meet our energy needs. But certain renewable resources are still going through their cost curves and learning curves to get the required amount of output. The Indian Government has strongly committed to its targets of reducing emissions by 33 per cent by 2030, and towards this it has initiated a strong push towards a gas-based economy and has also invested heavily in renewable energy} However, business houses are wary of investing too heavily in renewable energy at a time when the technology is not yet ready.

- 14. Which one of the following is the most logical and rational inference that can be made from the above passage?
- (a) India's commitment to reduce emissions by 33% is unlikely to be achieved.
- (b) India should import gas rather than invest in renewable resources.
- (c) Getting renewable resources to market too soon may be costly.
- (d) India should put in more efforts in the exploration of natural gas.
- 15. With reference to the above passage, the following assumptions have been made:
- 1. Governments often provide inefficient and costly subsidies for technologies that may not be ready in the near future.
- 2. India's commitment of reducing emissions by 33% by 2030 shall be on the basis of gas-based economy.

Which of the above assumptions is/are valid?

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





1 STOP SOLUTION

FOR YOUR
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AI ETHICS

Ethics is a set of moral principles which help us discern between right and wrong. All ethics is a set of guidelines that advise on the design and outcomes of artificial intelligence. Human beings come with all sorts of cognitive biases, such as recency and confirmation bias, and those inherent biases are exhibited in our behaviours and subsequently, our data. Since data is the foundation for all machine learning algorithms, it's important for us to structure experiments and algorithms with this in mind as artificial intelligence has the potential to amplify and scale these human biases at an unprecedented rate.

With the emergence of big data, companies have increased their focus to drive automation and data-driven decision-making across their organizations. While the intention there is usually, if not always, to improve business outcomes, companies are experiencing unforeseen consequences in some of their Al applications, particularly due to poor upfront research design and biased datasets.

As instances of unfair outcomes have come to light, new guidelines have emerged, primarily from the research and data science communities, to address concerns around the ethics of AI. Leading companies in the field of AI have also taken a vested interest in shaping these guidelines, as they themselves have started to experience some of the consequences for failing to uphold ethical standards within their products. Lack of diligence in this area can result in reputational, regulatory and legal exposure, resulting in costly penalties. As with all technological advances, innovation tends to outpace government regulation in new, emerging fields. As the appropriate expertise develops within the government industry, we can expect more AI protocols for companies to follow, enabling them to avoid any infringements on human rights and civil liberties.

ESTABLISHING PRINCIPLES FOR AI ETHICS

While rules and protocols develop to manage the use of AI, the academic community has leveraged the Belmont Report as a means to guide ethics within experimental research and algorithmic development. There are main three principles that came out of the Belmont Report that serve as a guide for experiment and algorithm design, which are:

RESPECT FOR PERSONS: This principle recognizes the autonomy of individuals and upholds an expectation for researchers to protect individuals with diminished autonomy, which could be due to a variety of circumstances such as illness, a mental disability, age restrictions. This principle primarily touches on the idea of consent. Individuals should be aware of the potential risks and benefits of any experiment that they're a part of, and they should be able to choose to participate or withdraw at any time before and during the experiment.

BENEFICENCE: This principle takes a page out of healthcare ethics, where doctors take an oath to "do no harm." This idea can be easily applied to artificial intelligence where algorithms can amplify biases around race, gender, political leanings, et cetera, despite the intention to do good and improve a given system.

JUSTICE:This principle deals with issues, such as fairness and equality. Who should reap the benefits of experimentation and machine learning? The Belmont Report offers five ways to distribute burdens and benefits,

which are by:
Equal share
Individual need
Individual effort
Societal contribution
Merit

PRIMARY CONCERNS OF AI TODAY

There are a number of issues that are at the forefront of ethical conversations surrounding AI technologies. Some of these include:

TECHNOLOGICAL SINGULARITY

While this topic garners a lot of public attention, many researchers are not concerned with the idea of Al surpassing human intelligence in the near or immediate future. This is also referred to as super intelligence, which Nick Bostrum defines as "any intellect that vastly outperforms the best human brains in practically every field, including scientific creativity, general wisdom, and social skills." Despite the fact that Strong AI and super intelligence is not imminent in society, the idea of it raises some interesting questions as we consider the use of autonomous systems, like selfdriving cars. It's unrealistic to think that a driverless car would never get into a car accident, but who is responsible and liable under those circumstances? Should we still pursue autonomous vehicles, or do we limit the integration of this technology to create only semi-autonomous vehicles which promote safety among drivers? The jury is still out on this, but these are the types of ethical debates that are occurring as new, innovative AI technology develops.

AI IMPACT ON JOBS

While a lot of public perception around artificial intelligence centers around job loss, this concern should be probably reframed. With every disruptive, new technology, we see that the market demand for specific job roles shift. For example, when we look at the automotive industry, many manufacturers, like GM, are shifting to focus on electric vehicle production to align with green initiatives. The energy industry isn't going away, but the source of energy is shifting from a fuel economy to an electric one. Artificial intelligence should be viewed in a similar manner, where artificial intelligence will shift the demand of jobs to other areas. There will need to be individuals to help manage these systems as data grows and changes every day. There will still need to be resources to address more complex problems within the industries that are most likely to be affected by job demand shifts, like customer service. The important aspect of artificial intelligence and its effect on the job market will be helping individuals transition to these new areas of market demand.

PRIVACY

Privacy tends to be discussed in the context of data privacy, data protection and data security, and these concerns have allowed policymakers to make more strides here in recent years. For example, in 2016, GDPR legislation was created to protect the personal data of people in the European Union and European Economic Area, giving individuals more control of their data. In the United States, individual states are developing policies, such as the California Consumer Privacy Act (CCPA), which require businesses to inform consumers about the collection of their data.



This recent legislation has forced companies to rethink how they store and use personally identifiable data (PII). As a result, investments within security have become an increasing priority for businesses as they seek to eliminate any vulnerabilities and opportunities for surveillance, hacking, and cyberattacks.

BIAS AND DISCRIMINATION

Instances of bias and discrimination across a number of intelligent systems have raised many ethical questions regarding the use of artificial intelligence. How can we safeguard against bias and discrimination when the training data itself can lend itself to bias? While companies typically have well-meaning intentions around their automation efforts, Reuters highlights some of the unforeseen consequences of incorporating AI into hiring practices. In their effort to automate and simplify a process, Amazon unintentionally biased potential job candidates by gender for open technical roles, and they ultimately had to scrap the project. As events like these surface, Harvard Business Review has raised other pointed questions around the use of AI within hiring practices, such as what data should you be able to use when evaluating a candidate for a role.

Bias and discrimination aren't limited to the human resources function either; it can be found in a number of applications from facial recognition software to social media algorithms.\

As businesses become more aware of the risks with AI, they've also become more active this discussion around AI ethics and values. For example, last year IBM's CEO Arvind Krishna shared that IBM has sunset its general purpose IBM facial recognition and analysis products, emphasizing that "IBM firmly opposes and will not condone uses of any technology, including facial recognition technology offered by other vendors, for mass surveillance, racial profiling, violations of basic human rights and freedoms, or any purpose which is not consistent with our values and Principles of Trust and Transparency."

ACCOUNTABILITY

Since there isn't significant legislation to regulate Al practices, there is no real enforcement mechanism to ensure that ethical Al is practiced. The current incentives for companies to adhere to these guidelines are the negative repercussions of an unethical Al system to the bottom line. To fill the gap, ethical frameworks have emerged as part of a collaboration between ethicists and researchers to govern the construction and distribution of Al models within society. However, at the moment, these only serve to guide, and research shows that the combination of distributed responsibility and lack of foresight into potential consequences isn't necessarily conducive to preventing harm to society.

HOW TO ESTABLISH AI ETHICS

Since artificial intelligence didn't give birth to moral machines, teams have started to assemble frameworks and concept to address some of the current ethical concerns and shape the future of work within the field. While more structure is injected into these guidelines every day, there is some consensus around incorporating the following:

GOVERNANCE: Companies can leverage their existing organizational structure to help manage ethical AI. If a company is collecting data, it has likely already established a governance system to facilitate data standardization and quality assurance. Internal regulatory and legal teams

are likely already partnering with governance teams to ensure compliance with government entities, and so expanding the scope of this team to include ethical AI is a natural extension of its current priorities. This team can also steward organizational awareness and incentivize stakeholders to act in accordance with company values and ethical standards.

EXPLAINABILITY: Machine learning models, particularly deep learning models, are frequently called "black box models" as it's usually unclear how a model is arriving at a given decision. According to this research, explainability seeks to eliminate this ambiguity around model assembly and model outputs by generating a "human understandable explanation that expresses the rationale of the machine". This type of transparency is important for building trust with Al systems to ensure that individuals understand why a model is arriving to a given decision point. If we can better understand the why, we will be better equipped to avoid Al risks, such as bias and discrimination.

Achieving ethical AI will undoubtedly be important to its success. However, it's important to note that it has tremendous potential to impact society for good. We've started to see this in its integration into areas of healthcare, such as radiology. This conversation around AI ethics is to ensure that in our attempt to harness this technology for good, we appropriately assess its potential for harm within its design.

ETHICAL AI ORGANIZATIONS

Since ethical standards are not the primary concern of data engineers and data scientists in the private sector, a number of organizations have emerged to promote ethical conduct in the field of artificial intelligence.

AI ETHICS

There is a need to establish a point of view on AI ethics, creating principles of trust and transparency to help clients understand where its values lie within the conversation around AI. It has three core principles that dictate its approach to data and AI, which are:

THE PURPOSE OF AI IS TO AUGMENT HUMAN INTELLIGENCE. This means that we do not seek to replace human intelligence with AI, but support it. Since every new technological innovation involves changes to the supply and demand of particular job roles, it requires commitment to support workers in this transition by investing in global initiatives to promote skills training around this technology.

DATA AND INSIGHTS BELONG TO THEIR CREATOR. All clients should have complete control over their data, not providing government access to client data for any surveillance programs, and it remains committed to protecting the privacy of its clients.

AI SYSTEMS MUST BE TRANSPARENT AND EXPLAINABLE. Technology companies need to be clear about who trains their AI systems, what data was used in that training and, most importantly, what went into their algorithms' recommendations.

Experts have identified a set of focus areas to guide the responsible adoption of AI technologies. These include:

EXPLAINABILITY: An AI system should be transparent, particularly about what went into its algorithm's recommendations, as relevant to a variety of stakeholders with a variety of objectives.



FAIRNESS: This refers to the equitable treatment of individuals, or groups of individuals, by an AI system. When properly calibrated, AI can assist humans in making fairer choices, countering human biases, and promoting inclusivity.

ROBUSTNESS: Al-powered systems must be actively defended from adversarial attacks, minimizing security risks and enabling confidence in system outcomes.

TRANSPARENCY: To reinforce trust, users must be able to see how the service works, evaluate its functionality, and comprehend its strengths and limitations.

PRIVACY: All systems must prioritize and safeguard consumers' privacy and data rights and provide explicit assurances to users about how their personal data will be used and protected.







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TOPICS OF THE MONTH





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PROGRESS DOES NOT LIE IN MERE SCIENTIFIC ADVANCEMENT

DEMOCRACY CAN BE MADE WORKABLE THROUGH FREE PRESS

SCIENTIFIC SPIRIT KEEPS QUEST ALIVE

-Mr.solomon John



DEMOCRACY WITHOUT DISCIPLINE IS MEANINGLESS

Democracy cannot succeed unless those who express their choice are prepared to choose wisely, The real safeguard of democracy, therefore is education and discipline – Franklin D Roosevelt.

Working of democracy imposes certain responsibilities and obligations upon the people as well as upon men in power. Democracy does not mean liberty sans limits; if people give a free play to their activities for realising the wishes it becomes a serious hindrance in the working of democracy. The Democratic government takes a lenient view of the popular risings because they fear losing the support of the people. Leniency on the part of the government encourages anti-social elements which make the life of the common man miserable. Consequently, there is dis-satisfaction and frustration among the peaceloving people of the country. For example, in India, the opposition parties wanted to take undue advantage of their right to oppose the party in power. They started provoking the different sections of the society against the government. In some states chaotic conditions are prevailing and in others it was feared that such conditions would prevail. This type of democracy loses its charm. Before De Gaulle came in power French democracy was reduced to a mockery because the government was toppled every week. Theoretically it may be interpreted as a healthy sign of the working of democracy but in practice administration becomes impossible. People must be aware of their obligations.

In fact, democracy demands a self-imposed discipline. The voters must realise their responsibilities while electing their representatives the latter should not fail in performing their duties. Political life demands certain ethical codes and if these go uncared for, the opposition as well as the party in power would fail to preserve the dignity of the political life. The party in power, intoxicated with authority, generally starts abusing it - opposition is suppressed or the public is kept in a state of ignorance. On the other hand, opposition parties try to tarnish the image of the government; they play up their weaknesses and try to create condition in which they may lose popular support. In India Opposition parties are not playing a healthy role. This results in agitations, strikes, bandhs and even riots. For a developing country like India it is unnecessary and dangerous diversion. When a particular political party is voted into power, we must accept their policies, at least for a period of five years. Political parties need discipline if political life is to be kept chaste.

No nation without discipline can work for progress. If the business men, consider monetary profit the only aim of life the smooth working of the society will come to an end. The distribution of wealth will be unequal and some sections of the society will earn profits disproportionate to their labour or investment. This economic disparity among the people becomes the source of exploitation and the poorer sections of the society would be miserable. India, being inhabited by the poor people cannot afford to have economically backward sections of the society. When we keep socialism as our goal and allow the businessmen to reap profits disproportionate to the income of others, our actions frustrate our ideals. There should be some ethics for businessmen because generally they constitute the corrupt sections of society. They conceal their income and use black money for unhealthy purposes. In this manner the whole economy of the country is upset. They also start bribing the officials, thereby importing corruption even in administration. No doubt law takes cognisance of these offences yet they manage to escape the grip of law by maintaining their relations with the high-ups in society. Clearly functioning of democracy is impaired. In order to make the businessmen to realise their responsibilities it is necessary that some strict steps must be taken within the frame work of law.

The most vulnerable section of the society, from the point of view of discipline, are the students. Revolutionary and new fledged ideas have a great appeal to them. They cannot stand the charm of persuasion. They are to be taught that without discipline they cannot get proper education. Agitations may be Gandhian method of protest but any good method which is misused can torpedo the whole system. Whatever might be the form of a discipline and however morally justified its aim may be it becomes a cancer in the body-politics. Indiscipline encourages antisocial elements and always puts the proper working out of gear. This Indiscipline breeds a generation of undependable citizens and gives momentum to disruptive forces.

The relevance of a political pattern is determined by its adequacy because it stitches up aspirations, functions, needs and demands of the society into a seamless web. The social unity which includes the unity of perspective, activities and aspirations fuse the divergent tendencies into semi-articulate whole. The system becomes a reflection of moods and motives and the pattern is that of behaviour. Under such circumstances if the political system projects a distorted image it will not satisfy the people. In case the object of reflection is itself disfigured, will not fit in the frame work of political institution. These institutions can function properly only if the people who established them are disciplined in every walk of life. Otherwise either the system will crack or people will lose faith in it.

Democracy presupposes that man possesses innate qualities to govern himself. They think that the people know their needs and welfare and can work for it in a more methodical manner. This supposition is based upon ideal calculations; man is generally swept away by emotions. Liberty often becomes licence so people must realise their duties. They must work for the common good. Workers in factories should aim at increasing production, people in the offices should facilitate the smooth working of the governmental machinery. So discipline becomes necessary.

Economy of the country is so closely linked up with political system that without a proper type of economic ordering there cannot be political stability. The economy of India was completely disturbed by the unprincipled sections of society. They indulged in black market, hoarding, smuggling and in many other activities which disrupted the economy of our country. Mere profit making should not be the aim of economic activity if some people are able to earn by trading in human lives. If others are able to oared resulting in numberless deaths due to starvation it will not serve the ends of justice. Democracy demands justice and equal treatment so that their free thinking may not be inhibited. For achieving this end we need discipline. Money should be just a means to carry on activities; it should not be the sole nexus of life.

For making a nation disciplined no mechanical method can be used for a long time. Once discipline becomes a part of our thinking we do not have to exert for remaining disciplined. It is through psychological methods that discipline can be fostered. Renan has correctly said that political institutions are destroyed by their triumphs. So for preserving democracy a nation has to adopt even



anti-democratic methods. Discipline is the hub of human activity and disciplined activity will strengthen democracy. Democracy disciplined and enlightened is the finest thing in

the world. A democracy prejudiced, ignorant, superstitious will land itself in chaos and may be self-destroyed. – Mahatma Gandhi

RESPONSIBILITIES OF THE PRESS

Democracy has least to do with the structural aspect; it is more concerned with developing democratic forces within and without. It not only allows the active participation of the people in administration it also makes them worthy of that participation. So if it is to go on working vigorously and is to make people fearless so that they can defend democracy and preserve it, it must take care of the stability of its four pillars-the Parliament, the executive, the judiciary and the press. The moment any of the pillars develops any crack, it is sure to collapse. All the four must therefore be independent, strong and free. Unless they are free they cannot be strong. But the freedom of these four organs are subordinate to the freedom of society or the people whom these are to serve. Unless they guard the freedom of the people and enable them to get the necessary strength, these will not be performing their proper function. No doubt Parliament is supreme within the Constitution, but outside it, people are supreme. In fact, people are the final authority in a democratic state.

The press is one of the most important pillars because it puts a check not on one organ but on all the three organs i. e. the Parliament, the executive and to some extent on the judiciary as well. But it is vital for the people because people should be kept informed of what is happening. Public opinion will be difficult to cultivate or make it to assert itself unless people have the knowledge of the happenings around them. It can be done more effectively by the press; it reflects the public opinion and keeps it healthy as well. The people in power always try to camouflage their actions and decisions in words which seem to be in the public interest. It is for the press to probe deep and discover the real motive of those steps or decisions. Apart from it, it gives strength to the people, to the Parliament, to the executive, or to all the judiciary. It brings to the notice of all the concerned what is wrong and what is likely to impair the freedom of the people, their rights and their welfare.

No doubt we talk about a free and independent press and also understand the necessity, yet we do not know or we pose that we have no knowledge of the ways to secure the independence of the press. If there is dictatorship in the country how can the independence of the press be guaranteed or preserved? Again this responsibility falls on the shoulders of the people. If people are politically conscious and they have faith in democracy, they will try to give whole hearted support to the independent press. In this respect press and people are inter-dependent; press informs the people and people fight for the freedom of the press. But this role of the people in guaranteeing freedom to the press may be frustrated by the Government if the press is not allowed to inform the people truthfully. So press despite all types of checks will have to assert its independence and objectivity to preserve democracy.

Some may think that the Government should play an important role in making the press independent. But it is wrong because the moment the government touches any of the pillars of democracy, it becomes distorted and may not be able to serve the public properly. Even if the press goes wrong a truly democratic government should not interfere. Let the public opinion put them in right place. In fact it the press indulges in yellow journalism or starts giving fabricated stories, the people will refuse to accept

it as a source of information and so its circulation will drop. This is the democratic way of punishing the errant press.

Unfortunately, politics corrodes upon the democratic structure and the party's interests distort the function of the press. No doubt everyone should be allowed to have his own political views or economic views but we should not try to spurn the views of others as long as those views do not do any harm to our freedom of opinion and expression. This objectivity is more vital for the press as it is for the judiciary. If the Government is to be objective as it should be, press will automatically be in proper trim.

Democracy implies the right to dissent but if criticism is to become effective or useful, it must be objective and based on facts and not on prejudices. Whenever it is based on prejudice, it does not do any good. If the criticism is misplaced due to selfish motive, it can never strengthen the democratic forces. Press has the right to decide and so have the people. But people's voice can become effective only if press supports it because that is only the effective medium of expressing public opinion. So it is only the press that can make democracy stable and workable.

It is a matter of common observation that the Parliament, the executive, the judiciary and the press must zealously guard the freedom of other three pillars because if one pillar gets weakened, all other pillars will become weak. So there is no question of contradiction among these. There is a relation of harmony among all of them and identify of interest, which is the interest of the people. The interest of the people justifies the existence of all the four otherwise there is no justification for any one of them. So if everyone balances properly, we should say no government is necessary. But that is an ideal state which perhaps may not be given any practical shape so easily.

If press is tempted into doing wrong things either by favours or money or by threats of government, nobody can preserve independence of the country. In fact, the press should guard against these types of temptations, it should have integrity. The unity of the press is vital in fundamental matters relating to the press and to the people. Of course they are bound to adhere to their opinions. Rather that is necessary for democracy. It is a common saying that only two idiots can agree on everything, and the intelligent people are sure to differ. It is the function of wisdom to show that when we work together, we coordinate our differences and act in the interest of all the concerned. This is what is assumed in democracy and this is what the press must propagate.

Nobody can say that the press is free from the weaknesses which are inherited from the human nature. Newspaper people are also human beings. But the weaknesses are to be removed, and they can be removed if we know about them. So the press should preferably regulate itself in a manner that it consolidates democratic forces, helps in cultivating the public opinion and puts a corrective check upon the people in power. If press is to become an important agency or the Fourth Estate, it must realise its responsibility and moral commitments to the people and to the government. If they want to enjoy their prerogatives without taking responsibilities on their shoulders, it may be difficult for them to carry on the work properly.



DRAMA HOLDS A MIRROR TO LIFE

Drama is the specific mode of fiction represented in performance: a play, opera, mime, ballet, etc., performed in a theatre, or on radio or television. Considered as a genre of poetry in general, the dramatic mode has been contrasted with the epic and the lyrical modes ever since Aristotle's Poetics – the earliest work of dramatic theory. The term "drama" comes from a Greek word meaning "deed" or "act" which is derived from "I do". The two masks associated with drama represent the traditional generic division between comedy and tragedy. In English (as was the analogous case in many other European languages), the word play or game was the standard term for dramas until William Shakespeare's time – just as its creator was a play-maker rather than a dramatist and the building was a play-house rather than a theatre.

Life consists of human activity, the highest object of which is man. Art and literature are the branches of knowledge, inseparable from life. In them we can discern a deep and lasting human significance. Literature, drama being a part of it, grows directly out of life and brings us into large, close and fresh relations with life. Greater the association the more will be the worth of that literature. It is a sort of vital record of what they have thought and felt about those aspects of it which have the most immediate and enduring interest for all of us. It is the fundamental expression of life through the medium of language. This expression is further moulded into various literary forms, and drama being the imitation of life with an occasional modification has a significant association. It is life itself, so to say, a reflection true to everyday life.

Drama reflects the great drama of life itself and offers us a true sight of life, true and mirror-like. The colouring of imagination that the artist gives takes its shades from life itself. Our interest in people, their doings and also in our world finds expression in that which recaptures this urge and presents it as it is. The self-expression of the dramatist includes a great deal of our own thoughts and feelings which are again akin to life, so he is not a different character. "The personality of the dramatist is merged in the depiction of life, and the mirror" says Hudson, "which the artist holds upto the world about him, is of necessity the mirror of his own personality". It may mean the instinct of originality but this originality implies genius and not newness. The origin of drama has its ingredients in mimicry, a natural instinct of man. Man tries to enter vividly into the situation, sentiments and progress of others and puts on a semblance of them in his gestures. A child has a great tendency to represent whatever he has seen in his elders or around him and whatever strikes his fancy or whatever he can imagine. Similarly, the dramatist has to indulge in the same practices; the field extending from the whole life of the universe to a capacity to deposit whatever he chooses. Generally, the dramatist has to separate parts of social life, and to present them to itself again in one collectiveness. The central point is life of man.In the drama we see man measuring his powers with others as intellectuals and moral beings, either friends or foes, influencing each other for the true enjoyment of life, may be the life itself consists of actions. The actions that the dramatist presents are sometimes the renovated pictures of life. Here no narration is required to fill the gaps of conversation, rather the living individuals accompanied by appropriate action and gesture and placed in apt circumstances, are to act and speak for life. This act the dramatist presents to us. They are to have their assumed ranks in life, age and country-locality from which they are all drawn.

The springboard for drama was religion and through religion it penetrated deep into life. It is to say that in the gardenland of religion the sources of dramatic art welled up, dividing into many streams, which widen as they run along, traverse the provinces of life. Many new brooks, flowing from other springs, fall into the main stream and swell its current. Firstly, it might have taken the Divine life as its subject as we find in the dialogues of divine forms in Rig Vedas. Similar is the case with the Greek, Roman and English dramas. The growth of drama is so obvious and natural that in most of the civilized countries of antiquity, the art had been imitated and so great has been the skill that the romantic drama of a very high order like "Shakuntala" could have a lasting effect. How delightful and romantic in its native climate and yet how very much in tune with our day to day life it was! The modernists' psychological approach to life has its seeds in this great creation. Thus we notice that with the advent of civilization, drama with the actual life as its model, holds a first place.

There is another aspect of the question too. Drama as well as literature brings us face to face with the subtle realities of life. We can feel the hold of virtue and vice on life, realize where the shoe pinches, and thus have scope for amendment. The mirror-like view that it yields cannot be misguiding in its accuracy of the realities of life, though the approach may have the licence to advance or reduce their bulk. The drama is to be generally moral in its tone and voice, and not leave behind any suggestion of wickedness. It is to create the impression of the triumph of virtue over vice. Instances may be picked from even the Shakespearean plays where Cordelia might suffer for her virtues but the fact remains that these inconsistencies are a part of life itself. Anyway the point of emphasis is that by bringing before us the virtues and vices of our day to day life, the picture of ours as we are and various aspects of ours or other routine, drama makes us conscious of what life is, where man stands and how the whole thing looks like. It might prepare us for reaction and it is of secondary importance and to take its teaching is our option but it does hold a mirror to life.

In this respect let us look into the growth of English drama in a passing manner to assert our point. The subject of the Miracle plays of the 12th Century, were taken from the legends of the saints and acts ascribed to them, while the Mystery plays had scriptures for their subjects. Their teaching was of a religious nature. The Morality plays, later, actually personified virtues and vices, and though they were not as true to life as were the Interlude in the Revived Era of learning, yet their influence was meant to throw a heavenly light on life. Now the public which showed an interest towards historical studies sought in its drama the treatment of actual human life and affairs. The characters in the Interludes were real men and women, even of English life of the day and these served some purpose. Pageants, Masgues and Pantomimes were at a later age, sources of delight through drama, whatever their nature may be, they echoed those aspects of life, which were amusing and light in their own way.

A similar kinship can be traced in two great branches of drama, that is Classical and Romantic: Classical drama dealt with the great legends of a remote mythological age, say of Greek or Roman Mythology. Its character was above commonplace humanity and experience. Here the scope was enhanced and limited to a sort of definition of life. No attempt to mirror ordinary life, or to reproduce common human nature was ever permitted. So was the case with the



Neo-classic concept of drama. The extraordinary coherence and heightened imagination brought about the Romantic drama in the Elizabethan age and the intermingling of so many lively plots, freedom in respect of time, place and action, religion reflected variety and complexity of actual life for our delight.

The various directions of dramas may also be referred to in support of our contention. The events and incidents in a tragedy really hold a mirror to life, the appeal to the sense of sympathy fills the mind with pity and terror. The chief aims of tragedy are to affect the feeling and to have a profound effect on the mind. The ruin of the principal character, the predominating influence of Fate, intense situation all remind us of the subtle realities of life around us. On the other hand, the happy ending of a comedy and the hero's triumph over difficulties and Poetic Justice teach us delightfully. Same is the case with other kinds of comedies including the tragicomedy. The historical plays can also be associated with this human kinship. On the whole drama as pointed out by Schelge, statesmangenerals holding the great event of the past similar to those in which they themselves are called upon to act, lays open their inmost springs and motives. Here too the philosopher finds subjects for profoundest reflection on nature and Constitution of man and with curious eyes the artist follows the groups which pass rapidly before him and impresses on his fancy the outlines of every future picture, and the susceptible youth opens his heart to every elevating feeling, age becomes young again in recollections, even child sits with anxious expectations before the grand curtain.

This estimate portrays the influence of drama on life. Whatever the form of drama may be the dramatic circumstances in our daily life seem appropriate to the theatre and it can be remarked that the portrayal of action which is the function of drama is itself an action of life. Drama has a free scope and significance as it depends upon the force and fidelity of the images rather than upon any individual agency. This image of life as a whole has a lasting influence for every taste in the society.

With the pageant of life as its eventual subject, drama as a well-made Nature of today has a tendency towards naturalism which is all the truer to life. This progressive movement has an all-round development in social, intellectual and critical fields, but its most universal quality has been a life-like character. It has been the endeavour of the dramatists to present the outward semblance of life as closely as possible. It is a definite form of art like naturalism in painting and not like that of the photographic art. It never was photographic. The imaginative colouring of Shakespeare of the plays is strictly in the order of painting though the subject was from life. Naturalism is indeed a form of style and gives impetus to the form wanting style. "The dramatist says Ashley Dukes, "Who takes pen in hand to portray everyday life in everyday speech must be a writer,

a writer in the ten thousand if he is altogether to avoid the rut of ordinary expression. The dramatist is to seek the help of style, if he has to make his individual idiom homelier and if he is to clothe apparent reality in a proper manner. "

The personal experience specially that of the writer is predominating in a drama. In ordinary intercourse men, for fear of mistrust or indifference from allowing others to look into what passes within them, exhibit only the outward man to each other, but the dramatist breaking through the conventional barriers, gives intensity to his feelings of the heart. This new tendency had its influence on the English drama in the days when Renaissance had touched it. This unmistakable element of personal character was full of vigour and strength of life.

Continually we catch the echoes of the doubts and fears and hopes that fill the spirit of man in his quest, not of the Gods indeed, or of the riddle of Sphinx, but of himself. The royal figure of Lear, undergoing the sufferings of the tragic destiny, has a nature common to ours and as much sensitive also, the dramatist being one of us, the common fellowman, is not to present the inner recesses of his characters' personality, the parables of which may easily be heard in his or our nature. The artist, says Plato, produces not reality but something less than that; though he creates something lesser than reality, he also creates something more than reality. He gives us his intention according to his standpoint. This kinship does not exist anyhow or the other. The listener to drama, it is held, needs absolutely neither learning nor cultivation, but a pair of eyes and a heart. This also reflects upon the relation that drama has with life.

The function of the dramatist as pointed out by critics is also practicable. To him subject is all important from every stand point. As he stands in close proximity to real life, and endeavours to endow his own imaginary creations with vitality-he must decidedly take part with one or another of leading views of human life, and constrain his audience also to participate in the same feeling. This is the keynote of the dramatist's art. So also the function of drama insists in its being acted and what is missed by the dramatist, is to be compensated by the actor. So in this way drama becomes self-contained, a complete picture of life as it is, rather a mirror to life.

Firstly, a mirror in the sense that it presents a view of life and secondly in a metaphorical sense as something presenting us a realisation of what life actually is. It is in the latter sense that we take the imaginative side of the dramatists' mind and views. So we feel that drama holds a mirror to life in every sense of the word. "There comes a time in life when you have to let go of all the pointless drama and the people who create it and surround yourself with people who make you laugh so hard that you forget the bad and focus solely on the good. After all, life is too short to be anything but happy."



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PROGRESS DOES NOT LIE IN MERE SCIENTIFIC ADVANCEMENT

Much of the progress that man has made is tagged with science. Not only progress but also the mental outlook of man is affected by it. The greatest victory of man is control over Nature. He tried to unveil the mysteries of Nature to the fullest extent. He has been successful in annihilating distance and has at his disposal not only planes but Appollo crafts and Lunas which move faster than the velocity of sound. The telegraph, telephone, wireless and radio have made communication so easy that we feel that the world has shrunk in size. Man has attained dreadful powers by a crash progress in industry. He has guns, tanks, missiles, bombs and so many other destructive weapons. Even a single man can kill hundreds of persons in a very short time. On the other hand the diminution of human sufferings owing to the advances in medicine is beyond all calculations. The wonder drugs of the present age have revolutionised the system of medical treatment and are giving a new life to thousands. He has got amenities for and comforts of life he had never dreamt of before. He has an electric fan-a soothing balm in sweltering heat, an electric lamp to dispel darkness, electric lift to carry him in a moment to the topmost floor and so many other amenities. To ease his jaded nerves, he has radio, television, gramophone, books, cinema and many other things. He has progressed in terms of wealth and prosperity. He has invented improved methods and techniques to step up production. He has improved the irrigation facilities and agricultural operations a lot and need not depend much on the mercy of Nature. Is this progress real?

The word 'progress' admits of so many interpretations and to some extent it is ambiguous also. Progress cannot be called 'change' because change may be for the better or for the worse. Progress is a purposeful change. Progress cannot be identified with evolution because evolution is partly a process of Nature and partly, as the modern philosophers think, a part of unconscious human effort. On the other hand, progress means an improvement over the past. Consequently, progress may be the result of evolution-the evolution which is a natural process. Progress is a change purposefully directed and properly conceived. Conception is the result of planned application of ideas to life. Progress can be viewed, particularly from materialistic and moral points of view. The glittering civilization with all the attendant mechanical progress and the development of critical faculties may be called material progress. If the world becomes richer in terms of gold, in terms of physical comforts, in terms of the enjoyment of worldly pleasures we call it material progress. By moral progress we mean the illumination of the spiritual self of man and consequently spiritually directed thinking and action.

All the progress man has made is material progress. As a result of this progress man has become more analytical, objective and mechanical in his attitude. His outlook is now more scientific. His faculties have developed a lot and to a great extent he does not believe in superstitions, religions and traditions. He gives importance to mere possibilities of thoughts. He ascertains the matter of fact by observation and not by consulting ancient authorities. He accepts only those ideas which express a definite knowledge and prove their worth by discovering new facts. As a result of it, he has become nothing more than a cog in the machine of social mechanism. He has lost his aesthetic sense and moral sense and has become useless as well as dangerous for the society. This materialistic progress has caused suppression of freedom, continuation of atrocities

and ageless inhumanity to man. He has no imaginative sympathy for others and has been dehumanized. This progress has apparently turned man into a clever devil. His capacity to inflict sufferings on his fellows seems limitless. He has more intelligence to exploit other's conditions and make use of their helplessness. His indifference to the cries of the hungry, the racially despised, the dispossessed is abyssmal. He may be a brilliant technician, but as yet he is a pigmy when it comes to making peace and fashioning a new humanity. His constructive efforts become pale and insignificant in comparison with his destructive use of the material progress. Appollo craft can journey to the Mars, but this does nothing in crossing the gulf which separates white man from the black man or rich nations from poor nations. All of his ambitions, ideals and aspirations are self-motivated as well as dangerous for the society. All the materialistic progress is leading man towards the destruction of humanity. It is creating more fear in the minds of the people, making them more frustrated, disappointed and dissatisfied. As a result of this, progress cannot be called progress rather it is retrogressing which is bringing the doom nearer and nearer.

If we review the internal situation we will find that man has degenerated to the level of brutes. He is always guided by the desire to dominate others. This is the reason that has developed lust for power in man. He is always busy in inventing more and more powerful and destructive weapons so that others fear him and may worship him. Despite the outward show of humanitarianism, ill feelings lurk in the hearts of the people. Nations are made puppets by the bigger nations without bothering about the poor nations. International politics has been reduced to hypocrisy and false-hood. It is now no more based on politics of ideals but politics governed by events. Every country has to take its stand after considering the interests of big countries. Even the national politics is governed by international considerations. Big countries play a great role in the internal affairs of the smaller countries. The lust for power is completely blind and treads upon all human considerations. Radhakrishnan has correctly said, "Irreligion is our malady and religion the only cure. "By religion he means morality as religion and morality are closely related. The person having belief in religion is always God-fearing. His actions are always guided by humanistic considerations which add to his moral outlook. Even on the individual level man considers that it is not prayer that causes things to go as he wishes, but knowledge of natural laws. The power he acquires in this way is greater and much reliable than what is supposed to be acquired by prayers. The powers of prayer, moreover, has recognised limits but the powers of science have no known limits. As a result, his faith in God and religion is decaying day by day. Man has become statistical in thinking.

The world needs a moral regeneration because perhaps the devil is at work upon this planet. If the destructions caused by the devil are not counteracted the consequences may be dangerous and devastating. It is necessary that nations may develop a moral outlook. Man will have to divert from his present path of progress because its destination is dissatisfaction which will ultimately bring an end to humanity. Religion must get a high esteem in our daily life. Modern progress should be viewed from the moral point of view and given a turn which may serve humanity. It is not a progress in the real sense of the word because man has not improved as far as humanitarianism is concerned.



DEMOCRACY CAN BE MADE WORKABLE THROUGH FREE PRESS

"The freedom of the human mind is recognised in the right to free speech and free press – Calvin Coolidge"

If a dog bites a man it is no news, but if a man bites a dog it is news. Newspapers not only give us information about the odd happenings which may interest the human beings and may also claim the emotional and intellectual involvement in that problem, but also something more than that. In fact, with the passage of time newspapers have grown into not only a diversion for the breakfast table but also an essential source of knowledge and the most important medium of making the people democratic in their outlook and give information to the people and to keep them alive to the changes in the country and the world at large. But as all media of education are used or misused for one or the other purpose so is the case with the newspapers. Long ago Burke called the press the Fourth Estate and we can conveniently call it the fourth important organ of the democratic states the other three being executive legislature and judiciary. If the press is independent and the reports are objective, which is of course impossible, it can keep the minds of the people open to all impressions. But now-a-days there are subtle suggestions in the news, and there are very clever distortions here and there. So the primary purpose of newspapers now-a-days is to colour the opinions of the people. They provide the public with readymade opinions of the people. They provide the public with readymade opinions and baked ideas. The people also accept these things happily because the common man has neither the intelligence nor the time to verify the truthfulness of the news or to gather the correct opinion from other sources. Otherwise also it is the weakness of even educated people that they believe a printed word more readily than a word from mouth. So most of the people quote newspapers in order to support their contentions. They forget that the newspapers might have falsified the news for the benefit of the party or in accordance with the newspapers also. Once the ideas are propagated it is very difficult, because of the lack of resources to sift the truth from falsehood. Consequently, people become the victim of propaganda without being conscious of this process.

From the foregoing discussion it becomes clear that the newspapers are generally not independent, though they should be because there lies the real service of the newspapers to the nation. A free press can definitely consolidate the forces of democracy and can easily negative the influence of pulls and pressures which have been dragging the citizens away from the democratic thinking. If the news is reported objectively and the problems are analysed with no bias, it is definitely possible to make the people to think correctly. Correct thinking on the part of the citizens of a democratic state is very important because that will guide them to cast their votes properly and as the people whom they elect would be the right sort of people. In the governmental institutions which work on the basis of governing oneself, the responsibilities of the people increase a lot but they can discharge their responsibilities if they have some pre-requisite qualifications for discharging them. Ignorance may be bliss as the 18th century poet thinks but in a democratic country ignorance of one's duties or of the political conditions definitely leads to the crumbling of the democratic structure. If the people do not get proper type of information how can they fight for their rights and discharge their duties. Moreover, the people in power have a tendency to assume more powers. Lust for power as Russell thinks cannot be completely finished. It is difficult to force the people in power to observe the ethics of power.

Consequently, power creates greater love for power and so they try to snatch away the rights of the people. People have to keep a watch over the government and their action; eternal vigilance is the price of liberty. For keeping vigilance, it is necessary that the citizen should be well informed; illinformed people may create difficulties in the working of the government and also be responsible for hindering the smooth working of the democratic institution. It is only the newspapers which can provide the objective assessment of the different happening at the state and the world level. The political and the economic problems whether national or international have become so complicated that it is necessary to know the background and also to know the complexity of the problem in a proper manner. Only the experts like the seasoned journalists can help the people to have an objective assessment of the situation. So a press which is committed to a particular policy can never help in consolidating the democratic forces. Similarly, the newspapers can create the conditions for war or peace. In fact, the only handy source of information for a common man is the press. They can rouse the people to rebellion if they feed them with the news which can prejudice the people against a particular authority. If they go on disseminating information which may make the people to think ill of other nations, the conditions of war are easily created. For example, Pakistan has been using press for channelizing the people's minds in a direction in which the government wanted it to be channelized. Whenever Pakistan leaders feel that the situation is beyond their control they try to divert the attention of the people by propagating that India was going to attack them. Similarly, the conditions for peace can also be created through the press. If they try to calm down the ruffled emotions of the people and adopt a constructive approach it is possible to establish peace in the world as well as in the States. Sometimes the newspapers create artificial scarcity of certain essential commodities if they publish false news regarding scarcity of certain goods or possibility of the imposition of certain taxes or probable closure of certain factories, they will succeed in creating greater demands for those goods.

Apart from it, free press can educate people for social progress as well. Customs and conventions entrench themselves in the thinking of the people so deep, that they colour every mode of behaviour and every act of the human beings. Sometime they become a second habit and it is impossible to shake them off. People stick to their social customs so religiously that even if the whole society is doomed they won't give up the observance of these conventions. The society cannot be kept static; the process of evolution should go unhampered and the social outlook and social behaviour should be in conformity with the social effort which is to be conditioned according to the circumstances. No doubt it is human nature to respect that mode of action which has stood the test of time and which has also transcended the jerks and jolts of the changing circumstances, yet it is necessary; for the society to adapt itself to the new values. For example, in the modern times scientific advances have created altogether new values of life; objective outlook, analytical approach and the spirit to investigate have created a new set of values to which the social customs will have to be adjusted. As in social life revolutionary changes always meet with a stiffer opposition, so a proper type of atmosphere must be created for bringing a change. It depends upon the press how far it is able to create conditions for bringing a social change. Similarly, a free and independent press can also give a



direction to the economy of a country. Economic problems in a country sometimes become very troublesome if the government does not get support from the newspapers. Economic crisis may be interpreted as the failure of the government, by the opposition parties. Consequently, the people may rally their forces and start opposing the people in power unnecessarily. The ultimate consequences of this type of action will never be beneficial because instead of solving the problems it will create more problems. Free and independent press is necessary for the working of political institutions and also for ameliorating the conditions of society. Many a time the press can boost up the morale of the people by keeping them properly informed about the situation. Sometimes the news may be suppressed in order to avoid panic which may result in so many other problems. Sometimes they distort the news so that may have a good effect upon the thinking of people.

Is it possible to make the press free and independent? There is doubt about this because nowadays the press is in the hands of big businessmen as it has become an industry. Like all industrial organisations it is also run with profit motive and with all the methods which are necessary for the growth of industry. In other words, we have what is generally called 'Yellow Journalism'. This type of journalism simply caters to the needs of the people and exploits their weakness for furthering the profit-interest of the industry. Otherwise yellow journalism leaves a wrong impression upon the mind of the people. Apart from this the newspapers serve the interests of the political parties. Their policies are coloured by the policies of those very parties. They propagate their ideologies. They try to build a better type of image of that party, they even go out of the way to colour the thinking of the people accordingly. Some of the newspapers give a slant to news according to the interests of that very party or the proprietors of the newspapers. All of these things are done by assigning particular types of headings to the news which clearly change the implications of the news. This is also done by distorting the news and by suppressing some of them. Suppression of the news is done in a very interesting manner; some of the unimportant news which serve the demands of their policy are given greater importance by bringing them on the front page. Some of the newspaper readers are interested only in the headings because they don't have enough time to go through the whole of it or to analyse it. Even reporting of the news may be biased. We have been hearing that some of the Asian Newspapers could not report certain news objectively because they get those only from the western news agencies. In Asia there are many news agencies which can cater to the needs of the Asian newspapers and

can interpret the news from their point of view. This makes a lot of difference and objective assessment of the news is not possible. So complete independence of the press is just a myth.

In India it seems that the press is to play a very important role because our democracy is passing through its infantile period. No doubt we have passed the teething troubles, still a proper nurse is needed to take active interest in the healthy development of our democracy. Press can ventilate the grievances of the people with greater force and can make the people in power to bow before the public opinion. On the other hand, it can interpret the policies of the government to the people in an objective manner. If there is a proper understanding between the people, the democracy becomes strong and people repose confidence in their leaders. This type of action on the part of the press will make the government responsible to the people and responsive to public opinion. If the press is not independent, it will never try to further the cause of the people if it does not conform to their policies. In India we have Press Council which according to some of the people is a hindrance in the way of independent press. They say it is dominated by the nominees of the government and so it has not been able to safeguard the interests of the newspaper industry. Moreover, some of the policies of the government like with holding the advertisements, laying the price-page schedule and also rationing the quantity of newsprint hampered the freedom of press. It is generally complained that the Indian Government wants to have a committed press as the Prime Minister has openly said. In fact, this is wrong tendency to have a committed judiciary or a committed press. In fact, this also boils down to a very ugly conclusion that the government wants to have committed voters-voters who are committed to the policies of the party in power. This will be prostitution of democracy and democracy itself will become a farce. Press will have to be independent as far as it is possible otherwise we will have to say that in India, democracy cannot strike its roots in the ground. The role of the press and the protections which we afford it are today more important than ever before, because we dwell in a society where the belief in our governments and in the strength of our institutions is declining, said by Rose Elizabeth Bird the 25th chief justice of the California supreme court. The American broadcast journalist who served as the anchorman for the CBS news for 19 years, who cited as the most trusted man in America said. "The role of the press and the protections which we afford it are today more important than ever before, because we dwell in a society where belief in our governments and in the strength of our institutions is declining"





SCIENTIFIC SPIRIT KEEPS QUEST ALIVE

Scientific spirit implies objectivity of outlook and detachment from the self and the object. It implies free will and unbiased attitude of the observer. The emotional reactions of man and the influence of feelings upon action and speech have always not only confused thinking but has also misdirected the actions of human beings. Objectivity of outlook implies that emotions and impulses must be subordinated to reason and intellect. Consequently scientific spirit leads to very concrete results, clear thinking and sound reasoning. Reason does not mean intellectual exercise in vacuum rather it means thinking which is based upon facts and probable results. It develops in man a desire to know important facts and an unwillingness to give assent to pleasant illusions. Scientific spirit means open mind which can receive all impressions without prejudice and can revise whenever it finds itself incorrect.

Naturally, there is no fanatical attachment with any idea or ideal, no blind faith in any theory or doctrine. Scientific theories, change from time to time and what recommends a theory is whether it 'works'. When new phenomena are discovered, the old which no longer 'work' are discarded. It is judged good or bad by its efficiency and the manipulation of facts. Scientific spirit makes us open to reason and arguments and so subject to revision and correction. The whole attitude of accepting a belief unquestioningly on the basis of authority is contrary to the scientific spirit and are scarcely compatible with the progress of science. It enables man to live without the delusive support of subjective certainty. Scientific spirit means a little of adventurous spirit. For a man with scientific outlook every action even the whole life becomes an experiment-of course a bold experiment.

Scientific spirit makes its possessor cheerful. It fills him with the joy of anticipation. It teaches him to look forward to the future, with the hope of fresh scientific wonders. There is no end to the achievements of science. The study of art and literature discourage the student; the literary and artistic masterpieces of the past appear to have touched a height which may be equally appreciated by the genius of the future. Scientific research on the other hand, shows a continually rising curve of achievements. The study of science also affords a man an escape from worries and anxieties. His own circumstances appear trivial when compared to the mysteries of the universe which he is trying to understand. Scientific spirit is creative and gives pleasant feelings of service to mankind because the inventions and discoveries may prove to be highly beneficial to the human beings.

Scientific spirit has transformed man and his relations with society, Nature and to some extent with God. Previously all the power was God's but man is powerful in some domains. Previously he was much afraid of mysterious nature. The effect of death and disease were not taken to be acts of a demon which must be driven away from the patient by prayers, incantation or recitation. Now he thinks that physical laws can explain even human behaviour. This leads to materialism and denial of free will. In his view the universe has no purpose and man is a significant creation. The thinking of man has crossed the bounds of earthly existence. No doubt reason was one of the features that distinguished mankind from animals but now reason has been so much developed that man cannot only realize his position in the world but also moulds the world according to his wishes. Due to triumphs of scientific technique, scientific spirit has undergone a change. Science shows us how to

change the world instead of providing means to know the world. Emotions have been completely subdued and even petty decisions are reasoned out (though the imitations of reason still exist). Scientific spirit has brought a great change not only in the organisation of the society but also in our view of society. Society is considered a mechanism which has made man a cog in it. In other words all those theories regarding the personality of society, separate identify of society, have been thrown into the wind.

One of the consequences of scientific spirit is that outlook of man has undergone a change. He has become more analytical, objective and mechanical in his attitude. His outlook has become more materialistic. As the reasoning of man does not allow him to take the unknown and invisible things as concrete objects so man has become earthly in outlook as well. He does not believe in superstitions, religions and traditions. Most of his activities are directed towards material progress and material possessions. Morality occupies no place in his considerations. He has no fellow feelings and no imaginative sympathies for the sufferers. Previously, man was considered to be the unit of society as well as political organisations. As science takes the world as a whole though man as an individual is as unimportant as motes in a beam of ray. The development of the mind of man and his desire to correct and revise his judgement have led to much progress in the world. The pace of the progress is so quick that even the things of vesterday become out dated. None can deny that progress is in the direction of materialism-that is the natural consequence of scientific spirit because it does not take account of morality and religious outlook.

Scientific spirit has made us formal and so it has created a big gap between our actions and thoughts. As a result of it people have become hypocrites. There is no love, no sincerity and no humanistic relations among human beings. As a result of it people try to satisfy their selfish motives and make others as the tools for realising their aims. Our attitude towards everything including our institutions, our life and our relations with others have become mechanical. We have become time conscious and always try to finish our work in a speedy though faulty manner. We are in such a hurry that we have lost the aesthetic sense of life. We don't have time to enjoy the charms of life. Not only this but also the time consciousness has created anxiety, some type of confusion in thinking and disturbance in emotions. Our thinking has become mechanical and so we try to find out ways to achieve our aims by giving ideas to others. We present our ideas as ideals and always try that people should adopt them and be baited. Man has become a thinking machine. Emotions have completely been smothered. Intellectual people who have no touch of emotions about them are good for nothing for the society. Their reason may direct them in the wrong direction but they act upon that because they think the decision is logical. Scientific spirit has also made man fickle-minded. In life we always need an anchorage.

In order to get rid of the evil effects we will have to supplement scientific education with moral and religious education. It is wrong to think that scientific spirit is opposed to religious spirit by its very nature. It does dissolve superstitions and break dogmas but it can go side by side with religion and religious spirit. Scientific spirit does give us initiative, energy and enthusiasm to work, and to explore the remote region. So instead of checking the growth of scientific spirit our aim should be to channelize it.



UPSC Civil Services (Mains) MOCK QUESTIONS

- 1. Examine the salient features of Project Saptirshi seven point programme provided in the Union Budget 2023-24
- 2. Discuss the major challenges for the Indian economy highlighted in the Economic Survey
- 3. The prolonged current status quo along the India-Sino border as a consequence of India's growing engagement with west. Discuss.
- 4. Form a critical analysis on the choice of parliamentary form of government by Indian Polity. How has it performed over the years.
- 5. Critically analyse how USA has influenced India's relation with China especially in the context Chinas Rise as a major power in the world
- 6. Examine the significance of mangroves in ecosystem.
- 7. What is mean by wetlands? Examine the current conservative measures are sufficient for the protection of mangroves in India.
- 8. How far do you think the drone technology can be a game changer in future?



UPSC (Mains) MODEL ANSWER

Examine the reasons for the decline of Mauryan Empire

The Mauryan Empire, founded by Chandragupta Maurya in 322 BCE, was one of the largest and most powerful empires in ancient India. However, by the end of the third century BCE, the empire began to decline and eventually collapsed. There were several reasons for the decline of the Mauryan Empire, including:

Weak Successors: After the death of Ashoka in 232 BCE, the Mauryan Empire was ruled by a succession of weak and ineffective rulers. The successors were unable to maintain the political and economic stability of the empire, leading to a decline in the overall power of the Mauryan Empire.

Economic Issues: The Mauryan Empire was a vast empire that stretched across much of the Indian subcontinent. Maintaining such a large empire required a lot of resources, and the Mauryan rulers were heavily dependent on revenue from agriculture. However, there were several factors that affected the agricultural productivity of the empire, including soil exhaustion, land degradation, and deforestation. These issues led to a decline in agricultural output and revenue, which in turn led to economic instability and contributed to the decline of the Mauryan Empire.

External Threats: The Mauryan Empire faced external threats from neighboring kingdoms and empires. The invasion of the Greeks led by Alexander the Greatin 327 BCE created a power vacuum that allowed the Mauryan Empire to expand. However, after the death of Ashoka, the empire faced increasing threats from the Seleucid Empire and other neighboring kingdoms, which weakened the empire and eventually led to its collapse.

Rebellion and Instability: The Mauryan Empire was a vast and diverse empire that included many different regions and cultures. The Mauryan rulers attempted to maintain control over these regions through a system of centralization and bureaucracy. However, this system was often ineffective, and many regions rebelled against Mauryan rule. The rebellions led to instability and weakened the overall power of the empire.

Religious Conflict: Ashoka's reign was marked by a policy of religious tolerance and the propagation of Buddhism. However, after his death, there were conflicts between different religious groups in the empire, which further weakened the overall stability of the Mauryan Empire.

In conclusion, the decline of the Mauryan Empire was caused by a combination of weak successors, economic issues, external threats, rebellion and instability, and religious conflict. These factors contributed to the gradual weakening of the empire, which eventually led to its collapse. Despite the decline of the Mauryan Empire, its legacy continued to influence Indian history and culture for centuries to come.

MODEL QUESTION PAPER-MCQ





Q1.Which of the following statements is incorrect about the capital receipts?

a.Loans from foreign governments and bodies constitute capital receipts.

b.Disinvestment proceeds and dividend distribution are part of capital receipts.

c.Recoveries of loans from state governments are constituents of capital receipts.

d.Market borrowings from the public and borrowings through the sale of Treasury-Bills (short-term borrowings) are part of capital receipts.

Q2.Consider following statements regarding Contingency Fund of India

1.The Parliament of India has authorised a corpus of 30000 Cr. for the Contingency Fund of India.

2.The Contingency Fund of India has been constituted to look for unforeseen expenditures.

3.The Contingency Fund of India is placed at the disposal of Union Council of Ministers.

Which of the above statements are correct

a.1 and 2 only

b.1 and 3 only

c.2 and 3 only

d.1, 2 and 3

Q3.Which of the following statements about Indian budget is incorrect?

a.Non-tax receipts of the government mainly consists of interest and dividends on investment in addition to fees and other receipts for services rendered but the government.

b.Interest payments on debt is part of the revenue expenditure.

c.All grants to the state governments and union territories except for use of creation of capital assets.

d.None of the above

Q4.Consider the following statements about the fiscal management.

1.The Union government will give 50 year interest free loans to states which are to be spent on capital expenditure within 2023-24.

2.A fiscal Deficit of 3.5% of Gross State Domestic Product (GSDP) is allowed for states (in which 0.5% is tied to power sector reforms).

3. The targeted fiscal deficit to be below 4.5% by 2024-25.

Q5.Which of the above statements are correct as per the Union Budget 2023-24?

a.1 and 3 only

b.1 and 2 only

c.2 and 3 only

d.1, 2 and 3

Q6.Consider following statements about the budget estimates of fiscal year 2023-24.

1.The share of subsidies is more than the share of defence in Union budget allocations.

2.Interest payment on borrowings is about 25% of total expenditure.

3.Centrally sponsored schemes have higher allocation of funds than Central sector schemes.

Which of the above statements are incorrect

a.1 only

b.1 and 3 only

c.2 and 3 only

d.1, 2 and 3

Q7.Consider the following statements about Fiscal Policy statements mandated under FRBM Act.

1.Macroeconomic Framework Statement contains an assessment of the growth prospects of the economy along with the statement of specific underlying assumptions.

2.Medium term Fiscal Policy cum Fiscal Policy Strategy Statement sets out three year rolling targets for fiscal deficit, revenue deficit, primary deficit, tax revenue, non-tax revenue and debt of Central government.

Which of the above statements are correct

a.1 only

b.2 only

c.Both of the above

d.None of the above

Q8.According to the Union Budget 2023-24, consider the following statements. The Budget adopts the following seven priorities under Project Saptirshi.

1.Inclusive Development

2.Reaching the Last Mile

3.Infrastructure and Investment

4.Unleashing the Potential

Which among the following is/are not a constituent of the Project Saptirshi?

a.1 and 2 only

b.2 and 3 only

c.1 and 4 only

d.None of the above

Q9.According to the Union Budget 2023-24, consider the following statements.

1. Agriculture Accelerator Fund will be set-up to encourage agri-startups by young entrepreneurs in urban areas.

2.The Fund will aim at bringing innovative and affordable solutions for challenges faced by farmers.



Which of the above statements is/are correct?

a.1 only

b.2 only

c.Both 1 and 2

d.Neither 1 nor 2

Q10.According to the Union Budget 2023-24, consider the following statements.

1.Atmanirbhar Clean Plant Program will be launched to boost availability of disease-free, quality planting material for high value horticultural crops at an outlay of 200 crore.

2.To enhance the productivity of extra-long staple cotton, the government will adopt a cluster-based and value chain approach through Public Private Partnerships (PPP).

Which of the above statements is/are not correct?

a.1 only

b.2 only

c.Both 1 and 2

d.Neither 1 nor 2

Q11.Consider following statements about the budget estimates of fiscal year 2023-24.

1.The share of subsidies is more than the share of defence in Union budget allocations.

2.The share of interest payment on borrowings is about 25% of total expenditure.

3.The Centrally sponsored schemes have higher allocation of funds than Central sector schemes.

Which of the above statements are incorrect?

a.1 only

b.2 only

c.1 and 2

d.1, 2 and 3

Q12.According to the Union Budget 2023-24, consider the following statements.

1.National Green Hydrogen Mission, with an outlay of 19,700 crores, will facilitate transition of the economy to low carbon intensity, reduce dependence on fossil fuel imports.

2.This Budget provides 35,000 crore for priority capital investments towards energy transition and net zero objectives, and energy security by the Ministry of Petroleum & Natural Gas.

Which of the above statements is/are not correct?

a.1 only

b.2 only

c.Both 1 and 2

d.Neither 1 nor 2

Q13.According to the Union Budget 2023-24, consider the following statements.

1.The PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth" will be launched to incentivize States and Union Territories to promote alternative fertilizers and balanced use of chemical fertilizers.

2.500 new 'waste to wealth' plants under GOBARdhan (Galvanizing Organic Bio-Agro Resources Dhan) scheme will be established for promote a circular economy.

Which of the above statements is/are not correct?

a.1 only

b.2 only

c.Both 1 and 2

d.Neither 1 nor 2

Q14.According to Union Budget 2023-24, consider the following statements regarding indirect taxation changes made for the green mobility:

1.Exemption of excise duty on GST-paid compressed biogas contained in it.

2.A customs duty exemption is being extended to import of capital goods and machinery required for manufacture of lithium-ion cells for batteries used in electric vehicles.

Which of the above statements is/are correct?

a.1 only

b.2 only

c.Both 1 and 2

d.Neither 1 nor 2

Q15.According to Union Budget 2023-24, consider the following statements regarding MSMEs:

1.Medium enterprises with turnover up to Rs2 crore and certain professionals with turnover of up to Rs 50 lakh can avail the benefit of presumptive taxation.

2.It is proposed to provide enhanced limits of Rs 3 crore and Rs75 lakh respectively, to the taxpayers whose cash receipts are no more than 5 percent.

3.It is proposed to allow deduction for expenditure incurred on payments made to them only when payment is actually made.

Choose the correct option using the codes below:

a.1 and 2 only

b.1 and 3 only

c.2 and 3 only

d.1, 2 and 3

Q16.According to Union Budget 2023-24, consider the following statements regarding the socio-economic welfare measures proposed by the government:

1.The payment received from the Agniveer Corpus Fund by the Agniveers enrolled in Agnipath



2.Scheme, 2022 is proposed to be exempt from taxes.

3.It is proposed to enable co-operatives to withdraw cash up to Rs 3 crore in a year without being subjected to TDS on such withdrawal.

4.Certain start-ups are eligible for some tax benefit if they are incorporated before 1st April,

5.2023, the period of incorporation is proposed to be extended by one year to before 1st April, 2024.

Choose the correct option using the codes below:

a.1 and 2 only

b.1 and 3 only

c.2 and 3 only

d.1, 2 and 3

Q17.Which Schedule of the Constitution is related to the allocation of seats in the Rajya Sabha to the States and the Union Territories?

1. Fourth Schedule

2.Fifth Schedule

3.Sixth Schedule

4. Seventh Schedule

a)1 and 4

b)2 and 3

c)1 only

d)4 only

Q18)Which of the following Articles of the Constitution of India deals with the power of the President to grant pardons, reprieves, and respites?

- a) Article 72
- b) Article 73
- c) Article 74
- d) Article 75

Q18)Section 144 of the Criminal Procedure Code (CrPC) empowers which of the following authorities to issue orders in urgent cases of nuisance or apprehended danger?

- a) Magistrate
- b) Police Commissioner
- c) District Collector
- d) Chief Minister

Q19)Can a person violate Section 144 of the CrPC if they have a valid reason to do so?

- a) No, it is an absolute prohibition and cannot be violated
- b) Yes, if they have a valid reason such as a medical emergency or attending a funeral
- c) It depends on the discretion of the Magistrate
- d) none of the above

Q20)What is the significance of Article 142 of the Indian Constitution?

a) It provides for the power of the President to grant pardons, reprieves, and respites

- b) It empowers the Supreme Court to pass any order necessary for doing complete justice in any case or matter before it
- c) It outlines the powers and functions of the Attorney General of India
- d) It deals with the procedure for amending the Constitution of India

Q21)Can the power of the Supreme Court under Article 142 of the Indian Constitution be challenged in any court?

- a) Yes, any court can hear a challenge to the power of the Supreme Court under Article 142
- b) No, the power of the Supreme Court under Article 142 cannot be challenged in any court
- c) It depends on the situation and circumstances
- d) none of the above

Q22)Which of the following is the objective of the Right to Information (RTI) Act, 2005?

- a) To promote transparency and accountability in the functioning of public authorities
- b) To provide citizens with the right to access information held by public authorities
- c) To curb corruption and promote good governance
- d) All of the above

Q23)In the context of Indian Constitution, Puttuswamy case is related to which of the following?

- a) Right to Education
- b) Right to Health
- c) Right to Privacy
- d) Right to Food

Q24) With regard to Indian governance, What was the context of the Puttuswamy case?

- a) Aadhaar card linkage with bank accounts
- b) Triple Talaq
- c) Section 377 of the Indian Penal Code
- d) None of the above

Q25)Who is responsible for the implementation of MPLAD scheme?

- a) Ministry of Home Affairs
- b) Ministry of Finance
- c) Ministry of Rural Development
- d) Ministry of Statistics and Programme Implementation

Q26) Who is the final authority to decide on disqualification of a member under the Anti-Defection Law?

- a) Speaker of the Lok Sabha or the Chairman of the Rajya Sabha
- b) President of India
- c) Prime Minister of India
- d) Chief Justice of India

Q26) Under the Anti-Defection Law, a member of a political party can be disqualified if he/she:

- a) Votes against the party whip
- b) Abstains from voting without prior permission from the party whip
- c) Both (a) and (b)
- d) None of the above



Q27)QWhat is the basic structure doctrine of the Indian Constitution?

a) It is a doctrine that defines the basic features of the Indian Constitution that cannot be amended by the Parliament.

b) It is a doctrine that defines the basic rights of citizens that cannot be violated by the government.

c) It is a doctrine that defines the basic principles of federalism that cannot be changed by the government.

d) None of the above.

Q28) Which of the following features of the Indian Constitution has been identified as a part of the basic structure by the Supreme Court?

a) Sovereignty

b) Federalism

c) Separation of powers

d) All of the above

Q29) Which provision of the Indian Constitution was amended by the 42nd Amendment to exclude judicial review from the scope of the basic structure?

a) Article 13

b) Article 32

c) Article 368

d) None of the above.

Q30) Consider the following statements.

1.Mangroves are able to survive in severe coastal conditions and are vital in preventing erosion, lessening the effects of storms, and providing habitat for a range of species.

2.Mangroves come in more than 80 different varieties, with Southeast Asia and the Pacific Islands having the greatest variety of species.

Select the correct statement/s using the code given

A.1 only

B.2 only

C.Both 1 and 2

D.Neither 1 nor 2

Q31). With reference to PM PRANAM often seen in news, consider the following statements.

1. The initiative aims to encourage states and union territories to promote alternative fertilizers and the moderate use of chemical fertilizers.

2.The programme intends to reduce the government's subsidy burden the fertilizers.

Select the NOT correct statement/s using the code given

A.1 only

B.2 only

C.Both 1 and 2

D.Neither 1 nor 2

Q32). Consider the following statements regarding the Red Sanders often seen in news.

1. They are listed as a vulnerable species under the Convention on International Trade in Endangered Species.

2.These tree species are indigenous to the southern region of India.

3. The tree is well recognized for its unusual reddish-purple

heartwood, which has both decorative and therapeutic

Which of the above statement/s is/ are correct?

A.1 only

B.2 and 3 only

C.1 and 3 only

D.1, 2 and 3

Q4. Consider the following.

1.Biodiversity

2.Water purification

3.Climate regulation

Q33)Which of the above can be consider as the different services provided by the wetlands ecosystem?

A.1 only

B.2 and 3 only

C.1 and 3 only

D.1. 2 and 3

Q32). 'Bharatpur Bird Sanctuary' often mentioned in news is located at

A.Bihar

B.Rajasthan

C.Odisha

D.Andra Pradesh

Q33). With reference to U.S.-India initiative on Critical and Emerging Technologies (iCET), consider the following statements.

1. The India-US initiative to promote technology is a bilateral partnership aimed at promoting collaboration between the two countries in the field of technology.

2.The initiative aims to advance and broaden strategic technology partnerships and defense industrial cooperation between our two governments, companies, and academic institutions

Select the correct statement/s using the code given

A.1 only

B.2 only

C.Both 1 and 2

D.Neither 1 nor 2

Q34). Consider the following statements regarding the Small Satellite Launch Vehicle of ISRO.

1.The launch vehicle provide a dedicated launch platform for small satellites.

2.Payload Capacity of launch vehicle is up to 500 kg to Low Earth Orbits (LEO), making it an ideal launch vehicle for small satellites.

Select the correct statement/s using the code given

A.1 only

B.2 only

C.Both 1 and 2

D.Neither 1 nor 2

Q35). Consider the following.

1.Liquid windows can be used to reduce the energy consumption of buildings.

2.Liquid windows can help reduce the carbon footprint of



buildings by reducing the energy consumption needed to regulate the temperature.

3.By controlling the amount of sunlight that enters a room, liquid windows can also improve the comfort level of the occupants.

Which of the above statement/s is/ are correct?

A.1 only

B.2 and 3 only

C.1 and 3 only

D.1, 2 and 3

Q36. Consider the following statements regarding the Voice deep fakes often sTeen in news.

1.It can be used to produce convincing fake audio recordings of prominent people, politicians, or celebrities expressing things they did not actually say, which can lead to misinformation and disinformation.

2.Vocal deep fakes can be used to pass for someone else in order to acquire private information, swindle people or organisation, or both.

3.It always make negative impacts.

Which of the above statement/s is/ are correct?

A.1 and 2 only

B.2 and 3 only

C.1 and 3 only

D.1, 2 and 3

Q37). Consider the following statements.

- 1. Amorphous materials include things like glass, rubber, and some plastics.
- 2. Amorphous materials are used in a variety of industrial processes, such as the creation of optical fibres, solar cells, and medication delivery devices.
- 3. Amorphous ice has been utilised in cryopreservation to protect biological tissues and cells, including organs, embryos, and vaccinations.

Which of the above statement/s is/ are correct?

A.1 and 2 only

B.2 and 3 only

C.1 and 3 only

D.1, 2 and 3

Q38)Consider the following statements.

- 1. Constituent assembly had two functions one as constituent assembly and other as legislative body
- 2. When it met as legislative body, it was chaired by Rajendra Prasad
- 3. When it met as constituent assembly, it was chaired by G.V Mavlankar

Which of the above statement is/are NOT correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Q39)Consider the following statements.

1. Fundamental Rights are borrowed from Bill of Rights of America.

- 2. Suspension of Fundamental Rights during Emergency borrowed from Canada.
- 3. Federation with strong centre, Residual power borrowed from Weimer constitution of Germany.

Which of the above statement is/are correct?

- a. 1 only
- b. 2 only
- c. 3 only
- d. 1, 2 and 3

Consider the following statements

- 1. The president can hold office beyond his term of five years until his successor assumes charge.
- 2. President is only impeached when the resolution passed with two-thirds of the members present.
- The oath of office to the President is administered by the Vice President

Q40)Which of the above statement is/are NOT correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Q41) Consider the following statements about Champaran Satyagraha:

- 1. Champaran Satyagraha (1917) First Civil Disobedience.
- 2. Champaran Satyagraha was against tinkathia system.
- 3. Gandhi was arrested during this protest.

Which of the statements is/are correct?

- a. 1 and 2 only
- b. 2 and 3 only
- c. 2 only

Q42)Hindustan Republican Association (HRA) was a revolutionary organization of India. Which of the following statements are correct regarding HRA?

- 1. It was established as an offshoot of Anushilan Samiti.
- 2. It was established by Bhagat Singh and Chandra Shekhar Azad.
- The objective was to establish a Federated Republic of the United States of India.

Select the code from below:

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. All the above

Q42)Which of the following statements are correct regarding Kakori Conspiracy?

- 1. It is the name given to train robbery at Kakori by HRA
- The objective of the robbery was to collect money and distribute it to poor farmers dying in famine.
- Only British money was looted while nothing was taken from Indian passenger.

Select the code from following:

- a. 1 and 2 only
- b. 2 and 3 only



- c. 1 and 3 only
- d. All the above

Q44)Which among the following statements were associated with Aligarh Movement?

- 1. It was the foremost movement for social reforms among the Indian Muslims
- 2. The aim of the movement was to organize the Muslim peasants against Hindu landlords and British indigo planters
- 3. All-India Muslim League was the outcome of this movement
- 4. The movement offered a serious threat to the British supremacy in India

Choose the appropriate answer

a.1 and 2 only

b.1 and 3 only

c. 1, 2 and 4 only

d. All the above

Q45)Consider the following statements about the Union and territories of India.

- 1. The territories of India share federal power with the center.
- 2. The Union of India includes the states only.
- The constitution describes India as, 'India that is Bharat, shall be Union of states'.
- 4. The settlement of border dispute requires constitutional amendment.

Which of the given statements is/are correct?

- a. 1 only
- b. 2 and 3
- c. 1 and 3
- d. None of the above

Q46)With reference to the wood-based textile fibers, consider the following statements:

- 1. Lyocell fibers are modern wood-based textile fibers that have properties like viscose and polyester.
- 2. Unlike rayon made by the viscose process, lyocell production does not use harmful carbon disulfide.

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

Q47)Consider the following statements:

- 1. National Small Savings Fund is administered by the Department of Financial Services of Finance ministry.
- 2. Central Economic Intelligence Bureau functions under the administrative control of the Department of Revenue.
- Matters relating to Central Government's disinvestment in PSUs are dealt with by the Department of Economic Affairs.

Which of the statements given above is/are correct?

- a. 1 only
- b. 2 only
- c. 1 and 3 only

d. 2 and 3 only

Q50)Consider the following statements about Scheme for Facilitating Start-Ups Intellectual Property Protection (SIPP):

- 1. The scheme of SIPP aims to promote awareness and adoption of Intellectual Property Rights amongst Start-Ups.
- 2. The scheme has now been revised and facilitation fees has been notably increased by at least 100 percent.

Which of the above given statements is/are correct?

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

Q51)Consider the following statements about India Infrastructure Project Development Fund Scheme (IIPDF Scheme):

- 1. It is available to the Sponsoring Authorities for PPP projects for meeting the project development costs.
- 2. The IIPDF will contribute up to 75% of the project development expenses to the

Sponsoring Authority as an interest free loan.

Which of the above given statements is/are correct?

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

Q52)The Gutti Koya tribes are found in which of the following States of India?

- a. Arunachal Pradesh, Manipur, and Nagaland
- b. Andhra Pradesh, Telangana, Chhattisgarh, and Odisha
- c. Assam, Mizoram, and Meghalaya
- d. Tamil Nadu, Karnataka, and Maharashtra



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