

DISASTER MANAGEMENT

- **❖** As president, India can guide G20's disaster management initiatives
- CONTEXT: The G20 under India's Presidency has endorsed a new working group on disaster risk reduction. This makes it well-positioned to prioritise disaster risk financing to achieve the targets set by Sendai framework for 2030.
 - Recent years have seen an increase in both natural and human-made catastrophes across the globe. The 2021-22 Human Development Report shows that disasters do not merely exacerbate poverty and thwart development, but also generate social polarisation across nations and communities.
 - The lack of competent financial risk management and insurance has provided a fertile breeding ground for these risks to proliferate and intensify, wreaking havoc on various aspects of society and the economy. Annual disaster losses account for a significant share of GDP in many low-income economies. To manage these risks, financial strategies must be developed.
 - The G20 has a crucial role to play in supporting countries to strengthen their financial risk management capabilities. States need to enhance their capacity to understand risks and integrate them into government planning and budget processes.
 - The insurance industry needs better regulation, legislation, and supervision. Partnerships with the private sector need to be enabled to transfer sovereign risk to the capital markets, and the financing for response, recovery, and reconstruction needs to be improved by shifting from ex-post to ex-ante mechanisms.
 - There is also a scarcity of investment in a development-oriented approach that unites all parties into a transparent framework of action at the national level. Solutions to these challenges exist, but there is a worrying dearth of investment in all these areas.
- > To address these pressing issues, the G20's new Disaster Risk Reduction Working Group (DRRWG) has recognised the importance of prioritising disaster risk financing. This will be the focus of their second meeting in Mumbai in the last week of May. By emphasising the importance of disaster risk financing, the G20 can help governments worldwide to manage risk more effectively and ensure sustainable development.
 - The DRRWG will offer an extensive overview of disaster risk assessment and financing practices across a wide range of economies. It can also support the harmonisation of definitions and methodologies for data collection and analysis to improve access to international (re)insurance markets.
 - The DRRWG will strive to address all the key components of a comprehensive financial management strategy for disaster risks. These include encompassing disaster risk assessment and modeling, affordable and comprehensive insurance coverage of disaster risks, financial assistance and compensation for affected individuals and businesses, and risk transfer mechanisms, including catastrophe bonds and insurance, for management of fiscal risks.
- The financial management of disaster risks has been approached in a variety of ways across different economies, reflective of both varying levels of disaster risk and economic development. However, there are still a number of common challenges that remain pervasive, such as the significant difficulty in collecting and analysing data on hazards and exposures, the necessity of strengthening technical and institutional capacity for risk assessment and modeling, and the challenge of achieving comprehensive coverage of disaster risks.
- The IPCC's Sixth Assessment Report highlights that significant number of people live in areas that are highly vulnerable to climate change, while the Sendai Framework for Disaster Risk Reduction calls for substantial reductions in disaster risk and losses.
- As markets and society become more aware of the reality of climate change, there is a growing recognition that disaster resilience must be a priority. However, bridging the gap between high-level objectives and practical investments remains a challenge. This is where the deliberations and consensus generated at the G20 DRRWG could play a significant role in directing capital flow towards investments that make societies and economies more disaster resilient.
- The working group on disaster risk reduction's addition in the Sherpa track of G20 will help issuers, investors, and other stakeholders to identify and classify disaster-resilient investments, assets, and entities in a more effective and evidence-based manner.
- > By providing the screening criteria for investments in various areas projects, assets, activities, entities the DRRWG could channel more capital towards disaster risk reduction investments, while also creating new opportunities for innovation in sectors less commonly associated with disaster resilience, such as health, social protection, and natural capital.
- Over 300 potential hazards identified by the UNDRR(United Nations Office for Disaster Risk Reduction) can significantly impact the financial services industry and hinder progress towards the Sustainable Development Goals. The industry must incorporate material disaster risk into its investment decisions. We need to move beyond treating disasters as singular events and adopt a multi-hazard approach, considering various emergencies and risks in financial decision-making.
- > The second DRRWG meeting in Mumbai will strive to create vital links between public and private actors' investment and financial decision-making. It will encompass a wide range of hazards and identify strategies to address them.



- > By prioritising disaster risk financing for the first time, the G20, under India's presidency can convert good intentions into opportunities for investment.
- India has extensive experience dealing with natural disasters and can lead in promoting awareness of the financial impacts of disasters. It can also lead the way in establishing a regulatory framework to enhance the financial capacity of insurance companies to cover disaster losses.
- > Through the DRRWG's systematic and granular approach, the G20 will make a significant contribution to global efforts to manage disaster risks and build resilient economies and societies.

About UNDRR(United Nations Office for Disaster Risk Reduction):

- The United Nations Office for Disaster Risk Reduction (UNDRR) was created in December 1999 to ensure the implementation of the International Strategy for Disaster Reduction (General Assembly (GA) resolution 54/219.
- UNDRR (formerly UNISDR) is part of the United Nations Secretariat and it supports the implementation & review of the Sendai Framework for Disaster Risk Reduction adopted by the Third UN World Conference on Disaster Risk Reduction on 18 March 2015 in Sendai, Japan.
- its headquarters in Geneva, Switzerland
- On 1 May 2019, the United Nations Office for Disaster Risk Reduction officially changed its acronym to UNDRR (from UNISDR) to better reflect its name.

About Sendai Framework For Disaster Risk Reduction(SFDRR):

- It has framework for 15-year i.e. **2015 to 2030**.
- It recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.
- SFDRR is an international Treaty that was approved by UN member states in March 2015 at the Third World Conference on Disaster Risk Reduction held in Sendai, Japan.
- It is a voluntary and non-binding treaty which recognizes that the UN member State has the primary role to reduce disaster risk.

• It calls for sharing the responsibility with other stakeholders including local government, the private sector and other stakeholders.

- It is successor of the Hyogo Framework for Action (2005–2015), which had been the most encompassing international accord on disaster risk reduction.
- It sets common standards, a comprehensive framework with achievable targets, and a legally-based instrument for disaster risk reduction.
- It calls for adopting integrated and inclusive institutional measures for preventing vulnerability to disaster, increase preparedness for response and recovery and strengthen resilience

Four specific priorities of Sendai Framework:

- 1. Understanding disaster risk
- Strengthening disaster risk governance to manage disaster risk
- 3. Investing in disaster risk reduction for resilience
- 4. Enhancing disaster preparedness for effective response and recovery, reconstruction and rehabilitation.

Reduce Increase Mortality/ **TARGETS** Countries with national global population & local DRR strategies 2020 Value >> 2015 Value Affected people/ global population International GLOBAL cooperation to developing countries Economic loss/ 2030 Value >> 2015 Value global GDP Availability and access Damage to critical infrastructure & disruption of basic services 2030 Values << 2015 Values

CLIMATE CHANGE

* Thawing permafrost in the Arctic could unlock toxic waste buried for decades: New study highlights risks

- **CONTEXT:** With rising global temperatures, thawing permafrost is likely to destabilise thousands of industrial sites and linked contaminated areas in the Arctic, which could result in the spread of toxic substances across the region, according to a new study. Nearly 2,100 industrial sites and between 5,600 and 10,000 contaminated sites are under threat of destabilisation by the end of this century.
- > The study, 'Thawing permafrost poses environmental threat to thousands of sites with legacy industrial contamination', was published in the journal Nature Communications.
- > Contrary to common perception, the Arctic is far from an uninhabited and untouched region. It's dotted with countless industrial facilities such as oilfields and pipelines, mines and military bases.
- All This entire infrastructure is built on permafrost, which was once believed to be perennially stable and reliable. The toxic waste from these industrial facilities has been buried in the permafrost, on the assumption that it would stay locked away permanently. But danger looms as the planet continues to heat up.
- A major problem is that for a long time (before and in the 1990s) the consequences of global warming and thawing permafrost were not taken into account and definitely underestimated. There are many engineering



studies from that time that consider permafrost as a favourable condition for the disposal of industrial legacies and other wastes. Today, these former practices (some of which are still in use) are becoming an increasing problem as large parts of the Arctic are already affected by thawing permafrost.

> What is permafrost?

Permafrost is essentially any ground that stays frozen — 0 degree Celsius or lower — for at least two years straight. These permanently frozen grounds are often found in Arctic regions such as Greenland, Alaska (the United States), Canada, Russia and Eastern Europe.

According to the National Aeronautics and Space Administration (NASA), permafrost is composed of "a combination of soil, rocks and sand that are held together by ice. The soil and ice in permafrost stay frozen all year long." However, although the ground remains perennially frozen, permafrost regions aren't always covered with snow.

What are the findings of the study?

- It was because of these characteristics that countries and corporations began building infrastructure on the
 Arctic's permafrost. The region witnessed a further expansion of industrial and economic development
 during the Cold War it became a centre for resource extraction and military activities. This led to the
 accumulation of industrial and toxic waste on or in permafrost which was never removed.
- Known industrial waste types (in the region) include drilling and mining wastes, toxic substances like drilling muds and fluids, mine waste heaps, heavy metals, spilled fuels, and radioactive waste.
- But as the Arctic is getting warmer nearly four times as fast as the rest of the planet due to climate change, permafrost is thawing rapidly, which could destabilise not only the industrial sites but also the contaminated areas. And once the destabilisation takes place, toxic substances would be unleashed across the region, threatening numerous species living there and the health of people who depend on them.
- According to the study, as of now, around 1,000 of the known industrial sites and 2,200 to 4,800 of the known contaminated sites are already at risk of destabilising due to thawing permafrost. These numbers will jump to more than 2,100 industrial sites and 5,600 to 10,000 contaminated sites by the end of the century under the low emissions scenario consistent with the 2-degree Celsius global warming target. And if the world continues to get warmer at present levels, almost all of the known industrial and contaminated sites would be affected.

What are the other consequences of thawing permafrost?

- According to experts, thawing permafrost can severely impact the planet. One of its most dangerous
 consequences is the release of greenhouse gases into the atmosphere.
- A 2022 report by NASA said, "Arctic permafrost alone holds an estimated 1,700 billion metric tons of carbon, including methane and carbon dioxide. That's roughly 51 times the amount of carbon the world released as fossil fuel emissions in 2019."
- Moreover, "Plant matter frozen in permafrost doesn't decay, but when permafrost thaws, microbes within the
 dead plant material start to break the matter down, releasing carbon into the atmosphere," it added.
- The report also said that current models estimate that there would be "a pulse of carbon released" from the permafrost to the atmosphere within the next hundred years, probably even sooner. It remains unclear how much of the carbon will be released from permafrost in the following years.
- A 2022 study by Columbia University observed that thawing permafrost would unleash thousands of dormant viruses and bacteria. Some of these "could be new viruses or ancient ones for which humans lack immunity and cures, or diseases that society has eliminated, such as smallpox or Bubonic plague."

PRELIMS

1. Sikkim Statehood Day

► IN NEWS: Sikkim celebrates its 48th State Day on 16th May.

It was on 16th May, 1975 that the erstwhile kingdom became part of India as its 22nd state.

- <u>Capital:</u> Gangtok.
- Borders: Tibet Autonomous Region of China to the north and northeast, Bhutan to the southeast, Indian state of
 West Bengal to the south and Nepal to the west. Sikkim is of great political and strategic importance for India
 because of its location along several international boundaries.
- Sikkim became a protectorate of India in 1950 following the Indo-Sikkimese Treaty, with India assuming responsibility for the external relations, defense and strategic communications of Sikkim.
- Sikkim became the 22nd state of India on 16th May 1975, following a statehood demand from the political leaders.
- The Namgyal dynasty ruled Sikkim until 1975.
- Mount Kanchenjunga, India's highest peak and the world's third highest mountain lies in Sikkim.
- The Kanchenjunga National Park (KNP) (established in 1977), near the peak is among the largest of India's high-elevation conservation areas. KNP was designated a World Heritage Site in 2016 under the 'mixed' category (sites containing elements of both natural and cultural significance).
- Sikkim is drained by the **Teesta river** and its tributaries such as the Rangit, Lhonak, Talung and Lachung. Teesta river is a tributary of Brahmaputra river.

2. 'Meri LiFE, Mera Swachh Shehar' Campaign

DAILY CURRENT AFFAIRS

- > <u>IN NEWS:</u> Minister for Housing and Urban Affairs Hardeep S Puri launched his Ministry's mega campaign 'Meri LiFE, Mera Swachh Shehar', in New Delhi.
 - This campaign aims to champion, Reduce, Reuse, and Recycle (RRR) concept of waste management.
 - Under this nationwide campaign, RRR Centres or one-stop collection centres will be set up where citizens can give their used clothes, shoes, old books, toys and plastic to be reused or recycled.
 - this three-week campaign will strengthen citizens' resolve under Swachh Bharat Mission-Urban 2.0. to reduce, reuse and recycle and will also champion Mission LiFE's objective of taking collective action for the protection and conservation of the environment by adopting sustainable daily habits.
 - The RRR Centres are scheduled to be launched nationwide on the 20th of this month and will serve as a one-stop solution for citizens, institutions, and commercial enterprises to deposit unused or used plastic items, clothes, shoes, footwear, books, and toys.
 - After collection, these items will be given to different stakeholders to be refurbished for reuse or would be made into new products, thus truly taking forward the Government's vision of a circular economy.
 - The Meri LiFE, Mera Swachh Shehar will culminate on the 5th of next month with the Pledge for LiFE, which
 will be undertaken by everyone on the occasion of World Environment Day as well as large-scale cleanliness
 drives across all cities.

3. Meri LiFE Mobile Application

- NEWS: Environment, Forest, and Climate Change Minister Bhupender Yadav launched a mobile application, called Meri LiFE (My life) in New Delhi.
 - Speaking on the occasion, Mr Yadav said that this app will showcase the power of citizens, especially young
 people in saving the environment. He also mentioned that through this app, simple actions in daily lives can have a
 larger climate impact. The Minister expressed hope that the portal and app together drive a national movement for
 LiFE
 - This app is <u>inspired by the concept of LiFE</u>, envisioned by Prime Minister Narendra Modi at COP 26, which emphasizes mindful and deliberate utilization instead of mindless and wasteful consumption.

About Lifestyle for the Environment (LiFE) Movement:

- The idea of LiFE was introduced by India during the 26th United Nations Climate Change Conference of the Parties (COP26) in Glasgow in 2021.
- On 5 June 2022, on World Environment Day, India furthered the vision of LiFE by launching the LiFE Global Movement, inviting academicians, researchers, and start-ups across the world to think about specific and scientific ways in which the full potential of collective action can be harnessed to address the environmental crisis.
- The idea promotes an environmentally conscious lifestyle that focuses on 'mindful and deliberate utilisation' instead of 'mindless and wasteful consumption.
- The Mission emboldens the spirit of the P3 model, i.e., Pro Planet People, as it is premised on the basic principles of 'Lifestyle of the planet, for the planet and by the planet'.
- It advocates for the circular economy where the concept of 'Reduce, Reuse and Recycle' can help in striking a balance between development, economic growth, and sustainability.
- Mission LiFE aims at following a three-pronged strategy for changing our collective approach toward sustainability.
 - 1. First is by nudging individuals to practice simple yet effective environment-friendly actions in their daily lives (demand):
 - 2. Second is by enabling industries and markets to respond swiftly to the changing demand (supply) and;
 - 3. The third is to influence government and industrial policy to support both sustainable consumption and production (policy).

4. National Gallery of Modern Art (NGMA)

> IN NEWS: Prime Minister recently visited Jana Shakti, an exhibition at the National Gallery of Modern Art.

About National Gallery of Modern Art (NGMA):

- It is located in Delhi.
- The building in which the gallery is situated was the former residence of the Maharaja of Jaipur and hence is known as Jaipur House.
- It was established on March 29, 1954, by the Indian Government.
- Aim: To acquire and preserve modern art from 1850 onwards and to present it to a global audience which will
 create an understanding and sensitivity towards a time that helped shape contemporary art in India.
- NGMA is home to more than 14,000 works of art by artists such as Raja Ravi Verma, Nobel Laureate Rabindranath Tagore, Abindranath Tagore, Gaganendranath Tagore, Jamini Roy, Amrita Sher-Gill and Nandalal Bose, among others.

What is Jana Shakti Art Exhibition?

- The exhibition has been organised to mark the 100th episode of the Prime Minister's popular radio programme Mann Ki Baat.
- The exhibition contains works by India's top artists on themes covered in Mann Ki Baat, such as Swachhata, water conservation, agriculture, space, India's northeast, Nari Shakti, Yoga and Ayurveda.
- The artworks on display in the exhibition showcase a diverse range of mediums, including paintings, sculptures, photographs, installations, and new media.

DAILY CURRENT AFFAIRS

5. Adopt a Heritage Scheme

IN NEWS: Union Minister of Culture recently said that the ministry is likely to launch a revamped 'Adopt a Heritage' or 'Monument Mitra' scheme.

> About Adopt a Heritage Scheme:

- It is an initiative of the Ministry of Tourism in collaboration with the Ministry of Culture and the Archaeological Survey of India.
- It was launched in September 2017 on World Tourism Day.
- Under it, the government invites entities, including public sector companies, private sector firms, as well as individuals, to develop selected monuments and heritage and tourist sites across India.
- The project aims to encourage these entities to become 'Monument Mitras' and take up the responsibility of developing and upgrading the basic and advanced tourist amenities at these sites.
- The Monument Mitras are selected by the 'oversight and vision committee,' co-chaired by the Tourism Secretary and the Culture Secretary, on the basis of the bidder's 'vision' for the development of all amenities at the heritage site.
- The oversight committee also has the power to terminate a memorandum of understanding in case of noncompliance or non-performance.
- The corporate sector is expected to use corporate social responsibility (CSR) funds for the upkeep of the site.
- The Monument Mitras, in turn, will get limited visibility on the site premises and on the Incredible India website.

ANSWER WRITTING

Q. Explain the concept of genome sequencing and highlight the significance of the Genome India Project.

Genome Sequencing refers to the method through which the order of DNA nucleotides, or bases, in a genome, the order of As, Cs, Gs, and Ts that make up an organism's DNA are figured. The human genome is made up of over 3 billion of these genetic letters

About Genome sequencing:

- A Genome is the complete genetic material of an organism. It is like an instruction manual which contains information about the make-up of the organism.
- While human genomes are made of DNA (Deoxyribonucleic acid), a virus genome can be made of either DNA or RNA (Ribonucleic acid).
- DNA and RNA provide genetic instructions for growth and functioning of organisms.
- Coronavirus is made of RNA. Genome sequencing is a technique that reads and interprets genetic information found within DNA or RNA.

Genome India Project:

- Taking inspiration from the Human Genome Project, this year, the Department of Biotechnology (DBT) initiated the ambitious "Genome India Project" (GIP) on 3rd January 2020.
- The Genome India Project, a Centre-backed initiative to sequence 10,000 Indian human genomes and create a database, is about two-thirds completed and will be 100% complete by year-end.
- Of the 7,000 genomes sequenced about 3,000 are already available for public access (as per the Department of Biotechnology)
- This project is led by the Centre for Brain Research at Bengaluru-based Indian Institute of Science, which acts as the central coordinator between a collaboration of 20 leading institutions, each collecting samples and conducting its own research.
- Institutes involved include the Indian Institute of Science (IISc) in Bengaluru as well as several Indian Institutes of Technology (IITs).
- For conducting the project, investigators in hospitals will lead the data collection through a simple blood test from participants and the information will be added to biobanks.

Significance of Genome India Project

- India's population of 4 billion is made up of over 4,600 diverse population groups, many of which are endogamous or marry within close ethnic groups.
- These groups haveunique genetic variations and disease-causing mutations that cannot be compared to other populations.
- By creating a database of Indian genomes, researchers can learn about these unique genetic variants and use the information to create personalized drugs and therapies.
- The project aims to develop personalized medicine based on patients' genomes to anticipate and modulate diseases.
- By mapping disease propensities to genetic variations, interventions can be targeted more effectively, and diseases
 can be anticipated before they develop. For example, variations across genomes may explain why cardiovascular
 disease leads to heart attacks in South Asians but to strokes in most parts of Africa.
- Similar benefits will come to agriculture if there is a better understanding of the genetic basis of the susceptibility of plants to pests, insects and other issues hampering productivity.
- Global science will also benefit from a mapping project in one of the world's most diverse gene pools.
- The project is said to be among the most significant of its kind in the world because of its scale and the diversity it would bring to genetic studies.

Finally, genes account for less than 25 percent of the DNA in the genome, and so knowing the entire



genome sequence will help scientists study the parts of the genome outside the genes. This includes the regulatory regions that control how genes are turned on and off, as well as long stretches of "nonsense" or "junk" DNA—so called because significance of it hasn't been established.

MCQs

- Consider the following statements regarding 'Meri LiFE, Mera Swachh Shehar' Campaign.
 - The Campaign launched under Ministry of Housing and Urban Affairs.
 - Under this nationwide campaign, RRR Centres or one-stop collection centres will be set up where citizens can give their used clothes, shoes, old books, toys and plastic to be reused or recycled.

Select the correct statements using the codes below:

- a) 1 only
- b) 2 only
- c) **Both 1 and 2** d)
- d) None of these
- Government had notified Electricity Promoting Renewable Energy through Green Energy Open Access Rules (GOAR), 2022. Which of the following statement is true regarding the GOAR 2022?
 - Significance of rules is to help cut emissions by 45% in line with India's updated NDC target for 2030
 - Green Open Access is allowed to any consumer and limit of Open Access Transaction reduced from 1 MW to 100 kW for green energy.

Select the correct statements using the codes below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None of these
- 3. Recently Kalasa Bhandura canal is in news, it is situated in which of the following River?
 - a) Narmada River
- b) Jhelum
- c) Cauvery River
- d) River Mahadayi
- Recently Aadhaar-enabled Payment Services (AePS) is in news. Consider the following Statements.
 - 1. It is is a bank-led model which allows online financial transactions at Point-of-Sale (PoS) and Micro ATMs through the business correspondent of any bank using Aadhaar authentication.
 - 2. There is no need for OTPs, bank account details, and other financial details for AePS.
 - 3. It allows fund transfers using only the bank name, Aadhar number, and fingerprint captured during Aadhaar enrolment.

Select the correct statement(s) using the codes below

- a) 1 and 2 only
- b) 1, 2 and 3
- c) 2 and 3 only
- d) 1 only
- Consider the following statements regarding Indo-Pacific Economic Framework for Prosperity (IPEF)
 - The IPEF was launched by the France in May, 2022 with Australia, Brunei Darussalam, Fiji India, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, and Vietnam.
 - 2. The 14 IPEF partners represent 40 percent of global GDP and 28 percent of global goods and services trade.
 - 3. The IPEF has **four pillars**: (1) Trade; (2) Supply Chains; (3) Clean Energy, Decarbonization, and Infrastructure; and (4) Tax and Anti-Corruption.

Select the correct statement(s) using the codes below

- a) 1 and 2 only
- b) 1, 2 and 3
- c) 2 and 3 only
- d) 1 only
- 6. Which of the following country is decided to supply The Storm Shadow Missile to Ukraine?
 - a) United States of America

- b) United Kingdom
- c) Germany
- d) France
- 7. Recently Cyclone Mocha made landfall in Myanmar's Rakhine state near Sittwe. Which of the following Countries suggested the Cyclone Name 'Mocha'?
 - a) Yemen
- b) Madagascar
- c) Srilanka
- d) India
- Consider the following statement regarding Global Report on Internal Displacement 2023 (GRID-2023)
 - 98% of disaster displacements in 2022 were triggered by weather-related events; floods and storms caused 6 out of 10 disaster displacements.
 - Pakistan had the highest number of disaster displacements in 2022, followed by China and Afghanistan, while India ranked fourth
 - 3. The prolonged three-year La Niña phenomenon contributed to the rise in weather-related disasters, especially floods, leading to widespread disasters across the globe
 - 4. The Global Report on Internal Displacement 2023 (GRID-2023), published by the Internal Displacement Monitoring Centre (IDMC).

Select the correct statements using the codes below

- a) 1, 2 and 3 only
- b) 2, 3 and 4 only
- c) 1, 2, 3 and 4
- d) 1, 3 and 4 only
- Recently The Reserve Bank of India (RBI) has opened the application window for firms and innovators to participate in the Global Financial Innovation Network's (GFIN) Greenwashing TechSprint. Consider the following statement regarding Greenwashing TechSprint.
 - The objective of TechSprint is to develop a tool that can help regulators and the market effectively tackle the deceptive practice of greenwashing.
 - 2. GFIN was launched in 2019 by international financial regulators and organizations with the aim of supporting financial innovation and identifying regulatory gaps in emerging technologies across different sectors. It acts as a surveillance tool to detect issues before they become problematic.

Select the correct statements using the codes below:

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None of these
- 10. The Indian government has launched the Central Equipment Identity Register (CEIR) tracking system to combat mobile phone theft. Consider the following statement regarding CEIR.
 - CEIR serves as a central depository or database of International Mobile Equipment Identity (IMEI) numbers, models, versions, and other details of mobile devices.
 - It is implemented by Centre for Department of Telematics (CDoT)
 - 3. International Mobile Equipment Identity(IMEI) is a unique 15-digit code that precisely identifies the device.

Select the correct statement(s) using the codes below

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