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RUSSIA's POLICY IN AFGHANISTAN

The major drivers of Russia's Afghan policy are:-.

Security

o Maintaining security and stability in Central Asia which borders Afghanistan seems to be a key pillar of Russia's Afghan calculus.

o Instability in Afghanistan has invariably spilled over into Central Asia in the form of terrorism, organised crime, radicalisation and refugees. Cross-border ethnic linkages and porous boundaries have only facilitated this spill-over.

o Russia appears to have identified the Islamic State of Khorasan (IS-K), an offshoot of the Islamic State of Levant (ISIL) which had lured-in more than 5,000 Russians and Central Asians, as the most potent threat to Central Asia's stability.

o It is here that Russia seems to be banking on the **Taliban to be a bulwark against the spread of IS-K** into Central Asia from Afghanistan. This is largely anchored in the perception of the Taliban focusing inwards and Russia seeking to exploit the adversarial relationship between the Taliban and the IS-K.

o Taliban's assurances of preventing Afghanistan from being a staging ground for instability in Central Asia appears to have carried a strong resonance in Russia.

o Incidentally, Russia's security concerns seem to be shared by China as well, given the proximity of restive **Xinjiang** to Afghanistan. There appears to be growing convergence between Russia and China to contain the Afghan volatility.

o In this, they have sought to tap Pakistan's strong linkages with the Taliban to shape a modus vivendi with the latter. Unsurprisingly, the growing Russia–Pakistan rapprochement is a key outcome of Russia's ongoing Afghan calculus.

Strategic Objectives

o By positioning itself as an interlocutor of the Taliban, Russia has emerged as a key stakeholder in the Afghan imbroglio. This could even be viewed as part of Russia's larger game plan of projecting itself as an indispensable pole in resolving global and regional issues. Russia's growing stakes in Afghanistan could help dilute the Western projection of Russia as an isolated power amidst the ongoing Russia–West confrontation.

o Incidentally, Russia has long been suspicious of the United States' strategic objectives in the **Eurasian geo-political** scene, notwithstanding the US presence being a factor of stability for Central Asia in the last two decades. In the past, Russia had accused the US of further weaponising the ISIS in Afghanistan to foment trouble in Central Asia.

o Concomitantly, the US withdrawal has provided Russia new tools in its information warfare with the US. This includes **raising questions on US reliability** as a strategic partner especially to countries like Georgia, Moldova and Ukraine which have increasingly courted the West. Meanwhile, it would be unsurprising if Russia viewed the US exit through the prism of schadenfreude *(meaning: pleasure derived by someone from another person's misfortune)*. The USSR's withdrawal from Afghanistan three decades ago continues to be viewed as a dark age in Soviet history. Today, Russia would pat its own back for accurately reading the Afghan tea-leaves by engaging the Taliban.

Russia's Afghan Toolkit

o A stable political transition in Afghanistan is a key concern for Russia. While acknowledging the Taliban's dominant position, it appears that Russia is seeking to replicate its Syrian playbook of connecting with all stakeholders, both internal and external.

o This has seen Russia engage actors across Afghanistan's political spectrum as well as extra-regional and regional powers.

o It can be seen as part of the Russian calculus to **facilitate an inclusive government led by the Taliban**, with perhaps a better chance at restoring peace and stability. Such a political set-up could also command greater international legitimacy especially if the Taliban walk the talk of moderation in its 2.0 avatar. Russia could take credit for any potential success.

o It is, therefore, unlikely that Russia will back any resistance movement which could complicate Russia's thaw with the Taliban. Nevertheless, Russia could play a role in bringing the warring sides to the negotiation table.

o An inclusive government in Kabul would allow Russia to recognise it without having to immediately lift its domestic ban on the Taliban. The carrot of legitimacy likely gives Russia some leverage over the Taliban to seek concessions. This is especially relevant in the current climate of the Taliban's continuing international ostracism.

o It is likely that Russia will back a governance model in Afghanistan anchored in local traditions and customs. President Putin's public rebuttal of the failure of the US model of parachuting Western form of governance is indicative of Russia's strategy.

o Meanwhile, a working relationship with Russia increases Taliban's scope for manoeuvre vis-à-vis its other backers. Russia could also be a pillar in the Taliban's quest for international legitimacy.

Opportunities

o The ongoing churnings in Afghanistan present to Russia an opportunity to consolidate its position as Central Asia's pre-eminent security provider anchored in the **Collective Security Treaty Organization (CSTO).** Russia has sought to leverage the region's emerging fear psychosis to strengthen existing regional capacities and step-up military coordination with the Central Asian Republics (CARs). This includes the frontline states of Uzbekistan and Turkmenistan which have traditionally remained outside the CSTO.

o Given Russia's sensitivities to a US military footprint in its immediate neighbourhood, it is unlikely that CARs would now acquiesce to any American request for basing rights to carry out air strikes in Afghanistan. This proposed US arrangement could in fact complicate Russia's and CARs' emerging equations with the Taliban.

o Arguably, Russia's enhanced military activism dovetails with its attempts at making a comeback in Eurasia.

Challenges

o The Taliban is not a monolith. There exist **questions on its ability to control multiple radical groups** especially those operating in the northern borders of Afghanistan who have cross-border ethnic linkages with CARs. The Taliban's victory could energise these groups. A similar situation could play out in Russia's northern Caucasus. Drug and weapons trafficking too could see a boost amidst Afghanistan's international sources of finance being increasingly blocked.

o Contrary to existing perceptions, Russia's engagement of the Taliban does not appear to be an indication of the Russia's outright approval of the group. This is reflected in Moscow treading cautiously as evident in Defence Minister Sergei Shoigu highlighting the threat posed by the weapons that the Taliban has forcibly acquired.

o The Taliban spokesperson's recent refusal to rule out ties with Al Qaeda would likely have upped the ante.

o Meanwhile, Russia's attempts at forming a modus vivendi with the Taliban could be complicated by CARs. Tajikistan, where Russia has a military base, seems to have struck a discordant note. While President of Tajikistan's statement criticising the Taliban could be a tactic to protect the interests of Tajik minority in the new Afghanistan political set-up, yet there are certain aces up Tajikistan's sleeves which could put

Russia in a difficult situation. This includes supporting resistance movements. Similarly, growing intra-CARs cooperation could upend Russia's Afghan game plan.

o Meanwhile, withdrawal from Afghanistan would allow the US to channelise its resources towards not only the **Indo-Pacific** but also Russia's western neighbourhood.

Afghanistan in the Indo-Russian Strategic Partnership

o India and Russia's Afghan policies have tactically diverged in the recent past, which is evident from their rationale of engaging the Taliban. This is notwithstanding their shared strategic convergence of a stable Afghanistan that is not a staging ground for terrorism.

o Nevertheless, the rise of Taliban today is a geo-strategic reality. With Russia emerging as a key interlocutor of the group, Russia could play a role in facilitating potential dialogue with India, if and when India decides to do so. The recent positive statements emanating from the Taliban about India could present an opening.

o Meanwhile, the Shanghai Cooperation Organization (SCO) led regional mechanism on Afghanistan, comprising all key regional stakeholders, appears to be gaining traction. Notably, Russia remains a vital pillar of support for India in this Eurasian multilateral grouping.

o With the Afghan political fog potentially lifting post August 2021, Russia appears invested in reaching out to India. This is evident from the recent talks between Prime Minister of India and President of Russia, which led to the two traditional partners establishing an exclusive channel of communication on Afghanistan.

o Incidentally, India is chairing, as part of its two year non-permanent membership of UNSC, the Taliban Sanctions Committee and Counter-Terrorism Committee. It remains to be seen whether India and Russia can harmonise their Afghan policies.

INDO-PACIFIC

o The Indo-Pacific has gained currency in recent times. In terms of geo-spatiality, the Indo-Pacific is broadly to be understood as an **interconnected space between the Indian Ocean and the Pacific Ocean**.

o Its expanse is debated to be ranging from the **eastern shores of Africa to the western coast of the United States,** albeit with variations in definitions depending on each actor and their own geographic positioning in the vast expanse.

o In a more functional understanding, the interconnectedness and the interdependence of the two oceans is a product of **growing forces of globalization, trade and changing equations between various actors** which has broken down older boundaries and opened up new avenues. Growing mobility across the oceans has helped formulate an integrated approach. Given that it contains the world's most crucial sea routes, the world's most populous nations fueling high energy demands on its rims and a stretch encapsulating finest global commons, the Indo-Pacific is adjudged to be the center of the globe in terms of politics and economics.

o Strategically, the Indo-Pacific has been seen as a continuum across the two oceans joined together by its main trading channel, the **straits of Malacca.** Two broad reasons explain the rise of a strategic imagination of the Indo-Pacific. **First,** the growing footprint of China across the length and breadth of the region and **second,** the relative decline of the U.S. alliance system and its strive for resurgence.

o China's maritime advances have sprawled across the two oceans in a bid to secure its energy requirements and boost its trading ties. China's rise has taken multiple forms. In the **South China Sea**, its claims have been showcased through territorial advances. Its growing strides in South Asian waters alongside the "**string" of port facilities** across the Indian Ocean is likely to make it a resident power. In terms of connectivity and infrastructure, the **Belt and Road Initiative** puts forward the Chinese-led plan to bind the geopolitical space. Economically, China is a crucial trading partner for all the major states in the region and also taking active interests to lead the economic partnerships of the region.

o The rise of China is to be read alongside a relative decline of the U.S. presence in the region. While the United States still is a net-security provider in the region for its allies and possesses the most potent navy, its strategies have left the door open for China in some cases and harmed its own allies in the rest. Although the United States has accorded renewed importance to the Indo-Pacific by a significant renaming of the U.S. Pacific Command to the **Indo-Pacific command**, its unilateral withdrawal from the **Trans-Pacific Partnership** and continuous calls for equitable burden-sharing for its allies has left its alliance system in limbo. Added to that, it has been unable to blow steam into the **Quad grouping** of like-minded democracies, comprised also of Australia, Japan and India in order to build the much touted "free and open Indo-Pacific."

o The U.S.-China conflict at the heart of the Indo-Pacific has also led to contested imaginations from other littoral actors. Australia, which was one of the first nations to discuss the idea of Indo-Pacific, has implicitly argued for a balance between the United States and China. While it is a part of the U.S. alliance system and favors its large scale presence in the region, Australia is also aware of its gradual decline.

o Simultaneously, Australia neither can discount the economic gains served by China and the possibility of deepening ties with other important actors like Japan, India and South Korea in the region which would be vital for its strategic future. Reflecting on the spirit of the "**confluence of two seas**" first espoused by Japanese Prime Minister Shinzo Abe, Japan's idea of the Indo-Pacific overlaps with the U.S. vision but with a strong emphasis on promoting infrastructure, beyond East Asia into Middle East and Africa. Placed centrally at the heart of the Indo-Pacific, **ASEAN nations** have taken a more functional outlook towards the Indo-Pacific, basing its strategy on four aspects – maritime cooperation, connectivity, sustainable development and economy.

o **India's imagination** of the Indo-Pacific is an extension of its advances in the east through the **Look East Policy**, now the **Act East Policy**. While the United States has pushed for a more active Indian role in the region, India's Indo-Pacific strategy has been more about dodging than distinctiveness. India, arguing for a **"free and open Indo-Pacific"** and siding with the Quad nations initially, has been unable to determine whether its Indo-Pacific strategy is inclusive of China or set against it. While it echoes the concerns of the U.S. alliance to bring about a **rules-based order characterized by freedom of navigation and settlement of disputes** through dialogue, it has also mentioned that its idea of the Indo-Pacific is not about restricting a particular state, hinting China, and also a parallel focus on its **Security and Growth for All in the Region approach, coined SAGAR.**

o Like every imaginative space, the Indo-Pacific is a construct of contested interpretation, necessitating warring visions and constructs likely to be wrestled out between opposed strategic stakeholders in the region. A rising China, a defiant United States, and a host of other regional actors in the ongoing Indo-Pacific are likely to define the politics of the region, which is open to multiple possibilities.

COLD WAR

o Cold War was rivalry that developed after **World War II between the United States and the Soviet Union** and their respective allies.

o The Cold War was waged on political, economic, and propaganda fronts and had only limited recourse to weapons.

o The term was first used by the English writer **George Orwell** in an article published in 1945 to refer to what he predicted would be a nuclear stalemate between "two or three monstrous super-states, each possessed of a weapon by which millions of people can be wiped out in a few seconds." It was first used in the United States by the American financier and presidential adviser Bernard Baruch in a speech at the State House in Columbia, South Carolina, in 1947.

Origins of The Cold War

o Following the surrender of Nazi Germany in May 1945 near the close of World War II, the uneasy wartime alliance between the United States and Great Britain on the one hand and the Soviet Union on the other began to unravel. By 1948 the Soviets had installed left-wing governments in the countries of eastern Europe that had been liberated by the Red Army.

o The **Americans and the British feared the permanent Soviet domination of eastern Europe** and the threat of **Soviet-influenced communist parties coming to power in the democracies of western Europe**.

o The Soviets, on the other hand, were determined to maintain control of eastern Europe in order to safeguard against any possible renewed threat from Germany, and they were intent on spreading communism worldwide, largely for ideological reasons.

o The Cold War had solidified by **1947–48**, when U.S. aid provided under the **Marshall Plan** to western Europe had brought those countries under American influence and the Soviets had installed openly communist regimes in eastern Europe.

The Struggle Between Superpowers

o The Cold War reached its peak in **1948–53**. In this period the Soviets unsuccessfully blockaded the Western-held sectors of West Berlin (1948–49); the United States and its European allies formed the North Atlantic Treaty Organization (NATO), a unified military command to resist the Soviet presence in Europe (1949); the Soviets exploded their first atomic warhead (1949), thus ending the American monopoly on the atomic bomb; the Chinese communists came to power in mainland China (1949); and the Soviet-supported communist government of North Korea invaded U.S.-supported South Korea in 1950, setting off an indecisive Korean War that lasted until 1953.

o From **1953 to 1957** Cold War tensions relaxed somewhat, largely owing to the death of the longtime Soviet dictator Joseph Stalin in 1953; nevertheless, the standoff remained.

o A unified military organization among the **Soviet-bloc countries, the Warsaw Pact, was formed in 1955**; and West Germany was admitted into NATO that same year.

o Another intense stage of the Cold War was in **1958–62**. The United States and the Soviet Union began developing intercontinental ballistic missiles, and in 1962 the Soviets began secretly **installing missiles in Cuba** that could be used to launch nuclear attacks on U.S. cities. This sparked the **Cuban missile crisis (1962),** a confrontation that brought the two superpowers to the brink of war before an agreement was reached to withdraw the missiles.

o The Cuban missile crisis showed that neither the United States nor the Soviet Union were ready to use nuclear weapons for fear of the other's retaliation (and thus of mutual atomic annihilation). The two superpowers soon signed the **Nuclear Test-Ban Treaty of 1963**, which banned aboveground nuclear weapons testing. But the crisis also hardened the Soviets' determination never again to be humiliated by their military inferiority, and they began a buildup of both conventional and strategic forces that the United States was forced to match for the next 25 years.

o Throughout the Cold War the United States and the Soviet Union **avoided direct military confrontation** in Europe and engaged in actual combat operations only to keep allies from defecting to the other side or to overthrow them after they had done so. Thus, the Soviet Union sent troops to preserve communist rule in **East Germany (1953), Hungary (1956), Czechoslovakia (1968), and Afghanistan (1979)**.

o For its part, the United States helped overthrow a **left-wing government in Guatemala (1954),** supported an unsuccessful invasion of Cuba (1961), invaded the Dominican Republic (1965) and Grenada (1983), and undertook a long (1964–75) and unsuccessful effort to prevent communist North Vietnam from bringing South Vietnam under its rule (see Vietnam War).

Toward A New World Order

o In the course of the 1960s and '70s, however, the bipolar struggle between the Soviet and American blocs gave way to a more-complicated pattern of international relationships in which the world was no longer split into two clearly opposed blocs. A major split had occurred between the **Soviet Union and China in 1960** and widened over the years, shattering the unity of the communist bloc.

o In the meantime, western Europe and Japan achieved dynamic economic growth in the 1950s and '60s, reducing their relative inferiority to the United States. Less-powerful countries had more room to assert their independence and often showed themselves resistant to superpower coercion or cajoling.

o The 1970s saw an easing of Cold War tensions as evinced in the **Strategic Arms Limitation Talks (SALT) that led to the SALT I and II agreements of 1972 and 1979**, respectively, in which the two superpowers set limits on their antiballistic missiles and on their strategic missiles capable of carrying nuclear weapons. That was followed by a period of renewed Cold War tensions in the early 1980s as the two superpowers continued their massive arms buildup and competed for influence in the Third World.

o But the Cold War began to break down in the late 1980s during the administration of Soviet leader **Mikhail S. Gorbachev**. He dismantled the totalitarian aspects of the Soviet system and began efforts to democratize the Soviet political system. When communist regimes in the Soviet-bloc countries of eastern Europe collapsed in 1989–90, Gorbachev acquiesced in their fall. The rise to power of democratic governments in East Germany, Poland, Hungary, and Czechoslovakia was quickly followed by the unification of West and East Germany under NATO auspices, again with Soviet approval.

o Gorbachev's internal reforms had meanwhile weakened his own Communist Party and allowed power to shift to Russia and the other constituent republics of the Soviet Union. In late **1991 the Soviet Union collapsed and 15 newly independent nations were born**, including a Russia with a democratically elected, anticommunist leader. The Cold War had come to an end.

⚜ IRAN AND SAUDI ARABIA

Recent pronouncements from Riyadh and Tehran could be supportive of peace and security in the Gulf littoral.

o The **Persian Gulf** is a nearly 990 kilometre-long body of water that separates Iran from the Arabian Peninsula. Seven member States of the United Nations lay claim to its waters.

o At its **narrowest point, in the Strait of Hormuz**, it is only 54 km wide and the main shipping channels that pass through it are 30km-35 km wide and 8km-12 km wide. They are critical to the transportation of crude oil and LNG to global markets.

o For over a century till the early 1970s, the Persian Gulf was a British lake. The imperial withdrawal propelled the **United States to step in as the guarantor of the sub-region with its Twin-Pillars (Iran-Saudi Arabia) policy**.

o An abortive effort was also made by **Oman through the Muscat Conference in November 1976**; it floundered on the obstinacy of Baathist Iraq. Bilateral efforts were also made by King Faisal of Saudi Arabia and the Shah of Iran; King Faisal initiated his Islamic solidarity policy in 1964 and visited Iran in December 1965; in 1966 Saudi Defence Minister Sultan bin Abdulaziz described the Iranian-Saudi friendship as a perfect example of Islamic brotherhood and neighbourly relations; the two States were also active members of the **Five Power 'Safari Club'** for intelligence sharing.

Impact of unrest

o The **Iranian Revolution of 1978-79** disturbed the strategic balance in the region and put an end to efforts to develop a regional consensus on security issues. Over the next decade, and particularly during the period of the **Iraq-Iran war**, the effort of the Gulf monarchies and of their western supporters was to destabilise and wish away the revolutionary regime.

o The formation of the **Gulf Cooperation Council (GCC) in 1981** was part of the effort to reassure the Gulf sheikhdoms. The end of the war and the cooling of tensions allowed saner perceptions to emerge. These were spelt out among others by the Saudi Arabian Foreign Minister in the **Manama Dialogue** in December 2004. In 1996, Iranian President Mohammad Khatami told the Saudi Defence Minister that a defence pact would be mutually beneficial. Crown Prince Abdullah attended the Islamic Summit conference in Tehran in December 9-11, 1997. This was seen in Tehran as 'a good beginning for removing misunderstandings'.

o Subsequent developments in the region **relating to Syria and the Hezbollah on the one side and the Saudi intervention in the Yemen** on the other conflict pushed back, even reversed, the developing perceptions in Riyadh.

o Yemen in particular has been critical to Saudi perceptions of national security. The clash of viewpoints dates back to the 1930s when King Abdulaziz ibn Saud was expanding the boundaries of the Kingdom of Najd to incorporate the western and southern parts of the Arabian Peninsula. Conflict developed over the southern region of Najran and resulted in a **Saudi military victory and the Treaty of 1934**.

o This maintained peace till the Egyptian Revolution and Gamal Abdel Nasser's 'intoxicating blend of nationalism and radicalism' that set the region alight. It led to the **Yemeni coup of 1962**, the Egyptian military intervention in Yemen and the souring of **Saudi-Egyptian relations that lasted till the Arab-Israeli war of 1967**. This suited the interests of the United States; military assistance programmes and the stationing of U.S. troops during the Kuwait war of 1990 followed. The Trump era and the jettisoning of the Joint Comprehensive Plan of Action witnessed a qualitative strengthening of ties between them.

Recent issues

o Most States have been affected adversely by the historically low oil prices and by COVID-19. The GCC has become inoperative with the focus on the boycott of Qatar that is now being reversed. There are new tensions between the United Arab Emirates (UAE) and Saudi Arabia.

o Saudi's access to the Oval Office in Washington is now not what it was in the Donald Trump era. The **Abraham Accords between Israel, the UAE and Bahrain** have qualitatively influenced the Arab-Israeli calculus in the Persian Gulf States and in the wider Arab world.

o More recently, the U.S.'s decision to withdraw forces from Afghanistan and reduce commitments in Iraq has been the subject of discussions on policy options in Washington.

o **One expert** has observed that "on balance, the American ground-force base in Kuwait, the Fifth Fleet naval base in Bahrain, [the] Al Udeid Air Base in Qatar, Al Dhafra Air Base in the UAE and the access arrangements in Oman provide the U.S. with a politically and financially sustainable military presence" in the region.

o **Another view** is that "the post-COVID-19 environment is going to be unfriendly to Saudi Arabia perhaps more than to any other leading power in the Gulf". The **Saudi failure to subdue the Houthis and to close the Yemen conflict** on their terms has become a source of concern. The U.S.'s inability to subdue Iran on its terms has also become evident.

o **Others** have drawn attention to the **Saudi Crown Prince's remark in April** that his country wants good relations with Iran and to the Iranian reaction of welcoming it. It is evident that policy options are being explored.

Security is the concern

o The impact of these recent developments on Saudi Arabia-Iran relations needs to be assessed in this context. The effort to impart a sectarian orientation to the divide does not seem to hold. Their primary concern is security in the Gulf littoral and the security of the waterway for the transportation of their hydrocarbon exports.

o In January 1987, the then U.S. Secretary of State said the Gulf has become 'critical to the economic health of the West.' A good part of the rest of the world can with justice be added to it.

o For this to be given practical shape, its essential ingredients would need to be:

▪ freedom of access to, and outlet from, Gulf waters through the Strait of Hormuz;

▪ freedom of commercial shipping in international waters in the Persian Gulf;

▪ prevention of conflict that may impinge on the freedom of trade and shipping;

▪ freedom to all States of the Gulf littoral to exploit their hydrocarbons and other natural resources and export them;

▪ ensure conditions of peace and stability in the individual littoral States, and ensure that regional or extra-regional conditions do not impinge on any of these considerations.

o The recent pronouncements from Saudi Arabia and Tehran do tend to suggest an inclination to be supportive of some of these suggestions. This is to be **welcomed since from an Indian viewpoint** the requirement is and will continue to be stability in the littoral States, freedom of navigation and safety of sea lanes.

INDO-SRILANKA DEVELOPMENT PARTNERSHIP

o Sri Lanka is one of India's major development partners and this partnership has been an important pillar of bilateral ties between the two countries over the years.

o With grants alone amounting to around USD 570 million, the overall commitment by GOI is to the tune of more than USD 3.5 billion.

o **Demand- driven and people-centric nature** of India's development partnership with Sri Lanka have been the cornerstone of this relationship. Grant projects cut across sectors such as education, health, livelihood, housing, industrial development etc.

o The **Indian Housing Project**, with an initial commitment to build 50,000 houses in war affected areas and estate workers in the plantation areas, is Government of India (GoI)'s flagship grant project in Sri Lanka. As on date, close to 49,300 houses spread across different provinces such as Northern, Eastern, Central etc. have already been completed. During the visit of Prime Minister of India to Sri Lanka in May 2017, he announced that an additional 10,000 houses would be constructed in plantation areas at a total cost of INR 453 crore. There are also four smaller housing programmes for constructing 2400 houses across Sri Lanka. Overall, India has so far committed to construct close to 62,500 houses in Sri Lanka.

o The country-wide **Emergency Ambulance Service** is another flagship project. The Service which was initially launched in July 2016 in Western and Southern Provinces of Sri Lanka was later expanded to all the Provinces in the next phase. Launch of the second phase was held on 21 July 2018 in Jaffna wherein Prime Minister of India joined the then Prime of Sri Lanka Ranil Wickremesinghe virtually from New Delhi. At a total cost of more than USD 22.5 million, close to 300 ambulances were provided by GOI under this project.

o Some of other notable grant projects which have been completed are the 150- bed **Dickoya hospital**, **livelihood assistance** to nearly 70,000 people from fishing and farming community in Hambantota, supply of **medical equipment** to Vavuniya Hospital and **Boats and Fishing gear** for Mullaithivu fishermen. A modern 1500 - seat **auditorium** named after Rabindranath Tagore in Ruhuna University, Matara, is the largest in any University in Sri Lanka.

o There are another 20 ongoing grant projects across diverse spheres. This includes:-

▪ the iconic Jaffna Cultural Center;
▪ construction of 153 houses and infrastructure facilities in ShobithaThero Village in Anuradhapura;
▪ Upgradation of Saraswathy Central College in Pusselawa, Kandy;
▪ Construction of 600 houses under Model Village Housing Project in 25 districts of Sri Lanka;
▪ 5000 MT temperature-controlled warehouse in Dambulla;
▪ Kandian Dancing School at Pallekelle/DaladaMaligawa Cultural Heritage project, Kandy;
▪ 144 transit housing units in Madhu Shrine, Mannar etc.

Projects under Lines of Credit

o 11 **Lines of credit (LOC)** have been extended to Sri Lanka by the Export Import Bank of India in the last 15 years. Important sectors in which Projects have been executed/ are under execution, under these LOCs include: Railway, transport, connectivity, defence, solar. Some important Projects completed are:

▪ supply of defence equipments; upgradation of railway line from Colombo to Matara;
▪ track laying by IRCON on Omanthai-Pallai sector, Madhu Church- Tallaimannar, Madawachchiya-Madhu Railway line;
▪ reconstruction of the Pallai-Kankesanthurai Railway line;
▪ signalling and telecommunication system;
▪ supply of engine kits for buses, diesel locomotives railways, DMUs, Carrier and fuel tank wagons etc.

o Under the LOC of USD 318 million, various projects for procurement of rolling stocks for Sri Lankan Railways, upgradation of railway tracks, setting up of railway workshop etc. are at different stages of implementation. A project for rehabilitation of the Kanakesanthuraiharbour is being executed under a LOC. Once complete, this project will bring immense economic benefits to the Northern region of Sri Lanka.

o A US$ 100 million LoC for undertaking solar projects in Sri Lanka has been signed between the Government of Sri Lanka and EXIM Bank on June 16, 2021. This LOC was announced during the Founding Conference of the International Solar Alliance (ISA) held on 11 March 2018, attended by former President of Sri Lanka Maithripala Sirisena participated. Projects under this LOC will include- rooftop solar units for Government buildings, rooftop solar units for low income families and a floating solar power plant.

o During President H.E Gotabaya Rajapaksa's visit in November 2019, a LOC of USD 400 million for development and infrastructure projects and USD 50 million for security and counter terrorism were announced. These LOC Agreements are currently under discussion between the two sides.

DEMOCRACY SUMMIT

Current Global Scenario
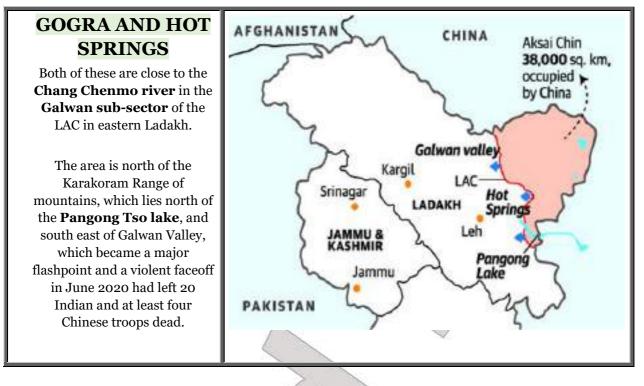
o Democracy and human rights are under threat around the world.

o Democracies — whether in transition or established for decades — are confronting serious challenges from within and outside of their borders.

o Public distrust and the failure of governments to deliver equitable and sustainable economic and political progress has fueled political polarization and the rise of leaders who are undermining democratic norms and institutions.

o Across the globe, weak state capacity, tenuous rule of law, high inequality, and corruption continue to erode democracy. At the same time, authoritarian leaders are reaching across borders to undermine democracies – from targeting journalists and human rights defenders to meddling in elections all while claiming their model is better at delivering for people.

o Hostile actors exacerbate these trends by increasingly manipulating digital information and spreading disinformation to weaken democratic cohesion.

The December 2021 Summit
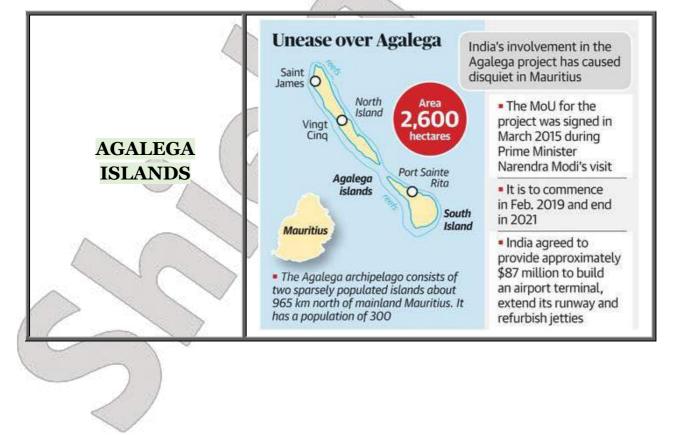
o In this context, in December 2021, President Biden will host a virtual summit for leaders from government, civil society, and the private sector.

o The summit will focus on challenges and opportunities facing democracies and will provide a platform for leaders to make both individual and collective commitments to defend democracy and human rights at home and abroad.

o The summit will offer an opportunity to listen, learn, and engage with a diverse range of actors whose support and commitment is critical for global democratic renewal.

o It will also showcase one of democracy's unique strengths: the ability to acknowledge its weaknesses and imperfections and confront them openly and transparently.

o In advance of the first summit, the US government is consulting with experts from government, multilateral organizations, philanthropies, civil society, and the private sector to solicit bold, practicable ideas around three key themes:

- Defending against authoritarianism
- Addressing and fighting corruption
- Advancing respect for human rights

o The December 2021 Summit will kick off a year of action by participants to make democracies more responsive and resilient, and to build a broader community of partners committed to global democratic renewal.

o Approximately one year after the December 2021 Summit, the US government will host a second summit to take stock of the progress made and forge a common path ahead. If public health conditions permit, this meeting will be convened in-person.

LOCATION IN CURRENT NEWS

GOGRA AND HOT SPRINGS

Both of these are close to the **Chang Chenmo river** in the **Galwan sub-sector** of the LAC in eastern Ladakh.

The area is north of the Karakoram Range of mountains, which lies north of the **Pangong Tso lake**, and south east of Galwan Valley, which became a major flashpoint and a violent faceoff in June 2020 had left 20 Indian and at least four Chinese troops dead.

AFGHANISTAN   CHINA

Aksai Chin **38,000** sq. km, occupied by China

Galwan valley

Kargil

Srinagar   LAC

LADAKH   *Hot Springs*

Leh

JAMMU & KASHMIR

Jammu   *Pangong Lake*

PAKISTAN

AGALEGA ISLANDS

Unease over Agalega

India's involvement in the Agalega project has caused disquiet in Mauritius

Saint James

North Island

Vingt Cinq

Area 2,600 hectares

Agalega islands

Port Sainte Rita

Mauritius

South Island

- The Agalega archipelago consists of two sparsely populated islands about 965 km north of mainland Mauritius. It has a population of 300

- The MoU for the project was signed in March 2015 during Prime Minister Narendra Modi's visit

- It is to commence in Feb. 2019 and end in 2021

- India agreed to provide approximately $87 million to build an airport terminal, extend its runway and refurbish jetties

DUQM PORT

The port is located on **Oman's southern coast** and also provides access onward into the **Red Sea** through the **Gulf of Aden**.

The port is **near to the Chabahar and Gwadar port**.

India and Oman finalized an agreement that will see India gain access to the strategically located port of Duqm.

The Indian Navy will be able to use the port for logistics and thereby allowing it to sustain long-term operations in the western Indian Ocean.

LEBANON

On August 4, the first anniversary of the Beirut blast, residents of the city took out a march with a mock guillotine outside its port that was ripped apart by the explosion.

Elsewhere in the city, protesters clashed with police with stones and fireworks. They wanted answers and the guilty to be punished.
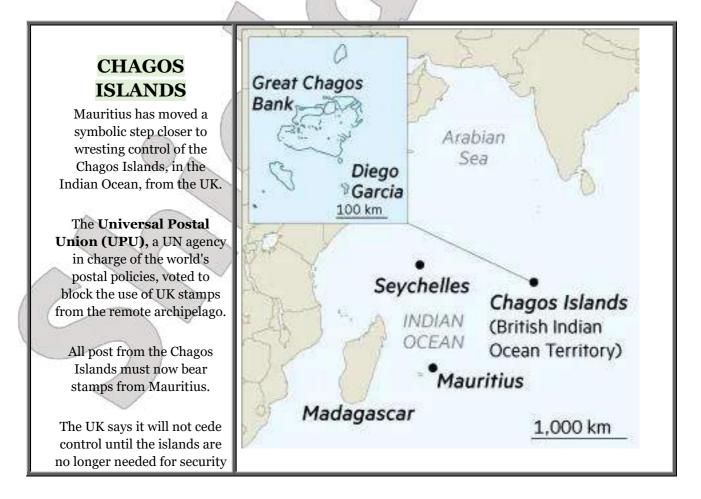
POLAND

Israel condemned Poland's approval of a law that restricts the rights of Holocaust survivors or their descendants to reclaim property seized by the country's former communist regime and announced it was recalling its top diplomat in protest.

The law itself says nothing about the Holocaust or Second World War. Instead it establishes that any administrative decision issued 30 years ago or more can no longer be challenged, meaning that property owners who had their homes or business seized in the communist era can no longer get compensation.

CHAGOS ISLANDS

Mauritius has moved a symbolic step closer to wresting control of the Chagos Islands, in the Indian Ocean, from the UK.

The **Universal Postal Union (UPU),** a UN agency in charge of the world's postal policies, voted to block the use of UK stamps from the remote archipelago.

All post from the Chagos Islands must now bear stamps from Mauritius.

The UK says it will not cede control until the islands are no longer needed for security

purposes.

The US currently uses the largest of the islands - **Diego Garcia** - for a military air base on what the UK describes as the British Indian Ocean Territory (BIOT).

Three powerful UN bodies have already ruled that the archipelago, which has a population of about 3,000, is part of Britain's old empire and should be handed to Mauritius immediately.

KYRGYZSTAN

Kyrgyzstan sits in Central Asia and has suffered spates of political violence in recent years. It is often referred to as '**Central Asia's only democracy'**

▪ **Strategic importance**

• For China, the country, located at the centre of Eurasia, is a vital link in its Belt and Road Initiative. China has built road and rail networks with Kyrgyzstan and Uzbekistan.

• During the early stages of the Afghan war, the U.S. had used Kyrgyzstan for refuelling and other logistical purposes.

• It hosts Russian air base. Russia sees this country as its political backyard and seeks to keep its dominance over it.

GEOGRAPHY AND ENVIRONMENT
(Ecology; Biodiversity and Disaster Management)

⊞ NATIONAL HYDROGEN MISSION

o National Hydrogen Mission **aims to cut down carbon emissions and increase the use of renewable sources of energy** while aligning India's efforts with global best practices in technology, policy and regulation.
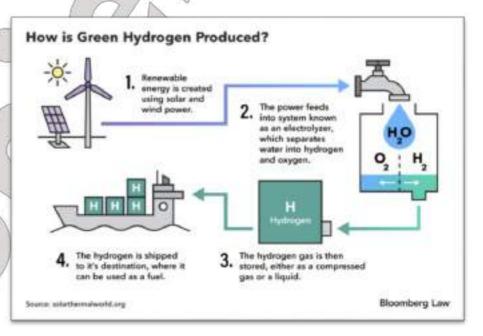
o The Government of India has allotted Rs 25 crore in the Union Budget 2021–22 for the research and development in hydrogen energy and intends to produce three-fourths of its hydrogen from renewable resources by 2050.

o Similarly, the GCC countries have invested heavily in hydrogen energy and are looking at it as the holy-grail to a cleaner future. This is an opportune time for **India and the GCC countries to strengthen partnership in R&D, production, storage and transportation of hydrogen energy**.

o India should look at enhancing hydrogen cooperation with GCC countries, especially the front runners, i.e., Saudi Arabia, the UAE and Oman.

Draft Paper

o The NHM, according to a draft paper prepared by the **Ministry of New and Renewable Energy (MNRE),** has identified pilot projects, infrastructure and supply chain, research and development, regulations and public outreach as broad activities for investment with a proposed financial outlay of Rs 800 crores for the next three years.

o It **aims to leverage the country's landmass and low solar and wind tariffs** to produce low-cost green hydrogen and ammonia for export to Japan, South Korea and Europe.

o In this regard, there are immense possibilities for India to collaborate with the Gulf Cooperation Council (GCC) countries that have also invested significantly in developing hydrogen as a future source of energy.

o Geographical proximity and robust trade ties in conventional energy calls for proactive measures to collaborate with GCC countries especially Saudi Arabia, UAE and Oman for research and development pertaining to hydrogen energy.

Hydrogen Energy

o Hydrogen is emerging as an important source of energy since it has **zero carbon content** and is a non-polluting source of energy in contrast to hydrocarbons that have net carbon content in the range of 75–85 per cent.

o Hydrogen energy is **expected to reduce carbon emissions** that are set to jump by 1.5 billion tons in 2021.

o It has the **highest energy content by weight and lowest energy content by volume**.

How is Green Hydrogen Produced?

1. Renewable energy is created using solar and wind power.

2. The power feeds into system known as an electrolyzer, which separates water into hydrogen and oxygen.

3. The hydrogen gas is then stored, either as a compressed gas or a liquid.

4. The hydrogen is shipped to it's destination, where it can be used as a fuel.

Source: solarthermalworld.org

Bloomberg Law

o As per **International Renewable Energy Agency (IRENA)**, Hydrogen shall make up 6 per cent of total energy consumption by 2050.

o The **Hydrogen Council Report, 2021** also mentions that, global investments on hydrogen will constitute around 1.4 per cent of the total global energy funding by 2030.

o Hydrogen energy is currently at a nascent stage of development, but has considerable potential for aiding the process of energy transition from hydrocarbons to renewables. Though it is the most abundantly available element on earth, commercially viable Hydrogen can be produced from hydrocarbons including natural gas, oil and coal through processes like steam methane reforming, partial oxidation and coal gasification; as well as from renewables like water, sunlight and wind through electrolysis and photolysis and other thermo-chemical processes.

o The current global demand for hydrogen is 70 million metric tons per year, more than 76 per cent of which is being produced from natural gas, 23 per cent comes from coal and the remaining is produced from electrolysis of water.

o Hydrogen can be stored in **cryo-compressed tanks** in gaseous form apart from being kept in liquefied and solid state. Presently, **Hydrogen is mostly used in industry sector** including those dealing with oil refining, ammonia production, methanol production and steel production. It has huge potential in transportation sector as a direct replacement to fossil fuels.

o Shipping and aviation have limited low-carbon fuel options available and represent an opportunity for hydrogen-based fuels.

Hydrogen Energy in India

o Hydrogen is at an early stage of entering the energy sector in India. Government as well as non-government funding agencies are engaged in R&D projects pertaining to hydrogen production, storage, utilisation, power generation and for transport applications.

o As early as in **2003, National Hydrogen Energy Board** was formed and in **2006** the Ministry of New and Renewable Energy laid out the **National Hydrogen Energy Road Map** identifying transport and power generation as two major green energy initiatives.

o India is participating in **Mission Innovation Challenge** for clean hydrogen and shares the objective to accelerate the development of a global hydrogen market by identifying and overcoming key technology barriers to the production, distribution, storage and use of hydrogen at gigawatt scale.

o By 2050 India intends to produce three-fourths of its hydrogen from renewable resources.

o Presently, more than 100 research groups are focusing on fuel cell technology. There are a number of foreign and Indian companies that are involved in hydrogen production, storage or delivery in India, including Praxair (USA), Linde (global-member of hydrogen council), Inox (Indo-US joint venture), Air Liquide (France), SAGIM (France), Air Products (USA), Fuel Cell Energy (USA), H2Scan (USA), ITM Power (UK), Heliocentris (Germany), Aditya Birla, Bhoruka Gases Ltd, Gujarat Alkalies and Chemicals Limited, Gujarat Heavy Chemicals Ltd, Air Science Technologies and Sukan Engineering Private Limited.

Hydrogen Energy and GCC

o Rich in hydrocarbon resources, currently the GCC countries consume around 7 per cent of the grey hydrogen sourced from the natural gas. **Qatar is the largest consumer of hydrogen** in the region followed by Saudi Arabia, Kuwait, Oman, the UAE and Bahrain.

o UAE and Saudi Arabia, and more recently Oman, have embraced the concept of a hydrogen economy. They are keen to use it domestically as part of decarbonisation effort as well as intend to use it as an alternative export commodity. Besides, there are other motivating factors including energy security and economic diversification.

o GCC countries are at the forefront of cost reductions in renewables and in shaping the energy transformation within as well as outside the region. According to an IRENA analysis, the accelerated deployment of renewable energy in the GCC region can reduce emissions of CO2 by 136 million tons.

o Apart from that, there are facilitating factors that make it convenient for the GCC countries to invest in renewable energy. These countries have the potential to become hydrogen producers as well as exporters as they have existing **industrial capacity and required capital to invest** in the initial infrastructure.

o Second, GCC has **abundance of inexpensive land and water along with solar and wind resources that can help in production of Green Hydrogen**.

o Third, the countries are situated in **geographical proximity to the emerging and future markets** for cleaner fuel.

o Lastly, the GCC countries can easily be producers of **Blue Hydrogen due to availability of hydrocarbons and the carbon capture, utilisation and storage (CCUS) capacity.**

India–GCC Cooperation

o India and GCC countries share robust energy cooperation. In 2017–18 India imported nearly 53 per cent of its energy from the Persian Gulf, and UAE and Saudi Arabia were third and fourth largest trading partners of India.

o India and the GCC are natural energy partners and have huge potential for extending cooperation in cleaner fuels like hydrogen. India has signed MoUs on renewable energy with most of the GCC countries.

o India's largest pure-play solar platform Acme Solar Holdings Ltd plans to invest US$ 2.5 billion to manufacture **green ammonia and green hydrogen in Duqm** and signed an MoU with the Oman Company for the Development of the Special Economic Zone. The manufacturing facility will supply green ammonia to Europe, America and Asia region and will produce 2,200 metric tonnes (mt) of green ammonia per day.

o India is looking at developing Hydrogen collaboration with Bahrain and even invited Bahrain to participate in the **Hydrogen Roundtable** in April 2021. The two countries agreed to engage more in renewable energy capacity-building and focus on cooperation between their governments as well as the private sector, particularly in the field of solar, wind and clean hydrogen.

o In 2019, **India signed an agreement with Saudi Arabia** about cooperation in renewable energy including hydrogen. The two countries are collaboratively exploring Hydrogen Energy as a future source of energy. Saudi companies like Alfanar and Aljomaih that have invested in India's wind and solar energy projects may be roped in for collaboration on production of Green Hydrogen.

o Similarly GCC leaders too have stated the importance of clean fuel and their willingness to collaborate on the hydrogen energy.

o Major prospects of hydrogen collaboration between India and GCC countries are in terms of investment and technology sharing. One of the major challenges faced by GCC countries in production of hydrogen fuel is the incompatibility of electrolysers with salt water. **Sea water needs to be desalinised before it becomes feasible** for electrolysis. There is a potential for collaboration between India and these countries on this issue.

o A number of Indian research groups are working on **hydrogen generation from sea water**. For instance, **Central Electrochemical Research Institute, Karaikudi** is conducting research on design of electrodes and electrolytes for hydrogen generation using sea water and Centre for Fuel Cell Technology at the International Advanced Research Centre for Powder Metallurgy and New Materials, Chennai is conducting research on sea water electrolysis.

TRADITIONAL RAINWATER HARVESTING-II

Nadi: Found near Jodhpur in Rajasthan, nadis are village ponds that store rainwater collected from adjoining natural catchment areas. The location of a nadi has a strong bearing on its storage capacity and hence the site of a nadi is chosen after careful deliberation of its catchment and runoff characteristics.

Since nadis received their water supply from erratic, torrential rainfall, large amounts of sandy sediments were regularly deposited in them, resulting in quick siltation. A local voluntary organisation, the Mewar Krishak Vikas Samiti (MKVS) has been adding systems like **spillways and silt traps to old nadis** and **promoting afforestation** of their drainage basin to prevent siltation.

Bhandara Phad: Phad, a community-managed irrigation system, probably came into existence a few centuries ago. The system starts with a **bhandhara (check dam)** built across a river, from which kalvas (canals) branch out to carry water into the fields in the phad (agricultural block).

Sandams (escapes outlets) ensure that the excess water is removed from the canals by charis (distributaries) and sarangs (field channels). The Phad system is operated on three rivers in the Tapi basin – Panjhra, Mosam and Aram – in the Dhule and Nasik districts of Maharashtra.

Zing: Zings, found in Ladakh, are small tanks that collect melting glacier water. A network of guiding channels brings water from the glacier to the tank. A trickle in the morning, the melting waters of the glacier turn into a flowing stream by the afternoon. The water, collected by evening, is used in the fields on the following day.

A water official called a **Chirpun** is responsible for the equitable distribution of water in this dry region that relies on melting glacial water to meet its farming needs.

Kuhls: Kuhls are surface water channels found in the mountainous regions of Himachal Pradesh. The channels carry glacial waters from rivers and streams into the fields. The Kangra Valley system has an estimated 715 major kuhls and 2,500 minor kuhls that irrigate more than 30,000 hectares in the valley.

An important cultural tradition, the kuhls were built either through public donations or by royal rulers. A kohli would be designated as the master of the kuhl and he would be responsible for the maintenance of the kuhl.

Zabo: The Zabo (meaning 'impounding run-off') system combines water conservation with forestry, agriculture and animal care.

Practised in **Nagaland**, Zabo is also known as the **Ruza system**. Rainwater that falls on forested hilltops is collected by channels that deposit the run-off water in pond-like structures created on the terraced hillsides. The channels also pass through cattle yards, collecting the dung and urine of animals, before ultimately meandering into paddy fields at the foot of the hill. Ponds created in the paddy field are then used to rear fish and foster the growth of medicinal plants..

Bamboo Drip Irrigation: Bamboo Drip irrigation System is an ingenious system of efficient water management that has been practised for over two centuries in northeast India. The tribal farmers of the region have developed a system for irrigation in which water from perennial springs is diverted to the terrace fields using varying sizes and shapes of bamboo pipes. Best suited for crops requiring less water, the system ensures that small drops of water are delivered directly to the roots of the plants. This ancient system is used by the farmers of Khasi and Jaintia hills to drip-irrigate their black pepper cultivation..
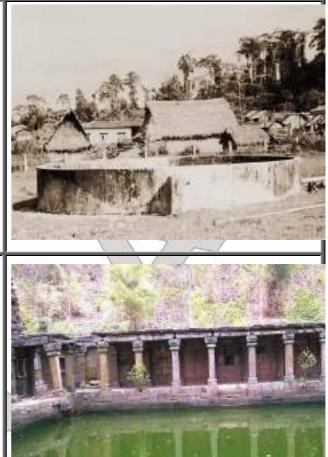
Jackwell: The Shompen tribe of the Great Nicobar Islands lives in a region of rugged topography that they make full use of to harvest water. In this system, the low-lying region of the island is covered with jackwells (pits encircled by bunds made from logs of hard wood). A full-length bamboo is cut longitudinally and placed on a gentle slope with the lower end leading the water into the jackwell. Often, these split bamboos are placed under trees to collect the runoff water from leaves. Big jackwells are interconnected with more bamboos so that the overflow from one jackwell leads to the other, ultimately leading to the biggest jackwell.

Ramtek model: The Ramtek model has been named after the water harvesting structures in the town of Ramtek in Maharashtra. An intricate network of groundwater and surface water bodies, this system was constructed and maintained mostly by the malguzars (landowners) of the region.

In this system, tanks connected by underground and surface canals form a chain that **extends from the foothills to the plains.** Once tanks located in the hills are filled to capacity, the water flows down to fill successive tanks, generally ending in a small waterhole. This system conserves about 60 to 70 % of the total runoff in the region!

Pat system: The Pat system, in which the peculiarities of the terrain are used to divert water from hill streams into irrigation channels, was developed in the Bhitada village in Jhabua district of Madhya Pradesh. Diversion bunds are made across a stream near the village by piling up stones and then lining them with teak leaves and mud to make them leak-proof. The Pat channel then passes through deep ditches and stone aqueducts that are skilfully cut info stone cliffs to create an irrigation system that the villagers use in turn..

Eri: The Eri (tank) system of Tamil Nadu is one of the oldest water management systems in India. Still widely used in the state, eris act as flood-control systems, prevent soil erosion and wastage of runoff during periods of heavy rainfall, and also recharge the groundwater.

Eris can either be a **system eri**, which is fed by channels that divert river water, or a non-system eri, that is fed solely by rain. The tanks are interconnected in order to enable access to the farthest village and to balance the water level in case of excess supply. The eri system enables the complete use of river water for irrigation and without them, paddy cultivation would have been impossible in Tamil Nadu.

There are several other hyperlocal versions of the traditional method of tank irrigation in India. From **Keres in Central Karnataka** and **Cheruvus in Andhra Pradesh** to **Dongs in Assam**, tanks are among the most common traditional irrigation systems in our country.
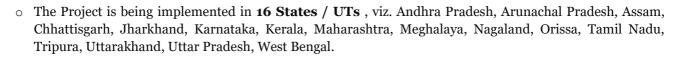
WORLD ELEPHANT DAY

o On **12 August, 2012**, the first international Elephant Day was celebrated. Since then, it is observed annually and this day is dedicated to **huge animal protection and preservation**.

o World Elephant Day was conceived by the **Elephant Reintroduction Foundation** and filmmakers **Patricia Sims** and **Michael Clark**.

o This day makes people understand the need for better protection for wild animals, elephants, and also to improve the illegal poaching and trade of ivory, better treatment of captive elephants.

o In the IUCN Red List of threatened species, **African elephants are listed as Vulnerable** and **Asian elephants as Endangered.**

o The goal of World Elephant Day is to create awareness of the urgent plight of African and Asian elephants, and to share knowledge and positive solutions for the better care and management of captive and wild elephants.

PROJECT ELEPHANT: INDIA's EFFORTS

o Project Elephant was launched by the Government of India in the year **1992** as a Centrally Sponsored Scheme.

o The Ministry of Environment, Forest and Climate Change provides the financial and technical support to major elephant range states in the country through Project Elephant.

o The Project is being implemented in **16 States / UTs** , viz. Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Kerala, Maharashtra, Meghalaya, Nagaland, Orissa, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal.

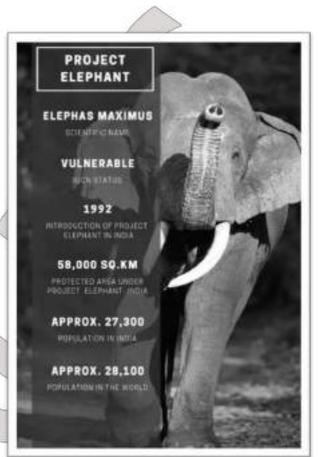## Project Elephant - Objectives

o To protect elephants, their habitat & corridors.
o To address issues of man-animal conflict.
o Welfare of captive elephants.

Project Elephant - Activities

o Main activities under Project Elephant are as follows:
▪ Research on Elephant management related issues;
▪ Public education and awareness programmes;
▪ Eco-development;
▪ Veterinary care;
▪ **Elephant Rehabilitation/Rescue Centers**;
▪ **Ecological restoration** of existing natural habitats and migratory routes of elephants;
▪ **Development of scientific and planned management** for conservation of elephant habitats and viable population of Wild Asiatic elephants in India;
▪ Promotion of **measures for mitigation of man-elephant conflict** in crucial habitats and moderating pressures of human and domestic stock activities in crucial elephant habitats;
▪ Strengthening of measures for the protection of Wild elephants from poachers and unnatural causes of death.

PROJECT ELEPHANT

ELEPHAS MAXIMUS
SCIENTIFIC NAME

VULNERABLE
IUCN STATUS

1992
INTRODUCTION OF PROJECT ELEPHANT IN INDIA

58,000 SQ.KM
PROTECTED AREA UNDER PROJECT ELEPHANT INDIA

APPROX. 27,300
POPULATION IN INDIA

APPROX. 28,100
POPULATION IN THE WORLD

🔲 MIKE: GLOBAL EFFORTS

o The **Monitoring the Illegal Killing of Elephants (MIKE) programme is an international collaboration** that measures the levels, trends and causes of elephant mortality, thereby providing an information base to support international decision-making related to conservation of elephants in Asia and Africa.

o The MIKE Programme was established by the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) by Resolution 10.10** adopted at the tenth Conference of the Parties in 1997.

o There are currently **28 sites participating in the MIKE programme in Asia**, distributed across 13 countries: India has 10 sites, followed by two sites each in Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar and Thailand, and one site each in Bangladesh, Bhutan, China, Nepal, Sri Lanka and Viet Nam.

o In 2017, IUCN was engaged by CITES to implement the MIKE Asia programme in two sub-regions: **South Asia** (via the IUCN India Country Office in New Delhi); and **Southeast Asia** (through the IUCN Asia Regional Office in Bangkok). This forms part of the wider Asia Wildlife Law Enforcement and Demand Reduction Management Project funded by the European Union.

o The main objective of the **MIKE Asia programme** is to identify spatial, temporal and other trends in elephant mortalities by collating and analysing data on elephant carcasses (which are collected by management agencies). Other objectives include support for law enforcement activities, capacity-building

for front-line field staff and limited provision of field equipment to sites. The program's analytical outputs and field activities support international decision-making related to elephant conservation in Asia.

Expected outputs:

o Collation and quality control of annual records of elephant carcasses from MIKE sites in Asia.

o Data analysis to identify patterns at the level of site, local region and country.

SUNDERBANS

Unregulated inflow of relief to the Sunderbans has resulted in a new crisis in the cyclone-battered region: plastic waste after Cyclone Yaas

o The Sundarbans is the **biggest delta, back water** and **tidal phenomenon of the region** and thus provides diverse habitats for several hundreds of aquatic, terrestrial and amphibian species.

o The site includes the entire landscape of **mangrove habitats with an adequate surrounding area of aquatic (both marine and freshwater) and terrestrial habitats**, and thus all the areas essential for the long term conservation of the Sundarbans and its rich and distinct biodiversity.

o The Sundarbans mangrove forest, one of the largest such forests in the world (140,000 ha), lies on the delta of the **Ganges, Brahmaputra and Meghna rivers** on the Bay of Bengal.

o It is adjacent to the border of **India's Sundarbans World Heritage site** inscribed in 1987. The site is intersected by a complex network of tidal waterways, mudflats and small islands of salt-tolerant mangrove forests, and presents an excellent example of ongoing ecological processes. The area is known for its wide range of fauna, including 260 bird species, the Bengal tiger and other threatened species such as the estuarine crocodile and the Indian python.

o The **Sundarbans Reserve Forest (SRF),** located in the south-west of Bangladesh between the river Baleswar in the East and the Harinbanga in the West, adjoining to the Bay of Bengal, is the largest contiguous mangrove forest in the world. The land area, including exposed sandbars, occupies 414,259 ha (70%) with water bodies covering 187,413 ha (30%).

o The three wildlife sanctuaries in the south cover an area of 139,700 ha and are considered core breeding areas for a number of endangered species. Situated in a unique bioclimatic zone within a typical geographical situation in the coastal region of the Bay of Bengal, it is a landmark of ancient heritage of mythological and historical events. Bestowed with magnificent scenic beauty and natural resources, it is internationally recognized for its high biodiversity of mangrove flora and fauna both on land and water.

o The Sundarbans is of universal importance for globally endangered species including the **Royal Bengal Tiger, Ganges and Irawadi dolphins, estuarine crocodiles** and the critically endangered endemic **river terrapin (Batagur baska).** It is the only mangrove habitat in the world for Panthera tigris species.

o The Sundarbans provides a significant example of on-going ecological processes as it represents the process of delta formation and the subsequent colonization of the newly formed deltaic islands and associated mangrove communities. These processes include monsoon rains, flooding, delta formation, tidal influence and plant colonization. As part of the world's largest delta, formed from sediments deposited by three great rivers; the Ganges, Brahmaputra and Meghna, and covering the Bengal Basin, the land has been moulded by tidal action, resulting in a distinctive physiology.

o Natural calamities such as cyclones, have always posed threats on the values of the property and along with saline water intrusion and siltation, remain potential threats to the attributes.

o Cyclones and tidal waves cause some damage to the forest along the sea-land interface and have previously caused occasional considerable mortality among some species of fauna such as the spotted deer.

o Over exploitation of both timber resources and fauna, illegal hunting and trapping, and agricultural encroachment also pose serious threats to the values of the property and its overall integrity.

✚ IPCC SIXTH ASESSMENT REPORT

IPCC

o The **Intergovernmental Panel on Climate Change (IPCC)** is the leading international body for the assessment of climate change.

o It was established by the **United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988** to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.

o In the same year, the UN General Assembly endorsed the action by WMO and UNEP in jointly establishing the IPCC.

o The IPCC **reviews and assesses** the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change. It **does not conduct any research nor does it monitor climate related data or parameters**. Thousands of scientists from all over the world contribute to the work of the IPCC.

o Review is an essential part of the IPCC process, to ensure an objective and complete assessment of current information. IPCC aims to reflect a range of views and expertise.

o The Secretariat coordinates all the IPCC work and liaises with Governments. It is established by WMO and UNEP and located at WMO headquarters in Geneva.

REPORT

o The current global warming trends overall are likely to lead an increase in annual mean precipitation over India, with more severe rains expected over southern India in the coming decades, says the Intergovernmental Panel on Climate Change (IPCC)'s Sixth Assessment Report.

o The planet was irrevocably headed towards warming by 1.5° Celsius over pre-industrial times in the next two decades, according to the most updated scientific consensus from the IPCC.

o Keeping global warming below 2° Celsius of pre-industrial levels by the turn of century and endeavoring to limit it to 1.5°C was at the heart

Alarm bells

A look at some of the observations and forecasts made by the panel on climate change

■ Heatwaves and humid heat stress will become more intense and frequent over Southeast Asia during the 21st century

■ Both annual and summer monsoon precipitation will increase, with enhanced interannual variability over Southeast Asia

■ Heat extremes have increased while cold extremes have decreased, and these trends will continue over the coming decades

■ Glacier run-off in the Asian high mountains will increase up to mid-21st century, and subsequently run-off may decrease due to the loss of glacier storage

■ Relative sea level around Asia increased faster than global average, with coastal area loss and shoreline retreat. Regional mean sea level will continue to rise

of the 2015 Paris Agreement.

o Unless extremely deep emission cuts were undertaken by all countries immediately, these goals were unlikely to be met. In line with this, the IPCC has recommended that countries strive to achieve net zero emissions — that is, no additional greenhouse gases were emitted — by 2050.

o In the most ambitious emissions pathway, the projection is that globe would reach the 1.5°C in the 2030s, overshoot to 1.6°C, with temperatures dropping back down to 1.4°C at the end of the century.

o The Sixth Assessment Report, has been finalised and approved by 234 authors and 195 governments, and updates the scientific consensus on extreme weather, human attribution, the carbon budget, feedback cycles, and charts the future state of the climate since the 5th Assessment Report of 2014.

o The report said warming is already accelerating sea level rise and worsening extremes such as heat waves, droughts, floods and storms. Tropical cyclones are getting stronger and wetter, while Arctic sea ice is dwindling in the summer and permafrost is thawing. All of these trends will get worse.

o **India is currently the world's third largest greenhouse gas emitter**, but per capita emissions are much lower. The U.S. emitted nearly 9 times more greenhouse gases per capita than India in 2018. Based on existing commitments by countries to curb their emission, the world is on track for global temperature warming by at least 2.7°C by 2100, predicts the report, calling it 'Code red for humanity'.

o The latest scientific assessment will influence discussions on the Conference of Parties meeting in Glasgow later this year where countries are expected to announce plans and steps they have taken to curb emissions.

Impact on India

The report warns that with a 7,517 km coastline, India will face significant threats from rising seas. Across six Indian port cities — Chennai, Kochi, Kolkata, Mumbai, Surat and Visakhapatnam — 28.6 million people will be exposed to coastal flooding if sea levels rise 50cm, according to one study that forms part of the IPCC report.

IMPORTANCE OF GLACIERS

o Ice acts like a protective cover over the Earth and our oceans. These bright white spots **reflect excess heat back into space and keep the planet cooler**. In theory, the Arctic remains colder than the equator because more of the heat from the sun is reflected off the ice, back into space.

o Glaciers around the world can range from ice that is several hundred to several thousand years old and provide a scientific record of how climate has changed over time.

o Through their study, we gain valuable information about the extent to which the planet is rapidly warming. They provide scientists a record of how climate has changed over time.

o Today, about **10% of land area on Earth is covered with glacial ice**. Almost **90% is in Antarctica, while the remaining 10% is in the Greenland ice cap.**

o **Rapid glacial melt in Antarctica and Greenland also influences ocean currents**, as massive amounts of very cold glacial-melt water entering warmer ocean waters is slowing ocean currents. And as ice on land melts, sea levels will continue to rise.
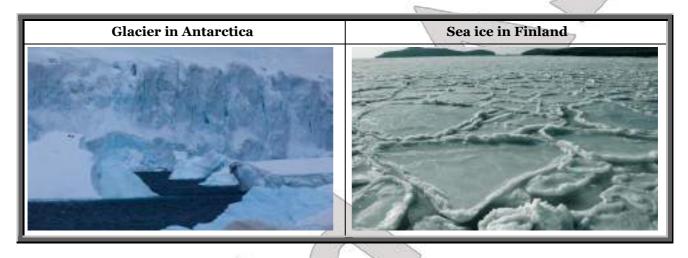
Difference between sea ice and glaciers

o Sea ice forms and melts strictly in the ocean whereas glaciers are formed on land. Icebergs are chunks of glacial ice that break off glaciers and fall into the ocean.

o When glaciers melt, because that water is stored on land, the runoff **significantly increases the amount of water** in the ocean, contributing to global sea level rise.

o Sea ice, on the other hand, is often compared to **ice cubes in a glass of water: when it melts, it does not directly change the level of water** in the glass. Instead, depleting Arctic sea ice triggers a host of other devastating consequences—from depleting available ice on which walrus can haul out or polar bears hunt to changing weather systems around the world by altering the pattern of the Jet stream.

Why are glaciers melting?

o Since the early 1900s, many glaciers around the world have been rapidly melting. Human activities are at the root of this phenomenon. Specifically, since the industrial revolution, carbon dioxide and other greenhouse gas emissions have raised temperatures, even higher in the poles, and as a result, glaciers are rapidly melting, calving off into the sea and retreating on land.

o Even if we significantly curb emissions in the coming decades, more than a third of the world's remaining glaciers will melt before the year 2100. When it comes to sea ice, 95% of the oldest and thickest ice in the Arctic is already gone.

o Scientists project that if emissions continue to rise unchecked, the Arctic could be ice free in the summer as soon as the year 2040 as ocean and air temperatures continue to rise rapidly.

Glacier in Antarctica	Sea ice in Finland

Effects of melting glaciers on sea level rise

o Melting glaciers add to **rising sea levels**, which in turn **increases coastal erosion and elevates storm surge** as warming air and ocean temperatures create more frequent and intense coastal storms like hurricanes and typhoons. Specifically, the Greenland and Antarctic ice sheets are the largest contributors of global sea level rise. Right now, the Greenland ice sheet is disappearing four times faster than in 2003 and already contributes 20% of current sea level rise.

o How much and how quickly these Greenland and Antarctic ice sheets melt in the future will largely determine how much ocean levels rise in the future. If emissions continue to rise, the current rate of melting on the Greenland ice sheet is expected to double by the end of the century. Alarmingly, if all the ice on Greenland melted, it would raise global sea levels by 20 feet.

How do melting sea ice and glaciers affect weather patterns?

o Today, the **Arctic is warming twice as fast as anywhere on earth**, and the sea ice there is declining by more than 10% every 10 years. As this ice melts, darker patches of ocean start to emerge, eliminating the effect that previously cooled the poles, creating warmer air temperatures and in turn disrupting normal patterns of ocean circulation. Research shows the polar vortex is appearing outside of the Arctic more frequently because of changes to the jet stream, caused by a combination of warming air and ocean temperatures in the Arctic and the tropics.

o The glacial melt we are witnessing today in Antarctic and Greenland is **changing the circulation of the Atlantic Ocean and has been linked to collapse of fisheries** in the Gulf of Maine and more destructive storms and hurricanes around the planet.

Effects of melting glaciers and sea ice loss on humans and wildlife

o What happens in these places has consequences across the entire globe. As sea ice and glaciers melt and oceans warm, ocean currents will continue to disrupt weather patterns worldwide.

o Industries that thrive on vibrant fisheries will be affected as warmer waters change where and when fish spawn. Coastal communities will continue to face billion-dollar disaster recovery bills as flooding becomes more frequent and storms become more intense.

o People are not the only ones impacted. In the Arctic, as sea ice melts, wildlife like walrus are losing their home and polar bears are spending more time on land, causing higher rates of conflict between people and bears.

CIRCULAR ECONOMY FOR PLASTIC

o A circular economy is **restorative and regenerative by design**. This means materials **constantly flow around a 'closed loop' system**, rather than being used once and then discarded.

o In the case of plastic, this means **simultaneously keeping the value of plastics in the economy**, **without leakage into the natural environment.**

o In short, the circular economy is an economic system in which **materials are designed to be used, not used up**. From the outset, products and the systems they sit within should be designed to ensure no materials are lost, no toxins are leaked, and the maximum use is achieved from every process, material, and component. If applied correctly, the circular economy benefits society, the environment, and the economy.
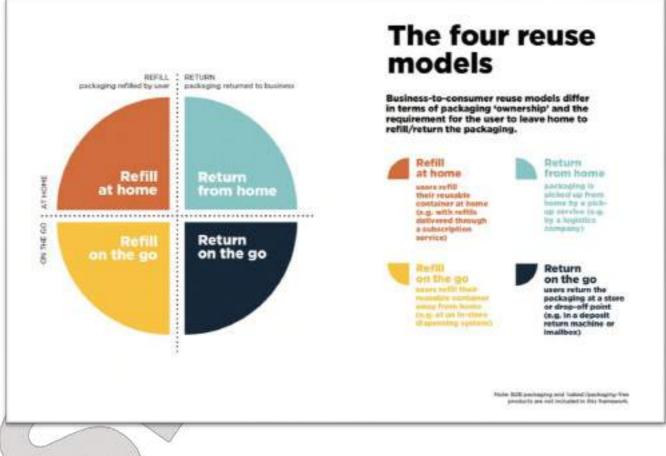
Eliminate the plastics we don't need.

o Plastic brings many benefits. At the same time, there are some problematic items on the market that need to be eliminated to achieve a circular economy, and sometimes, plastic packaging can be avoided altogether while maintaining utility.

o While improving recycling is crucial, we cannot recycle our way out of the plastic issues we currently face. Wherever relevant, **reuse business models should be explored as a preferred solution** (or 'inner loop' in circular economy terms), reducing the need for single-use plastic packaging. Reuse models, which provide an economically attractive opportunity for at least 20% of plastic packaging, need to be implemented in practice and at scale.

o **Innovate** to ensure that the plastics we do need are reusable, recyclable, or compostable. This requires a combination of redesign and innovation in business models, materials, packaging design, and reprocessing technologies.

o **Compostable plastic packaging** is not a blanket solution, but rather one for specific, targeted applications, because an effective collection and composting infrastructure is essential but often not in place.

o Circulate all the plastic items we use to keep them in the economy and out of the environment.

o No plastic should end up in the environment. Landfill, incineration, and waste-to-energy are not long term solutions that support a circular economy.

o Governments are essential in setting up effective collection infrastructure, facilitating the establishment of related self-sustaining funding mechanisms, and providing an enabling regulatory and policy landscape.

o Businesses producing and/or selling packaging have a responsibility beyond the design and use of their packaging, which includes contributing towards it being collected and reused, recycled, or composted in practice.

o In a new plastics economy, plastic never becomes waste or pollution. Three actions are required to achieve this vision and create a circular economy for plastic. **Eliminate** all problematic and unnecessary plastic items. **Innovate** to ensure that the plastics we do need are reusable, recyclable, or compostable. **Circulate** all the plastic items we use to keep them in the economy and out of the environment.

REUSE

INDIA PLASTIC PACT

o The India Plastics Pact is an ambitious, collaborative initiative that aims to bring together **businesses, governments and NGOs** to reduce, reuse, and recycle plastics in their value chain.

o Launched on 3 September, the Pact aims to **tackle plastic pollution** in the country, bringing together businesses from across the Indian plastics value chain to **move towards a circular plastics system** that aims to keep the material in the economy, and out of the environment.
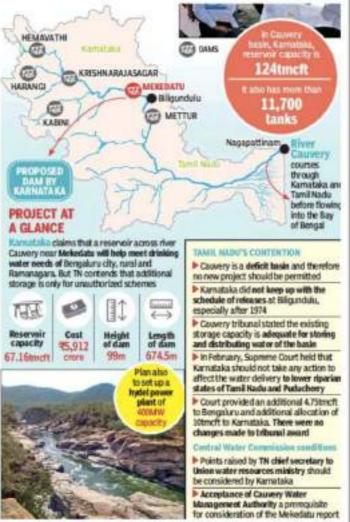
o India generates 9.47 million tonnes of plastic waste annually, of which 40 per cent goes uncollected. 43 per cent of all plastics produced in the country are used for packaging, most of which is single-use.

o The India Plastics Pact will set out to address this through direct actions across four 2030 targets – define a list of unnecessary or problematic plastic and take measures to address them through redesign and innovation; 100 per cent of plastic packaging to be reusable or recyclable; 50 per cent of plastic packaging to be effectively recycled, and 25 per cent average recycled content across all plastic packaging.

o A total of 27 businesses and supporting organisations have joined the Pact as founding members, including major FMCG brands, manufacturers, retailers and recyclers such as Tata Consumer Products, Amazon, Hindustan Unilever, Coca Cola India, Mondelez, Godrej, Marico and ITC.

o The Pact has been developed as a **collaboration between WRAP, WWF India, and the CII.** The development received funding from **UK Research and Innovation (UKRI),** with further capital to support delivery being secured from Stewart Investors.

o Following the launch of the Pact in India, collaboration is set to continue between WRAP, the CII and WWF-India on four key actions – draw up a delivery roadmap; initiate 'Action Groups' to support the targets; scope out the reporting process to develop a baseline; drive recruitment.

o The India Plastics Pact is the latest to join a growing list of Pacts, including initiatives in Europe, the US, Canada, South Africa and Chile.

MEKEDATU PROJECT

The Tamil Nadu government has moved the Supreme Court against a National Green Tribunal (NGT) decision to close proceedings against the Mekedatu dam project.

o Mekedatu, meaning **goat's leap**, is a deep gorge situated at the confluence of the **rivers Cauvery and its tributary Arkavathi.**

o The Rs. 9,000 crore project aims to store and supply water for drinking purposes for the Bengaluru city. Around 400 megawatts (MW) of power is also proposed to be generated through the project.

o It was first approved by the Karnataka state government in 2017.

o It received approval from the erstwhile Ministry of Water Resources for the detailed project report and is awaiting approval from the Ministry of Environment, Forest and Climate Change (MoEFCC).

o The approval from MoEFCC is crucial because 63% of the forest area of the Cauvery Wildlife Sanctuary will be submerged.

o In 2018, Tamil Nadu approached the Supreme Court (SC) against the project even if Karnataka had held that it would not affect the flow of water to Tamil Nadu.

o In June 2020, during the Cauvery Water

Management Authority's meeting, Tamil Nadu reiterated its opposition to the project.

Reasons for Opposition by Tamil Nadu:

o Tamil Nadu is opposed to any project being proposed in the upper riparian unless it was approved by the SC.

o Karnataka has no right to construct any reservoir on an inter-state river without the consent of the lower riparian state i.e. Tamil Nadu in this case.

o The project is against the final order of the Cauvery Water Disputes Tribunal (CWDT) in which the SC held that no state can claim exclusive ownership or assert rights to deprive other states of the waters of inter-state rivers.

o The CWDT and the SC have found that the existing storage facilities available in the Cauvery basin were adequate for storing and distributing water so Karnataka's proposal is ex-facie (on the face of it) untenable and should be rejected outright.

o It has also held that the reservoir is not just for drinking water alone, but to increase the extent of irrigation, which is in clear violation of the Cauvery Water Disputes Award.

GEO-TOURISM SITES

The Geological Survey of India (GSI) has identified certain geological sites across the Northeast for promotion of geo-tourism.

o Of the 12 sites in the Northeast, three are in Meghalaya, two each in Assam and Tripura, and one each in Arunachal Pradesh, Manipur, Mizoram, Nagaland and Sikkim.

MEGHALAYA

Mawmluh Cave: Near Cherrapunjee in the East Khasi Hills district, this cave led scientists to the **Meghalayan Age** associated with a major climatic event – very abrupt, critical and significant drought and cooling – 4,200 years ago.

A stage of the **Meghalayan Age is defined from a specific level in a stalagmite from this cave.** According to geologists, speleothems from the cave provide important records of Holocene paleo-climate and paleo-monsoon.
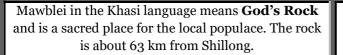
The cave is about 55 km from the State capital Shillong.

Mawblei or God's Rock: Situated near Syntung village in East Khasi Hills district, it is a huge balancing rock slanting at an angle of about 45 degrees in the south-southeast direction on a hill slope at 1,303 metres above mean sea level overlooking the Wahrashi River valley.

The rock is composed of the **reddish-purple Mahadek sandstone** belonging to the Khasi group of cretaceous age. Thin partings of shale are also observed in the boulder.

Therriaghat: Also in East Khasi Hills district, it is probably one of the best-preserved and most complete Cretaceous-Paleogene boundary sections in India.

Most of the large vertebrates, planktons and many tropical invertebrates suddenly became extinct at the end of the Cretaceous period.

A new assemblage of ammonites recorded recently probably represent a few of the last representatives just before the mass extinction in which the

Mawblei in the Khasi language means **God's Rock** and is a sacred place for the local populace. The rock is about 63 km from Shillong.	complete sub-class Ammonidea vanished from the face of the earth.

ASSAM

Umananda: One of the smallest inhabited islands in the Brahmaputra, Umananda is off the administrative hub of Guwahati and sports an old Shiva temple. The island is actually an inselberg, composed of the rocks of the Assam-Meghalaya gneissic complex.

Majuli: A river "island", among the world's largest, Majuli is a district at the mercy of the Brahmaputra. The river erodes the island every year but also deposits soil to ensure a constant change in its shape. The island is also the hub of spiritualism in Assam because of a number of 'satras' or Vaishnav monasteries established by the 15th-16th century saint-reformer **Srimanta Sankaradeva** and his disciples. The island is about 330 km east of Guwahati.	

TRIPURA

Chabimura: In Gomati district, this site is known for its panels of rock carving on a steep hill wall on the bank of river Gomati. The huge images of **Shiva, Vishnu, Karthikeya, Durga** and other gods and goddesses date back to the 15th-16th century and the biggest carved deity is about 20 ft. The hill range is covered with thick jungles and one can reach this abode of gods after trekking through the foliage but rafting or boating on the river is the only option for a view of the rock-face carvings. The site is about 82 km from the State capital Agartala.	

Unakoti: This site in the Unakoti district has numerous rock-cut sculptures and temples made between the 7th and 9th centuries. The hilly environs and waterfalls are an added attraction at Unakoti, which means "one less than a crore". The place is a historic Shaiva pilgrimage 172 km from Agartala. The central Shiva head, known as 'Unakotiswara Kal Bhairava' is about 30 feet high, including an embroidered headdress that is 10 feet high.

MIZORAM

Reiek Tlang: About 29 km from State capital Aizawl, this hill is a **cuesta formed due to erosion of the tertiary sand shale alternations**.

Cuesta means a ridge with a gentle slope or dip on one side and a steep slope or scarp on the other. The local authorities host the annual anthurium festival at a heritage village near the Reiek peak.

ARUNACHAL PRADESH

Sangetsar Tso: Popularly known as **Madhuri Lake**, this waterbody in Tawang district is close to the border with Tibet and was formed due to the damming of a river during a major earthquake in 1950.

The lake is surrounded by a lush valley and snow-capped mountains.

NAGALAND

Naga Hill Ophiolite: Geologically referred to as NHO, it is in the Pungro region of Kiphire district and about 240 km from State capital Kohima.

It refers to the **ophiolitic rocks of mantle and oceanic crust percentage at the continental plate margin** with vast potential for intensive research and economic growth.

The NHO consists of a variety of Mesozoic and the subsequently Cenozoic rocks – magmatic, metamorphic and sedimentary – that originated at the India-Myanmar convergent plate boundary. It has been assigned ages ranging from Cretaceous to Paleocene.

SIKKIM

Stromatolite Park: At Mamley, about 80 km from State capital Gangtok, this site comprising stromatolitic (algal) development – boulder outcrops with circular structures – hosted in the limestone of **Buxa Formation** was discovered a little over a decade ago.

It provides one of the rare examples of early life on earth in the Sikkim Himalayas. The age of the Buxa Formation is tentatively assigned as Meso-Neoproterozoic based on the available evidence of stromatolites and organic-walled microfossils.

MANIPUR

Loktak Lake: About 40 km from State capital Imphal, this lake in the Bishnupur district is the largest freshwater lake in the Northeast.

The attractions of this lake are the '**phumdis**' or floating biomass and the 'phumsangs' or huts of fishermen on them.

The **Keibul Lamjao National Park**, the only floating wildlife habitat on earth, is on the southwestern part of the lake and is the last natural habitat of the sangai or brow-antlered dancing deer.

✦ ANIMAL DISCOVERIES 2020

India has added 557 new species to its fauna, which includes 407 new species and 150 new records, reveals Animal Discoveries 2020, a document published recently by the Zoological Survey of India (ZSI). The number of faunal species in India has climbed to 1,02,718 species with the discovery of the news species.
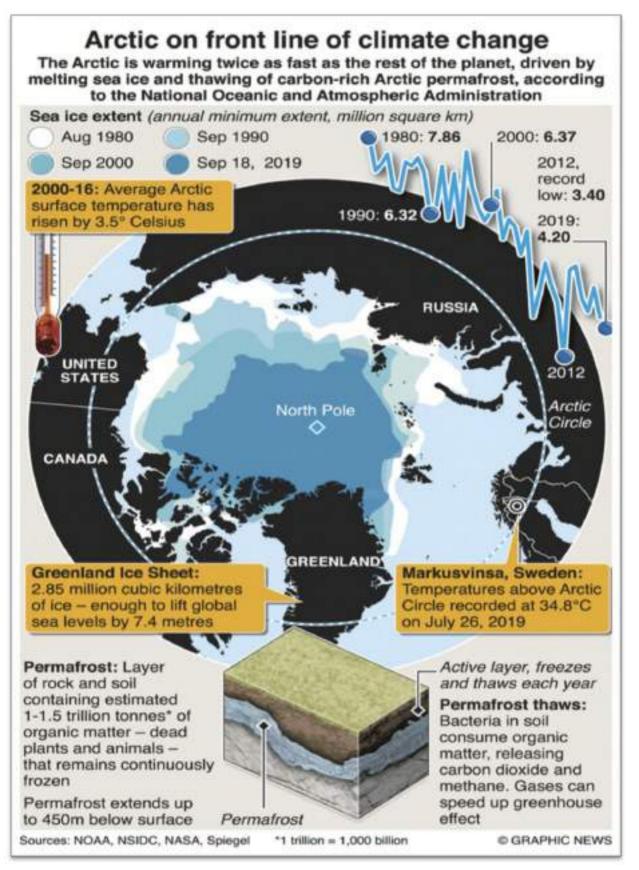
o The ZSI, which was set up by British zoologist **Thomas Nelson Annandale, in 1916**, has been publishing Animal Discoveries since 2007.

o The ZSI publication shows that India is a **mega biodiverse country, rich in biodiversity, with 23.39% of its geographical area under forest and tree cover**.

o India is positioned **8th in mega biodiversity countries in the world with 0.46 BioD index** which is calculated by its percentage of species in each group relative to the total global number of species in each group.

o Among the new species, some interesting species discovered in 2020 are:

Trimeresurus salazar	a new species of green pit viper discovered from Arunachal Pradesh
Lycodon deccanensis	the Deccan wolf snake discovered from Karnataka
Sphaerotheca Bengaluru	a new species of burrowing frog named after the city of Bengaluru
Xyrias anjaalai	a new deep water species of snake eel from Kerala
Glyptothorax giudikyensis	a new species of catfish from Manipur
Clyster galateansis	a new species of scarab beetles from the Great Nicobar Biosphere
Myotis cf. frater	a bat species earlier known from China, Taiwan and Russia, has been reported for the first time from Uttarakhand in India
Zoothera citrina gibsonhilli	an orange-headed thrush from the Narcondam island in the Andaman & Nicobar Islands.

o Of these 557 species, invertebrates constitute the majority with 486 species, while 71 species belong to vertebrates. Among invertebrates, insects dominated, with 344 species, whereas pisces and reptiles dominated among vertebrates.

o Among the States, the **highest number of new species were discovered from Karnataka** (66 species), followed by Kerala (51 species). Also in 2020, 46 new species were discovered from Rajasthan and 30 from West Bengal.

o In terms of new records or species recorded in the country for the first time, Arunachal Pradesh had the highest (20 new records). In the Andaman & Nicobar Islands, 25 new species were discovered and 16 new records documented in 2020.

ARCTIC AND CLIMATE CHANGE

Arctic on front line of climate change

The Arctic is warming twice as fast as the rest of the planet, driven by melting sea ice and thawing of carbon-rich Arctic permafrost, according to the National Oceanic and Atmospheric Administration

Sea ice extent (annual minimum extent, million square km)

- Aug 1980
- Sep 1990
- Sep 2000
- Sep 18, 2019

1980: **7.86**
1990: **6.32**
2000: **6.37**
2012, record low: **3.40**
2019: **4.20**

2000-16: Average Arctic surface temperature has risen by 3.5° Celsius

RUSSIA

North Pole

2012

Arctic Circle

UNITED STATES

CANADA

GREENLAND

Greenland Ice Sheet: 2.85 million cubic kilometres of ice — enough to lift global sea levels by 7.4 metres

Markusvinsa, Sweden: Temperatures above Arctic Circle recorded at 34.8°C on July 26, 2019

Permafrost: Layer of rock and soil containing estimated 1-1.5 trillion tonnes* of organic matter — dead plants and animals — that remains continuously frozen

Permafrost extends up to 450m below surface

Active layer, freezes and thaws each year

Permafrost thaws: Bacteria in soil consume organic matter, releasing carbon dioxide and methane. Gases can speed up greenhouse effect

Permafrost

Sources: NOAA, NSIDC, NASA, Spiegel   *1 trillion = 1,000 billion   © GRAPHIC NEWS

ARCTIC COUNCIL

o The establishment of the Arctic Council was considered an important milestone enhancing cooperation in the circumpolar North.

o In the **Ottawa Declaration**, the eight Arctic States established the Council as a high-level forum to provide means for promoting cooperation, coordination and interaction among the Arctic States – including the full consultation and full involvement of Arctic Indigenous communities and other Arctic inhabitants.

o The **Arctic Council is the leading intergovernmental forum promoting cooperation, coordination and interaction among the Arctic states, Arctic Indigenous communities and other Arctic inhabitants** on common Arctic issues, in particular, on issues of sustainable development and environmental protection in the Arctic.

The work of the Council is primarily carried out in six Working Groups:

1. The **Arctic Contaminants Action Program (ACAP)** acts as a strengthening and supporting mechanism to encourage national actions to reduce emissions and other releases of pollutants.

2. The **Arctic Monitoring and Assessment Programme (AMAP)** monitors the Arctic environment, ecosystems and human populations, and provides scientific advice to support governments as they tackle pollution and adverse effects of climate change.

3. The **Conservation of Arctic Flora and Fauna Working Group (CAFF)** addresses the conservation of Arctic biodiversity, working to ensure the sustainability of the Arctic's living resources.

4. The **Emergency Prevention, Preparedness and Response Working Group (EPPR)** works to protect the Arctic environment from the threat or impact of an accidental release of pollutants or radionuclides.

5. The **Protection of the Arctic Marine Environment (PAME)** Working Group is the focal point of the Arctic Council's activities related to the protection and sustainable use of the Arctic marine environment.

6. The **Sustainable Development Working Group (SDWG)** works to advance sustainable development in the Arctic and to improve the conditions of Arctic communities as a whole.

7. The Council may also establish Task Forces or Expert Groups to carry out specific work.

Member States

Canada, the Kingdom of Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States

Permanent Participants

Aleut International Association (AIA), Arctic Athabaskan Council (AAC), Gwich'in Council International (GCI), Inuit Circumpolar Council (ICC), Russian Association of Indigenous Peoples of the North (RAIPON), Saami Council (SC)

Observers

o **States:** France, Germany, the Netherlands, Poland, Spain, United Kingdom, People's Republic of China, Italian Republic, Republic of Korea, Republic of Singapore, Republic of India

o **Non-Govermental Organizations:** Advisory Committee on Protection of the Seas (ACOPS), Arctic Institute of North America (AINA)—Formerly Arctic Cultural Gateway (ACG), Association of World Reindeer Herders (AWRH), Circumpolar Conservation Union (CCU), International Arctic Science Committee (IASC), International Arctic Social Sciences Association (IASSA), International Union for Circumpolar Health (IUCH), International Work Group for Indigenous Affairs (IWGIA), Northern Forum (NF), University of the Arctic (UArctic), World Wide Fund for Nature-Global Arctic Program (WWF)
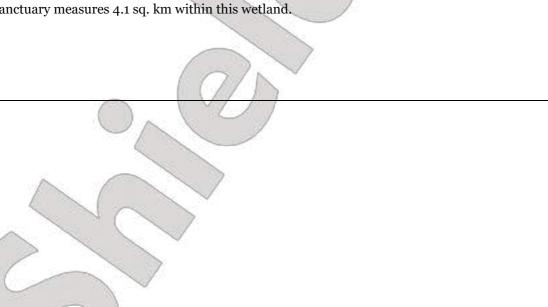
Chairmanship

o The chairmanship of the Council rotates among the eight member states, each state holding the position for two years at a time.

o **Iceland** is currently holding the Arctic Council Chairmanship (2019-2021).

DEEPER BEEL

o The Ministry of Environment, Forest and Climate Change notified the eco-sensitive zone of the Deepar Beel Wildlife Sanctuary on the south-western edge of Guwahati.

o Deepor Beel (**Beel means wetland or large aquatic body in Assamese)** located about 10 km Southwest of Guwahati city is considered one of the large and important riverine wetlands in the Brahmaputra Valley of lower Assam, India.

o Deepor Beel is an **open lake basin** connected with a set of inflow and outflow channels.

o Deepor Beel has both biological and environmental importance besides being the only major storm-water storage basin for Guwahati city. It is considered one of the staging sites for migratory birds in India; and some of the large congregations of aquatic birds in Assam during winter.

o Because of the richness of avian fauna it enjoyed, **Deepor Beel has been selected as one of the Important Bird Area (IBA) sites by Birdlife International**.

o Deepor Beel has also been designated as a **Ramsar Site in November 2002**.

o The wetland expands up to 30 sq. km in summer and reduces to about 10 sq. km in the winter. The wildlife sanctuary measures 4.1 sq. km within this wetland.

SCIENCE AND TECHNOLOGY
(Inventions, Innovations, Discoveries and Explorations)

INDIA and SPACE SCIENCE

COMMUNICATION SATELLITES

o The **Indian National Satellite (INSAT) system** is one of the largest domestic communication satellite systems in Asia-Pacific region with nine operational communication satellites placed in **Geo-stationary orbit**.

o **Established in 1983 with commissioning of INSAT-1B,** it initiated a major revolution in India's communications sector and sustained the same later.

o GSAT-17 joins the constellation of INSAT System consisting 15 operational satellites, namely - INSAT-3A, 3C, 4A, 4B, 4CR and GSAT-6, 7, 8, 9, 10, 12, 14, 15, 16 and 18.

o The INSAT system with more than 200 transponders in the **C, Extended C and Ku-bands** provides services to telecommunications, television broadcasting, satellite newsgathering, societal applications, weather forecasting, disaster warning and Search and Rescue operations.

EARTH OBSERVATION SATELLITES

o Starting with **IRS-1A in 1988**, ISRO has launched many operational remote sensing satellites. Today, India has one of the largest constellations of remote sensing satellites in operation.

o Currently, *thirteen* operational satellites are in **Sun-synchronous orbit** – RESOURCESAT-1, 2, 2A CARTOSAT-1, 2, 2A, 2B, RISAT-1 and 2, OCEANSAT-2, Megha-Tropiques, SARAL and SCATSAT-1, and *four* in **Geostationary orbit**- INSAT-3D, Kalpana & INSAT 3A, INSAT -3DR.

o Varieties of instruments have been flown onboard these satellites to provide necessary data in a diversified spatial, spectral and temporal resolutions to cater to different user requirements in the country and for global usage.

o The data from these satellites are used for several applications covering **agriculture, water resources, urban planning, rural development, mineral prospecting, environment, forestry, ocean resources and disaster management**.

ASTROSAT

o **AstroSat is the first dedicated Indian astronomy mission** aimed at studying celestial sources in **X-ray, optical and UV spectral bands** simultaneously.

o The payloads cover the energy bands of Ultraviolet (Near and For), limited optical and X-ray regime (0.3 keV to 100keV).

o One of the unique features of AstroSat mission is that **it enables the simultaneous multi-wavelength observations** of various astronomical objects with a single satellite.

o AstroSat with a lift-off mass of 1515 kg was launched on September 28, 2015 into a 650 km orbit inclined at an angle of 6 deg to the equator by PSLV-C30 from Satish Dhawan Space Centre, Sriharikota.

o The minimum useful life of the AstroSat mission is expected to be 5 years.

MARS ORBITER MISSION

o Mars Orbiter Mission is ISRO's **first interplanetary mission to planet Mars** with an orbiter craft designed to orbit Mars in an elliptical orbit of 372 km by 80,000 km.

o Mars Orbiter mission can be termed as a challenging technological mission and a science mission considering the critical mission operations and stringent requirements on propulsion, communications and other bus systems of the spacecraft.

o The primary driving technological objective of the mission is to design and realize a spacecraft with a capability to perform **Earth Bound Manoeuvre (EBM), Martian Transfer Trajectory (MTT) and Mars Orbit Insertion (MOI)** phases and the related deep space mission planning and communication management at a distance of nearly 400 million Km. Autonomous fault detection and recovery also becomes vital for the mission.

SATELLITE NAVIGATION

o Satellite Navigation service is an emerging **satellite based system with commercial and strategic applications**.

o ISRO is committed to provide the satellite based Navigation services to meet the emerging demands of the Civil Aviation requirements and to meet the user requirements of the positioning, navigation and timing based on the independent satellite navigation system.

o To meet the Civil Aviation requirements, **ISRO is working jointly with Airport Authority of India (AAI) in establishing the GPS Aided Geo Augmented Navigation (GAGAN) system**.

o To meet the user requirements of the positioning, navigation and timing services based on the indigenous system, ISRO is establishing a regional satellite navigation system called **Indian Regional Navigation Satellite System (IRNSS).**

GPS Aided GEO Augmented Navigation (GAGAN):

o This is a Satellite Based Augmentation System (SBAS) implemented jointly with Airport Authority of India (AAI).

o The main objectives of GAGAN are to provide Satellite-based Navigation services with accuracy and integrity required for civil aviation applications and to provide better Air Traffic Management over Indian Airspace.

o The system will be interoperable with other international SBAS systems and provide seamless navigation across regional boundaries.

o The GAGAN Signal-In-Space (SIS) is available through GSAT-8 and GSAT-10.

Indian Regional Navigation Satellite System (IRNSS) : NavIC

o This is an independent Indian Satellite based positioning system for critical National applications.

o The main objective is to provide Reliable Position, Navigation and Timing services over India and its neighbourhood, to provide fairly good accuracy to the user.

o The IRNSS will provide basically two types of services

▪ **Standard Positioning Service (SPS)**

▪ **Restricted Service (RS)**

o To date, ISRO has built a total of nine satellites in the IRNSS series; of which eight are currently in orbit.

o Three of these satellites are in geostationary orbit (GEO) while the remaining in geosynchronous orbits (GSO) that maintain an inclination of 29° to the equatorial plane.

o The IRNSS constellation was named as **"NavIC" (Navigation with Indian Constellation)** and it was dedicated to the nation on the occasion of the successful launch of the IRNSS-1G satellite.

o The eight operational satellites in the IRNSS series, namely IRNSS-1A, 1B, 1C, 1D, 1E, 1F, 1G and 1I were launched on Jul 02, 2013; Apr 04, 2014; Oct 16, 2014; Mar 28, 2015; Jan 20, 2016; Mar 10, 2016, Apr 28, 2016; and Apr 12, 2018 respectively.

SMALL SATELLITES

The small satellite project is envisaged to provide platform for stand-alone payloads for earth imaging and science missions within a quick turn around time. For making the versatile platform for different kinds of payloads, two kinds of buses have been configured and developed.

Indian Mini Satellite -1 (IMS-1)

o IMS-1 bus has been developed as a versatile bus of 100 kg class which includes a payload capability of around 30 kg. The bus has been developed using various miniaturization techniques.

o The first mission of the IMS-1 series was launched successfully on April 28th 2008 as a co-passenger along with Cartosat 2A. Youthsat is second mission in this series and was launched successfully along with Resourcesat 2 in 2011.

Indian Mini Satellite -2 (IMS-2) Bus

o IMS-2 Bus is evolved as a standard bus of 400 kg class which includes a payload capability of around 200kg.

o IMS-2 development is an important milestone as it is envisaged to be a work horse for different types of remote sensing applications.

o The first mission of IMS-2 is **SARAL.**

o SARAL is a co-operative mission between ISRO and CNES with payloads from CNES and spacecraft bus from ISRO.

GAGANYAAN

o The Gaganyaan Programme envisages undertaking the demonstration of human spaceflight to **Low Earth Orbit (LEO)** in the short-term and will lay the foundation for a sustained Indian human space exploration programme in the long run.

o The objective of Gaganyaan programme is to demonstrate indigenous capability to undertake human space flight mission to LEO.

o As part of this programme, two unmanned missions and one manned mission are approved by Government of India (GoI).

likely benefits

The Human spaceflight programme has both tangible and intangible benefits for the nation, which includes:

1. Progress towards a sustained and affordable human and robotic programme to explore the solar system and beyond.

2. Advanced technology capability for undertaking human space exploration, sample return missions and scientific exploration.

3. Future capability to actively collaborate in global space station development & to carry out scientific experiments of interest to the nation.

4. Create a broad frame work for wider Academia – Industry partnership in taking up development activities for national development.

5. Ample scope for employment generation and human resource development in advanced science and R&D activities.

6. Unique opportunity to inspire and excite Indian youth and steer many students toward careers in science and technology towards challenging jobs that encourage knowledge, innovation and creativity.

7. The programme will strengthen international partnerships and global security through the sharing of challenging and peaceful goals. Having a vibrant human spaceflight programme can be leveraged as a potent foreign policy tool.

The major new technologies required for Gaganyaan programme are as follows:

o Human rated launch vehicle
o Crew escape systems
o Habitable orbital module
o Life support system
o Crew selection and training and associated crew management activities

GSLV F10 and EOS-03

o A technical anomaly preventing the ignition of the **GSLV-F10 rocket's cryogenic upper stage** and ISRO could not accomplish the mission to launch earth observation satellite EOS-03 into the intended orbit.

o **GSLV-F10 was ISRO's eighth flight with indigenous cryo**, 14th GSLV flight and 79th launch from Sriharikota.

o **EOS-03,** intended to be positioned in the geostationary transfer orbit initially, was supposed to reach the final geostationary orbit.

o It was expected to provide near real-time imaging of a large area of interest at frequent intervals, which could be used for quick monitoring of natural disasters, episodic events and any short-term events. The mission life of the satellite was 10 years.
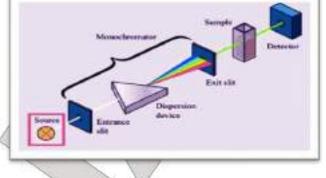
Know about GSLV

o Geosynchronous Satellite Launch Vehicle Mark II (GSLV Mk II) is the **largest launch vehicle developed by India**, which is currently in operation.

o This **fourth generation launch vehicle** is a **three stage vehicle with four liquid strap-ons**. The indigenously developed cryogenic Upper Stage (CUS), which is flight proven, forms the third stage of GSLV Mk II.

o **Payload to GTO**: 2,500 kg- GSLV's primary payloads are **INSAT class of communication satellites** that operate from **Geostationary orbits** and hence are placed in **Geosynchronous Transfer Orbits** by GSLV.

o **Payload to LEO**: 5,000 kg-Further, GSLV's capability of placing up to 5 tonnes in Low Earth Orbits broadens the scope of payloads from heavy satellites to multiple smaller satellites.

o **Third Stage**: CUS- Developed under the Cryogenic Upper Stage Project (CUSP), the CE-7.5 is India's first cryogenic engine, developed by the Liquid Propulsion Systems Centre. CE-7.5 has a staged combustion operating cycle.

o **Second Stage**: GS2-One Vikas engine is used in the second stage of GSLV. The stage was derived from the PS2 of PSLV where the Vikas engine has proved its reliability.

o **First Stage**: GS1-The first stage of GSLV was also derived from the PSLV's PS1. The 138 tonne solid rocket motor is augmented by 4 liquid strap-ons.

o **Strap-on Motors**: The four liquid engine strap-ons used in GSLV are heavier derivatives of PSLV's PS2, and use one Vikas engine each.

ABSORPTION SPECTROSCOPY

o Researchers from IIT Madras and IISER Kolkata have developed a method to detect minute quantities of chemicals in solution. They use a variation of **absorption spectroscopy**.
o With this technique, they can, in principle, illuminate the insides of cells and detect minuscule quantities of substances present there.

Science of Absorption spectroscopy

o Absorption spectroscopy is a **tool to detect the presence of elements in a medium**.
o Light is shone on the sample, and after it passes through the sample is examined using a spectroscope.
o **Dark lines are seen in the observed spectrum** of the light passed through the substance, which correspond to the wavelengths of light absorbed by the intervening substance and are characteristic of the elements present in it.
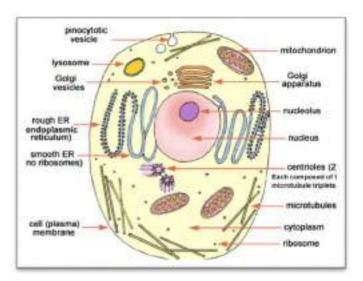o In usual methods, about a cubic centimetre of the sample is needed to do this experiment. In the method developed here, minute amounts of dissolved substances can be detected easily.
o Usually in absorption spectroscopy, the principle used is that **light because of its wavelike nature, shows diffraction patterns, that is, dark and light fringes, when it scatters off any object**. A related concept called the **Abbe criterion sets** a natural limit on the size of the object being studied. According to this criterion, the size of the observed object has to be at least of the order of the wavelength of the light being shone on it.
o In the method used by the researchers here, tiny, nano-sized particles that can absorb light being shone on them and re-emit red, blue and green light were employed.
o The absorption leaves a gap in the reflected light, which is what is observed and used to analyse the nature of the absorbing material.

Inside living cells

o There are many potential applications. To study particles inside living cells, and the emission can be used as a tiny flash lamp to look for absorption from individual molecules in the close proximity to the particle.
o The future is to use it to measure individual molecules, see an absorption spectroscopy of a single DNA or protein molecule.

BIOLOGICAL CELL

o It only takes **one biological cell to create an organism**. In fact, there are countless species of single-celled organisms, and indeed multi-cellular organisms like ourselves.
o A single cell is able to keep itself functional by owning a series of **'miniature machines' known as organelles**. The following list looks at some of these organelles and other characteristics typical of a fully functioning cell.

Mitochondrion	An important cell organelle involved in respiration.
Cytoplasm	A fluid surrounding the contents of a cell and forms a vacuole.
Golgi Apparatus	The processing area for the creation of a glycoprotein.
Endoplasmic Reticulum	An important organelle heavily involved in protein synthesis.
Vesicles	Packages of substances that are to be used in the cell or secreted by it.
Nucleus	The "brain" of a cell containing genetic information that determines every natural process within an organism.
Cell Membrane	Also known as a plasma membrane, this outer layer of a cell assists in the movement of molecules in and out the cell plays both a structural and protective role.
Lysosomes	Membranous sacs that contain digestive enzymes.
Cell Wall	A structure that characteristically is found in plants and prokaryotes and not animals that plays a structural and protective role.

Cell Specialisation: Cells can become specialized to **perform a particular function** within an organism, usually as part of a larger tissue consisting of many of the same cells working in tandem, for example;
o Nerve cells to operate as part of the nervous system to send messages back and forth via the brain at the center of the nerve system.
o Skin cells for waterproof protection and protection against pathogens in the open-air environment.
o Xylem tubes to transport water around plants and to provide structural support for the plant as a whole.
 Cells combine their efforts in these tissue types to **perform a common cause**. The task of the specialized cell will determine in what way it is going to be specialized, because different cells are suited to different purposes, as illustrated in the above list and below example:
o Muscle cells are long and smooth in structure and their elastic nature allows these cells to perform flexible movements, just as they do in our own bodies.
o Some white blood cells contain powerful digestive enzymes to eliminate pathogens by breaking them down to the molecular level.
o Cells at the back of the eye are sensitive to light stimuli, and thus can interpret differences in light intensity which can, in turn, be interpreted by our nervous system and brain.

Cell Transport: There are three methods in which ions are transported through the cell membrane into the cell:-
o **Active Transport** – Active transport is the transport of molecules with the active assistance of a carrier that can transport the material against a natural concentration gradient.
o **Passive Transport (Diffusion)** – The movement of molecules from areas of high concentration (i.e. outside a cell) to areas of low concentration (i.e. within a cell) via a carrier. This process does not require energy.
o **Simple Diffusion** – The movement of molecules from areas of high concentration to areas of low concentration in a free state. Osmosis of water involves this type of diffusion through a selectively permeable membrane (i.e. plasma membrane)
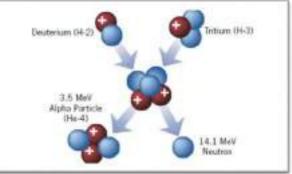
NUCLEAR FUSION

For the first time, scientists at the U.S. National Ignition Facility (NIF) have demonstrated an experiment that nearly showed up nuclear fusion in a laboratory.
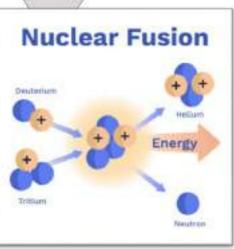
Nuclear Fusion

o It is a nuclear process, where energy is produced by **smashing together light atoms**. It is the **opposite reaction of fission**, where heavy isotopes are split apart.

o Fusion is the process by which the sun and other stars generate light and heat.

o It's most easily achieved on Earth by combining **two isotopes of hydrogen: deuterium and tritium**.

o Hydrogen is the lightest of all the elements, being made up of a **single proton and a electron**.

o Deuterium has an **extra neutron in its nucleus; it can replace one of the hydrogen atoms in H20 to make what is called "heavy water."**

o Tritium has two extra neutrons, and is therefore three times as heavy as hydrogen.

o In a fusion cycle, tritium and deuterium are combined and result in the formation of helium, the next heaviest element in the Periodic Table, and the release of a free neutron.

o Deuterium is found **one part per 6,500 in ordinary seawater**, and is therefore globally available, eliminating the problem of unequal geographical distribution of fuel resources. This means that there will be fuel for fusion as long as there is water on the planet.

What is Fusion Power?

o Let's take look at a fusion reaction. You can see that as deuterium and tritium fuse together, their component parts are recombined into a helium atom and a fast neutron. As the two heavy isotopes are reassembled into a helium atom, you have **'extra' mass leftover which is converted into the kinetic energy of the neutron, according to Einstein's formula: $E=mc2$.**

o For a nuclear fusion reaction to occur, it is necessary to bring two nuclei so close that nuclear forces become active and glue the nuclei together. Nuclear forces are small-distance forces and have to act against the electrostatic forces where positively charged nuclei repel each other. This is the reason nuclear fusion reactions occur mostly in high density, high temperature environment.

o At very high temperatures, **electrons are stripped from atomic nuclei to form a plasma (ionized gas).** Under such conditions, the repulsive electrostatic forces that keep positively charged nuclei apart can be overcome, and the nuclei of select light elements can be brought together to fuse and form other elements.

o Nuclear fusion of light elements releases vast amounts of energy and is the fundamental energy-producing process in stars.

o The **goal of fusion research is to confine fusion ions at high enough temperatures and pressures and for a long enough time to fuse.**

BLACK HOLES

o A black hole is a place in space where **gravity pulls so much that even light can not get out**. The gravity is so strong because matter has been squeezed into a tiny space. This can happen when a star is dying.

o Because no light can get out, people can't see black holes. **They are invisible**. Space telescopes with special tools can help find black holes. The special tools can see how stars that are very close to black holes act differently than other stars.

How Big Are Black Holes?

o Black holes can be big or small. Scientists think the smallest black holes are as **small as just one atom**. These black holes are very tiny but have the mass of a large mountain. **Mass is the amount of matter, or "stuff," in an object**.

o Another kind of black hole is called **"stellar."** Its mass can be up to 20 times more than the mass of the sun. There may be many, many stellar mass black holes in Earth's galaxy. Earth's galaxy is called the Milky Way.

o The largest black holes are called **"supermassive."** These black holes have masses that are more than 1 million suns together. Scientists have found proof that every large galaxy contains a supermassive black hole at its center. The supermassive black hole at the center of the Milky Way galaxy is called Sagittarius A. It has a mass equal to about 4 million suns and would fit inside a very large ball that could hold a few million Earths.

How Do Black Holes Form?

o Scientists think the smallest black holes formed when the universe began.

o Stellar black holes are made when the center of a very big star falls in upon itself, or collapses. When this happens, it causes a **supernova.** A supernova is an exploding star that blasts part of the star into space.

o Scientists think supermassive black holes were **made at the same time as the galaxy they are in**.

If Black Holes Are "Black," How Do Scientists Know They Are There?

o A black hole cannot be seen because strong gravity pulls all of the light into the middle of the black hole. But scientists can see how the strong gravity affects the stars and gas around the black hole. Scientists can study stars to find out if they are flying around, or orbiting, a black hole.

o When a black hole and a star are close together, high-energy light is made. This kind of light cannot be seen with human eyes. Scientists use satellites and telescopes in space to see the high-energy light.

Could a Black Hole Destroy Earth?

o Black holes do not go around in space eating stars, moons and planets. Earth will not fall into a black hole because no black hole is close enough to the solar system for Earth to do that.

o Even if a black hole the same mass as the sun were to take the place of the sun, Earth still would not fall in. The black hole would have the same gravity as the sun. Earth and the other planets would orbit the black hole as they orbit the sun now.

o The sun will never turn into a black hole. The sun is not a big enough star to make a black hole.

How Is NASA Studying Black Holes?

NASA is using satellites and telescopes that are traveling in space to learn more about black holes. These spacecraft help scientists answer questions about the universe.

INDIAN POLITY
(Constitution; Polity and Governance)

🔸 REGISTRATION OF POLITICAL PARTIES

o Registration of Political parties is governed by the provisions of **Section 29A** of the **Representation of the People Act, 1951.**

o A party seeking registration under the said Section with the Commission has to submit an application to the Commission **within a period of 30 days following the date of its formation** as per guidelines prescribed by the Election Commission of India in exercise of the powers conferred by Article 324 of the Commission of India and Section 29A of the Representation of the People Act, 1951.

National Party: To be eligible for a 'National Political Party of India,' the Election Commission has set the following criteria:

o It secures **at least six percent of the valid votes polled in any four or more states**, at a general election to the House of the People or, to the State Legislative Assembly; and

o In addition, it wins **at least four seats** in the House of the People from any State or States. OR

o It wins at least two percent seats in the House of the People (i.e., 11 seats in the existing House having 543 members), and these members are elected from at least three different States.

State Party: To be eligible for a 'State Political Party,' the Election Commission has set the following criteria:

o It secures at **least six percent of the valid votes polled in the State** at a general election, either to the House of the People or to the Legislative Assembly of the State concerned; and

o In addition, it wins at least two seats in the Legislative Assembly of the State concerned. OR

o It wins at least three percent (3%) of the total number of seats in the Legislative Assembly of the State, or at least three seats in the Assembly, whichever is more.

Benefits:

o If a party is recognised as a State Party', it is entitled for exclusive allotment of its reserved symbol to the candidates set up by it in the State in which it is so recognised, and if a party is recognised as a `National Party' it is entitled for exclusive allotment of its reserved symbol to the candidates set up by it throughout India.

o Recognised `State' and `National' parties need only one proposer for filing the nomination and are also entitled for two sets of electoral rolls free of cost at the time of revision of rolls and their candidates get one copy of electoral roll free of cost during General Elections.

o They also get broadcast/telecast facilities over Akashvani/Doordarshan during general elections.

o Political parties are entitled to nominate "Star Campaigners" during General Elections. A recognized National or State party can have a maximum of 40 "Star campaigners" and a registered un-recognised party can nominate a maximum of 20 'Star Campaigners".

o The travel expenses of star campaigners are not to be accounted for in the election expense accounts of candidates of their party.

🔸 INDEPENDENT CANDIDATE

o The **eligibility criteria for independent candidates are same as that of other members from any political party** who wish to contest elections either in Lok Sabha or in State Legislative Assembly.

o Thus, for Lok Sabha and State Legislative Assembly, the independent candidate must be a citizen of India and should **not be less than 25 years of age**.

o The nomination paper of an independent candidate must be subscribed by ten proposers who are also electors of the constituency. Under the **Representation of the People Act 1951**, this is mandatory for independent candidates and those candidates who belong to unrecognized political parties.

o The law is little stricter for the independent candidates as candidates fielded by recognised political parties need to have only one proposer for their nomination.

o The candidate contesting as independent is allowed to choose three free symbols listed by the Election Commission. Following which, they have to name them in order of preference and mention it in their nomination papers.

o Preferences indicated in the nomination papers are taken into account and it's the Returning officer who finally assesses whether there is any other contender for the same symbol and then takes the call based on the rules declared in **Election Symbols (Reservation and Allotment) Order, 1968**.

o **Under anti defection law**: If a member has been elected as "Independent", then he / she would be disqualified if they join any political party after their election.

o Views of Election Commission & Law Commission on independent candidates contesting polls

o The Election Commission has **recommended in the past that only those independent candidates who have a previous record of winning local election should be allowed to contest for Parliamentary or Assembly elections**.

o The commission had also recommended doubling the security deposits for independent candidates to put a check on their proliferation and prevent malpractices in the election process because of their influx.

o The Commission also had clearly **advocated for barring independent candidates from contesting elections for a minimum of 6 years if they fail to secure at least five percent of the total number of votes cast** in their constituencies.

o It was also suggested that the independent candidate who loses election three times consecutively should be "permanently debarred" from contesting election.

o On other hand law commission has recommended completely barring the independent candidates from contesting elections as they are either not serious or contest just to confuse electors.

CREATION OF NEW STATES

Creation Of New States In India: The Constitutional Procedure

New States in India are created under the provisions of Articles 2, 3 and 4 of the Indian Constitution.

o **Article 2** of the Constitution of India vests in the Indian Parliament the exclusive power to admit or establish new states into the Indian Union on such terms and conditions as the Parliament may provide for. This authority is with the Indian Parliament only and the State legislatures have no power to frame laws on this subject matter.

o **Article 2 reads as**: Parliament may by law admit into the Union, or establish, new states on such terms and conditions as it thinks fit.

o **Article 3 of the Constitution of India** dives and defines further and authorises the Indian Parliament to form new states; alter the area, boundaries or names of existing states by legislation.

o The parliament, under this Article, is empowered to form a **new state by separating a territory from any state or by uniting states or parts of States or by uniting any territory to a part of any state**.

o It is also empowered to increase or diminish the area of any state or to alter the boundaries or the name of any state. It should be noted that in clauses from (a) to (e) under Article 3, the expression 'State' includes a Union Territory.

o There is a proviso clause attached to Article 3. The clause provides that any legislation framed upon the provisions of Article 3 shall not be introduced in either House of the Indian Parliament, except when it is firstly recommended by the President of India for the same purpose.

o This clause further provides that where such legislation affects the area, boundary or the name of any existing State, then such a legislation shall not be introduced in either House of the Parliament unless,

when first referred by the President to such State legislature affected, views of such State legislature are first acquired on its area, boundary or name being affected thereby.

- o It is to be noted that such views by the State legislature shall be communicated to the Parliament within such time period as the President of India may specify in such reference or within such time period as the President may allow. If the Centre accepts the State's recommendation, a bill can be introduced in either House of Parliament on the recommendation of the President, which in fact means the recommendation of the Union government.
- o **Before drafting the Bill, it is open to the Centre to appoint a Commission to fix boundaries and for Sharing waters**, providing other guarantees and location of capitals, High Courts and all other requirements of the States to be formed. It is only on receipt of a report of the Commission that the President may recommend a Bill, on the advice of the Union Council of Ministers.
- o However, **the Parliament is not bound to accept or act upon the views of the State legislature**, even if such views are received in time. This means, even if there is opposition to the referred Bill, or such reference is not responded to within the prescribed time, or when such a Bill is approved, the a President can go ahead with formation of a new State.
- o Period within which the State Legislature must express its views has to be specified by the President; but the President may extend the period so specified.
- o If, however, the period specified or extended expires and no views of the State Legislature are received, the Second condition laid down in the proviso is fulfilled in spite of the fact that the views of the State legislature have not been expressed. The intention seems to be to give an opportunity to the State Legislature to express its views within the time allowed; if the State Legislature fails to avail itself of that opportunity, such failure does not invalidate the introduction of the bill.
- o It should be noted that in the proviso clause attached to Article 3, the expression State does not include a Union Territory.
- o **The proviso clause reads as** : provided that no bill for the purpose shall be introduced in either House of Parliament except on the recommendation of the President and unless, where the proposal contained in the Bill affects the area, boundaries or names of any of the States, the Bill has been referred by the President to the Legislature of that State for expressing its views thereon within such further period as the President may allow and the period so specified or allowed has expired.

- o **Article 4 of the Indian Constitution** reflects a mandatory direction to the Parliament while framing a legislation under Article 2 and 3. It directs the Parliament to frame a legislation which bears within it certain provisions providing for the **amendment of the First Schedule and the Fourth Schedule of the Constitution of India** in order to giving effect to such legislation.
- o Such a law may also contain such supplemental, incidental and consequential provisions, including provisions relating to the **distribution of representation in the Parliament and in the legislatures of the States,** as the Parliament may deem necessary. Further, this Article clearly bars the jurisdiction of the Parliament to frame a legislation intending to be an amendment of the Constitution for the purposes of Article 368.
- o The **First Schedule of the Indian Constitution enlists the names of the States and the Union Territories** which are included in the expression 'Union of States'.
- o **The Fourth Schedule prescribes the allocation of seats in the Council of States**.

Article 4 of the Constitution of India reads as:

- o Any law referred to in Article 2 or Article 3 shall contain such provisions for the amendment of the First Schedule and the Fourth Schedule as may be necessary to give effect to the provisions of the law and may also contain such supplemental, incidental and consequential provisions (including provisions as to representation in Parliament and in the Legislature or Legislatures of the State or States affected by such law) as Parliament may deem necessary.

o No such law as aforesaid shall be deemed to be an amendment of this Constitution for the purposes of Article 368.

Therefore, the procedure discussed above is how States in India are created.

- **DIFFERENT REASONS**: Jharkhand, Uttarakhand and Chhattisgarh were created in 2000 on socio-political basis.
- **LINGUISTIC REASONS**: States have also been created on linguistic lines, such as Andhra Pradesh in 1953.
- **AUTONOMOUS REGION**: An autonomous region, like the Gorkhaland semi-autonomous administrative area, enjoys a degree of administrative and financial autonomy.

FORMATION OF STATES IN INDIA - BIFURCATIONS:

Chronology of states' bifurcation in India till date:

o 1947 - Provinces and around 550 princely states were merged with existing provinces.
o 1953 - Andhra Pradesh was carved out of Madras. States' reorganisation commission was formed.
o 1953 - Northeast Frontier Agency was formed.
o 1956 - 14 states and 6 UTs were created.
o 1960 - Bombay state split into Maharashtra and Gujarat.
o 1963 - Nagaland carved out of Assam.
o 1966 - Haryana and Himachal Pradesh carved out of Punjab state.
o 1972 - Meghalaya, Manipur and Tripura were formed.
o 1975 - Sikkim became part of Indian Union.
o 1987 - Goa and Arunachal Pradesh became states (earlier these were UTs).
o 2000 - Uttaranchal (out of Uttar Pradesh), Jharkhand (out of Bihar) and Chhattisgarh (out of Madhya Pradesh) were formed.
o 2014- The State of Telangana was officially formed on June 2, 2014. Telangana region was part of the Hyderabad State from September 17th , 1948 to November 1st, 1956, until it was merged with Andhra State to form the Andhra Pradesh State. After decades of movement for a separate state, Telangana was created by passing the Andhra Pradesh State Reorganisation Act in both the Houses of the Parliament.
o 2019- The former State of Jammu and Kashmir was officially created into a Union Territory on 31 October, 2019 by the Jammu and Kashmir Reorganisation Act, 2019, which was passed by both the Houses of the Parliament of India in August 2019. This Act resulted into the re constitution of the former State of J&K into two Union Territories i.e Union Territory of J&K and Union Territory of Ladakh.

Conclusion

o India, a Union of States, has a federal structure and being so it is counted in as one of the Basic Structure of the Indian Constitution. India being rich in diversity, cultures and languages, it is abundantly necessary to preserve these aspects. The Constitution makers also envisaged this and therefore, provisions like Article 2, 3 and 4 were incorporated as an important part of Indian Federalism.
o In this respect, new States are created in India on the basis of these criteria to strengthen and preserve the States unique cultures and languages or scripts. This is one of the ways through which not only the uniqueness of India is protected but also its cultures, traditions and dialects.

SPECIAL STATUS TO NORTH-EASTERN STATES

o **Article 371A: NAGALAND-** This provision was introduced in the Constitution by the **13th Amendment in 1962** in order to protect Naga culture and society after a 16-point agreement between the Centre and the Naga People's Convention in 1960. This agreement led to the creation of the state of Nagaland in 1963.

Under **Article 371A, Parliament cannot legislate, without the concurrence of the Nagaland Legislative Assembly**, on Naga religion or social practices, Naga customary law and procedure, administration of civil and criminal justice involving decisions according to Naga customary law, and ownership and transfer of land and its resources.

The Article includes a provision for a **35-member Regional Council** for Tuensang district, which elects the Tuensang members in the Assembly. A member from the Tuensang district is Minister for Tuensang Affairs. The Governor has the final say on all Tuensang-related matters.

o **Article 371B: ASSAM**- Under this Article, introduced in the Constitution by the 22nd Amendment Act in 1969, the President may provide for the setting up of a committee of the state Assembly consisting of members elected from the state's tribal areas.

o **Article 371C: MANIPUR-** This provision was introduced by the 27th Amendment in 1971. The President may provide for the constitution and functions of a committee of elected members from the Hill areas of the state in the Assembly, and entrust "special responsibility" to the Governor to ensure its proper functioning. The Governor is required to file an annual report to the President.

o **Article 371F: SIKKIM-** The 36th Amendment Act, 1975 provides that the MLAs of Sikkim shall elect the representative of Sikkim in Lok Sabha. To protect the rights and interests of various sections of the state's population, Parliament may provide for the number of seats in the Assembly, which may be filled only by candidates from those sections. The Governor shall have "special responsibility for peace and for an equitable arrangement for ensuring the social and economic advancement of different sections of the population".

o **Article 371G: MIZORAM-** Under this provision, introduced by the 53rd Amendment in 1986, Parliament cannot make laws on "religious or social practices of the Mizos, Mizo customary law and procedure, administration of civil and criminal justice involving decisions according to Mizo customary law, ownership and transfer of land unless the Legislative Assembly by a resolution so decides".

o **Article 371H: ARUNACHAL PRADESH**- Following the 55th Amendment, 1986, the Governor has a special responsibility with regard to law and order, and "he shall, after consulting the Council of Ministers, exercise his individual judgment as to the action to be taken". Should a question arise over whether a particular matter is one in which the Governor is "required to act in the exercise of his individual judgment, the decision of the Governor in his discretion shall be final", and "shall not be called in question."

PANCHAYATI RAJ

A three-tier structure of the Indian administration for rural development is called Panchayati Raj. The aim of the Panchayati Raj is to develop local self-governments in districts, zones and villages.

Introduction to Panchayati Raj

o Rural development is one of the main objectives of Panchayati Raj and this has been established in all states of India except Nagaland, Meghalaya and Mizoram, in all Union Territories except Delhi. and certain other areas. These areas include:

o The scheduled areas and the tribal areas in the states;

o The hill area of Manipur for which a district council exists; and

o Darjeeling district of West Bengal for which Darjeeling Gorkha Hill Council exists.

Evolution of Panchayati Raj

o The Panchayati system in India is not purely a post-independence phenomenon. In fact, the dominant political institution in rural India has been the village panchayat for centuries. In ancient India, panchayats were usually elected councils with executive and judicial powers. In the pre-independence period, however, the panchayats were instruments for the dominance of the upper castes over the rest of the village, which furthered the divide based on either the socio-economic status or the caste hierarchy.

o The evolution of the Panchayati Raj System, however, got a fillip after the attainment of independence after the drafting of the Constitution. The Constitution of India in **Article 40 enjoined**: *"The state shall take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government"*.

o There were a number of committees appointed by the Government of India to study the implementation of self-government at the rural level and also recommend steps in achieving this goal.

o The committees appointed are: *Balwant Rai Mehta Committee; Ashok Mehta Committee; G V K Rao Committee; L M Singhvi Committee.*

♦ BALWANT RAI MEHTA COMMITTEE

o The committee was appointed in 1957, to examine and suggest measures for better working of the **Community Development Programme and the National Extension Service**. The committee suggested the establishment of a democratic decentralised local government which came to be known as the Panchayati Raj.

Recommendations by the Committee:

o Three-tier Panchayati Raj system: Gram Panchayat, Panchayat Samiti and Zila Parishad.

o Directly elected representatives to constitute the gram panchayat and indirectly elected representatives to constitute the Panchayat Samiti and Zila Parishad.

o **Planning and development** are the primary objectives of the Panchayati Raj system.

o Panchayat Samiti should be the executive body and Zila Parishad will act as the advisory and supervisory body.

o **District Collector to be made the chairman** of the Zila Parishad.

o It also requested for **provisioning resources** so as to help them discharge their duties and responsibilities.

o The Balwant Rai Mehta Committee further revitalised the development of panchayats in the country, the report recommended that the Panchayati Raj institutions can play a substantial role in community development programmes throughout the country. The objective of the Panchayats thus was the democratic decentralisation through the effective participation of locals with the help of well-planned programmes. Even the then Prime Minister of India, Pandit Jawaharlal Nehru, defended the panchayat system by saying, ". . . authority and power must be given to the people in the villages …. Let us give power to the panchayats."

♦ ASHOK MEHTA COMMITTEE

The committee was appointed in 1977 to suggest measures to revive and strengthen the declining Panchayati Raj system in India. The key recommendations are:

o The three-tier system should be replaced with a two-tier system: **Zila Parishad (district level)** and the **Mandal Panchayat (a group of villages).**

o District level as the first level of supervision after the state level.

o Zila Parishad should be the executive body and responsible for planning at the district level.

o The institutions (Zila Parishad and the Mandal Panchayat) to have compulsory taxation powers to mobilise their own financial resources.

G V K RAO COMMITTEE

The committee was appointed by the planning commission in 1985. It recognised that development was not seen at the grassroot level due to bureaucratisation resulting in Panchayat Raj institutions being addressed as 'grass without roots'. Hence, it made some key recommendations which are as follows:

o Zila Parishad to be the most important body in the scheme of democratic decentralisation. Zila Parishad to be the principal body to manage the developmental programmes at the district level.
o The district and the lower levels of the Panchayati Raj system to be assigned with specific planning, implementation and monitoring of the rural developmental programmes.
o Post of **District Development Commissioner** to be created. He will be the chief executive officer of the Zila Parishad.
o Elections to the levels of Panchayati Raj systems should be held regularly.

L M SINGHVI COMMITTEE

The committee was appointed by the Government of India in 1986 with the main objective to recommend steps to revitalise the Panchayati Raj systems for democracy and development. The following recommendations were made by the committee:

o The committee recommended that the **Panchayati Raj systems** should be constitutionally recognised. It also recommended constitutional provisions to **recognise free and fair elections for the Panchayati Raj systems**.
o The committee recommended reorganisation of villages to make the gram panchayat more viable.
o It recommended that village panchayats should have more finances for their activities.
o Judicial tribunals to be set up in each state to adjudicate matters relating to the elections to the Panchayati Raj institutions and other matters relating to their functioning.

o All these things further the argument that panchayats can be very effective in identifying and solving local problems, involve the people in the villages in the developmental activities, improve the communication between different levels at which politics operates, develop leadership skills and in short help the basic development in the states without making too many structural changes.
o Rajasthan and Andhra Pradesh were the first to adopt Panchayati raj in 1959, other states followed them later. Though there are variations among states, there are some features that are common. In most of the states, for example, a three-tier structure including **panchayats at the village level, panchayat samitis at the block level and the zila parishads at the district level**-has been institutionalized.
o Due to the sustained effort of the civil society organisations, intellectuals and progressive political leaders, the Parliament passed two amendments to the Constitution – **the 73rd Constitution Amendment for rural local bodies (panchayats) and the 74th Constitution Amendment for urban local bodies (municipalities)** making them 'institutions of self-government'. Within a year all the states passed their own acts in conformity to the amended constitutional provisions.

73rd CONSTITUTIONAL AMENDMENT ACT

Significance of the Act

o The Act added Part IX to the Constitution, **"The Panchayats" and also added the Eleventh Schedule which consists of the 29 functional items of the panchayats**.
o Part IX of the Constitution contains **Article 243 to Article 243 O**.
o The Amendment Act provides **shape to Article 40 of the Constitution**, (Directive Principles of State Policy), which directs the state to organise the village panchayats and provide them powers and authority so that they can function as self-government.
o With the Act, Panchayati Raj systems come under the purview of the justiciable part of the Constitution and mandates states to adopt the system. Further, the election process in the Panchayati Raj institutions will be held independent of the state government's will.

o The **Act has two parts: compulsory and voluntary**. Compulsory provisions must be added to state laws, which includes the creation of the new Panchayati Raj systems. Voluntary provisions, on the other hand, is the discretion of the state government.

o The Act is a very significant step in creating democratic institutions at the grassroots level in the country. The Act has transformed the representative democracy into participatory democracy.

Salient Features of the Act

o **Gram Sabha**: Gram Sabha is the primary body of the Panchayati Raj system. It is a village assembly consisting of all the registered voters within the area of the panchayat. It will exercise powers and perform such functions as determined by the state legislature.

o **Three-tier system**: The Act provides for the establishment of the three-tier system of Panchayati Raj in the states (village, intermediate and district level). States with a population of less than 20 lakhs may not constitute the intermediate level.

o **Election of members and chairperson**: The members to all the levels of the Panchayati Raj are elected directly and the chairpersons to the intermediate and the district level are elected indirectly from the elected members and at the village level the Chairperson is elected as determined by the state government.

Reservation of seats:

o For SC and ST: Reservation to be provided at all the three tiers in accordance with their population percentage.

o For women: Not less than one-third of the total number of seats to be reserved for women, further not less than one-third of the total number of offices for chairperson at all levels of the panchayat to be reserved for women.

o The state legislatures are also given the provision to decide on the reservation of seats in any level of panchayat or office of chairperson in favour of backward classes.

Duration of Panchayat: The Act provides for a five-year term of office to all the levels of the panchayat. However, the panchayat can be dissolved before the completion of its term. But fresh elections to constitute the new panchayat shall be completed –

o before the expiry of its five-year duration.

o in case of dissolution, before the expiry of a period of six months from the date of its dissolution.

Disqualification: A person shall be disqualified for being chosen as or for being a member of panchayat if he is so disqualified –

o Under any law for the time being in force for the purpose of elections to the legislature of the state concerned.

o Under any law made by the state legislature. However, no person shall be disqualified on the ground that he is less than 25 years of age if he has attained the age of 21 years.

o Further, all questions relating to disqualification shall be referred to an authority determined by the state legislatures.

State Election Commission:

o The commission is responsible for superintendence, direction and control of the preparation of electoral rolls and conducting elections for the panchayat.

o The state legislature may make provisions with respect to all matters relating to elections to the panchayats.

Powers and Functions: The state legislature may endow the Panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government. Such a scheme may contain provisions related to Gram Panchayat work with respect to:

- o the preparation of plans for economic development and social justice.
- o the implementation of schemes for economic development and social justice as may be entrusted to them, including those in relation to the 29 matters listed in the Eleventh Schedule.

Finances: The state legislature may –

- o Authorize a panchayat to levy, collect and appropriate taxes, duties, tolls and fees.
- o Assign to a panchayat taxes, duties, tolls and fees levied and collected by the state government.
- o Provide for making grants-in-aid to the panchayats from the consolidated fund of the state.
- o Provide for the constitution of funds for crediting all money of the panchayats.

Finance Commission: The state finance commission reviews the financial position of the panchayats and provides recommendations for the necessary steps to be taken to supplement resources to the panchayat.

- o Audit of Accounts: State legislature may make provisions for the maintenance and audit of panchayat accounts.
- o Application to Union Territories: The President may direct the provisions of the Act to be applied on any union territory subject to exceptions and modifications he specifies.

Exempted states and areas: The Act does not apply to the states of Nagaland, Meghalaya and Mizoram and certain other areas. These areas include,

- o The scheduled areas and the tribal areas in the states
- o The hill area of Manipur for which a district council exists.
- o Darjeeling district of West Bengal for which Darjeeling Gorkha Hill Council exists.
- o However, Parliament can extend this part to these areas subject to the exception and modification it specifies. Thus, the PESA Act was enacted.

- o Continuance of existing law: All the state laws relating to panchayats shall continue to be in force until the expiry of one year from the commencement of this Act. In other words, the states have to adopt the new Panchayati raj system based on this Act within the maximum period of one year from 24 April 1993, which was the date of the commencement of this Act. However, all the Panchayats existing immediately before the commencement of the Act shall continue till the expiry of their term, unless dissolved by the state legislature sooner.
- o **Bar to interference by courts:** The Act bars the courts from interfering in the electoral matters of panchayats. It declares that the validity of any law relating to the delimitation of constituencies or the allotment of seats to such constituencies cannot be questioned in any court. It further lays down that no election to any panchayat is to be questioned except by an election petition presented to such authority and in such manner as provided by the state legislature.

PESA ACT

PESA Act of 1996

- o The **provisions of Part IX are not applicable to the Fifth Schedule areas**. The Parliament can extend this Part to such areas with modifications and exceptions as it may specify. Under these provisions, Parliament enacted Provisions of the Panchayats (Extension to the Scheduled Areas) Act, popularly known as PESA Act or the extension act.

Objectives of the PESA Act:

o To extend the provisions of Part IX to the scheduled areas.

o To provide self-rule for the tribal population.

o To have village governance with participatory democracy.

o To evolve participatory governance consistent with the traditional practices.

o To preserve and safeguard traditions and customs of tribal population.

o To empower panchayats with powers conducive to tribal requirements.

o To prevent panchayats at a higher level from assuming powers and authority of panchayats at a lower level.

o As a result of these constitutional steps taken by the union and state governments, India has moved towards what has been described as 'multi-level federalism', and more significantly, it has widened the democratic base of the Indian polity. Before the amendments, the Indian democratic structure through elected representatives was restricted to the two houses of Parliament, state assemblies and certain union territories. The system has brought governance and issue redressal to the grassroot levels in the country but there are other issues too. These issues, if addressed, will go a long way in creating an environment where some of the basic human rights are respected.

o After the new generation of panchayats had started functioning, several issues have come to the fore, which have a bearing on human rights. The important factor which has contributed to the human rights situation vis-a-vis the panchayat system is the nature of Indian society, which of course determines the nature of the state. Indian society is known for its inequality, social hierarchy and the rich and poor divide. The social hierarchy is the result of the caste system, which is unique to India. Therefore, caste and class are the two factors, which deserve attention in this context.

o Thus, the local governance system has challenged the age old practices of hierarchy in the rural areas of the country particularly those related to caste, religion and discrimination against women.

PREVENTIVE DETENTION

o The Supreme Court states that **Preventive Detention** is a necessary evil only to prevent public disorder.

o The court must ensure that the facts brought before it directly and inevitably lead to a harm, danger or alarm or feeling of insecurity among the general public or any section thereof at large.

o The **State should not arbitrarily resort to "preventive detention"** to deal with all and sundry "law and order" problems, which could be dealt with by the ordinary laws of the country.

o Preventive detention must fall within the **four corners of Article 21 (due process of law) read with Article 22 (safeguards against arbitrary arrest and detention)** and the statute in question.

What is preventive detention?

o Under **Section 151 of The Criminal Procedure Code, 1973 (CrPC)** preventive detention is action taken on grounds of suspicion that some wrong actions may be done by the person concerned.

o A police officer can arrest an individual without orders from a Magistrate and without any warrant if he gets any information that such an individual can commit any offense.

o **Article 22 of the Indian Constitution** provides protection against arrest and detention in certain cases.

Does the constitution provide any safeguard against misuse of preventive detention?

o The Article 22 of the Indian Constitution provides safeguards against the misuse of police powers to make arrests and detentions.

o The **clause(2) of Article 22** reads, "Every person who is arrested and detained in custody shall be produced before the nearest magistrate within a period of twenty four hours of such arrest excluding the time necessary for the journey from the place of arrest to the court of the magistrate and no such person shall be detained in custody beyond the said period without the authority of a magistrate."

o The **clause (4) of the article** states that **no individual can be detained for more than 3 months** unless a bench of High court judges or an Advisory board decides to extend the date.

o The **clause (4) of Article 22**, reads as, "No law providing for preventive detention shall authorise the detention of a person for a longer period than three months unless (a) an Advisory Board consisting of persons who are, or have been, or are qualified to be appointed as, Judges of a High Court has reported before the expiration of the said period of three months that there is in its opinion sufficient cause for such detention:

o The **clause(5) of the Article 22** states that the detained individual **should be made aware of the grounds he/she has been detained (in pursuance of the order)** and should provide him/her with an opportunity of making a representation against the case.

o The clause(5) of Article 22 reads as, "When any person is detained in pursuance of an order made under any law providing for preventive detention, the authority making the order shall, as soon as may be, communicate to such person the grounds on which the order has been made and shall afford him the earliest opportunity of making a representation against the order."

o **Parliament may by law prescribe the circumstances under a person may be detained for a period longer than three months** under any law providing for preventive detention without obtaining the opinion of an Advisory Board.

What is the difference between preventive detention and an arrest?

o An 'arrest' is done when a person is charged with a crime. An arrested person is produced before a magistrate within the next 24 hours.

o In case of preventive detention, a person is detained as he/she is simply restricted from doing something that might deteriorate the law and order situation.

SESSIONS COURT

Sessions Court definition:

o In India, the Court of Sessions, commonly referred to as Sessions Court, has been established by the state government for every sessions division and it is presided over by a Sessions Court judge.

o The judge is appointed by the High Court of the state. Keep in mind that there is only one Sessions Court in each division at different places. Also, it comes within the purview of a specific number of judges.

o **Sections 225 to 237 of The Code of Criminal Procedure** deal with the procedure in trials before a Court of Sessions. In case the office of the Sessions Judge is vacant, the High Court can make necessary arrangements for any urgent matter or application that is pending before the court mentioned above to be dealt with by an Additional or an Assistant Sessions Judge or in their absence, by a Chief Judicial Magistrate (CJM).

What is the difference between Civil Court and Sessions Court?

o A Civil Court deals with disputes related to civil law, whereas a **Sessions Court usually deals with criminal cases**. Can a Sessions Court give a death sentence? **As per section 366 (i) CrPC, the Sessions Court judge can do so**.

What are the functions of a Sessions Court?

o A trial before a Sessions judge begins after an accused pleads guilty or not guilty, and the judge, therefore, proceeds to follow the procedure as per section 231, Cr PC. At the first hearing in a Sessions court, the public prosecutor opens the case by highlighting the charges framed against the accused.

o Upon hearing the submission and evidence presented from both sides, the Sessions Court judge can decide any of the following:

▪ Whether to discharge the accused if sufficient grounds are not established;

- Frame charges if there is adequate ground for presuming that the said accused committed an offence that is exclusively triable by the sessions court;
- Read out the charge, explain its meaning to the accused and record the accused's plea at the Sessions Court;
- If the Sessions Court judge feels that the offence that has been made out against the said accused is not exclusively to be tried in the Sessions Court, then the concerned judge can opt to transfer the case to the Chief Judicial Magistrate (CJM);
- In case, however, the accused pleads guilty, then the Sessions Court judge can convict him. Otherwise, a date for the hearing of the prosecution's evidence can be fixed;
- A Sessions Court judge can also compel the attendance of witnesses if the prosecution applies for it as part of the hearing of evidence. At the stage of framing charges in a Sessions Court, the material that is produced by the prosecution alone is to be considered;
- Also, while framing charges, meticulous examination of evidence and material is not required. Strong suspicion against the accused is sufficient ground to frame charges.

JOINT PARLIAMENTARY COMMITTEE

- There are two types of Parliamentary Committees in India:
- **Standing Committees:** Standing Committees are those which are elected by the House or nominated by the Speaker/Chairman every year or from time to time and are permanent in nature.
- **Ad Hoc Committees**: Ad Hoc Committees are those constituted by the House or by the Speaker/Chairman to consider and report on specific matters and expires as soon as they have completed their work on allocated matters.
- Joint Parliamentary Committee (JPC) is a kind of Ad Hoc Committee constituted for a specific purpose.
- The JPC is set up for a given period of time and is aimed at addressing a specific issue. Joint committees are set up by a motion passed in one house of Parliament and agreed to by the other. The details regarding membership and subjects are also decided by Parliament.
- JPC are generally constituted on the basis of consensus arrived between the government and the opposition to investigate specific issues.
- The mandate of a JPC depends on the specifics of motion presented in either House of Parliament. Thus, a JPC has a wider ambit and need not only be limited to the scrutiny of government finances.
- The committee's members are decided by Parliament.
- Number of members for a JPC is not fixed and may vary each time. In a JPC, number of Lok Sabha members are double than the Rajya Sabha members..
- A JPC is authorised to collect evidence in oral or written form or demand documents in connection with the matter which is being investigated.
- A JPC can obtain evidence of experts, public bodies, associations, individuals or interested parties suo motu or on requests made by them.
- If a witness fails to appear before a JPC in response to summons, his conduct constitutes Contempt of the House.
- The proceedings and findings of the committee are confidential, except in matters of public interest. The government can take the decision to withhold a document if it is considered prejudicial to the safety or interest of the State.
- The Speaker has the final word in case of a dispute over calling for evidence.
- JPC recommendations have persuasive value but the committee cannot force the government to take any action on the basis of the report.
- The government may decide to launch fresh investigations on the basis of a JPC report. However, the discretion to do so rests entirely with the government.
- The government is required to report on the follow-up action taken on the basis of the recommendations of the JPC and other committees.

o However, the opposition can always attack the government on the reports and recommendations made by the JPC in a particular case.

ADMINISTRATIVE TRIBUNALS

o The enactment of **Administrative Tribunals Act in 1985** opened a new chapter in the sphere of administering justice to the aggrieved government servants.

o Administrative Tribunals Act owes its origin to **Article 323-A of the Constitution** which empowers Central Government to set-up by an Act of Parliament, Administrative Tribunals for adjudication of disputes and complaints with respect to recruitment and conditions of service of persons appointed to the public service and posts in connection with the affairs of the Union and the States.

o The Act provides for establishment of Central Administrative Tribunal (CAT) and the State Administrative Tribunals. The CAT was set-up on 1 November 1985. Today, it has 17 regular benches, 15 of which operate at the principal seats of High Courts and the remaining two at Jaipur and Lucknow.

o These Benches also hold circuit sittings at other seats of High Courts. In brief, the tribunal consists of a Chairman, Vice-Chairman and Members. The Members are drawn, both from judicial as well as administrative streams so as to give the Tribunal the benefit of expertise both in legal and administrative spheres.

o The Administrative Tribunals exercise jurisdiction only in relation to the service matters of the litigants covered by the Act. The procedural simplicity of the Act can be appreciated from the fact that the aggrieved person can also appear before it personally. The Government can present its case through its departmental officers or legal practitioners.

o Thus, the objective of the Tribunal is to provide for speedy and inexpensive justice to the litigants.

o As a result of the judgement in 1997 of the Supreme Court, the appeals against the orders of an Administrative Tribunal shall lie before the **Division Bench of the concerned High Court**.

TRIBUNALS

o **Article 323B in the Constitution of India**: The appropriate Legislature may, by law, provide for the adjudication or trial by tribunals of any disputes, complaints, or offences with respect to all or any of the matters specified to which such Legislature has power to make laws.

o The matters referred are the following, namely:

(a) levy, assessment, collection and enforcement of any tax;

(b) foreign exchange, import and export across customs frontiers;

(c) industrial and labour disputes;

(d) land reforms by way of acquisition by the State of any estate as defined in Article 31A or of any rights therein or the extinguishment or modification of any such rights or by way of ceiling on agricultural land or in any other way;

(e) ceiling on urban property;

(f) elections to either House of Parliament or the House or either House of the Legislature of a State, but excluding the matters referred to in Article 329 and Article 329A;

(g) production, procurement, supply and distribution of foodstuffs (including edible oilseeds and oils) and such other goods as the President may, by public notification, declare to be essential goods for the purpose of this article and control of prices of such goods;

(h) offences against laws with respect to any of the matters specified in sub clause (a) to (g) and fees in respect of any of those matters;

(i) any matter incidental to any of the matters specified in sub clause (a) to (h).

COLLEGIUM

o It is the system of appointment and transfer of judges that has evolved through judgments of the SC, and not by an Act of Parliament or by a provision of the Constitution.
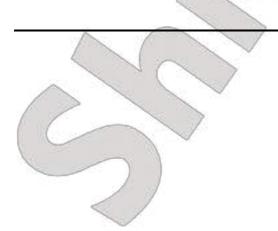o **Evolution of the System:**

First Judges Case (1981)

o It declared that the "primacy" of the Chief Justice of India (CJI)s recommendation on judicial appointments and transfers can be refused for "cogent reasons."
o The ruling gave the Executive primacy over the Judiciary in judicial appointments for the next 12 years.

Second Judges Case (1993)

o SC introduced the Collegium system, holding that "consultation" really meant "concurrence".
o It added that it was not the CJI's individual opinion, but an institutional opinion formed in consultation with the two senior-most judges in the SC.

Third Judges Case (1998)

o SC on President's reference expanded the Collegium to a five-member body, comprising the CJI and four of his senior-most colleagues.
o The SC collegium is headed by the CJI and comprises four other senior most judges of the court.
o A HC collegium is led by its Chief Justice and four other senior most judges of that court.
o Names recommended for appointment by a HC collegium reaches the government only after approval by the CJI and the SC collegium.
o Judges of the higher judiciary are appointed only through the collegium system and the government has a role only after names have been decided by the collegium.
o The government's role is limited to getting an inquiry conducted by the Intelligence Bureau (IB) if a lawyer is to be elevated as a judge in a High Court or the Supreme Court.
o Intelligence Bureau (IB): It is a reputed and established intelligence agency. It is authoritatively controlled by the Ministry of Home Affairs.
o It can also raise objections and seek clarifications regarding the collegium's choices, but if the collegium reiterates the same names, the government is bound, under Constitution Bench judgments, to appoint them as judges.

SOVEREIGN RIGHT TO TAX

Recently, the GoI decided to withdraw the retrospective taxation amendment in the I-T Act introduced in March 2012.

Sovereign right to taxation in India

o In India, the Constitution gives the government the right to levy taxes on individuals and organisations, but makes it clear that no one has the right to levy or charge taxes except by the authority of law.

o **Any tax being charged has to be backed by a law passed by the legislature or Parliament.**

o A document on the Ministry of Statistics and Programme Implementation website quotes the **definition of tax** as a "pecuniary burden laid upon individuals or property owners to support the government, a payment exacted by legislative authority", and that a tax "is not a voluntary payment or donation, but an enforced contribution, exacted pursuant to legislative authority".

o Taxes in India come under a three-tier system based on the **Central, State and local governments**, and the **Seventh Schedule of the Constitution puts separate heads of taxation under the Union and State list.**

o There is no separate head under the Concurrent list, meaning Union and the States have no concurrent power of taxation, as per the document.

e-RUPI

o e-RUPI is basically a **digital voucher which a beneficiary gets on his phone in the form of an SMS or QR code**. It is a **pre-paid voucher**, which he/she can go and redeem it at any centre that accepts its.

o For example, if the Government wants to cover a particular treatment of an employee in a specified hospital, it can issue an e-RUPI voucher for the determined amount through a partner bank. The employee will receive an SMS or a QR Code on his feature phone / smart phone. He/she can go to the specified hospital, avail of the services and pay through the e-RUPI voucher received on his phone.

o Thus e-RUPI is a **one-time contactless, cashless voucher-based mode of payment that helps users redeem the voucher without a card, digital payments app, or internet banking access.**

o e-RUPI should not be confused with Digital Currency which the Reserve Bank of India is contemplating. **Instead e-RUPI is a person specific, even purpose specific digital voucher.**

How is e-RUPI advantageous to the Consumer ?

o e-RUPI **does not require the beneficiary to have a bank account**, a major distinguishing feature as compared to other digital payment forms. It ensures an easy, contactless two-step redemption process that does not require sharing of personal details either.

o Another advantage is that e-RUPI is **operable on basic phones also**, and hence it can be used by persons who do not own smart-phones or in places that lack internet connection.

o e-RUPI is expected to play a major role in strengthening Direct-Benefit Transfer and making it more transparent. Since, there is no need for physical issuance of vouchers, it will also lead to some cost savings as well.

o Being a prepaid voucher, e-RUPI would assure real time payments to the service provider.

Who has developed the e-RUPI ?

o The National Payments Corporation of India (NPCI), which oversees the digital payments ecosystem in India, has launched e-RUPI, a voucher-based payments system to promote cashless transactions.

o It has been developed in collaboration with the **Department of Financial Services, Ministry of Health & Family Welfare and National Health Authority**.

Which Banks issue e-RUPI ?

o NPCI has partnered with 11 banks for e-RUPI transactions. They are Axis Bank, Bank of Baroda, Canara Bank, HDFC Bank, ICICI Bank, Indian Bank, IndusInd Bank, Kotak Mahindra Bank, Punjab National Bank, State Bank of India and Union Bank of India.

o The acquiring Apps are Bharat Pe, BHIM Baroda Merchant Pay, Pine Labs, PNB Merchant Pay and YoNo SBI Merchant Pay.

o More banks and acquiring Apps are expected to join the e-RUPI initiative soon.

To begin with NPCI has tied up with more than 1,600 hospitals where e-RUPI can be redeemed. Experts say, in the days to come the user base of e-RUPI is expected to widen, with even private sector using it to deliver employee benefits and MSMEs adopting it for Business To Business (B2B) transactions.

GENERAL INSURANCE BUSINESS (NATIONALISATION) AMENDMENT BILL, 2021

o The Rajya Sabha passed the Bill that would **allow the government to cut its share in public sector insurance companies**, paving the way for more private sector participation.

o The Bill seeks to amend the General Insurance Business (Nationalisation) Act, 1972. The Act was enacted to nationalise all private companies undertaking general insurance business in India.

o The Bill **seeks to provide for a greater private sector participation** in the public sector insurance companies regulated under the Act.

o The 1972 Act set up the General Insurance Corporation of India (GIC). The businesses of the companies nationalised under the Act were restructured in four subsidiary companies of GIC: (**i) National Insurance, (ii) New India Assurance, (iii) Oriental Insurance, and (iv) United India Insurance.** The Act was subsequently amended in 2002 to transfer the control of these four subsidiary companies from GIC to the central government, thereby making them independent companies. Since 2000, GIC exclusively undertakes reinsurance business.

o **Government shareholding threshold**: The Act requires that shareholding of the central government in the specified insurers (the above five companies) must be at least 51%. The new Bill removes this provision.

Change in definition of general insurance business:

The Act defines general insurance business as fire, marine or miscellaneous insurance business. It excludes capital redemption and annuity certain business from the definition. Capital redemption insurance involves payment of a sum of money on a specific date by the insurer after the beneficiary pays premiums periodically. Under annuity certain insurance, the insurer pays the beneficiary over a period of time. The Bill removes this definition and instead, refers to the definition provided by the Insurance Act, 1938. Under the Insurance Act capital redemption and annuity certain are included within general insurance business.

Transfer of control from the government

o The Bill provides that the Act will not apply to the specified insurers from the date on which the central government relinquishes control of the insurer. Control means: (i) the power to appoint a majority of directors of a specified insurer, or (ii) to have power over its management or policy decisions.

o The Act empowers the central government to notify the terms and conditions of service of employees of the specified insurers. The Bill provides that schemes formulated by the central government in this regard will

be deemed to have been adopted by the insurer. The board of directors of the insurer may change these schemes or frame new policies. Further, powers of the central government under such schemes (framed under the Act) will be transferred to the board of directors of the insurer.

Liabilities of directors: The Bill specifies that a director of a specified insurer, who is not a whole-time director, will be held liable only for certain acts. These include acts which have been committed: (i) with his knowledge, attributable through board processes, and (ii) with his consent or connivance or where he had not acted diligently.

VEHICLE SCRAPPAGE POLICY

o The GoI has launched policy on phasing out old and defective vehicles. This is being done **in order to achieve goals like reducing air pollution, fulfilling India's climate commitments, improving road and vehicular safety, better fuel efficiency and increasing the availability of low-cost raw materials** for the auto, steel and electronics industry.

o Under its **Voluntary Vehicle-Fleet Modernisation programme (VVMP),** the government plans to set up between 450-500 automated vehicle fitness testing stations across India on a public-private partnership (PPP) basis involving private firms and state governments.

o A total of 60-70 vehicle scrapping centres will also be built. A total of seven agencies – including Tata Motors – have signed a Memorandum of Understanding (MoU) with the government today for this project.

o **Tata Motors' vehicle scrapping centre** will be set up in Gujarat, will scrap both passenger and commercial vehicles and will have the capacity to recycle up to 36,000 vehicles a year.

o The scrappage policy **leaves the choice of scrapping to the owner of the vehicle**.

o Private vehicles – which are over 20 years old – will have to undergo fitness tests, at an estimated cost of Rs 300-400 per test. Vehicles **that pass the automated tests will be subjected to a 'green tax'**, which will see owners shell out an additional 10 percent to 25 percent of road tax at the time of the renewal of the vehicle's fitness certificate, along with re-registration fees. However, those who choose to drive a vehicle that has failed the automated test will face substantial penalties, and such vehicles could also be impounded.

When will the vehicle scrappage policy come into effect?

o The implementation of the vehicle scrappage policy in India is still some time away. Initially, it will be heavy commercial vehicles that will need to undergo fitness tests starting 1 April, 2023, while fitness tests will be made mandatory for all other types of vehicles from 1 June, 2024, in a phased manner.

What are the benefits for a vehicle owner to scrap their vehicle?

o Once the vehicle has been scrapped, the owner will receive anywhere between four to six percent of their old vehicle's ex-showroom price, and a scrappage certificate, which will make the individual eligible for a road tax rebate of 25 percent, a registration fee waiver and a discount of five percent of a new vehicle's ex-showroom cost, offered by the vehicle manufacturer. This will essentially make a new vehicle cheaper for someone who has scrapped their old vehicle, with potential discounts in the range of Rs 30,000 (for a car costing Rs 6 lakh) to Rs 50,000 (for a car costing Rs 10 lakh).

o Over a period of time, the government estimates scrapping an old vehicle and replacing it with a new one will bring substantial monetary benefits for motorists, in addition to reducing emissions and enhancing fuel efficiency.

What are the other positives of the vehicle scrappage policy?

o The National Automobile Scrappage Policy will attract investment of over Rs 10,000 crore, and generate 50,000 jobs in the country. The proper recycling of raw materials obtained from the scrapping will help reduce import of materials such as aluminium, copper, steel and more. With the potential to recycle up to 99 percent of materials used in a vehicle, raw material costs are estimated to drop by as much as 40

percent. This will make components cheaper for vehicle manufacturers, and will also lead to increased GST revenues of Rs 30,000-40,000 crore for both state and central governments.

o Additionally, there's also a possibility to derive materials needed for local production of lithium-ion batteries (to be used in electric vehicles) from scrapping older vehicles, which could help drive the growth of the EV business.

NMEO-OP

o India is the world's biggest vegetable oil importer

o The country does export agricultural commodities such as sugar and rice on the world market, but domestic oilseed production is nearly six times lower than rice and wheat.

o India produces **less than half of the roughly 2.4 crore tonnes of edible oil** that it consumes annually. It imports the rest, buying palm oil from Indonesia and Malaysia, soyoil from Brazil and Argentina, and sunflower oil, mainly from Russia and Ukraine.

In this regard, National Edible Oil Mission-Oil Palm (NMEO-OP) to boost domestic oilseed production and make the country self-sufficient in cooking oils is launched. ₹11,000 crore will be invested in the edible oil ecosystem.

o The scheme will immensely benefit the oil palm farmers, increase capital investment, create employment generation, shall reduce the import dependence and also increase the income of the farmers.

o Since 1991-92, many efforts have been made by the Government of India to increase the production of oilseeds and oil palm. The oilseeds production has increased from 275 lakh tons in 2014-15 to 365.65 lakh tons in 2020-21. For harnessing the potential of palm oil production, in the year 2020, an assessment has been made by the **Indian institute of Oil Palm Research (IIOPR)** for cultivation of oil palm which has given an assessment of around 28 lakh ha. Thus, there is huge potential in oil palm plantation and subsequently production of **Crude Palm Oil (CPO).** At present only 3.70 lakh hectares is under Oil Palm cultivation. Oil palm produces 10 to 46 times more oil per hectare compared to other oilseed crops and has yield of around 4 tons oil per ha. Thus, it has enormous potential for cultivation.

o Keeping the above in view, and also the fact that even today around 98% of CPO is being imported, it is proposed to launch the Scheme to further increase the area and production of CPO in the country.

o The proposed scheme will subsume the **current National Food Security Mission-Oil Palm programme**.

o There are two major focus areas of the Scheme. The oil palm farmers produce **Fresh Fruit Bunches (FFBs)** from which oil is extracted by the industry. Presently the prices of these FFBs are linked to the international CPO prices fluctuations.

o For the first time, the **Government of India will give a price assurance to the oil palm farmers for the FFBs**. This will be known as the **Viability Price (VP).** This will protect the farmers from the fluctuations of the international CPO prices and protect him from the volatility. This VP shall be the annual average CPO price of the last 5 years adjusted with the wholesale price index to be multiplied by 14.3 %. This will be fixed yearly for the oil palm year from 1st November to 31st October. This assurance will inculcate confidence in the Indian oil palm farmers to go for increased area and thereby more production of palm oil.

o **A Formula price (FP) will also be fixed** which will be 14.3% of CPO and will be fixed on a monthly basis. The viability gap funding will be the VP-FP and if the need arises, it would be paid directly to the farmers accounts in the form of DBT.

o The assurance to the farmers will be in the form of the viability gap funding and the industry will be mandated to pay 14.3% of the CPO price which will eventually go up to 15.3%. There is a sunset clause for the scheme which is 1st November 2037. To give impetus to the North-East and Andaman, the Government will additional bear a cost of 2% of the CPO price to ensure that the farmers are paid at par with the rest of India. The states who adopt the mechanism proposed by the Government of India would

benefit from the viability gap payment proposed in the scheme and for this they will enter into MoUs with the Central Government.

o The **second major focus of the scheme is to substantially increase the assistance of inputs/interventions**. A substantial increase has been made for planting material for oil palm and this has increased from Rs 12,000 per ha to Rs.29000 per ha. Further substantial increase has been made for maintenance and inter-cropping interventions. A special assistance @ Rs 250 per plant is being given to replant old gardens for rejuvenation of old gardens.

o To address the issue of shortage of planting material in the country, **seed gardens will be provided assistance** up to Rs.80 lakhs for 15 ha. in Rest of India and Rs.100 lakhs for 15 ha in North-East and Andaman regions.

o Further, assistance for seed gardens @ Rs.40 lakhs and Rs.50 lakhs for Rest of India and North-East & Andaman regions respectively. Further Special assistance will be provided for the North-East and the Andaman regions in which special provisions is being made for half-moon terrace cultivation, bio fencing and land clearance along with integrated farming.

RoDTEP

o The government notified the rates and norms for the R**emission of Duties and Taxes on Exported Products (RoDTEP) scheme.**

o The RoDTEP scheme had kicked in from January 1, after the earlier Merchandise and Services Export Incentive Schemes (MEIS and SEIS) were scrapped as they were found to be impermissible under the World Trade Organisation norms.

o Export centric industries are being reformed and introduced to better mechanisms so as to increase their competitiveness, boost exports, generate employment and contribute to the overall economy. This will go a long way in achieving our vision of building an Aatmanirbhar Bharat.

o **Remission of Duties and Taxes on Exported Products (RoDTEP) is one such reform, based on the globally accepted principle that taxes and duties should not be exported, and taxes and levies borne on the exported products should be either exempted or remitted to exporters.**

Scheme's objective is to refund, currently un-refunded:

▪ Duties/ taxes/ levies, at the Central, State & local level, borne on the exported product, including prior stage cumulative indirect taxes on goods & services used in production of the exported product, and

▪ Such indirect Duties/ taxes/ levies in respect of distribution of exported products.

o It may be noted that rebate under the Scheme shall not be available in respect of duties and taxes already exempted or remitted or credited.

o RoDTEP is going to give a boost to Indian exports by providing a **level playing field to domestic industry abroad**.

o RoDTEP support will be available to eligible exporters at a notified rate as a percentage of Freight On Board (FOB) value. Rebate on certain export products will also be subject to value cap per unit of the exported product.

o Scheme **is to be implemented by Customs through a simplified IT System**. Rebate will be issued in the form of a transferable duty credit/ electronic scrip (e-scrip) which will be maintained in an electronic ledger by the Central Board of Indirect Taxes & Customs (CBIC).

o Identified export sectors and rates under RoDTEP cover 8555 tariff lines in addition to similar support being extended to apparel and made-ups exports under RoSCTL scheme of Ministry of Textiles.

o Employment Oriented Sectors like Marine, Agriculture, Leather, Gems & Jewellery etc. are covered under the Scheme. Other sectors like Automobile, Plastics, Electrical / Electronics, Machinery etc. also get support. The entire value chain of textiles also gets covered through RoDTEP & RoSCTL.

OIL BONDS

Oil bonds were issued by the government to compensate oil marketing companies (OMCs) to offset losses that they suffer to shield consumers from rising crude oil prices. The government issued these bonds mainly during 2005 to 2010.

Why were these bonds issued?

o These bonds were issued to OMCs in lieu of cash at a time when the central government used to administer or fix petrol and diesel prices. Petrol and diesel prices were fixed by the government to cushion consumers from price shocks of costly international crude oil.

o For instance, previously, if crude oil prices were high, oil refining and marketing companies would technically sell petrol and diesel at retail outlets at a loss. The government, however, compensated oil companies by issuing long-term bonds that they could redeem at a later date, typically ranging 15-20 years.

o High crude prices and the blowback from the recession of 2008 increased the fiduciary pressure on the government. By raising capital through bonds, these payments could be made in a deferred manner without causing a major escalation in prices, thus insulating customers.

o These bonds are, in essence, **promissory notes of deferred payment of subsidies** that the government owes to oil marketing companies. Since the government did not subsidise these companies upfront, these payouts did not show up in budget documents, until the repayment of the principal or interest components took place.

o These **'off-budget' items**, also sometimes described as under-recoveries of oil companies, therefore, did not show up in the fiscal deficit numbers disclosed during the annual budget. The fiscal deficit started factoring these only when the repayment of the principal and interest of these bonds started to take place, years after they were issued.

o Moreover, oil bonds do not qualify as statutory liquidity ratio (SLR) securities, making them less liquid when compared to other government securities.

What are under-recoveries?

o Under recoveries are revenues foregone by state-run refiners **for selling fuel below cost**. This is what kept diesel and petrol prices artificially in check.

o Between 2005 and 2009, the government issued bonds worth Rs 1.4 lakh crore. This was done to **partially compensate OMCs for recoveries amounting to Rs 2.9 lakh crore**. Under-recoveries are the difference between the cost of purchasing crude oil in the international market and the price at which petroleum products are sold in the domestic market.

o In the aftermath of the recession, OMCs were facing large under-recoveries. This presented the government with the dilemma of ensuring the financial stability of state-owned OMCS, while taking into account political repercussions of allowing fuel prices to rise. Oil bonds were chosen as the vehicle to dampen the pressure on OMCs while keeping prices in check.

When were oil prices deregulated?

o The first step towards deregulation was taken in 2010 with the announcement that oil bonds will be discontinued, and OMCs will be paid in cash.

o In June 2010, petrol prices were deregulated, mirroring the market price of crude.

o The government freed up diesel prices in October 2014. Initially, prices changed on a fortnightly basis, based on the average global crude prices.

o In June 2017, India adopted the system of dynamic fuel pricing where the retail price of petrol and diesel fluctuate on a daily basis.

What are total outstanding payments on oil bonds?

o The government has so far paid Rs 70,195.72 crore as interest on oil bonds in the last seven years. Of the Rs 1.34 lakh crore worth of oil bonds, Rs 3,500 crore principal has been paid and the remaining Rs 1.3 lakh crore is due for repayment until 2025-26.

o The government has to repay Rs 10,000 crore in the current fiscal year, another Rs 31,150 crore in 2023-24, Rs 52,860 crore in 2024-25, and Rs 36,913 crore in 2025-26.

o On an accumulated basis this is still far less than what the government collects from central excise duties on petroleum products alone. For instance, in 2020-21 it collected Rs 3.71 lakh crore as central excise revenues from petroleum products, nearly three times of what it has to pay—Rs 1.34 lakh crore—over the next five years to square up the oil bonds.

o In effect, repayment of oil bonds issued by the previous government alone is not the only reason why retail fuel prices are high. High crude prices and taxes are key reasons.

How are petroleum products taxed?

o **Taxes and duties account for nearly 60 percent of the price** that the consumer pays at a petrol pump. The price of a litre of petrol includes: **Base Price, Freight, Price charged to dealers** (excluding Excise Duty and VAT), **Central Excise Duty (including road cess), Dealer Commission, VAT (including VAT on Dealer Commission).**

o Successive governments, both at the Centre and states, have used petroleum products as milch cows. In 2020-21, the Centre earned Rs 3.71 lakh crore from central excise duty on petroleum products, which is about 20 percent of the Centre's total gross tax revenues of Rs 19 lakh crore earned during the year.

o Likewise, states earn significant revenues from taxing petroleum products. In 2020-21, all states put together earned Rs 2.02 lakh crore from state VAT on petroleum products.

o The pattern is more or less similar across most states, illustrating how a disproportionately high amount of tax revenues are coming from just one set of products, both for the Centre and the states.

✚ DISINVESTMENT

o Disinvestment refers to the mechanism in which the Government loses a part of its ownership of the PSUs through the sale of shares.

o The Disinvestment as a policy was adopted by the Government post 1991 LPG Reforms.

o The Department of Investment and Public Asset Management under the Ministry of Finance acts as the nodal agency for the Disinvestment in India.

Strategic Disinvestment

o According to the Department, strategic sale of a company has two elements:

▪ Transfer of a block of shares to a Strategic Partner; and
▪ Transfer of management control to the Strategic Partner.

o The strategic sale takes place when more than 51% of shares go to the private sector strategic partner. At the same time, it is not necessary that more than 51% of the total equity goes to the Strategic Partner for the transfer of management to take place. In other words, strategic sale can take place even if the private sector partner gets less than 51% shares.

o According to the strategic sale guidelines issued by DIPAM, after the transaction, the Strategic Partner may hold less percentage of shares than the Government but the control of management would be with partner.

o For instance, if in a PSU the shareholding of Government is 51% and the balance is dispersed in public holdings, then Government may go in for a 25% strategic sale and pass on management control, though the Government would post-transfer have a larger share holding (26%) than the Strategic Partner (25%).

o But the necessary condition is that the control of the firms should be with the strategic partner.

- o **NITI Aayog**: Identifies CPSEs for Strategic Disinvestment; NITI Aayog advises on the mode of sale and percentage of shares to be sold; Core Group of Secretaries on Disinvestment (CGD) headed by Cabinet Secretary considers the recommendations of NITI Aayog; Decision by the Cabinet Committee on Economic Affairs (CCEA) on strategic disinvestment.

NATIONAL MONETISATION PLAN

Union Budget 2021-22 has identified monetisation of operating public infrastructure assets as a key means for sustainable infrastructure financing. Towards this, the Budget provided for preparation of a 'National Monetisation Pipeline (NMP)' of potential brownfield infrastructure assets. NITI Aayog in consultation with infra line ministries has prepared the report on NMP.

o Recently, Union Finance Minister announced a ₹6 lakh crore National Monetisation Pipeline (NMP) that will look to unlock value in infrastructure assets across sectors ranging from power to road and railways.

Framework

o The pipeline has been prepared based on inputs and consultations from respective line ministries and departments, along with the assessment of total asset base available therein.

o Monetization through disinvestment and monetization of non-core assets have not been included in the NMP.

o Further, currently, only assets of central government line ministries and CPSEs in infrastructure sectors have been included. Process of coordination and collation of asset pipeline from states is currently ongoing and the same is envisaged to be included in due course.

o The framework for monetisation of core asset monetisation has three key imperatives.

o This includes **selection of de-risked and brownfield assets** with stable revenue generation profile with the overall transaction structured around revenue rights.

o The **primary ownership of the assets under these structures, hence, continues to be with the Government** with the framework envisaging hand back of assets to the public authority at the end of transaction life.

Estimated Potential

o Considering that infrastructure creation is inextricably linked to monetisation, the period for NMP has been decided so as to be co-terminus with balance period under National Infrastructure Pipeline (NIP).

o The aggregate asset pipeline under NMP over the four-year period, FY 2022-2025, is indicatively valued at Rs 6.0 lakh crore.

o The estimated value corresponds to 14% of the proposed outlay for Centre under NIP (Rs 43 lakh crore). This includes more than 12 line ministries and more than 20 asset classes.

o The sectors included are **roads, ports, airports, railways, warehousing, gas & product pipeline, power generation and transmission, mining, telecom, stadium, hospitality and housing**.

o The top 5 sectors (by estimated value) capture 83% of the aggregate pipeline value.

o These **top 5 sectors include**: Roads (27%) followed by Railways (25%), Power (15%), oil & gas pipelines (8%) and Telecom (6%).

o In terms of annual phasing by value, 15% of assets with an indicative value of Rs 0.88 lakh crore are envisaged to be rolled out in the current financial year (FY 2021-22). However, the aggregate as well as year on year value under NMP is only an indicative value with the actual realization for public assets depending on the timing, transaction structuring, investor interest etc.

o The assets and transactions identified under the NMP are expected to be rolled out through a range of instruments. These include direct contractual instruments such as public private partnership concessions and capital market instruments such as Infrastructure Investment Trusts (InvIT) among others. The choice of instrument will be determined by the sector, nature of asset, timing of transactions (including market considerations), target investor profile and the level of operational/investment control envisaged to be retained by the asset owner etc.

o The monetisation value that is expected to be realised by the public asset owner through the asset monetisation process, may either be in form of upfront accruals or by way of private sector investment. The potential value assessed under NMP is only an indicative high level estimate based on thumb rules. This is based on various approaches such as market or cost or book or enterprise value etc. as applicable and available for respective sectors.

Implementation & Monitoring Mechanism

o As an overall strategy, significant share of the asset base will remain with the government.

o The programme is envisaged to be supported through necessary policy and regulatory interventions by the Government in order to ensure an efficient and effective process of asset monetisation. These will include streamlining operational modalities, encouraging investor participation and facilitating commercial efficiency, among others.

o Real time monitoring will be undertaken through the asset monetisation dashboard, as envisaged under Union Budget 2021-22, to be rolled out shortly.

o The **end objective of this initiative to enable 'Infrastructure Creation through Monetisation'** wherein the public and private sector collaborate, each excelling in their core areas of competence, so as to deliver socio-economic growth and quality of life to the country's citizens.

✦ AIIH LTD

o The Cabinet Committee on Economic Affairs cleared a foreign direct investment (FDI) proposal to invest up to **₹15,000 crore in Anchorage Infrastructure Investment Holding (AIIH) Ltd.,** a firm incorporated to invest in the country's infrastructure and construction development sectors.

o The government said the investment would prove to be a significant boost to the recently announced National Monetisation Pipeline (NMP) as AIIH had proposed downstream investments in some of the sectors covered under the NMP.

o This would include investments in **leasing out of state-owned infrastructure assets** like roads, railways, airports, sports stadiums, power transmission lines and gas pipelines to private operators.

CODE ON SOCIAL SECURITY BILL 2020

This bill seeks to provide social security benefits such as Provident Fund, Insurance etc. to the workers. It seeks to replaces nine laws related to social security. These include the Employees' Provident Fund Act, 1952; the Maternity Benefit Act, 1961; and the Unorganised Workers' Social Security Act, 2008.

Social Security Entitlements

o The 2020 Bill states that the central government through notification provide that Industries employing workers above a certain threshold level would be required to make contributions towards various social security benefits such as Provident Fund, Insurance etc.

o **Reasons for Opposition:** Presently, the threshold level for the contribution towards Social Security scheme has been provided under the law itself. For example, Employees Provident Fund Act, 1952 is applicable to all Industries employing more 20 people. The EPF is not compulsory for all employees. Only those who earn up to Rs 15,000 a month have to contribute 12% of their basic salary plus dearness allowance to EPF. The employer contributes an equal percentage (12%) to the corpus out of which 3.67% goes to the EPF and the rest 8.33% goes towards employees' pension scheme (EPS).

However, the 2020 Bill gives the discretionary power to the Government to lay down the criteria for the eligibility for the contribution to Social Security Schemes. This has been criticised on account of following reasons:

1. Excessive Delegated Legislation.
2. Exclusion of Informal Workers in the Small-Scale Industries from Social Security benefits
3. Against the Idea of Universal Social Security put forward by National Commission on Labour.

Expanded Coverage of Workers

o The government can make provisions for registration of various categories of workers- Unorganised, Gig Workers and Platform workers. It can also notify schemes for their social security. **Gig workers** refer to workers outside the traditional employer-employee relationship. **Platform workers** are those who access organisations or individuals through an online platform and provide services or solve specific problems.

o **Reasons for Opposition:** Lack of Clarity in the definition of Unorganised Worker, Gig Worker or Platform Worker. For example, Ola Cab Driver can be considered to be belonging to all the 3 different categories simultaneously.

Mandatory Linking with Aadhaar

• Employee or a worker (including an unorganised worker) must provide his Aadhaar number to receive social security benefits

1. **Reasons for Opposition:** This may violate the Supreme Court's judgement in Puttaswamy Case. In its judgement, the Court had ruled that the Aadhaar card/number may only be made mandatory for expenditure on a subsidy, benefit or service incurred from the Consolidated Fund of India.

CODE ON WAGES, 2019

o It seeks to regulate wage and bonus payments in all employments where any industry, trade, business, or manufacture is carried out. The Code replaces the following four laws: (i) *the Payment of Wages Act,*

1936; (ii) *the Minimum Wages Act, 1948;* (iii) *the Payment of Bonus Act, 1965;* and (iv) the *Equal Remuneration Act, 1976.*

o **Coverage:** The Code will apply to all employees. The central government will make wage-related decisions for employments such as railways, mines, and oil fields, among others. State governments will make decisions for all other employments.

o **Floor wage:** According to the Code, the central government will fix a floor wage, taking into account living standards of workers. Further, it may set different floor wages for different geographical areas.

o The minimum wages decided by the central or state governments must be higher than the floor wage. In case the existing minimum wages fixed by the central or state governments are higher than the floor wage, they cannot reduce the minimum wages.

o **Fixing the minimum wage:** The Code prohibits employers from paying wages less than the minimum wages. Minimum wages will be notified by the central or state governments.

o While fixing minimum wages, the central or state governments may take into account factors such as: (i) skill of workers, and (ii) difficulty of work.

How the Code on Wages would benefit?

o **Expansion in coverage of Employees:** The Code proposes to do away with the concept of bringing specific jobs under the Act by the Centre and states and mandates that minimum wages be paid for all types of employment – irrespective of whether they are in the organized or the unorganized sector.

o **Introduction of National Minimum Wage:** The Code introduces a national minimum wage which will be set by the central government. This will act as a floor for state governments to set their respective minimum wages.

o **Easier compliance of law:** The Code introduces the concept of a 'facilitator' who will carry out inspections and also provide employers and workers with information on how to improve their compliance with the law. Further, there are 12 definitions of wages in the different Labour Laws leading to litigation besides difficulty in its implementation. The definition has been simplified and is expected to reduce litigation and will entail at lesser cost of compliance for an employer.

Concerns with Code on Wages 2019

o **Poor Consolidation of Labour Laws:** The Code on Wages, 2019 seeks to consolidate and simplify four laws into a single code. While the previous four pieces of legislation had a total of 119 sections, the new Code has 69 sections. However, the reduction in the number of sections is not on account of synergistic consolidation, but rather on account of Delegated legislation.

o Earlier, the number of provisions were incorporated in the act itself, but now under the Code on wages 2019, these provisions have been converted into rules to be formulated by the Government. Hence, if we combine the Code of wages 2019 along with the rules formulated under it, it would be much bulkier and more complex as compared to previous 4 laws.

o **Violation of Article 50**: Code of Wages 2019 provides that an officer (not below the rank of an under-secretary to the government) will be notified with power to impose a penalty in the place of a judicial magistrate. This is in clear violation of Article 50 of the Indian Constitution, which calls for separation of Executive from the Judiciary.

o **Provisions on Penalty**: The penalties/fines imposed under the Code on wages, 2019 are quite meagre and hence may not be sufficient enough to discourage the firms from violation of the law. Further, the violations under the law are considered to be compoundable offences and not non-compoundable. (Compoundable offences are usually non-serious in nature and hence can be compromised between the two parties. However, non-compoundable offences cannot be compromised). Hence, the law can be considered to be mere paper tiger.

Exemptions from Violation of Provisions: The Code exempts employers from penal provisions if they were able "to prove that they had used due diligence in enforcing the execution of the code and it was the other person who had committed the offence without his knowledge or consent.

✦ INDUSTRIAL RELATIONS (IR) CODE BILL

The Code provides for the recognition of trade unions, notice periods for strikes and lock-outs, standing orders, and resolution of industrial disputes. It subsumes and replaces three labour laws: The Industrial Disputes Act, 1947; the Trade Unions Act, 1926; and the Industrial Employment (Standing Orders) Act, 1946.

The 2020 Bill introduces provisions on fixed term employment. Fixed term employment refers to workers employed for a fixed duration based on a contract signed between the worker and the employer.

Benefits of Fixed Term Employment:

○ Allow employers the flexibility to hire workers for a fixed duration and for work that may not be permanent in nature.

○ Fixed term contracts are negotiated directly between the employer and employee and reduce the role of a middleman such as an agency or contractor.

○ Benefit the worker since the Code entitles fixed term employees to the same benefits (such as medical insurance and pension) and conditions of work as are available to permanent employees.

○ Improve the conditions of temporary workers in comparison with contract workers who may not be provided with such benefits.

Reasons for Opposition:

○ Unequal bargaining powers between the worker and employer could affect the rights of workers.

○ Employer has the power to renew contracts and hence lead to job insecurity

○ The Bill does not restrict the type of work in which fixed term workers may be hired. Therefore, they may be hired for roles offered to permanent workmen.

Recommended improvements

o The **Second National Commission on Labour (2002)** had recommended that no worker should be kept continuously as a casual or temporary worker against a permanent job for more than two years.

o The **International Labour Organisation (ILO)** has highlighted that several countries restrict the use of fixed term contracts by: (i) limiting renewal of employment contracts (Example- Vietnam, Brazil and China allow two successive fixed term contracts), (ii) limiting the duration of contract (Example- Philippines limits it up to a year), or (iii) limiting the proportion of fixed term workers in the overall workforce.

o These recommendations of the Second National Commission on Labour and ILO need to be incorporated in the 2020 Bill.

Applicability of Standing Orders:

o The 2020 IR Code bill provides that all industrial establishment with 300 workers or more must prepare standing orders on the matters related to: (i) classification of workers, (ii) manner of informing workers about work hours, holidays, paydays, and wage rates, (iii) termination of employment, and (iv) grievance redressal mechanisms for workers.

o **Reasons for Opposition**: The IR Code bill 2019 was applicable to establishments employing more than 100 workers. The threshold for the applicability to Industries has been increased to 300 in the IR Code Bill 2020. This means that Small Scale Industries employing less than 300 workers would no longer be required to lay down standing orders and hence may lead to exploitation of workers.

Closure and Lay-off

o Under the 2019 Bill, an establishment having at least 100 workers was required to seek prior permission of the government before closure, lay-off, or retrenchment. Lay-off refers to an employer's inability to continue giving employment to a worker in the face of adverse business conditions. Retrenchment refers

to the termination of service of a worker for any reason other than disciplinary action. The 2020 Bill provides that prior permission will be required for establishments with at least 300 workers.

o **Reason for Opposition**: Increase in threshold from 100 to 300; Enable small scale Industries to hire and fire workers at will.

Strikes and Lockouts

o The 2020 Bill requires all persons to give a prior notice of 14 days before a strike or lock-out. This notice is valid for a maximum of 60 days. The Bill also prohibits strikes and lock-outs: (i) during and up to seven days after a conciliation proceeding, and (ii) during and up to sixty days after proceedings before a tribunal.

o **Reason for Opposition**: Impacts the ability of the workers to carry out Strike or lock-out; Decreases their bargaining power.

Power to Exempt Industries

• Provides the government with the power to exempt any new industrial establishment or class of establishment from any or all of its provisions if it is in "Public Interest".

o **Reason for Opposition:** Factories Act, 1948 permitted exemptions from its provisions only in cases of public emergency and limited such exemption to three months. However, under the IR Code Bill 2020 there is no limit on time duration for which Industries can be exempted. Further, the term "Public Interest" could be interpreted broadly and hence government has wide discretion in providing exemptions.

OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS CODE BILL

The Code seeks to regulate health and safety conditions of workers. It subsumes and replaces 13 labour laws relating to safety, health and working conditions. These laws include: Factories Act, 1948; Mines Act, 1952; Dock Workers Act, 1986; Contract Labour Act, 1970; and Inter-State Migrant Workers Act, 1979.

Threshold for Coverage of Establishments

o The 2020 Bill defines a factory as any premises where manufacturing process is carried out and it employs more than: (i) 20 workers, if the process is carried out using power, or (ii) 40 workers, if it is carried out without using power.

o **Reasons for Opposition:** Safety Standards should be applicable to all Industries irrespective of size.

Power to Exempt Industries

o Empowers the Government to exempt any new factory from the provisions of the Code in order to create more economic activity and employment.

o **Reasons for Opposition**: Factories Act, 1948 provided for exemption only in cases of Public Emergency and for a limited time duration of 3 months. The new provision has led to higher discretionary powers to Government.

Benefits for Inter-State Migrants

Provision: Benefits for Inter-State Migrant Workers in the form of:

o Option to avail PDS either in Native State or state of employment.

o Insurance and Provident Fund Benefits

o Create a database of Inter-State Migrant Workers

Reasons for Opposition: Need to implement 'One-Nation One Ration Card' faster; Need to have proper coordination between Centre and States.

TRADE AGREEMENTS

1. **Preferential Trade Agreement (PTA)**: It is agreement whereby the countries may decide to reduce the customs duty on commonly agreed goods. Usually, the list of goods on which the customs duty is to be reduced is part of **Positive List**. In general PTAs do not cover substantially all trade. **Example:** India-Afghanistan PTA (2003)

2. **Free Trade Agreement (FTA)**: It is a **bilateral agreement** whereby the countries may decide to reduce or eliminate the customs duty on commonly agreed goods. Usually, the list of goods on which the customs duty would not be reduced is part of **Negative list** and on all other goods the customs duty is eliminated. Normally, the FTAs cover trade in goods or trade in services. FTAs can also **cover other areas** such as intellectual property rights (IPRs), investment, government procurement and competition policy, etc. **Example:** India-ASEAN FTA in Goods

3. **Comprehensive Economic Cooperation Agreement (CECA)/Comprehensive Economic Partnership Agreement (CEPA)**: These terms describe agreements which consist of an integrated package on goods, services and investment along with other areas including IPR, competition etc. The **India Japan CEPA** is one such example and it covers a broad range of other areas like trade facilitation and customs cooperation, investment, competition, IPR etc.

4. **Custom Union**: In a Customs union, member countries may decide to **trade at zero duty among themselves**, however they maintain common customs duty against rest of the world. An example is **Southern African Customs Union (SACU)** amongst South Africa, Lesotho, Namibia, Botswana and Swaziland.

5. **Common Market**: Integration provided by a **Common market is one step deeper** than that by a Customs Union. A common market is a **Customs Union** with provisions to facilitate free movements of labour and capital.

6. **Economic Union**: Economic Union is a Common Market extended through further harmonization of fiscal/monetary policies and shared executive, judicial and legislative institutions among the member countries. **European Union (EU)** is an example.

SOCIETY
(Social Issues and Social Justice)

⊕ UNIVERSAL DECLARATION OF HUMAN RIGHTS

o The traumatic events of the Second World War brought home that human rights are not always universally respected.

o After the war, governments worldwide made a concerted effort to foster international peace and prevent conflict. This resulted in the **establishment of the United Nations in June 1945**.

o **In 1948**, representatives from the 50 member states of the United Nations came together under the guidance of **Eleanor Roosevelt** (First Lady of the United States 1933-1945) to devise a list of all the human rights that everybody across the world should enjoy.

o On **10 December 1948**, the General Assembly of the United Nations announced the Universal Declaration of Human Rights (UDHR) - 30 rights and freedoms that belong to all of us. Seven decades on and the rights they included continue to form the basis for all international human rights law.

o The **30 rights and freedoms set out in the UDHR** include the **right to asylum, the right to freedom from torture, the right to free speech and the right to education**. It includes **civil and political rights, like the right to life, liberty, free speech and privacy**. It also includes **economic, social and cultural rights, like the right to social security, health and education.**

A summary of the 30 articles of the Universal Declaration of Human Rights

Article 1	We are all born free. We all have our own thoughts and ideas and we should all be treated the same way.
Article 2	The rights in the UDHR belong to everyone, no matter who we are, where we're from, or whatever we believe.
Article 3	We all have the right to life, and to live in freedom and safety.
Article 4	No one should be held as a slave, and no one has the right to treat anyone else as their slave.
Article 5	No one has the right to inflict torture, or to subject anyone else to cruel or inhuman treatment.
Article 6	We should all have the same level of legal protection whoever we are, and wherever in the world we are.
Article 7	The law is the same for everyone, and must treat us all equally.
Article 8	We should all have the right to legal support if we are treated unfairly.
Article 9	Nobody should be arrested, put in prison, or sent away unless there is good reason to do so.
Article 10	Everyone accused of a crime has the right to a fair and public trial, and those that try us should be independent and not influenced by others.
Article 11	Everyone accused of a crime has the right to be considered innocent until they have fairly been proven to be guilty.
Article 12	No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.

Article 13	We all have the right to move freely within our country, and to visit and leave other countries when we wish.
Article 14	If we are at risk of harm we have the right to go to another country to seek protection.
Article 15	We all have the right to be a citizen of a country and nobody should prevent us, without good reason, from being a citizen of another country if we wish.
Article 16	We should have the right to marry and have a family as soon as we're legally old enough. Our ethnicity, nationality and religion should not stop us from being able to do this. Men and women have the same rights when they are married and also when they're separated. We should never be forced to marry. The government has a responsibility to protect us and our family.
Article 17	Everyone has the right to own property, and no one has the right to take this away from us without a fair reason.
Article 18	Everyone has the freedom to think or believe what they want, including the right to religious belief. We have the right to change our beliefs or religion at any time, and the right to publicly or privately practise our chosen religion, alone or with others.
Article 19	Everyone has the right to their own opinions, and to be able to express them freely. We should have the right to share our ideas with who we want, and in whichever way we choose.
Article 20	We should all have the right to form groups and organise peaceful meetings. Nobody should be forced to belong to a group if they don't want to.
Article 21	We all have the right to take part in our country's political affairs either by freely choosing politicians to represent us, or by belonging to the government ourselves. Governments should be voted for by the public on a regular basis, and every person's individual vote should be secret. Every individual vote should be worth the same.
Article 22	The society we live in should help every person develop to their best ability through access to work, involvement in cultural activity, and the right to social welfare. Every person in society should have the freedom to develop their personality with the support of the resources available in that country.
Article 23	We all have the right to employment, to be free to choose our work, and to be paid a fair salary that allows us to live and support our family. Everyone who does the same work should have the right to equal pay, without discrimination. We have the right to come together and form trade union groups to defend our interests as workers.
Article 24	Everyone has the right to rest and leisure time. There should be limits on working hours, and people should be able to take holidays with pay.
Article 25	We all have the right to enough food, clothing, housing and healthcare for ourselves and our families. We should have access to support if we are out of work, ill, elderly, disabled, widowed, or can't earn a living for reasons outside of our control. An expectant mother and her baby should both receive extra care and support. All children should have the same rights when they are born.
Article 26	Everyone has the right to education. Primary schooling should be free. We should all be able to continue our studies as far as we wish. At school we should be helped to develop our talents, and be taught an understanding and respect for everyone's human rights. We should also be taught to get on with others whatever their ethnicity, religion, or country they come from. Our parents have the right to choose what kind of school we go to.

Article 27	We all have the right to get involved in our community's arts, music, literature and sciences, and the benefits they bring. If we are an artist, a musician, a writer or a scientist, our works should be protected and we should be able to benefit from them.
Article 28	We all have the right to live in a peaceful and orderly society so that these rights and freedoms can be protected, and these rights can be enjoyed in all other countries around the world.
Article 29	We have duties to the community we live in that should allow us to develop as fully as possible. The law should guarantee human rights and should allow everyone to enjoy the same mutual respect.
Article 30	No government, group or individual should act in a way that would destroy the rights and freedoms of the Universal Declaration of Human Rights.

UN GUIDELINES FOR PWD

The guidelines outline a set of 10 principles and detail the steps for implementation. The 10 principles are :-

1. **Principle 1** - All persons with disabilities have legal capacity and, therefore, no one shall be denied access to justice on the basis of disability.
2. **Principle 2** - Facilities and services must be universally accessible to ensure equal access to justice without discrimination of persons with disabilities.
3. **Principle 3** - Persons with disabilities, including children with disabilities, have the right to appropriate procedural accommodations.
4. **Principle 4** - Persons with disabilities have the right to access legal notices and information in a timely and accessible manner on an equal basis with others.
5. **Principle 5** - Persons with disabilities are entitled to all substantive and procedural safeguards recognized in international law on an equal basis with others, and States must provide the necessary accommodations to guarantee due process.
6. **Principle 6** - Persons with disabilities have the right to free or affordable legal assistance.
7. **Principle 7** - Persons with disabilities have the right to participate in the administration of justice on an equal basis with others.
8. **Principle 8** - Persons with disabilities have the rights to report complaints and initiate legal proceedings concerning human rights violations and crimes, have their complaints investigated and be afforded effective remedies.
9. **Principle 9** - Effective and robust monitoring mechanisms play a critical role in supporting access to justice for persons with disabilities.
10. **Principle 10** - All those working in the justice system must be provided with awareness-raising and training programmes addressing the rights of persons with disabilities, in particular in the context of access to justice.

AMBEDKAR SOCIAL INNOVATION & INCUBATION MISSION (ASIIM)

o ASllM is launched under Venture Capital Fund for SCs (VCF-SC) to promote innovation and enterprise among Scheduled Castes (SC) students studying in Higher Educational Institutions (HEI).
o VCF-SC (by MoSJE) is for developing entrepreneurship amongst SC and Divyang youth, by providing concessional finance to entities of SC entrepreneurs, and enabling them to become Job-Givers.
o Under ASllM, 1,000 initiatives of SC youth would be identified and funded up to Rs. 30 lakhs in three years as equity.

Objectives of ASllM

o Promoting entrepreneurship among SC Youth with special preference to Divyangs.
o Supporting (1,000) innovative ideas till 2024 through Technology Business lncubators (TBls).
o TBls are set up by Department of Science and Technology in HEI.
o Support, promote, handhold the start-up ideas till they reach commercial stage by providing liberal equity support;
o Incentivise students with innovative mind-set to take to entrepreneurship with confidence.

Other initiatives for economic development of SCs

o Stand-up lndia scheme for financing SC/ST and/or women entrepreneurs.
o National Scheduled Castes Finance & Development Corporation to financing income generating activities of SCs.
o Credit Enhancement Guarantee Scheme for SCs to support entrepreneurs.

NATIONAL COUNCIL FOR TRANSGENDER PERSONS

Aim

o To **mainstream the transgender community,** focusing on **livelihood issues.**
o To raise awareness so that trans-persons are accepted within families and in the larger society.
o To ensure that **transgender welfare boards** are set up in all States and essential needs of the transgender community, like housing, food, healthcare and education are met.

Functions

o **Advising the Central government** on the formulation of policies, programmes, legislation and projects with respect to transgender persons.
o **Monitoring and evaluating** the impact of policies and programmes designed for achieving equality and full participation of transgender persons.
o **Reviewing and coordinating** the activities of all the departments.
o **Redressing grievances** of transgender persons.
o Performing such **other functions** as prescribed by the Centre.

Composition

o Its **chairperson** will be the **Union Minister of the Ministry of Social Justice and Empowerment.** It will also consists of:
o **Representatives from five states or Union Territories** (one each from the north, south, east, west and northeast regions), on a rotational basis.
o **Five members of the transgender community** (one each from the north, south, east, west and northeast regions).
o The tenure of the community members shall be **three years.**
o The council will have joint secretary-level members from the Ministries of Health, Home, Minority Affairs, Education, Rural Development, Labour and Law.
o In addition, there will be a member from the Department of Pensions (Ministry of Personnel, Public Grievances & Pensions), NITI Aayog, National Human Rights Commission and National Commission for Women.

SELF HELP GROUPS

o Self-Help Group (SHG) is a small voluntary association of poor people, preferably from the same socio-economic background.

o They come together for the **purpose of solving their common problems through self-help and mutual help**. The SHG **promotes small savings** among its members.

o The savings are kept with a bank. This common fund is in the name of the SHG. SHG is a group formed by the community, which has specific number of members like 15 or 20. Usually, the number of members in one SHG does not exceed twenty.

o The SHG shouldn't have more than one member from a particular family. This allows the inclusion of many families.

o In such a group, the poorest would come together for emergency, disaster, social reasons, economic support to each other have ease of conversation, social interaction and economic interactions.

o NABARD introduced **SHG-Bank Linkage Programme in 1992-1993** as a microfinance innovation.

o SHGs have been an effective mechanism for poor women in the rural areas who usually are unbanked.

Functions of the SHGs

o **Initiate and maintain savings within the group**: All members must regularly save at least a small amount. These savings allow them to get future credits for their group.

o **Lending loans to the members**: The savings made by the SHG must be used to provide loans to members of the group. Everything related to the loan must be decided within the group.

o **Solving common problems**: SHGs mostly consist of individuals who face similar problems. The grouping should essentially help the individual overcome these problems through discussions and interactions within the group and overcoming the problems and finding a common and united solution to the problems.

o **Bank Loans**: SHGs must work on getting a collective guarantee system so that they can avail loans from official sources.

Advantages of SHGs

o **Combating social evils**: The SHGs play a crucial role in overcoming social evils like alcoholism, drug addiction, gambling, etc.

o **Women empowerment**: Women SHGs make its members independent from social constraints and allow them to make independent decisions. They can even actively participate in the gram sabha.

o **Active participation in democracy**: SHGs can actively participate in the aspects of local governance. This would mean the inclusion of weaker and marginalised sections of the society in the local governance.

o **Increase employment opportunities in rural India**: It allows for micro-level entrepreneurship within the rural society and reduces too much dependence on agriculture.

o **Easier access to government schemes**: The government schemes are mostly meant for the marginalised sections of the society. The inclusion and identification of these people are highly difficult. If they are grouped together, it is easier for the government to identify those who are in need of assistance quickly and efficiently. It also prevents the exploitation and corruption of the government at the ground level.

o **Improves the standard of living**: The collective team effort by the SHGs for financial inclusion allows for the improvement in the living standard, family planning, healthcare, of the vulnerable sections of the society.

o **Financial discipline**: The members of the SHGs are encouraged to open savings accounts in banks. This assures improved living conditions, increased spending on education, health, etc.

Limitations of SHGs

- o **Too much dependence on government and NGOs**: Many SHGs are dependent on the promoter agencies for their survival. In case these agencies withdraw their support, the SHGs are vulnerable to downfall.
- o **Lacks qualified facilitator**: The facilitators do not have professional training with regards to organising SHGs.
- o **Lacks up-gradation of skills**: Most SHGs are not making use of new technological innovations and skills. This is because there is limited awareness with regards to new technologies and they do not have the necessary skills to make use of the same. Furthermore, there is a lack of effective mechanisms that promote skill developments in rural areas.
- o **SHGs are run by non-professionals**: There is no professionalism within the SHGs. This does not promote the expansion and improvement of the SHGs. This does not allow for the increase of wages of the members and improvement in their living conditions. This also leads to error in accounting and mismanagement of the funds.
- o **Lacks security**: SHGs are mostly not registered. They are run based on the trust between the members. The savings made by the SHG members may not be safe, which brings in the mistrust between the members.

✚ SOCIAL AUDIT

- Social audit is a process of reviewing official records and determining whether state reported expenditures reflect the actual money spent on the ground.

- According to **Food and Agriculture Organisation (FAO),** a social audit is a way of measuring, understanding, reporting and ultimately improving an organization's social and ethical performance. A social audit helps to narrow gaps between vision/goal and reality, between efficiency and effectiveness.

- So far, social audits of government programmes have been done at the initiative of civil society organisations. But to give it a formal shape, through legislation, the state of Meghalaya became the first state in 2017 to pass social audit law.

- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was the **first law to mandate social audit as a statutory requirement**. The Office of the CAG developed social audit rules for the MGNREGA in 2011.

Objectives of Social Audit

- o Accurate identification of requirements;
- o Prioritization of developmental activities as per requirements;
- o Proper utilization of funds;
- o Conformity of the developmental activity with the stated goals;
- o Quality of service.

Benefits of Social Audit

- o Involvement of people in developmental activities ensures that money is spent where is it actually needed;
- o Reduction of wastages;
- o Reduction in corruption;
- o Awareness among people;
- o Promotes integrity and a sense of community among people. Improves the standard of governance.

Way Forward

o   The breakdown of institutions has underlined the fact that democracy — and especially public funds — need eternal public vigilance. Democratic governance needs the citizen to be legally empowered to ask questions, file complaints, and be a part of the corrective process.

o   Social audits, as they have begun to evolve in India, can potentially become a powerful democratic method by which transparency can be combined with an institutionalised form of accountability to the people.

o   An independent facilitation structure needs to be set up, fleshed out, legally empowered and mandated to ensure that social audits are conducted. The relationship between the powerful and the powerless has to shift from patronage to rights, and from inequality to equality, making the right to question sacrosanct. Specific methods of sharing information, recording comments and acting on findings have been worked out. They now need to be acted upon.

⊕ DIFFERENTLY ABLED: CHALLENGES and REMEDIES

Common Challenges

1. **Differently abled children are subjected to ugly forms of discrimination:** Due to stigma associated with disabilities, families become victims of discrimination and human rights abuse. When poverty, physical neglect and social marginalization intersect, the impact on the disabled can be devastating. Differently abled children are kept hidden away at their home, denied basic rights of mobility, education and employment. They are viewed as dependent persons. Such discrimination in some cases starts from the family members and spreads right up to the policy makers and state authorities. As a result of such discrimination the differently abled children face chronic ill health, socio-economic burden and destitution. Sometimes it is so difficult to define the marginalization — they are outside the margin or within the community meaning, locked in the rooms, institutionalized, families isolating themselves.

2. **Denial of disability:** Predominantly in the cases of mental or intellectual disability, the family members are reluctant to accept the disability or refer to it as a physical illness and treatable condition. The pseudo-stigma attached to such disabilities, makes them hide the fact of having a disabled or challenged member at home ultimately leading to social isolation and restrictive behaviors. There is a fear that they would be victims of disgrace and indignity and thereby family members lose the status or acceptance they enjoy in the community. This denial becomes a hurdle for early identification and treatment.

3. **Physical restraints:** Superstitions prevailing in the communities also play a big role in subjecting the people with disabilities to various harmful treatments. The black-magicians and quacks physically hurt people, subject them to food restrictions etc. Claiming to cure the "disability" leading to acquiring disability. Families often lock or chain their children with intellectual disability having behavioral issues, due to helplessness, ignorance and/or under social pressure.

4. **Social boycott:** Preventing of CWDs participating in any social events. Even the family members of the differently abled often tend to avoid such social gatherings in shame or fear that someone would ask about their family member with disability. Differently abled children's are not exposed to any social gathering, nor does our community recognize the need for children's participation. CWDs are not been given opportunities in the areas of education, training and employment. Under these circumstances it is natural that the CWDs feel rejected or unwanted in the society.

5. **Denial of property rights:** As per the Indian laws, all kith and kin in the family are eligible to get their share of inherited property, but in reality, persons with disabilities are denied these rights. The siblings take responsibility of providing care and they would enjoy the property meant for the person with disability. Families perceive that CWD are incapable of managing their property, they are denied of their property rights and made dependent on the able-bodied siblings. Worst of all would be when family members ensure the chronic condition of the disability by denying treatment or other aids, so that the siblings enjoy the property.

6. **Decreased marital life prospects:** In India the elders arrange majority of the marriages. If a family has person with disability, eligible boys and girls finding a prospective spouse is almost next to impossible because of the stigma and the disability being seen as a family illness. There are occasions where they hide

the information and after marriage the problems erupts. It is also common a close relative getting pressurized to marry such a person.

7. **Implications on sexuality of a person with disability:** Sexual identity is a critical component of overall personality development and self-esteem, which matures during adolescence. CWDs are at a particular disadvantage in this regard as well. There is a strong attitude of overprotection toward the disabled child. Parents infantilize disabled children and imply that sex is only for the able-bodied and of no relevance to the disabled. These parental attitudes are transmitted to the child in subtle ways making him/her feel that she/he is inferior and unworthy of love. Parents of CWDs encourage dependence and share the general societal perception of disabled persons as essentially child-like, innocent and asexual.

8. **Women with disabilities:** Due to differential gender-based role expectations, education is not considered a priority for disabled girls. Dropout rates for disabled girls are higher than for disabled boys. There is an over-representation of disabled boys in education, both in special and mainstream schools. Parents become more protective and restrictive, especially after a disabled girl reaches puberty. Travelling to school is a huge problem, since, besides transport difficulties, the danger of sexual abuse and violation looms large. There is also the reasoning that there's little point investing in a disabled girl's education as they will anyhow never be able to earn. Unfortunately, a girl child with disability is seen as a lifelong burden on the natal family because marriage is not a realistic option. Hence, it is concluded to be economically unsound to invest in her education or vocational training.

How to address the challenges?

There are several unmet challenges, which need to be addressed among disability sector in India.

1. Need for dignified life for children and people with disabilities.
2. Need to remove attitudinal barriers among communities and provide rehabilitation of CWDs.
3. Need to improve infrastructures in mainstream schools to make them disabled friendly and train teachers for optimal support.
4. Need to converge between various departments providing services for CWDs.
5. Need for national harmonization of disability welfare program.
6. Need to give executive powers and necessary resources to the commissioner of disabilities for effective implementation and safeguarding rights of PWD.
7. Need for promoting and monitoring mechanisms for service outreach below district level.
8. Need to improve effective collaborations between Government and NGO to avoid duplications.
9. Need to adopt to a down to top approach in policy design.
10. Need to improve community participation programs.

✤ SDG GOALs

SDG GOAL 1: NO POVERTY

o By 2030, **eradicate extreme poverty** for all people everywhere, currently measured as people living on less than $1.25 a day.

o By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.

o **Implement nationally appropriate social protection systems** and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.

o By 2030, ensure that all men and women, in particular the poor and the vulnerable, have **equal rights to economic resources**, as well as **access to basic services, ownership and control over land** and other forms of properties, inheritance, natural resources, appropriate new technology and financial services, including micro-finance.

o By 2030, build the **resilience of the poor and those in vulnerable situations** and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

o Ensure significant **mobilization of resources** from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions.

o **Create sound policy frameworks** at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions.

SDG GOAL 2: ZERO HUNGER

o By 2030, **end hunger** and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to **safe, nutritious and sufficient food all year round**.

o By 2030, **end all forms of malnutrition**, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

o By 2030, **double the agricultural productivity and incomes of small-scale food producers**, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

o By 2030, ensure **sustainable food production systems and implement resilient agricultural practices** that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

o By 2020, **maintain the genetic diversity** of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

o **Increase investment**, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countriesCorrect and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

o Adopt measures to ensure the **proper functioning of food commodity markets and their derivatives** and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

SDG GOAL 3: GOOD HEALTH AND WELL-BEING

o By 2030, reduce the **global maternal mortality ratio to less than 70 per 100,000 live births.**
o By 2030, **end preventable deaths of newborns and children under 5 years of age**, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births
o By 2030, **end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases** and combat hepatitis, water-borne diseases and other communicable diseases
o By 2030, **reduce by one third premature mortality from non-communicable diseases** through prevention and treatment and promote mental health and well-being
o Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
o By 2020 **halve the number of global deaths and injuries** from road traffic accidents.
o By 2030, ensure **universal access to sexual and reproductive health-care services**, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
o **Achieve universal health coverage**, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
o By 2030, substantially **reduce the number of deaths and illnesses from hazardous chemicals** and air, water and soil pollution and contamination
o **Strengthen the implementation of the World Health Organization Framework** Convention on Tobacco Control in all countries, as appropriate
o **Support the research and development of vaccines and medicines** for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
o Substantially **increase health financing** and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
o **Strengthen the capacity of all countries**, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

SDG GOAL 4: QUALITY EDUCATION

o By 2030, **ensure that all girls and boys complete free, equitable and quality primary and secondary education** leading to relevant and Goal-4 effective learning outcomes
o By 2030, ensure that all girls and boys have **access to quality early childhood development**, care and preprimary education so that they are ready for primary education
o By 2030, ensure equal access for all women and men to **affordable and quality technical, vocational and tertiary education, including university**
o By 2030, **substantially increase the number of youth and adults who have relevant skills**, including technical and vocational skills, for employment, decent jobs and entrepreneurship

- By 2030, **eliminate gender disparities in education** and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- By 2030, ensure that **all youth and a substantial proportion of adults**, both men and women, achieve literacy and numeracy.
- By 2030, ensure that **all learners acquire the knowledge and skills needed** to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
- **Build and upgrade education facilities** that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all
- By 2020, substantially **expand globally the number of scholarships** available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
- By 2030, substantially **increase the supply of qualified teachers**, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states.

SDG GOAL 5: GENDER EQUALITY

- **End all forms of discrimination** against all women and girls everywhere
- **Eliminate all forms of violence** against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
- **Eliminate all harmful practices**, such as child, early and forced marriage and female genital mutilation
- **Recognize and value unpaid care and domestic work** through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate
- Ensure **women's full and effective participation and equal opportunities for leadership** at all levels of decision making in political, economic and public life.
- Ensure **universal access to sexual and reproductive health and reproductive rights** as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the **Beijing Platform for Action** and the outcome documents of their review conferences
- Undertake reforms to **give women equal rights to economic resources**, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
- Enhance the **use of enabling technology**, in particular information and communications technology, to promote the empowerment of women
- Adopt and strengthen **sound policies and enforceable legislation for the promotion of gender equality** and the empowerment of all women and girls at all levels.

SDG GOAL 6: CLEAN WATER AND SANITATION

- By 2030, achieve **universal and equitable access to safe and affordable drinking water** for all.
- By 2030, achieve **access to adequate and equitable sanitation and hygiene for all** and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- By 2030, **improve water quality by reducing pollution**, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

o   By 2030, **substantially increase water-use efficiency** across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

o   By 2030, **implement integrated water resources management at all levels**, including through transboundary cooperation as appropriate

o   By 2020, **protect and restore water-related ecosystems**, including mountains, forests, wetlands, rivers, aquifers and lakes

o   By 2030, **expand international cooperation and capacity-building support to developing countries** in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

o   **Support and strengthen the participation of local communities** in improving water and sanitation management

GENDER BUDGETING

o   GB is concerned with **gender sensitive** formulation of legislation, programmes and schemes; allocation of resources; implementation and execution; audit and impact assessment of programmes and schemes; and follow-up corrective action to address gender disparities.

o   A powerful tool for achieving gender mainstreaming so as to ensure that benefits of development reach women as much as men.

o   Does not seek to create a separate budget but **seeks affirmative action to address specific needs of women**.

o   Monitors expenditure and public service delivery from a gender perspective.

o   Entails dissection of the Government budgets to establish its gender differential impacts and to ensure that gender commitments are translated in to budgetary commitments.

The Five-Step Framework for Gender Budgeting

1. **Step 1:** An analysis of the situation for women and men and girls and boys (and the different sub-groups) in a given sector.

2. **Step 2**: An assessment of the extent to which the sector's policy addresses the gender issues and gaps described in the first step.

3. **Step 3**: An assessment of the adequacy of budget allocations to implement the gender-sensitive policies and programmes identified in step 2.

4. **Step 4**: Monitoring whether the money was spent as planned, what was delivered and to whom.

5. **Step 5**: An assessment of the impact of the policy/ programme/scheme and the extent to which the situation described in step 1 has changed.

Rationale Behind Gender Budgeting

o   According to the 2011 census, women account for 48 per cent of the total population of the country.

o   Women face disparities in access to and control over services and resources.

o   Bulk of the public expenditure and policy concerns are in "gender neutral sectors".

o   Implications on women in the above sectors are not recognised or identified.

o   Gender responsive budgets policies can contribute to achieving the objectives of gender equality, human development and economic efficiency.

Gender Budgeting in India

o   Gender Budget Statement (GBS) was first introduced in the **Indian Budget in 2005-06**. This GB Statement comprises two parts–

1. **Part A** reflects Women Specific Schemes, i.e. those which have 100% allocation for women.

2. **Part B** reflects Pro Women Schemes, i.e. those where at least 30% of the allocation is for women.

o India's gender budgeting efforts stand out globally because they have not only influenced expenditure but also revenue policies (like differential rates for men and women in property tax rates and reconsideration of income tax structure) and have extended to state government levels.

o Gender budgeting efforts in India have encompassed four sequential phases: **(i) knowledge building and networking, (ii) institutionalizing the process, (iii) capacity building, and (iv) enhancing accountability.**

o Gender budgeting in India is not confined to an accounting exercise. The gender budgeting framework has helped the gender-neutral ministries to design new programs for women.

o Gender Budgeting Cells (GBC) as an institutional mechanism have been mandated to be set up in all Ministries/Departments.

o GBCs conduct gender based impact analysis, beneficiary needs assessment and beneficiary incidence analysis to identify scope for re-prioritization of public expenditure and improve implementation etc.

Shortcomings

o Not only has the magnitude of the gender budget as a proportion of the total expenditure of the Union Budget decreased, the budgetary allocations for promoting gender equality and women's empowerment have also shown a decline.

o There are only a few "big budget" women exclusive schemes of the Ministry of Women and Child Development (MWCD) like the Nirbhaya Fund and the Beti Bachao Beti Padhao campaign.

o Lack of dedicated human resources to implement the interventions identified by the GBCs.

o Monitoring remains one of the weakest links in the GRB work with no designated mechanism for monitoring it at the national level.

o Assumptions behind reporting allocations under Part B of the GBS remain questionable.

Way Forward

o An assessment of gender responsive budgeting in India reveals a mixed picture.

o There are number of positive developments, such as changes in select planning and budgeting processes and creation of gender budget cells.

o However, restricted reach of GB and stagnant or even declining allocations for the gender agenda are stumbling blocks.

o The adoption of the GB should be accompanied by multifaceted and interrelated improvements to budgets in general and the gender sensitivity of budgets.

o There needs to be shift from mere "reporting" of gender allocations to "purposive planning" with wider participation of women.

SECURITY
(Internal and External)

⁂ CHAFF TECHNOLOGY

*The Defence Research and Development Organisation (DRDO) has developed an advanced **Chaff technology to safeguard the fighter aircraft of the Air Force against hostile radar threats.***

DRDO's Defence Laboratory at Jodhpur developed the advanced chaff material and chaff cartridge — called 118/I — in collaboration with its Pune-based High Energy Materials Research Laboratory (HEMRL).

Know about Chaff Technology

o Chaff is an **electronic countermeasure technology** used by militaries worldwide to protect naval ships or other sensitive targets from radar and radio frequency (RF) guiding mechanisms of the enemy missile.

o The **chaff rockets deployed in the air reflect as multiple targets for the missile guidance systems and deflecting adversary missiles,** thus protecting their own assets.

o DRDO has indigenously developed three variants of the critical technology namely **Short Range Chaff Rocket (SRCR), Medium Range Chaff Rocket (MRCR) and Long Range Chaff Rocket (LRCR).**

Difference between Chaff and Flares:

o Both chaff and flares are defensive countermeasures deployed by military aircraft. The purpose is to confuse radar-guided or infrared-guided anti-aircraft missiles fired so that they could be diverted.

o Chaff is composed of many small **aluminium or zinc coated fibres stored on-board the aircraft in tubes**. In case the aircraft feels threatened by any radar tracking missiles, chaff is ejected into the turbulent wake of air behind the plane.

o Flares on being fired provide an **alternate strong IR (Infrared) source to heat-seeking anti-air missiles** so that they are lured away from the aircraft.

⁂ UNITED NATIONS SECURITY COUNCIL

o UNSC primary responsibility is the **maintenance of international peace and security.**

o The Security Council originally consisted of 11 members—five permanent members (the Republic of China [Taiwan], France, the Soviet Union, the United Kingdom, and the United States) and six nonpermanent members elected by the UN General Assembly for two-year terms. An amendment to the UN Charter in **1965 increased council membership to 15,** including the **original five permanent members and 10 nonpermanent members**.

o Among the permanent members, the People's Republic of China replaced the Republic of China in 1971, and the Russian Federation succeeded the Soviet Union in 1991.

o The nonpermanent members are generally chosen to achieve equitable representation among geographic regions, with five members coming from Africa or Asia, one from eastern Europe, two from Latin America,

and two from western Europe or other areas. Five of the 10 nonpermanent members are elected each year by the General Assembly for two-year terms, and five retire each year. The presidency is held by each member in rotation for a period of one month.

o **Each member has one vote**. On all "procedural" matters—the definition of which is sometimes in dispute—decisions by the council are made by an affirmative vote of any nine of its members.

o **Substantive matters**, such as the investigation of a dispute or the application of sanctions, also require **nine affirmative votes,** including those of the five permanent members holding veto power. In practice, however, a permanent member may abstain without impairing the validity of the decision. A vote on whether a matter is procedural or substantive is itself a substantive question. Because the Security Council is required to function continuously, each member is represented at all times at the United Nations headquarters in New York City.

UN SECURITY COUNCIL

The UN Security Council is composed of five permanent and ten non-permanent members. Each year, five out of ten non-permanent UN Security Council members are elected by the UN General Assembly for a two-year term. The ten non-permanent seats are distributed on a geographical basis:

Asia (2)   Africa (3)
permanent members (5)   Latin America and the Caribbean (2)
Eastern Europe (1)
15   Western Europe and other countries (2)

o The composition of the Security Council has been a contentious matter, particularly since the end of the Cold War. Critics have argued that the Security Council and its five permanent members reflect the power structure that existed at the end of World War II, when much of the world was under colonial rule. Reform efforts have remained elusive but have centered on efforts to make the work of the Security Council more transparent and on demands by important non-permanent members, such as **Brazil, Germany, India, and Japan (the so-called G-4), to obtain permanent membership**—or at least have special status within the Security Council. One proposal put forward by the G-4 countries was to increase the membership of the Security Council to 25 seats by adding six new permanent members, including one each for themselves and two for Africa.

o Any state—even if it is not a member of the UN—may bring a dispute to which it is a party to the attention of the Security Council. When there is a complaint, the council first explores the possibility of a peaceful resolution. International peacekeeping forces may be authorized to keep warring parties apart pending further negotiations (see United Nations Peacekeeping Forces). If the council finds that there is a real threat to the peace, a breach of the peace, or an act of aggression (**as defined by Article 39 of the UN Charter**), it may call upon UN members to apply diplomatic or economic sanctions. If these methods prove inadequate, the UN Charter allows the Security Council to take military action against the offending nation.

o In addition to several standing and ad hoc committees, the work of the council is facilitated by the Military Staff Committee, Sanctions Committees for each of the states under sanctions, Peacekeeping Forces Committees, and an International Tribunals Committee.

NORTH ATLANTIC TREATY ORGANIZATION

o North Atlantic Treaty Organization (NATO) is a military alliance that was established by the **North Atlantic Treaty (also called the Washington Treaty) of April 4, 1949**.

o It sought to create a counterweight to Soviet armies stationed in central and eastern Europe after World War II.

o At present, NATO has **30 members**. In 1949, there were 12 founding members of the Alliance: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the United States. The other member countries are: Greece and Turkey (1952), Germany (1955), Spain (1982), the Czech Republic, Hungary and Poland (1999), Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia (2004), Albania and Croatia (2009), Montenegro (2017) and North Macedonia (2020).

Historical Background

o After World War II in 1945, western Europe was economically exhausted and militarily weak (the western Allies had rapidly and drastically reduced their armies at the end of the war), and newly powerful communist parties had arisen in France and Italy.

o By contrast, the Soviet Union had emerged from the war with its armies dominating all the states of central and eastern Europe, and by 1948 communists under Moscow's sponsorship had consolidated their control of the governments of those countries and suppressed all non-communist political activity. What became known as the **Iron Curtain**, a term popularized by Winston Churchill, had descended over central and eastern Europe. Further, wartime cooperation between the western Allies and the Soviets had completely broken down. Each side was organizing its own sector of occupied Germany, so that two German states would emerge, a democratic one in the west and a communist one in the east.

o **In 1948,** the United States launched the **Marshall Plan**, which infused massive amounts of economic aid to the countries of western and southern Europe on the condition that they cooperate with each other and engage in joint planning to hasten their mutual recovery. As for military recovery, under the **Brussels Treaty** of 1948, the United Kingdom, France, and the Low Countries—Belgium, the Netherlands, and Luxembourg—concluded a collective-defense agreement called the **Western European Union**. It was soon recognized, however, that a more formidable alliance would be required to provide an adequate military counterweight to the Soviets.

o By this time Britain, Canada, and the United States had already engaged in secret exploratory talks on security arrangements that would serve as an alternative to the United Nations (UN), which was becoming paralyzed by the rapidly emerging Cold War. In March 1948, following a virtual communist coup d'état in Czechoslovakia in February, the three governments began discussions on a multilateral collective-defense scheme that would enhance Western security and promote democratic values. These discussions were eventually joined by France, the Low Countries, and Norway and in April 1949 resulted in the **North Atlantic Treaty.**

Article 5 of the North Atlantic Treaty

o *an armed attack against one or more of them in Europe or North America shall be considered an attack against them all; and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defense recognized by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.*

o NATO invoked Article 5 for the first time in 2001, after the September 11 attacks on World Trade Center in New York City

Article 6 of the North Atlantic Treaty

o *defines the geographic scope of the treaty as covering "an armed attack on the territory of any of the Parties in Europe or North America." Other articles commit the allies to strengthening their democratic institutions, to building their collective military capability, to consulting each other, and to remaining open to inviting other European states to join.*

SECURITY COOPERATION: INDIA, MALDIVES AND SRILANKA

o India, Sri Lanka and the Maldives have agreed to work on "four pillars" of security cooperation, covering areas of **marine security, human trafficking, counter-terrorism, and cyber security**, in a recent virtual meeting of top security officials of the three countries.

o The initiative, grounded in military and security collaboration, assumes significance in the region, in the wake of the current geostrategic dynamic that India shares with Sri Lanka and the Maldives.

o Earlier this year, India aired security concerns over China being awarded development projects in an island off Sri Lanka's northern province, close to India's southern border.

o It also marked the **revival of NSA-level trilateral talks on maritime security** in the Indian Ocean Region after a gap of six years. It identified "four pillars" of cooperation in **Marine Safety and Security, Terrorism and Radicalisation, Trafficking and Organised Crime, and Cyber security.**

o The **'Colombo Security Conclave'** among the three neighbouring countries seeks to "further promote" maritime security in the Indian Ocean Region. It was initiated by President Gotabaya Rajapaksa in 2011.

o On the other hand, the Maldives's engagement with members of the India-United States-Japan-Australia grouping, known as the 'Quad', has been growing over the last year, especially in the area of defence cooperation.

MILITARY EXERCISE: INDIA AND SAUDI ARABIA

o In a sign of growing defence ties between the two nations, the naval army of India and Saudi Arabia started their first-ever joint exercise.

o The exercise is called **Al-Mohed Al-Hindi Exercise**.

o **INS Kochi**, the flagship destroyer of the Indian Western Naval Fleet, arrived at Port Al-Jubail for the exercise.

o The warship sailed to Saudi Arabia after conducting the **"Zayed Talwar" drill with the United Arab Emirates (UAE)** off the coast of Abu Dhabi.

o India's defence and military ties with Saudi Arabia received a major boost with Indian Army chief Gen MM Naravane's visit to Riyadh – the first such trip by an Indian service chief – last December. Naravane had also visited the UAE on the same tour.

NAVAL EXERCISE: INDIA AND VIETNAM

o The navies of India and Vietnam undertook a bilateral exercise in the **South China Sea,** a region that has been witnessing growing Chinese militarisation.

o The Indian Navy deployed its **guided-missile destroyer Ranvijay and guided-missile corvette Kora** for the exercise with the Vietnamese Navy, signalling growing convergence of interests in the maritime security domain, officials said.

o Both India and Vietnam have common concerns over China's military expansionism in the South China Sea.

o Vietnam, an important country of the ASEAN (Association of Southeast Asian Nations), has territorial disputes with China in the South China Sea region. India has oil exploration projects in the Vietnamese waters in the South China Sea.

o China claims sovereignty over all of the South China Sea, a huge source of hydrocarbons. However, several ASEAN member countries, including Vietnam, the Philippines and Brunei, have counterclaims.

o In early August, the Indian Navy deployed a naval task group comprising four frontline warships for a two-month voyage to the South China Sea, Western Pacific and South East Asia, in a move aimed at enhancing its profile in the strategically key sea lanes.

MALABAR NAVAL EXERCISE

o The **Quad countries—India, the US, Australia and Japan** participated in the high-voltage Malabar naval exercise amid mounting global concerns over China's growing military muscle-flexing in the Indo-Pacific region.

o The Australian navy joined the annual Malabar exercises.

o The Malabar drill, **which began in 1992 as a bilateral exercise between India and the United States, was expanded to include Japan as a permanent member in 2017**. It has also seen the occasional participation of other countries.

o India's decision to include Australia for the annual drills comes in the wake of a push for deeper security collaboration in the "Quad.

o Australia returns to the exercises after 13 years, when its participation triggered strident Chinese objections. But this time the Malabar exercises will endure as all four participants seek a long-term counterbalancing strategy to China according to analysts.

o The first phase of the exercises, which includes simulated war games and combat maneuvers, is being held in the Bay of Bengal. The second phase will be held in mid-November in the Arabian Sea.

DEFENCE INDIA STARTUP CHALLENGE 5.0

o The Ministry of Defence launched 5th edition of the Defence India Start-up Challenge (DISC) under Innovations for Defence Excellence - Defence Innovation Organisation (iDEX-DIO) meant to achieve self-reliance and foster innovation and technology development in the defence and aerospace sectors.

o Thirty-five problem statements – 13 from the Services and 22 from Defence Public Sector Undertakings (DPSUs) – were unveiled under DISC 5.0. These are in areas such as **situational awareness, augmented reality, artificial intelligence, aircraft-trainer, non-lethal devices, 5G network, underwater domain awareness, Drone SWARMS and data capturing.**

o The launch of DISC 5.0 comes three years after the launch of DISC 1.0. iDEX initiative.

ICGS VIGRAHA

o Indian Coast Guard (ICG) **Ship Vigraha, seventh in the series of Offshore Patrol Vessels (OPVs)**, is commissioned on August 28, 2021.

o The ship will be based in Visakhapatnam, Andhra Pradesh and operate on the eastern seaboard under the **Operational and Administrative Control of the Commander, Coast Guard Region (East).**

o The 98-meter OPV, with a complement of 11 officers and 110 sailors, has been designed and built indigenously by Larsen & Toubro Ship Building Limited.

o It is fitted with advanced technology radars, navigation & communication equipment, sensors and machinery capable of operating in tropical sea conditions. The vessel is armed with a **40/60 Bofors gun and fitted with two 12.7 mm Stabilised Remote Control Gun with fire control system**. The ship is also equipped with integrated bridge system, integrated platform management system, automated power management system and high-power external fire-fighting system.

o The ship is also designed to **carry one twin-engine Helicopter and four high speed boats for boarding operation, search & rescue, law enforcement and maritime patrol.**

o The ship is also capable of **carrying pollution response equipment to contain oil spill at sea**. The ship displaces approximately 2,200 tons and is propelled by two 9100 KW diesel engines to attain a maximum speed of 26 nautical miles per hour with endurance of 5000 nm at economical speed.

o The ship will be deployed extensively for EEZ surveillance and other duties as enshrined in the Coast Guard Charter to safeguard the country's maritime interests.

BLUE WATER FORCE

o A Blue Water Navy is one that has the capacity to project itself over a much bigger maritime area than its **maritime borders.**

o It is able to carry out operations far from its borders, without being required to return to its home port to refuel or re-stock.

o Blue Water navies belong to the most powerful nations like USA etc., yet there is no one internationally agreed upon definition.

o However, according to the **Indian Maritime Doctrine, 2015**, "The ability to undertake distant operations distinguishes a blue-water navy from a brown-water force. It requires strong integral capacity, including logistics, surveillance, networked operations, etc., and enabling capability, including equipment design, training, doctrine and organisation."

o As the Indian Navy has the capacity to carry distant operations "at or from the sea, up to considerable distance from national shore bases", it qualifies as a Blue Water Force.

Why Develop 'Blue Water' Capabilities? Almost unnoticed by the rest of the world, India has built one of the largest and most powerful navies in the world. However, there exist a number of drivers for further expanding its influence at sea.

o **Beijing's String of Pearls:** It is perceived as encirclement by China's strategic alliances and building of maritime facilities in Sri Lanka, Pakistan, Bangladesh and Myanmar. With China developing its own blue water navy, India aims to not only secure its own territory but also be able to project power farther than its shores.

o **Strategic Edge:** While most of its wars have been fought on land and air, a strong navy with nuclear deployment capabilities gives India a much-needed strategic edge. Also, few economists argue that India's naval advantage might allow it to impede oil traffic heading for China through the Malacca Straits.

o **Energy Security:** India is expected to import 90 percent of its crude oil by 2030. India needs to be able to protect the energy routes to bring these resources to its shores.

o **South China Sea:** India might not be a primary player in the disputed waters, but it would not want to be excluded from exploring assets in the resource-rich South China Sea, as witnessed during China claiming control over the waters where an oil block was being explored by an Indian petroleum giant at Vietnam's invitation (2014).

o **Balance of power in Asia:** As India juggles the dual imperative to simultaneously befriend and hedge against an economically and militarily rising China, the outcome of its blue water force will influence the balance of power in Asia for years to come.

o A blue water navy would provide muscle for all these strategic imperatives, enhance regional power projection capabilities, more effectively protect India's expanding energy and trade routes, and enable stronger defence and trade ties with other nations.

HISTORY AND CULTURE
(Ancient; Medieval and Modern)

⊞ ABANINDRANATH TAGORE

Celebrations begin to mark 150 years of iconic artist Abanindranath Tagore.

o Abanindranath Tagore, the nephew of Rabindranath Tagore, was one of the most prominent artists of India. He was the first major supporter of **swadeshi values in Indian art.**

o Abanindranath first created the **'Indian Society of Oriental Art'** and later went on to establish **Bengal school of art**.

o His sole aim for establishing the school was to **counter the English influence on Indian artists.**

o His idea of **modernizing Mughal and Rajput paintings eventually gave rise to modern Indian painting**, which took birth at his Bengal school of art.

o Abanindranath is also regarded as a **proficient and accomplished writer**. Most of his literary works were meant for children.

o Some of his books like '**BudoAngla', 'KhirerPutul' and 'Rajkahini'** are best examples of Bengali children's literature.

His Style

o Abanindranath Tagore believed in the traditional Indian techniques of painting. He rejected the materialistic art of the West and emphasized on returning to the Indian traditional art forms.

o He believed that Indian art and its art forms gave importance to spirituality as opposed to the West which stressed on materialism. He was very much influenced by the **Mughal School of painting as well as Whistler's Aestheticism**.

o In his later works, Abanindranath started integrating Chinese and Japanese calligraphic traditions into his style.

o The intention behind this move was to construct an amalgamation of the modern pan-Asian artistic tradition and the common elements of Eastern artistic and spiritual culture. His works reflected his ideologies and since they were simple in nature, his paintings were a hit among Indian art lovers.

Abaninranath's Notable Paintings:

| Ganesh Janani	Painted in the year 1908, 'Ganesh Janani' depicts an image of Lord Ganesh in his child form. The Lord is seen playing by hanging on to a branch of a tree while his mother wears a concerned look on her face.
Bharat Mata	This beautiful painting was completed in the year 1905. The painting depicts Bharat Mata (Mother India). She is portrayed as having four hands, carrying important elements in each of her hand. The painting reflects Indian tradition, which features in most of his works.
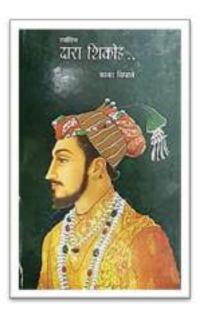
The Victory of Buddha	The Victory of Buddha depicts a portrait of Buddha after achieving enlightenment. It also answers Buddha's ultimate question pertaining to the human sufferings.
The Passing of Shah Jahan	This is a scene straight out of Mughal Emperor Shah Jahan's final day. The picture depicts Shah Jahan in his death bed, trying to get a final view of Taj Mahal, which would be his final resting place.
Journey's End	Painted in the year 1913, 'Journey's End' depicts a tired looking camel, which looks more relieved than happy after coming to an end of its journey.
Chaitanya	Chaitanya with his followers on the sea beach of Puri
Radhika gazing at the portrait of Sri Krishna	This is one of his many paintings based on the life of Lord Krishna. These paintings were created during the early stages of his career.
Departure of Siddhartha	This painting narrates the story behind Buddha's departure, when he decides to leave behind his wife and son for the greater good.
Illustrations of Omar Khayyam	Painted in the year 1909, this beautiful portrait depicts the illustrations of Omar Khayyam.
Summer	Completed in the year 1905, this painting is about the legendary Indian poet Kalidasa.
Birds and Animals series	This is a series of paintings that depict birds and animals. It was painted in the year 1915.
The Call of the Flute	Painted in the year 1910, 'The Call of the Flute' narrates one of the many interesting stories from the life of Lord Krishna.

🔸 DARA SHIKOH (1615 A.D.- 1659 A.D.)

The Ministry of Culture recently set up a seven-member panel of the Archaeological Survey of India (ASI) to locate the grave of the Mughal prince Dara Shikoh (1615-59). He is believed to be buried somewhere in the Humayun's Tomb complex.

o He was the eldest son of Shah Jahan. He is described as a "liberal" who tried to find **commonalities between Hindu and Islamic traditions.**

o He is known as a pioneer of the **academic movement for interfaith understanding in India**.

o He had a deep understanding and knowledge of major religions, particularly Islam and Hinduism.

o He was **inclined towards philosophy and mysticism** over military pursuits in comparison to Aurangzeb.

o In 1655, his father declared him the Crown Prince, but was defeated by Aurangzeb, his younger brother, in 1657 after Shah Jahan fell ill.

o He was assassinated by Aurangzeb, in a bitter struggle for the throne on 30th August, 1659 when he was 44.

Works:

o Connection between Hinduism and Islam:

His most important works, **Majma-ul-Bahrain (Mingling of Two Oceans)** and **Sirr-i-Akbar (Great Mystery),** are devoted to the cause of establishing connections between Hinduism and Islam.

Promotion of Indian Culture:

o He acquired proficiency in Sanskrit and Persian, which enabled him to play a key role in popularising Indian culture and Hindu religious thought.

o He translated the Upanishads and other important sources of Hindu religion and spirituality from Sanskrit to Persian. Through these translations, he was responsible for taking the Hindu culture and spiritual traditions to Europe and the West.

KESHAB CHANDRA SEN

o Keshab Chandra Sen was a champion of women's rights.

o His ideology was mix of religious and social ideas.

o He condemned child marriage and was instrumental in having the marriage rites of his society recognized by law in 1872 (the Civil Marriage Act of 1872).

o He also advocated widow remarriage and inter-caste marriage.

o He attempted to incorporate Christian theology within the framework of Hindu thought.

o He established the **Nava Vidhan** in 1881 along with the newspaper 'New Dispensation' to disseminate his religious ideas and philosophy.

o Keshab witnessed a split in Brahmo samaj.

o Keshab and his followers founded the Adi Brahmo Samaj.

o Ex-followers of Keshab set up the Sadharan Brahmo Samaj.

o Prarthana Samaj was founded in Bombay by Atmaram Pandurang with the help of Keshab Chandra Sen. Other prominent leaders associated with it were M G Ranade, R G Bhandarkar.

o It took up the issues of caste system rejection, women education and widow remarriage.

o The **Indian Reform Association** was established by Keshab Chandra Sen.

o It represented the secular side of the Brahmo Samaj and included many who did not belong to the Brahmo Samaj.

o The objective was to put into practice some of the ideas Sen was exposed to during his visit to Great Britain.

o Its objective also included to create public opinion against child marriage, get Brahmo form of marriage legalized, promote status of women.

HENRY VIVIAN DEROZIO

o Derozio followed radical views and drawn his inspiration from the great French Revolution.

o Derozio taught in Hindu College, Calcutta.

o Derozians attacked old and decadent customs, rites and traditions.

o They carried on public agitation on public questions such as the revision of the company's Charter, the freedom of the press, better treatment for Indian labour in British colonies abroad, trial by jury, protection

of the ryots from oppressive zamindars and employment of Indians in the higher grades of government services.

o Surendranath Banerjee describes Derozians as pioneers of modern civilizations of Bengal.
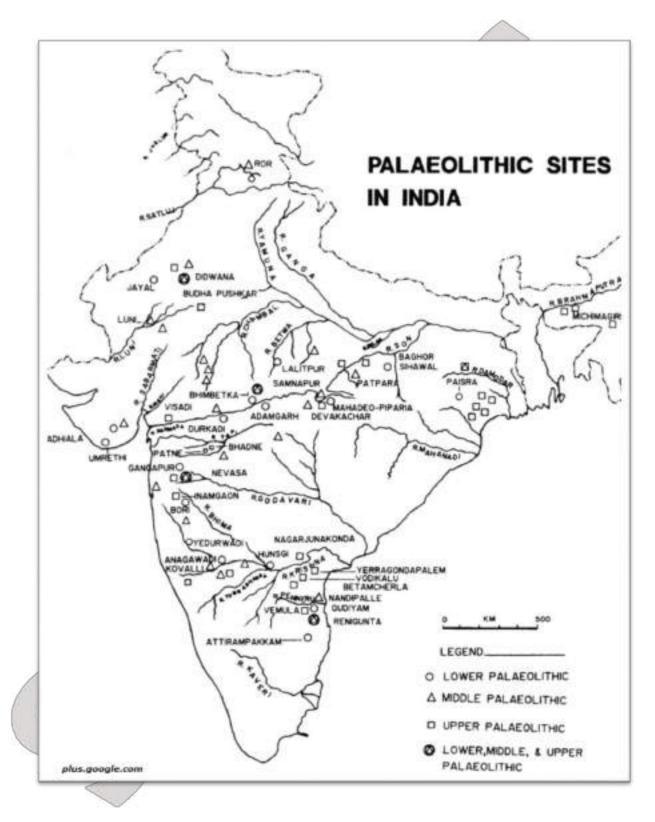
DYARCHY

o Dyarchy was a **system of double government introduced by the Government of India Act (1919) for the provinces** of British India.

o It marked the **first introduction of the democratic principle into the executive branch** of the British administration of India.

o Though much-criticized, it signified a breakthrough in British Indian government and was the forerunner of India's full provincial autonomy (1935) and independence (1947).

o **Dyarchy was introduced as a constitutional reform by Edwin Samuel Montagu (secretary of state for India, 1917–22) and Lord Chelmsford (viceroy of India, 1916–21).**

o The principle of dyarchy was a division of the executive branch of each provincial government into authoritarian and popularly responsible sections. The first was composed of executive councillors, appointed, as before, by the crown. The second was composed of ministers who were chosen by the governor from the elected members of the provincial legislature. These latter ministers were Indians.

o The various fields, or subjects of administration were divided between the councillors and the ministers, being named **reserved and transferred subjects**, respectively. The reserved subjects came under the heading of law and order and included justice, the police, land revenue, and irrigation. The transferred subjects (i.e., those under the control of Indian ministers) included local self-government, education, public health, public works, and agriculture, forests, and fisheries.

o The system ended with the introduction of provincial autonomy in 1935.
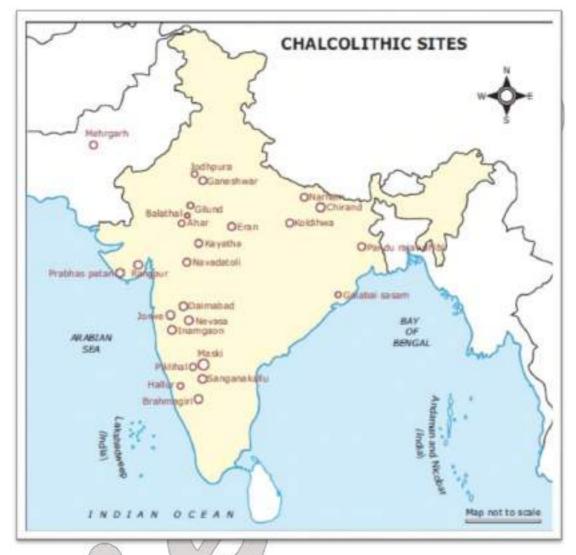
HISTORICAL MAPS

PALAEOLITHIC-SITES

PALAEOLITHIC SITES IN INDIA
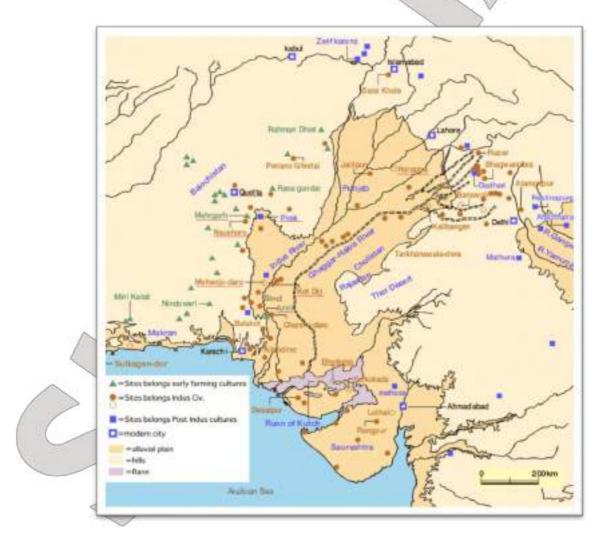
CHALCOLITHIC-SITES

INDUS VALLEY CIVILISATION SITES

A recent publication- Ancestral Dravidian Languages in Indus Civilization, has provided crucial evidence that Ancestral Dravidian languages were possibly spoken by a significant population in the Indus Valley civilisation.

Site	Location	River	Findings
Harappa	**Punjab-Pakistan**	Ravi	Fortified wall , R-37 cemetery, Copper Chariot with canopy, Evidence of pre-Harappan to mature Harappan stage, Workmen's quarter , Copper specimen of bullock cart
Mohenjo-daro	**Sindh-Pakistan**	Indus	Great Granary, A small fragment of cotton, Bronze dancing girl, Well known for the Great Bath
Kalibangan	**Rajasthan**	Ghaggar	Mud-brick fortification , Evidence of earliest datable earthquake, Discovery of a plough field

Chanhu-Daro			Sindh-Pakistan	Indus	A manufacturing site during the Harappan period
Banawali			Haryana	Saraswati	Pre -Harappan and Harappan sites, Remain of streets and drains
Suktagendor			Baluchistan	Dasht	Trade point between Harappa and Babylon situated on natural rock
Lothal			Gujarat	Bhogawa	A coastal site, Dockyard built with brick, Pottery with the painting of 'clever fox'
Surkotada			Gujarat	--	Flourishing urban centers, Fossils remain of horses
Rangpur			Gujarat	Bhandar	Plant remains (rice, millets and possibly bajara)
Rakhigarhi			Haryana	--	Well planned city
Dholavira	Gujarat	--			Unique water management, Largest Harappan inscription, use of fire-altars

MULTIPLE CHOICE QUESTIONS
(100 MCQs)

Q1. **Jaldapara National Park lies in which of the following states?**
(a) Assam
(b) West Bengal
(c) Jharkhand
(d) Odisha

Q2. **Haritha Haram afforestation programme belongs to which of the following states?**
(a) Telangana
(b) Chhattisgarh
(c) Jharkhand
(d) Odisha

Q3. **Agalega Islands belong to which of the following countries?**
(a) Seychelles
(b) France
(c) Mauritius
(d) Fiji

Q4. **Which of the following is not a port city?**
(a) Beirut
(b) Tel Aviv
(c) Aqaba
(d) Amman

Q5. **Lebanon is bordered by which of the following?**
(a) Israel and Syria
(b) Israel and Jordan
(c) Syria and West Bank
(d) Syria and Jordan

Q6. **Ghataprabha and Malaprabha are the tributaries of**
(a) River Godavari
(b) River Krishna
(c) River Narmada
(d) River Tungabhadra

Q7. **Which of the following categories of bills require prior consent of the President before their introduction?**
1. Bills to re-organise states.
2. Bills affecting taxes in which the states are interested.
3. State bills imposing restrictions on freedom of trade.
4. Bills involving expenditure from the Consolidated Fund of India.
Select the correct answer from the given options
(a) 1, 2 and 4 only
(b) 1, 2, 3 and 4 only

(c) 2, 3, and 4 only
(d) 1, 2 and 3 only

Q8. **Which of following statements is/are correct?**
1. Members of Parliament Local Area Development Scheme (MPLADS) was launched in 1993.
2. MPLADS is currently administered by the Ministry of Rural Development.
Choose the correct code:
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q9. **Hajong and Koch are the tribes in**
(a) Assam
(b) Meghalaya
(c) Mizoram
(d) Manipur

Q10. **Which of following statements is/are correct?**
1. Public Accounts Committee (PA(C) was introduced in 1936 after its first mention in the Government of India Act, 1935.
2. PAC is one of the parliamentary committees that examine the annual audit reports of CAG.
Choose the correct code:
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q11. **Which of following statements is/are correct?**
1. Standing Committees are permanent and regular committees.
2. Ad hoc Committees are appointed for a specific purpose and they cease to exist when they finish the task assigned to them.
Choose the correct code:
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Q12. **Which of following statements is/are correct?**
1. Select and Joint Committees on Bills are standing committees.
2. Financial Committees are Adhoc committees.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q13. Which of following statements is/are correct?
1. National Health Authority (NH(A) is associated with recently launched e-RUPI.
2. The Ministry of Health and Family Welfare (MoHFW) is associated with recently launched e-RUPI.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q14. Which of following statements is/are correct?
1. The Monetary Policy Committee (MP(C) determines the policy interest rate required to achieve the inflation target.
2. The Financial Market Committee (FM(C) meets once a week to review the liquidity conditions.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q15. Which of following statements is/are correct?
1. World Elephant Day was launched in the year 2012.
2. World Elephant Day was launched by Patricia Sims and the Elephant Reintroduction Foundation.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q16. Teen Bigha Corridor is a corridor between
(a) India and Nepal
(b) India and Bangladesh
(c) India and Bhutan
(d) India and Myanmar

Q17. Bru community does not reside in which of the following states?
(a) Tripura   (b) Assam
(c) Mizoram   (d) Meghalaya

Q18. Consider the following statements:
1. Halam communities belong to the Kuki-Chin tribes of Tibeto-Burmese ethnic group.
2. Halam community is categorised as a scheduled tribe in Tripura.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q19. Consider the following statements:
1. Abanindranath Tagore was the principal artist and creator of the "Indian Society of Oriental Art".
2. Abanindranath Tagore was also the first major exponent of Swadeshi values in Indian art.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q20. Which of the following countries does not border Bolivia?
(a) Paraguay   (b) Chile
(c) Argentina   (d) Uruguay

Q21. Mirabai Chanu won silver medal in Tokyo 2020 in
(a) Wrestling   (b) Boxing
(c) Weightlifting   (d) Archery

Q22. Neeraj Chopra won India's first gold medal in athletics in Tokyo 2020 in
(a) Discus throw   (b) Hammer throw
(c) Javelin throw   (d) Shot put

Q23. 20 km walk gold medals in Tokyo 2020 for both women and men were won by which of the following countries?
(a) Spain   (b) Italy
(c) France   (d) China

Q24. Aditi Ashok belongs to which of the following sports?
(a) Golf   (b) Fencing
(c) Shooting   (d) Equestrian

Q25. Men's Marathon winner in Tokyo 2020 belongs to which of the following countries?

(a) Ethiopia   (b) Kenya
(c) USA   (d) Italy

Q26. Qatar borders which of the following countries?
(a) UAE   (b) Oman
(c) Bahrain   (d) Saudi Arabia

Q27. Nagarhole National Park is in the state of
(a) Maharashtra   (b) Orissa
(c) Kerala   (d) Karnataka

Q28. Which one of the following articles of the Indian Constitution gives the President and the Governor, protection from legal action?
(a) Article 352   (b) Article 355
(c) Article 356 (1)   (d) Article 361(1)

Q29. Which of the following is the most biologically diverse country?
(a) Congo   (b) Brazil
(c) Russia   (d) India

Q30. Micro-plastics are plastics less than:
(a) 50 mm in length
(b) 100 mm in length
(c) 10 mm in length
(d) 5 mm in length

Q31. Consider the following statements:
1. **The Rajya Sabha is an institutional** mechanism to provide representation to the states. Its purpose is to protect the powers of the states.
2. Rajya Sabha cannot initiate, reject or amend money bills.
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

Q32. The members of the Rajya Sabha are not associated with:
1. Public Accounts Committee
2. Estimates Committee
3. Committee on Public Undertakings
Choose the correct code:
(a) 1 and 2   (b) 2 only
(c) 3 only   (d) 1 only

Q33. Which of following statements is/are correct?
1. The Index of Industrial Production (IIP) is an index which shows the growth rates in different industry groups of the economy in a stipulated period of time.
2. The IIP index is computed and published by the Central Statistical Organisation (CSO) on a quarterly basis.
Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q34. Under IIP, the growth rate of industry groups is classified as:
1. Broad sectors, namely, Mining, Manufacturing and Electricity.
2. Use-based sectors, namely Basic Goods, Capital Goods and Intermediate Goods.
Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q35. Which of following statements is/are correct?
1. FPO is a Farmer Producer Company registered Indian company in the Registrar of Companies (RO(C).
2. SFAC is the pioneer in the formation of FPOs.
Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q36. Which of following statements is/are correct?
1. The Sundarbans mangrove forest spans from the Hooghly River West Bengal to the Baleswar River in Bangladesh.
2. The Indian Sundarbans were considered endangered in a 2020 assessment under the IUCN Red List of Ecosystems framework.
Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q37. Which of following statements is/are correct?
1. Green tax is also called as pollution tax or environmental tax and is the tax

levied on all the goods that cause environmental pollution.
2. According to the proposal, Green tax funds in India are to be kept in a separate account to help States measure pollution and tackle it.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2
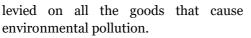
Q38. Which of following statements is/are correct?

1. Environmental Performance Index (EPI) ranks 180 countries on environmental health and ecosystem vitality.
2. The EPI was preceded by the Environmental Sustainability Index (ESI).

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q39. Which of the following National Parks are located at the junction of the Aravalli and Vindhya hill ranges?

(a) Ranthambore   (b) Sariska
(c) Dudhwa   (d) Panna

Q40. Duncan Pass is a strait located between

(a) Little Andaman and Great Nicobar
(b) North Andaman and Middle Andaman
(c) Car Nicobar and Great Nicobar
(d) South Andaman and Little Andaman

Q41. Which of the following statements is/are correct?

1. A bond's yield refers to the expected earnings generated and realized on a fixed-income investment over a particular period of time.
2. High-Yield bonds are better investments than Low-Yield bonds.

Select the correct answer using the code given below:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q42. Which of following statements is/are correct?

1. The Global Hunger Index (GHI) is a tool designed to comprehensively measure and track hunger at global, regional, and national levels.
2. GHI scores are calculated every alternate year to assess progress and setbacks in combating hunger.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q43. Consider the following statements:

(1) A special case of geosynchronous orbit is the geostationary orbit, which is a circular geosynchronous orbit at zero inclination (that is, directly above the Equator).
(2) A low earth orbit is the simplest and most cost effective for a satellite placement and provides high bandwidth and low communication latency.

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

Q44. Consider the following statements:

1. Purchasing Managers' Index (PMI) is an indicator of business activity -- both in the manufacturing and services sectors.
2. PMI is calculated compositely for the manufacturing and services sectors.

Which of the above statement/s is/are correct?
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q45. Consider the following statements:

1. The Eastern Ghats are a continuous range of mountains along India's eastern coast.
2. The Eastern Ghats run from the northern Odisha to Tamil Nadu.

Which of the above statement/s is/are correct?
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q46. Consider the following statements:

1. The tropics lies between the latitude lines of the Tropic of Cancer and the Tropic of Capricorn.

2. The tropics does not include parts of North America.

Which of the above statement/s is/are correct?

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

Q47. Which of the following rates are determined by the Reserve Bank of India?

(1) Primary Lending Rate (PLR)
(2) Cash Reserve Ratio (CRR)
(3) Statutory Liquidity Ratio (SLR)
(4) Bank Rate

Choose the correct code:

(a) 1 and 4 only
(b) 2, 3 and 4
(c) 1, 2 and 3
(d) All of the above

Q48. Which of the following ecosystems is considered to be most biologically diverse of all ecosystems?

(a) Wetlands
(b) Estuaries
(c) Rain forests
(d) Shallow sea

Q49. Which of following statements is/are correct?

1. The Ken-Betwa Link Project is the first project under the National Perspective Plan for interlinking of rivers.
2. Ken and Betwa are tributaries of River Ganga.

Choose the correct code:

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

Q50. Which of following statements is/are correct?

1. The SC collegium is headed by the CJI and comprises four other senior most judges of the court.
2. Judges of the higher judiciary are appointed only through the collegium system and the government does not have any role in the appointment.

Choose the correct code:

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

Q51. Which of the following countries does not share land border with Poland?

(a) Czech Republic
(b) Romania

(c) Belarus
(d) Ukraine

Q52. Arrange the following countries from North to South:

(a) Estonia- Latvia- Lithuania- Poland
(b) Estonia- Lithuania- Latvia- Poland
(c) Lithuania- Latvia- Estonia- Poland
(d) Latvia- Estonia- Lithuania- Poland

Q53. Arrange the following countries from North to South:

(a) Kyrgyzstan- Tajikistan- Kazakhstan - Afghanistan
(b) Tajikistan- Kazakhstan - Kyrgyzstan- Afghanistan
(c) Kyrgyzstan- Kazakhstan - Tajikistan- Afghanistan
(d) Kazakhstan - Kyrgyzstan- Tajikistan- Afghanistan

Q54. Arrange the following countries from South to North:

(a) Afghanistan- Kazakhstan- Uzbekistan Turkmenistan
(b) Afghanistan- Kazakhstan- Turkmenistan- Uzbekistan
(c) Afghanistan- Turkmenistan- Uzbekistan- Kazakhstan
(d) Afghanistan- Uzbekistan- Turkmenistan- Kazakhstan

Q55. Which of the following pair of rivers empty into the Caspian Sea?

(a) Volga and Don
(b) Volga and Ural
(c) Don and Dnieper
(d) Dnieper and Volga

Q56. Consider the following statements:

1. Apennines mountains form the border between Spain and France.
2. Tagus and Douro are the rivers in Scandinavia.

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

Q57. Arrange the following seas from East to West:

(a) Aegean Sea- Ionian Sea- Tyrrhenian Sea- Ligurian Sea

(b) Aegean Sea- Ligurian Sea - Ionian Sea- Tyrrhenian Sea

(c) Ligurian Sea- Tyrrhenian Sea -Aegean Sea- Ionian Sea

(d) Tyrrhenian Sea- Ligurian Sea- Aegean Sea- Ionian Sea

Q58. Arrange the following rivers from West to East:

(a) Danube- Don- Dniester- Dnieper

(b) Danube- Dniester- Dnieper- Don

(c) Don- Dnieper -Dniester- Danube

(d) Don- Dniester- Dnieper -Danube

Q59. Which of following statements is/are correct?

1. Syr Darya and Amu Darya empty into the Lake Balkash.

2. Aral Sea lies to the east of Lake Balkash.

Choose the correct code:

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q60. Arrange the following capital cities from North to South:

(a) Dushanbe- Bishkek -Tashkent- Astana

(b) Tashkent- Dushanbe- Astana- Bishkek

(c) Astana- Bishkek -Tashkent- Dushanbe

(d) Bishkek -Tashkent- Astana- Dushanbe

Q61. Which of following statements is/are correct with reference to Rebate of State and Central Levies and Taxes (RoSCTL) Scheme?

1. The scheme would refund to exporters the embedded central, state and local duties or taxes that were so far not being rebated or refunded.

2. The rebate under the scheme would not be available in respect of duties and taxes already exempted or remitted or credited.

Choose the correct code:

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q62. Which of following statements is/are correct?

1. Malaysia is the largest producer of oil palm.

2. Columbia and Ecuador are the major producers of oil palm in South America.

Choose the correct code:

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q63. Which of following statements is/are correct?

1. Andhra Pradesh (83.5 percent) along with Telangana accounts for about 97 percent of crude palm oil production in India.

2. India is one of the biggest exporters of palm oil in the world.

Choose the correct code:

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q64. Which of the following mountain passes does not lie in Himachal Pradesh?

(a) Shipki La   (b) Bara-Lacha Pass

(c) Nathu La   (d) Kunzum Pass

Q65. The geo-heritage sites- Mawmluh Cave and Mawblei or God's Rock lie in the state of

(a) Meghalaya   (b) Arunachal Pradesh

(c) Mizoram   (d) Manipur

Q66. Which of the following statements is/are correct?

1. Umananda is one of the smallest inhabited islands in the Brahmaputra.

2. Umananda is actually an inselberg.

Select the correct answer using the code given below:

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q67. Chabimura and Unakoti rock carvings are the geo-heritage sites in the state of

(a) Manipur   (b) Assam

(c) Mizoram   (d) Tripura

Q68. Consider the following statements:

1. Sangetsar Tso is popularly known as Madhuri Lake. It is a waterbody in Tawang district of Arunachal Pradesh.

2. The Keibul Lamjao National Park, the only floating wildlife habitat on earth is on Loktak Lake.

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

Q69. Consider the following statements:

1. An inselberg is an isolated rock hill, knob, ridge, or small mountain that rises abruptly from a gently sloping or virtually level surrounding plain.

2. Cuesta means a ridge with a gentle slope or dip on one side and a steep slope or scarp on the other.

Which of the above statement/s is/are correct?

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

Q70. Stromatolite Park is a geo-heritage site in the state of

(a) Sikkim   (b) Manipur
(c) Mizoram   (d) Meghalaya

Q71. Reiek Tlang, a cuesta, is a geo-heritage site in the state of

(a) Nagaland   (b) Manipur
(c) Meghalaya   (d) Mizoram

Q72. Consider the following statements:

1. The Abraham Accords are the peace agreements between Israel-UAE and Israel-Bahrain, mediated by the USA.

2. The accords are named after Abraham to emphasize the shared origin of belief between Judaism and Islam, both of which are Abrahamic religions that strictly espouse the monotheistic worship of the God of Abraham.
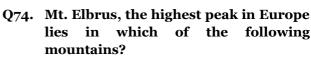
Which of the above statement/s is/are correct?

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

Q73. Which of the following landforms does not lie in Turkey?

(a) Pontiac Mountains
(b) Anatolian Plateau
(c) Taurus Mountains
(d) Elburz Mountains

Q74. Mt. Elbrus, the highest peak in Europe lies in which of the following mountains?

(a) Caucasus Mountains
(b) Dinaric Alps
(c) Apennines
(d) Pyrenees

Q75. Vietnam does not share land border with which of the following countries?

(a) China   (b) Thailand
(c) Laos   (d) Cambodia

Q76. Vishnugadh Pipalkoti and Singoli Bhatwari hydropower projects are proposed in the state of

(a) Himachal Pradesh (b) Maharashtra
(c) Uttarakhand   (d) Madhya Pradesh

Q77. Which of following statements is/are correct?

1. The Arctic Council is a high-level intergovernmental body set up by the Montreal declaration.

2. India has observer status in the Arctic Council.

Choose the correct code:

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

Q78. Match the following:

Places	Locations
A. Nuuk	1. Sweden
B. Kiruna	2. Norway
C. Fairbanks	3. Alaska
D. Svalbard	4. Greenland

(a) A-4, B-1, C-3, D-2
(b) A-3, B-2, C-4, D-1
(c) A-2, B-3, C-1, D-4
(d) A-1, B-4, C-2, D-3

Q79. Which of following statements is/are correct with reference to Himalayas?

1. Nanga Parbat, lies just south of the northernmost bend of the Indus river.

2. Namcha Barwa, lies immediately west of the great bend of the Yarlung Tsangpo River.

Choose the correct code:

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q80. Consider the following statements:

1. A beel is a lake-like wetland with static water.
2. Deepor Beel is located in West Bengal.

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

Q81. Trimeresurus Salazar discovered from Arunachal Pradesh is new species of:

(a) Fresh water turtle   (b) Alligator
(c) Pangolin   (d) Snake

Q82. Consider the following statements:

1. The Malabar exercise started in 1992 as a bilateral drill between India and Japan in the Indian Ocean.
2. USA became a permanent member in 2015 in the Malabar exercise.

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

Q83. Recently commissioned ICGS Vigraha is a/an

(a) Submarine
(b) Air Craft Carrier
(c) Offshore Patrol Vessel
(d) Fast speed attack ship

Q84. Which of following statements is/are correct?

1. The system of dyarchy at centre was established under Govt. of India Act, 1919.
2. The system of dyarchy in provinces was established under Govt. of India Act, 1935.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q85. Chagos Archipelago or Chagos Islands lie in the:

(a) Indian Ocean
(b) South Atlantic Ocean
(c) Pacific Ocean

(d) North Atlantic Ocean

Q86. Which of following statements is/are correct?

1. BCG, or Bacille Calmette-Guerin, is a vaccine for tuberculosis (T(B) disease.
2. BCG is used in many countries with a high prevalence of TB to prevent childhood tuberculous meningitis and miliary disease.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q87. Which of following statements is/are correct?

1. Chagos Islands lie to the south of Mauritius.
2. Madagascar lies to the east of Mauritius.

Choose the correct code:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q88. Bum La and Kepang La are the mountain passes in

(a) Ladakh   (b) Arunachal Pradesh
(c) Uttarakhand   (d) Himachal Pradesh

Q89. Which of the following statements is/are correct?

1. A supernova is an exploding star that blasts part of the star into space.
2. The supermassive black hole at the center of the Milky Way galaxy is called Sagittarius A.

Select the correct answer using the code given below:
(a) 1 only   (b) 2 only
(c) Both 1 and 2   (d) Neither 1 nor 2

Q90. Kalagarh Tiger Reserve is located in the state of

(a) Rajasthan   (b) Madhya Pradesh
(c) Maharashtra   (d) Uttarakhand

Q91. Consider the following statements:

1. Bihar does not have any Tiger Reserve.
2. Kamlang Tiger Reserve is in Arunachal Pradesh.

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

Q92. Consider the following statements:

1. The objective of Gaganyaan is to carry a crew of three to Low Earth Orbit (LEO).
2. GSLV Mk III has been identified for the launching Gaganyaan.

Which of the above statement/s is/are correct?

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q93. Consider the following statements:

1. The Second Anglo-Afghan War led to the acceptance of Durand line as the border between Afghanistan and British India.
2. The Third Anglo-Afghan War was known as the War of Independence in Afghanistan against British.

Which of the above statement/s is/are correct?

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q94. Consider the following statements:

1. Greenland is an autonomous territory of Norway.
2. Svalbard is an autonomous territory of Denmark.

Which of the above statement/s is/are correct?

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q95. Consider the following statements:

1. Davis Strait lies between Greenland and Iceland.
2. Baffin Bay lies between Greenland and Canada.

Which of the above statement/s is/are correct?

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q96. Consider the following statements:

1. In a nuclear fusion reaction, two light nuclei merge to form a single heavier nucleus.
2. Nuclear fusion process releases energy because the total mass of the resulting single nucleus is less than the mass of the two original nuclei.

Which of the above statement/s is/are correct?

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q97. Consider the following statements:

1. A cyclone is a system of winds rotating counter-clockwise in the Northern Hemisphere around a low pressure center.
2. An anticyclone's winds rotate clockwise in the Northern Hemisphere around a center of high pressure.

Which of the above statement/s is/are correct?

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q98. Mount Kamet and Mana Peak lie in

(a) Ladakh   (b) Uttarakhand

(c) Himachal Pradesh   (d) Sikkim

Q99. Consider the following statements:

1. The G7 (Group of Seven) is an organisation of the world's seven largest so-called advanced economies.
2. Russia was excluded from G8 in 2018.

Which of the above statement/s is/are correct?

(a) 1 only   (b) 2 only

(c) Both 1 and 2   (d) Neither 1 nor 2

Q100. Somalia does not share land border with which of the following countries?

(a) Ethiopia   (b) Djibouti

(c) Kenya   (d) Eritrea

ANSWERS

1	2	3	4	5	6	7	8	9	10
b	a	c	d	a	b	b	a	b	b
11	12	13	14	15	16	17	18	19	20
c	d	c	a	c	b	d	c	c	d
21	22	23	24	25	26	27	28	29	30
c	c	b	a	b	d	d	d	b	d
31	32	33	34	35	36	37	38	39	40
c	b	a	c	c	c	c	c	a	d
41	42	43	44	45	46	47	48	49	50
a	a	c	a	b	a	b	a	a	a
51	52	53	54	55	56	57	58	59	60
b	a	d	c	b	d	a	b	d	c
61	62	63	64	65	66	67	68	69	70
c	b	a	c	a	c	d	c	c	a
71	72	73	74	75	76	77	78	79	80
d	c	d	a	b	c	b	a	c	a
81	82	83	84	85	86	87	88	89	90
d	d	c	d	a	c	d	b	c	d
91	92	93	94	95	96	97	98	99	100
b	c	b	d	b	c	c	b	a	d