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GS 2 : Polity, Governance, International Relations

1. Rules regulating cable TV network amended

Context:

The Information and Broadcasting Ministry has **amended the rules regulating cable television networks.**

Details:

- The amendment provides for a **statutory mechanism for complaints raised by citizens regarding any content broadcast.**
- At present, there are over 900 TV channels that are **required to comply with the Programme and Advertising Code** laid down by the Ministry of Information and Broadcasting under the **Cable Television Network Rules.**
- The Cable Television Networks (Amendment) Rules, 2021, provides for a **three-level grievance redressal mechanism:**
 - self-regulation by broadcasters
 - self-regulation by the self-regulating bodies of the broadcasters
 - oversight by an Inter-Departmental Committee at the level of the Centre.
- A viewer could file a complaint directly to the broadcaster, who **would have to respond within 15 days.**
- If the complainant was not satisfied with the response, the **complaint could be escalated to the self-regulating bodies set up by TV channels,** which should **deal with the case in 60 days.**
 - Such appeals would be dealt with by the **Inter-Departmental Committee set up under the Oversight Mechanism.**
 - The Committee would be headed by the Additional Secretary in the Ministry of Information and Broadcasting.
 - Its members would be from the Ministry of Women and Child Development, Home Ministry, Ministry of Electronics and Information Technology, Ministry of External Affairs, Ministry of Defence, and representatives of other Ministries and organisations, including experts, as decided by the Centre.
- This third tier was **not only kept aside to hear the appeals, it could take up complaints that come directly to the Centre.**

2. Birth, death registrations up in 2019

Context:

According to the “Vital Statistics of India Based on The Civil Registration System” report the level of registration of births and deaths in the country improved in 2019.

Key Highlights:

- While 14 States/Union Territories achieved 100% level of birth registrations, 19 States/Union Territories achieved 100% registration in cases of death.
- The report states that the level of **birth registration increased from 87.8% in 2018 to 92.7% in 2019. Death registrations went up from 84.6% to 92% during the period.**

Sex ratio at birth:

- The share of **institutional births in the total registered births was 81.2%**.
- The number of registered births increased to 2.48 crore in 2019 from 2.33 crore in 2018.
- The **share of male and female was 52.1% and 47.9%**.
- The **highest sex ratio at birth (SRB)** was reported by Arunachal Pradesh (1,024), followed by Nagaland (1,001) Mizoram (975) and Andaman & Nicobar Islands (965).
- The **lowest SRB** was reported by Gujarat (901), Assam (903) and Madhya Pradesh (905), followed by Jammu & Kashmir (909).

Limitations:

- The level of registration was arrived at **using the mid-year projected population of the respective States/Union Territories of 2011-2019 based on the 2011 census** (Report of the Technical Group on Population Projections, July 2020, National Commission on Population, Ministry of Health & Family Welfare).
 - Therefore, it is not comparable with rates presented in previous reports.
- The level of registration was arrived at using Sample Registration System Rates for 2018 as the **survey for 2019, could not be completed due to the COVID-19 pandemic.**
- Also, some States/Union Territories submitted incomplete or partial data, which was not included.

3. A place for disruptive technology in India's health sector

Context:

- In the light of the **health crisis brought out by the COVID-19 pandemic**, the article discusses the **relevance of disruptive technology and its applications in the medical sector**.

Blockchain technology:

- The term 'Blockchain' denotes a shared immutable record of a chain of transactions, each comprising one block, with the blocks being held together by cryptographic keys. These keys or signatures are stored in shared ledgers, joined by a mesh of nodes, or processes that connect them. Each node has a copy of the whole chain, being constantly synchronized and kept up to date.
- The advantages of blockchain technology include its **tamper-resistant nature, the decentralized nature of the digital ledgers, and the impossibility of changing a published transaction** subsequently within the user community that shares the ledger. This technology is also called **digital ledger technology (DLT)**.

Medical blockchain:

- The health blockchain would contain a complete **indexed history of all medical data**, including formal medical records and health data from mobile applications and wearable sensors that can be stored in a secure network and authenticated.

Application in healthcare:

- Blockchains in healthcare can be envisaged in the following areas:

Securing patient data:

- Keeping important medical data safe and secure is the most popular blockchain healthcare application at the moment, given that data breach of patient records has been a major challenge.
- Blockchain technology can help conceal the identity of any individual with complex and secure codes that **can protect the sensitivity of medical data**.

Streamline medical care:

- The time-consuming process of obtaining access to a patient's medical records exhausts staff resources and delays patient care. Blockchain-based medical records offer a cure for these ills.
- **The decentralized nature of the technology creates one ecosystem of patient data that can be quickly and efficiently referenced** by doctors, hospitals, pharmacists and anyone else involved in treatment. In this way, blockchain can lead to faster diagnoses and personalized care plans.
- Thus blockchain medical records can help streamline care.

Medical supply chain management and drug traceability and safety:

- Blockchain has immense applications in **pharmaceutical supply chain management**, and it can virtually guarantee full transparency in the shipping process right from the manufacturing centre up until it reaches the consumer.

Complementing genomics:

- Blockchain is a perfect complement for the growing genomics field as it **can safely house billions of genetic data points**. Thus medical blockchain offers potential for point-of-care genomics management and the innumerable benefits that it offers to medical treatment.

Big data analytics:

- Big data analytics examines large amounts of data to **uncover hidden patterns, correlations and other insights**. Analysis of big data allows analysts, researchers and business users to make **better and faster decisions** using data that was previously unusable.

Big data in the medical sector:

- In healthcare, big data uses specific statistics from a population or an individual to research new advancements, reduce costs, and even cure or prevent the onset of diseases. In recent years, **healthcare data collection has moved into the digital realm, making analysis faster and more accurate**.

Application in healthcare:

- Applications of big data analytics can help improve the patient-based service, through **early disease detection**, generate new insights into disease mechanisms, monitor the quality of the medical and healthcare institutions as well as provide **optimized hospital healthcare treatment regimes**.

Artificial intelligence:

- Artificial intelligence (AI) is the **simulation of human intelligence processes by machines**, especially computer systems. Specific applications of AI include expert systems, natural language processing (NLP), speech recognition and machine vision.

AI in healthcare:

- Artificial intelligence in healthcare refers to the use of complex algorithms designed to perform certain tasks in an automated fashion. When researchers, doctors and scientists inject data into computers, the newly built algorithms can **review, interpret and even suggest solutions to complex medical problems**.

Application in healthcare:

- AI offers a number of advantages over traditional analytics and clinical decision-making techniques. Learning algorithms can become more precise and accurate as they interact with training data, allowing humans to gain unprecedented **insights into diagnostics, care processes, treatment variability, and patient outcomes**.
- AI can help deploy **more precise, efficient, and impactful interventions** at exactly the right moment in a patient's care.

Developing the next generation of radiology tools:

- As per some experts, artificial intelligence will enable the next generation of radiology tools that are accurate and detailed enough to **replace the need for tissue samples in some cases**.

Expanding access to care in underserved regions:

- Shortages of trained healthcare providers, including ultrasound technicians and radiologists can significantly limit access to life-saving care in developing nations around the world.
- Artificial intelligence could help mitigate the impacts of this severe deficit of qualified clinical staff by **taking over some of the diagnostic duties typically allocated to humans**.
- For example, AI imaging tools can screen chest x-rays for signs of tuberculosis, often achieving a level of accuracy comparable to humans. This capability could be deployed through an app available to providers in low-resource areas, reducing the need for a trained diagnostic radiologist on site.

Creating more precise analytics:

- Artificial intelligence can allow for **more detailed and precise analysis of tests and scans** that may escape the human eye.

Monitoring health:

- There has been increased access to devices with sensors that can collect valuable data about their health. Example- Smartphones with step trackers; wearables that can track heartbeat. This has helped generate large quantities of health-related data.
- Collecting and analyzing this data – and supplementing it with patient-provided information through apps and other home monitoring devices – can **offer a unique perspective into individual and population health**. Artificial intelligence will play a significant role in extracting actionable insights from this large and varied treasure trove of data.
- **AI can provide earlier warnings for conditions like seizures or sepsis.**

Revolutionize clinical decision making:

- Artificial intelligence can help power predictive analytics and clinical decision support tools that can help provide clues to problems long before they might otherwise be identified using traditional approaches.
 - **Immunotherapy** is one of the most promising avenues for treating cancer. By using the body's own immune system to attack malignancies, patients may be able to beat stubborn tumours. However, only a small number of patients respond to current immunotherapy options, and oncologists still do not have a precise and reliable method for identifying which patients will benefit from this option. Machine learning algorithms and their ability to synthesize highly complex datasets may be able to illuminate new options for targeting therapies to an individual's unique genetic makeup.

Internet of Things:

- The Internet of things describes the **network of physical objects** that are embedded with sensors, software, and other technologies for the purpose of **connecting and exchanging data with other devices and systems over the Internet**.
- **The Internet of Medical Things, or IoMT** (which is defined as a connected infrastructure of medical devices, software applications, and health systems and services) is shaping healthcare applications.
- There are hospitals, in China, that use 5G-powered temperature measurement devices at the entrance to flag patients who have fever/fever-like symptoms. Other robots measure heart rates and blood oxygen levels through smart bracelets and rings that patients wear.

Autonomous systems:

- An autonomous robot is a robot that performs behaviours or tasks with a high degree of autonomy. Autonomous robotics is usually considered to be a subfield of artificial intelligence, robotics, and information engineering.

Application in healthcare:

- There have been numerous reports of field hospitals **using robots to care for COVID-19 affected patients and even sanitize wards**. Autonomous systems could potentially help reduce the chances of hospital staff contracting infectious diseases from patients.
 - The Sawai Man Singh government hospital in Jaipur has held trials with a humanoid robot to deliver medicines and food to COVID-19 patients.
- **Medical autonomous systems can help improve health delivery** to a great extent. These systems can also help provide medical care delivery in dispersed and complex environments wherein there is a shortage of skilled manpower.
 - Autonomous systems in the medical sector could include autonomous critical care system, autonomous intubation, autonomous cricothyrotomy and other autonomous interventional procedures.

Cloud computing:

- Cloud computing is the delivery of computing services – including servers, storage, databases, networking, software, analytics, and intelligence – over the Internet to offer faster innovation, flexible resources, and economies of scale.

Application in healthcare:

- **Cloud computing could facilitate collaboration and data exchanges** between doctors, departments, and even institutions and medical providers to enable the best treatment.

Quantum computing:

- Quantum computing is the exploitation of collective properties of quantum states, such as superposition and entanglement, to perform computation.
- **Quantum-enhanced machine learning algorithms** are particularly relevant to the medical sector.

Application in healthcare:

- In the healthcare industry, quantum computing could help **accelerate diagnoses, and personalize medicine.**
- In genomic medicine, quantum computers may lead to **quick sequencing of DNA**, opening up the possibility of personalized medicine.
- It can help **speed up drug design and development.**
- In health care data collection, quantum mechanics and the related computer power may assist on several levels, including with **data storage, data transmission, and data security.**

Challenges in the adoption of disruptive technologies:

- The large scale adoption of these technologies should consider the **ethical appropriateness of digital technologies** and acknowledge the **digital divide in society.**
- Other challenges include the non-standardisation of health data, organisational silos, **data security and data privacy concerns**, and also the **high upfront costs** involved in the adoption of these technologies.

Recommendations:

- The adoption of the above technologies should be complemented by a **robust strategy integrating human, financial, organisational and technological resources.**
- The adoption of disruptive technologies should be complemented by **drawing upon local knowledge.** Community nurses, doctors, and health workers in developing countries do act as frontline sentinels and can provide valuable information at scale and pace. Thus the local/traditional knowledge and experiences need to be used with modern technology.

Conclusion:

- The disruptive technologies discussed above can play an important role in improving the health sector in general and improve the welfare of societies.
- The application of the disruptive technologies discussed above in the medical sector can **help realize the ideal of universal health coverage (UHC).**

4. Chinese astronauts dock with new space station

What's in News?

- The first group of Chinese astronauts have entered the country's under-construction space station.

Details:

- The **Shenzhou-12 spaceship** carried the three astronauts to Tianhe.
 - Tianhe is the main module of its first permanent space station by China.
- This is a major step in China's plans to have a **fully functioning space station by 2022**.
 - **China's first space station called Tiangong** is set to be functional by the end of 2022 and is the second space station only after **the International Space Station**.
 - The Space Station China is building is called Tiangong which means "Heavenly Space".

GS 3 : Economy, Science and Technology, Environment

5. Assam seeks realignment of tracks through wetland

Context:

The Assam government has proposed the **realignment of a broad-gauge railway line through the Deepor Beel**.

- Clearance from the National Green Tribunal is expected once the eco-sensitive zone is declared by the concerned authorities.

Issue:

- **Several elephants have been run over** on the railway track between the elevated Rani Reserve Forest and the sanctuary.
- The elephants use four corridors crossing the track to often bathe and feed on the aquatic plants in the wetland.
- Besides, it **creates noise pollution and disturbs the migratory birds**.

Deepor Beel

- Deepor Beel is an '**Important Bird Area**' site as designated by Birdlife International.
- It is a bird sanctuary that shelters over 200 species of birds, including about 70 species of migratory birds.

- It is also designated a wetland of international importance under the **Ramsar Convention of Wetlands**.
 - **Ramsar Convention is an international agreement promoting the conservation and wise use of wetlands.**
 - It is the only global treaty to focus on a single ecosystem.
- The wetland is also **used by elephants as a major corridor.**
- It is considered one of the largest and important **riverine wetlands in the Brahmaputra Valley of lower Assam.** It is a **permanent freshwater lake.**
- It is located about 10 km southwest of Guwahati in **Assam.**

6. Recovery takes more than reforms

Background:

- Growth estimates of the National Statistical Office show that after a steep contraction in the first quarter of 2020, growth accelerated steadily afterwards bringing hopes of an economic recovery.
- However, the **second wave of the COVID-19 pandemic** has adversely impacted this economic recovery process. So **as against the earlier predictions of a V-shaped economic recovery, India is more likely to witness a W-shaped economic recovery.**
- In this light, the article analyzes the government's policies and their possible impact on the economic recovery process.

Government policy:

Emphasis on long term economic reforms:

- The government has introduced a number of reforms in the economic sphere which it hopes will help the economy recover.
 - This includes the liberalization of the agricultural marketing sector, policies like the Production Linked Incentive scheme under the Atmanirbhar Bharat Abhiyaan, privatization of public sector units, lowering of corporate taxes, etc.
 - The reforms have **helped remove restrictions on private sector activity and helped incentivize private participation in the economy.**

Continued emphasis on fiscal consolidation:

- After the announcement of the limited economic stimulus package during the first wave, the **government reverted to fiscal consolidation** or the paring

down of the fiscal deficit. Accordingly, it raised its budgeted expenditure by less than 1% in the last Budget.

Concerns:

Doubts over the effectiveness of the reforms in the short term:

- The article argues that the economic reforms though well-intended, may alone not be sufficient to induce the economic recovery process in India. The current economic situation and expectation of the state of the economy in the near future have **failed to enthruse private sector investment**.

Low public expenditure would impact demand generation:

- The article expresses concerns that the macroeconomic pre-occupation with fiscal consolidation may not be the best policy in the current situation. There has been an **increase in the unemployment rate and this could negatively impact demand in the economy**.
- The decision to limit public expenditure even as the economic recovery process is most likely to be hit by the second wave, will only **negatively impact the economic recovery process**.

Recommendations:

- The government should **adopt higher public expenditure as a way out of the current economic slump even if it leads to a higher than budgeted deficit or inflation**.
 - **India's public debt is low** by comparison with the OECD countries.
 - Inflation from economic expansion could be controlled through the increased availability of food resources.

THE INDIAN EXPRESS

GS 2 : Polity, Governance, International Relations

1. National Maritime Heritage Complex

In order to showcase the maritime heritage and history of India, a National Maritime Heritage Complex (NMHC) will be developed in the Lothal region of Gujarat.

National Maritime Heritage Complex

- It is to note that the National Maritime Heritage Complex will be made within the ASI site of Lothal that is located 80 km away from Ahmedabad in Gujarat.
- The project, once completed, will be made an international tourist destination in India where people from across the countries can take a look at the maritime heritage of India from ancient to modern times.
- The government is aiming to showcase this via an edutainment approach where the latest technology would be adopted to spread awareness.
- The development will be done in an area expanding 400 acres.
- The complex will have many offerings including National Maritime Heritage Museum, Heritage Theme Park, and Light House Museum.

About Lothal

- Lothal was one of the southernmost cities of the ancient Indus Valley Civilization located in Gujarat.
- Construction of the city began around 2200 BCE.
- According to the ASI, Lothal had the world's earliest known dock, which connected the city to an ancient course of the Sabarmati river on the trade route between Harappan cities in Sindh and the peninsula of Saurashtra.
- Lothal was a vital and thriving trade Centre in ancient times, with its trade of beads, gems, and valuable ornaments reaching the far corners of West Asia and Africa.
- The techniques and tools they pioneered for bead-making and in metallurgy have stood the test of time for over 4000 years.

- The Lothal site has been nominated as a UNESCO World Heritage Site, and its application is pending on the tentative list of UNESCO.

2. Namami Gange Programme

Why in News

Recently, an agreement was signed for Development of 35 MLD (Mega Liters per day) **Sewage Treatment Plant** in Maheshtala (City situated on the east bank of **River Ganga**), West Bengal under **Namami Gange Programme**.

- The project was signed under **Hybrid Annuity PPP mode**.

Key Points

- **Namami Gange Programme:**
 - Namami Gange Programme is an **Integrated Conservation Mission**, approved as a '**Flagship Programme**' by the Union Government in June 2014 to accomplish the **twin objectives of effective abatement of pollution and conservation and rejuvenation of National River Ganga**.
 - It is being operated under the Department of Water Resources, River Development and Ganga Rejuvenation, **Ministry of Jal Shakti**.
 - The program is being implemented by the **National Mission for Clean Ganga (NMCG)**, and its state counterpart organizations i.e State Program Management Groups (SPMGs).
 - NMCG is the implementation wing of **National Ganga Council** (set in 2016; which replaced the National Ganga River Basin Authority - NGRBA).
 - It has a Rs. 20,000-crore, **centrally-funded, non-lapsable corpus** and consists of nearly 288 projects.
 - The **main pillars** of the programme are:
 - Sewage Treatment Infrastructure
 - River-Front Development
 - River-Surface Cleaning
 - Biodiversity
 - Afforestation
 - Public Awareness
 - Industrial Effluent Monitoring
 - Ganga Gram
- **The Ganga River System:**

- The headwaters of the Ganga called the 'Bhagirathi' are fed by the Gangotri Glacier and joined by the Alaknanda at Devprayag in Uttarakhand.
- At Haridwar, Ganga emerges from the mountains to the plains.
- The Ganga is joined by many tributaries from the Himalayas, a few of them being major rivers such as the Yamuna, the Ghaghara, the Gandak and the Kosi.

GS 3 : Economy, Science and Technology, Environment

3. Chennai-Kanyakumari Industrial Corridor (CKIC)

The Asian Development Bank (ADB) and the Centre have signed a \$484 million loan to improve transport connectivity and facilitate industrial development in the Chennai-Kanyakumari Industrial Corridor (CKIC).

About CKIC

- CKIC is part of India's East Coast Economic Corridor (ECEC), which stretches from West Bengal to Tamil Nadu.
- The project will upgrade about 590 km of state highways in the CKIC influence areas that cover 23 of the 32 districts between Chennai and Kanyakumari in Tamil Nadu.
- It connects India to the production networks of South, Southeast, and East Asia.
- ADB is the lead partner in developing ECEC.

Significance of CKIC

- The project is part of the priority infrastructure projects identified for corridor development under the ADB-supported CKIC comprehensive development plan.
- Enhanced connectivity of industrial hubs with hinterland and ports will particularly help increase the participation of Indian manufacturing in global production networks and global value chains.
- The project will also strengthen road safety improvement programs through advanced technologies for road monitoring and enforcement.
- In addition, the project will help improve the planning capacity of Tamil Nadu's Highways and Minor Ports Department.

4. Desertification and Land Degradation Atlas of India

The Union Environment Ministry has released the latest version of “Desertification and Land Degradation Atlas of India.

Desertification and Land Degradation Atlas

- It has been published by Space Application Centre, ISRO, Ahmedabad.
- The Atlas provides a state-wise area of degraded lands for the time frame 2018-19.
- It also provides the change analysis for the duration of 15 years, from 2003-05 to 2018-19.
- It would provide important baseline and temporal data and technical inputs.

Content of the atlas

- This Atlas presents state-wise desertification and land degradation status maps depicting land use, the process of degradation, and severity level.
- This was prepared using IRS Advanced Wide Field Sensor (AWiFS) data of 2011-13- and 2003-05-time frames in the GIS environment.
- The area under desertification/land degradation for both time frames and changes are reported state-wise as well as for the entire country.
- The outputs are helpful in prioritizing areas to be taken up for minimizing the impact of desertification and land degradation.

India and desertification

- Desertification and land degradation are major threats to agricultural productivity in our country.
- India hosted the 14th session of the Conference of Parties (COP 14) of the United Nations Convention to Combat Desertification (UNCCD) in September 2019.
- India is striving towards achieving the national commitments of Land Degradation Neutrality (LDN) and restoration of 26 million ha of degraded land by 2030.
- India has been at the forefront of bringing the issue of land degradation to the core of relevant international alliances for the protection and conservation of the environment.
- India has adopted a collective approach for making progress towards achieving the national commitments related to land restoration.

5. World Competitiveness Index 2021

Why in News

According to the **World Competitiveness Yearbook (WCY)**, **India** maintained **43rd** rank on the **annual World Competitiveness Index**.

- The World Competitiveness Index is a **comprehensive annual report** and worldwide reference point on the competitiveness of countries.

Key Points

- **About:**
 - **Published by:** WCY was **first published in 1989** and is compiled by the **Institute for Management Development (IMD)**.
 - In 2021, the IMD examined the impact of **Covid-19** on economies around the world.
 - It provides **extensive coverage of 64 economies**.
 - **Factors:** It measures the prosperity and competitiveness of countries by examining four factors (334 competitiveness criteria):
 - Economic performance
 - Government efficiency
 - Business efficiency
 - Infrastructure
- **Top Global Performers:**
 - **Europe:**
 - The European countries display regional strength in world competitiveness ranking with Switzerland (1st), Sweden (2nd), Denmark (3rd), the Netherlands (4th).
 - **Asia:**
 - The top-performing Asian economies are, in order, Singapore (5th), Hong Kong (7th), Taiwan (8th) and China (16th).
 - Singapore was 1st in the **2020 World Competitiveness Index**.
 - **Others:**
 - The **UAE and the USA remain in their same spots** as last year (9th and 10th, respectively).
- **India's Performance:**
 - **In Comparison to BRICS Nations:** Among the **BRICS nations**, India ranked second (43rd) after China (16th), followed by Russia (45th), Brazil (57th) and South Africa (62nd).

- **Performance on Four Factors:** Among the four indices used, **India's ranking in government efficiency increased** to 46 from 50 a year ago, while its **ranking in other parameters** such as economic performance (37th), business efficiency (32th) and infrastructure (49) **remained the same.**
- **Improvements in Government Efficiency:** Mostly due to relatively stable public finances. Despite difficulties brought by the pandemic, in 2020, the government deficit stayed at 7%. The Government also provided support and subsidies to the private companies.
- **India's Strengths:**
 - India's strengths lie in investments in telecoms (1st), mobile telephone costs (1st), ICT services exports (3rd), remuneration in services professions (4th) and terms of trade index (5th).
- **India's Weaknesses:**
 - India's performance is the worst in sub-indices such as broadband subscribers (64th), exposure to **particulate pollution** (64th), **human development index** (64th), **GDP per capita** (63rd) and **foreign currency reserves per capita** (62nd) among others.
- **Analysis:**
 - **Qualities of Top Performers:** The qualities such as **investment in innovation, digitalisation, welfare benefits, diversified economic activities, supportive public policy and leadership**, resulting in **social cohesion** have helped countries better manage the crisis and thus ranking higher in competitiveness.
 - **Addressed Unemployment:** Competitive economies succeeded in transitioning to a remote work routine while also allowing remote learning.
 - **Public Spending:** The effectiveness of key public spending, such as public finance, tax policy and business legislation, are seen to relieve the pressure on the economies hit by the Covid-19.
- **Recent Steps Taken by India to Increase its Competitiveness :**
 - The government has introduced the **Production-Linked Incentive (PLI) Scheme** in various sectors for enhancing India's manufacturing capabilities and exports.
 - The five pillars of '**Atmanirbhar Bharat Abhiyan (or Self-reliant India Mission)**' are - Economy, Infrastructure, System, Vibrant Demography and Demand.

Way Forward

- As Michael Porter has stated, a nation that ensures balance between economic and social progress can enhance its productivity, followed by creating competitiveness and thus, prosperity.

- Therefore, it is necessary to create an environment which not only pushes the businesses to compete successfully in local as well as international markets, but ensures that the average citizen's standard of living also improves.
- Governments need to provide an environment characterized by efficient infrastructures, institutions and policies that encourage sustainable value creation by the enterprises.

6. Changes in Cable Television Network Rules

Why in News

The central government issued a **notification** amending the **Cable Television Network Rules, 1994** thereby providing a **statutory mechanism for redressal of grievances/complaints** of citizens.

- These grievances/complaints are related to content broadcast by television channels in accordance with the provisions of the **Cable Television Network Act, 1995**.

Key Points

- **About the Notification:** The notification issues **Cable Television Networks (Amendment) Rules, 2021**.
 - It provides for a **three-level grievance redressal mechanism** – self-regulation by **broadcasters**, self-regulation by the **self-regulating bodies** of the broadcasters, and oversight by an Inter-Departmental Committee at the level of the **Union government**.
- **Significance Cable Television Networks (Amendment) Rules, 2021:**
 - Various **Self-regulatory bodies** like News Broadcasters Standards Authority (NBSA) and Broadcasting Content Complaints Council (BCCC) will **get legal recognition**.
 - **At present**, there is an **institutional mechanism** by way of an **Inter-Ministerial Committee** to address grievances of citizens relating to violation of the Programme/Advertising Codes under the Rules.
 - Various **broadcasters** have also developed their **internal self-regulatory mechanism** for addressing grievances.
 - There are **over 900 television channels** that have been granted permission by the Ministry of Information and Broadcasting (MIB).
 - The recent notification is significant as it paves the way for a strong **institutional system for redressing grievances** while

- placing **accountability and responsibility on the broadcasters** and their self-regulating bodies.
- This will bring the television's self-regulatory mechanism **at par with that being set-up for OTT players and digital news publishers**, as envisaged in the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**.
- **Cable Television Network Act, 1995:**
 - **Objective:** The Act aimed at **regulating content and operation** of cable networks. This Act regulates the '**haphazard mushrooming** of cable television networks'.
 - **Important Provisions:**
 - **Section 2:** Under the Act, district magistrates, sub-divisional magistrates and police commissioners are the '**authorised officers**' to ensure that the Programme Code is not breached.
 - **Section 3:** No person shall operate a cable television network unless he is registered as a cable operator under this Act.
 - **Section 4A:** It is obligatory for cable operators to transmit programmes of any channel in an encrypted form through a digital addressable system when the centre asks them to do so.
 - **Section 16:** Whoever contravenes any of the provisions of this Act shall be punishable.
 - **Section 19:** Authorised officer has power to prohibit transmission of certain programmes in public interest if it promotes, disharmony or feelings of enmity, hatred or ill-will between different religious, racial, linguistic or regional groups or castes or communities.
 - **Section 20:** Parliament has power to prohibit operation of cable television networks in public interest.

Prelims Practice Questions

1. Consider the following statements:

1. The heavy metals are released in the environment by natural sources only.
2. The heavy metals found in drinking water have beneficial effects on the human body.

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

Answer : D

Explanation

- The term heavy metal refers to any metallic chemical element that has a relatively high density ($> 5 \text{ g/cm}^3$) and is toxic or poisonous at low concentrations.
 - Examples of heavy metals include mercury (Hg), cadmium (Cd), arsenic (As), chromium (Cr), thallium (Tl), and lead (Pb)
- **Source of Heavy Metals:**
 - Heavy metals are introduced into the environment either by natural means or by human activities.
 - **Natural Sources:** Geographical phenomena like volcanic eruptions, weathering of rocks, leaching into rivers, lakes and oceans due to action of water.
 - **Anthropogenic Sources:** These metals are released into the water through anthropogenic activities such as mining, manufacturing, electroplating, electronics, discharge from auto exhaust, domestic waste, agricultural waste and fertilizer production. **Hence, statement 1 is not correct.**
- **Effect of Heavy Metals on Human:**
 - There are some essential heavy metals which the human body requires in trace amounts such as Cobalt, copper, zinc, and manganese but in the excessive amount, it can be detrimental to health.
 - The **heavy metals found in drinking water** such as lead, mercury, arsenic, and cadmium have **no beneficial effects on your body. Hence, statement 2 is not correct.**

- In fact, their accumulation inside the body can cause severe health problems.

2. The World Energy Transitions Outlook is brought out by:

- a. International Atomic Energy Agency
- b. International Renewable Energy Agency
- c. Intergovernmental Panel on Climate Change
- d. Intergovernmental Renewable Energy Organization

Answer: b

Explanation:

The World Energy Transitions Outlook is brought out by the International Renewable Energy Agency.

3. Consider the following statements:

1. The Members of Parliament Local Area Development Scheme (MPLADS) is a Central Sector Scheme.
2. The nominated members of Rajya Sabha are not entitled to use funds from the MPLAD scheme.

Which of the statements given above is/are correct?

- A 1 only
B 2 only
C Both 1 and 2
D Neither 1 nor 2

Answer : A

Explanation

- The **Members of Parliament Local Area Development Scheme (MPLADS)** is a **Central Sector Scheme** which was announced in December 1993. Hence, **statement 1 is correct.**
 - Initially, it came under the control of the Ministry of Rural Development. Later, in October 1994, it was transferred to the **Ministry of Statistics and Programme Implementation.**
- **Functioning:**

- Each year, MPs receive **Rs. 5 crore in two instalments of Rs. 2.5 crore each**. Funds under MPLADS are non-lapsable.
- Lok Sabha MPs have to **recommend the district authorities** projects in their Lok Sabha constituencies, while **Rajya Sabha MPs** have to spend it in the **state that has elected** them to the House.
- **Nominated Members** of both the Rajya Sabha and Lok Sabha can **recommend works anywhere in the country**. Hence, **statement 2 is not correct**.

4. Consider the following statements with respect to Development Finance Institutions:

1. Industrial Finance Corporation of India was the first DFI in India.
2. The Budget 2021-22 has provided for an initial amount of ₹20,000 crore for the DFIs.
3. DFIs do not accept deposits.

Which of the given statement/s is/are correct?

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

Answer: c

Explanation:

- IFCI – 1st DFI in India. Industrial Finance Corporation of India was established in 1948.
- The Budget 2021-22 has provided for an initial amount of ₹20,000 crore for the DFIs.
- DFIs do not accept deposits.
- The development finance institutions or development finance companies are organizations owned by the government or charitable institutions to provide funds for low-capital projects or where their borrowers are unable to get it from commercial lenders.

5. Consider the following statements:

1. Periyar River originates from Sivagiri hills of Western Ghats.
2. Cheruthoni and Perinjankutti are the tributaries of Periyar River.

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

Answer :C

Explanation

- The **Periyar River** is the longest river in the state of Kerala with a length of 244 km.
- It is also known as 'Lifeline of Kerala' as it is one of the few perennial rivers in the state.
 - A perennial river is a channel that has continuous flow in parts of its stream bed all year round.
- Periyar River originates from **Sivagiri hills of Western Ghats** and flows through the Periyar National Park. **Hence, statement 1 is correct.**
- The **main tributaries of Periyar** are Muthirapuzha, Mullayar, **Cheruthoni and Perinjankutti. Hence, statement 2 is correct.**

6. Mullaperiyar Dam dispute is between which of the following states?

1. Kerala
2. Andhra Pradesh
3. Karnataka
4. Tamil Nadu

Choose the correct option:

- a. 1, 2 and 3 only
- b. 2 and 3 only
- c. 1, 3 and 4 only
- d. 1 and 4 only

Answer: d

Explanation:

- The Mullaperiyar Dam is a masonry gravity dam on the Periyar River in the Indian state of Kerala.

- The dam is located in Kerala on the river Periyar, but is operated and maintained by Tamil Nadu state.
- The dispute between Kerala and Tamil Nadu states is because of the control and safety of the dam and the validity and fairness of the lease agreement. The dispute began in 1998 when Tamil Nadu wanted to raise the height of the water level and Kerala opposed it.

