NATIONAL MISSION FOR CLEAN GANGA (NMCG)

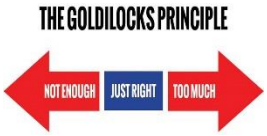
The National Mission for Clean Ganga (NMCG) recently signed a Memorandum of Common Purpose (MoCP) with the Mississippi River Cities and Towns Initiative (MRCTI), which represents 124 cities/towns situated along the banks of the Mississippi River, the United States.

About National Mission for Clean Ganga (NMCG):

- It is a registered **society under the Ministry of Jal Shakti,** Government of India, to take measures for **prevention, control and abatement of environmental pollution in the river Ganga** and to ensure continuous adequate flow of water so as to rejuvenate the river Ganga.
- It **acted as the implementation arm of the National Ganga River Basin Authority (NGRBA),** which was constituted under the provisions of the Environment (Protection) Act (EPA), 1986.
- **NGRBA has since been dissolved** with effect from 2016, **consequent to the constitution of the** National Council for Rejuvenation, Protection and Management of River Ganga (referred to as **National Ganga Council**).
- The **aims and objectives of NMCG** is to accomplish the mandate of the NGRBA:
- To **ensure effective abatement of pollution and rejuvenation of the river Ganga** by adopting a river basin approach to promote inter-sectoral co-ordination for comprehensive planning and management and
- To **maintain minimum ecological flows in the river Ganga** with the aim of ensuring water quality and environmentally sustainable development.
- The **Executive Committee** of NMCG has been **authorized to accord approval for all projects up to Rs. 1000 crores.**
- The **Director General** (DG) of NMCG **is an Additional Secretary in the Government of India.**

WHAT IS GOLDILOCKS EFFECT?

The RBI's growth and inflation forecasts indicate a Goldilocks Effect on the economy by the second quarter of the next fiscal year.



About Goldilocks Effect:

- The Goldilocks Effect, or the Goldilocks Principle, is **the premise that people are inclined to seek 'just the right' amount of something.**
- **People prefer something** that is **neither too extreme nor too moderate but** falls **within an optimal or desirable range**, fitting their specific needs or preferences.
- The concept is derived from the children's story of Goldilocks and the Three Bears, where Goldilocks preferred the porridge, chair and bed that were neither too hot nor too cold, too big nor too small, but just right.
- It has a place in several fields and disciplines. It **applies to elements of psychology, hard sciences, economics, marketing and engineering**, and each one has its own twist on how the principle is applied.

Goldilocks Pricing:

- It is one of the effect's more prominent applications. It's a psychological pricing strategy that rests **on the concepts of**
- **Product differentiation**
- **Comparative pricing**
- **Bracketing**
- **Product differentiation** is the practice of **distinguishing certain products from others.**
- Businesses can only leverage the Goldilocks Effect if they can differentiate their own products from one another.
- It ultimately informs a comparative pricing strategy involving three options. **One that's too high** for most, **one that's too low** for most, and **one that's just right.**
- When done right, the strategy all**ows a business to appeal to various parts of the market**-registering with premium buyers, standard consumers and discount seekers.

COUNCIL FOR THE INDIAN SCHOOL CERTIFICATE EXAMINATION (CISCE)

Council for the Indian School Certificate Examinations (CISCE) has cancelled the compartment tests for the Class 12 board exams 2024.

About Council for the Indian School Certificate Examination (CISCE):

- CISCE is a **privately held national-level board of school education** in India that **supervises and controls the Indian Certificate of Secondary Education (ICSE).**
- It was **established in 1958**. **Over 2,100 schools** in India and abroad are **affiliated to the CISCE.**
- It has been designed to **deliver an examination** in the course of general education t**hrough the medium of English**, in **accordance with the recommendations of the New Education Policy 1986.**
- CISCE **conducts three examinations**, namely, the Indian Certificate of Secondary Education (**ICSE –Class X**); The **Indian School Certificate (ISC - Class XII**) and the **Certificate in Vocational Education (CVE - Year 12).**
- The subject choices and syllabuses prescribed for these examinations are varied and aimed at nurturing the unique gifts of individual pupils.
- It **does not allow a private student to appear for the exam**, which has not been studying in ICSE affiliated school.
- The Council has been so **constituted as to secure suitable representation of: Government of India, State Governments/Union Territories** in which there are Schools affiliated to the Council, the **Inter-State Board for Anglo Indian Education**, the Association of Indian Universities, the Association of Heads of Anglo-Indian Schools, the Indian Public Schools' Conference, the Association of Schools for the ISC Examination and members co-opted by the Executive Committee of the Council.

SPENDING ON ADAPTATION TO CLIMATE CHANGE 5.6% OF GDP: INDIA PUTS ON RECORD

Why in the News?

- The Central government told the UN Framework for Climate Change Convention (UNFCCC) that **India has spent about Rs 13.35 lakh crore in 2021-22**, just over 5.5% of its GDP.

What is Climate Adaptation?

- The world is already experiencing changes in average temperature, shifts in the seasons, an increasing frequency of extreme weather events, and slow onset events.
- The faster the climate changes and the longer adaptation efforts are put off, the more difficult and expensive responding to climate change will be.
- **Adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects**.
- It refers to changes in processes, practices and structures to moderate potential damages or to benefit from opportunities associated with climate change.
- In simple terms, countries and communities need to develop adaptation solutions and implement actions to respond to current and future climate change impacts.
- Adaptation actions can take on many forms, depending on the unique context of a community, business, organization, country or region.
- **There is no 'one-size-fits-all-solution'**—adaptation can range from building flood defences, setting up early warning systems for cyclones, switching to drought-resistant crops, to redesigning communication systems, business operations and government policies.
- Many nations and communities are already taking steps to build resilient societies and economies.

TECHNOLOGY DEVELOPMENT FUND (TDF) SCHEME

Recently, the Union Raksha Rajya Mantri informed Lok Sabha that 16 defence technologies have been successfully developed/realised under the Technology Development Fund (TDF) scheme.

About Technology Development Fund (TDF) scheme:

- It is a flagship programme of **Ministry of Defence** executed by **Defence Research and Development Organisation** (DRDO) under 'Make in India' initiative.
- The main objectives of the scheme are:
- To provide **Grant in Aid to Indian industries**, including MSMEs and Start-ups, as well as academic and scientific institutions for the development of Defence and dual use technologies that are currently not available with the Indian defence Industry.
- To **engage with the private industries** especially MSMEs and Start-ups to bring in the culture of Design & Development of Military Technology and support them with Grant in Aid.
- To focus on **Research, Design & Development** of Niche technologies which are being developed for the first time in the country.
- To create a bridge amongst the Armed Forces, research organizations, academia and qualifying/certifying agencies with private sector entities.
- To support the **futuristic technologies** having a Proof of Concept and converting them into prototype.

Funding Support:

- The funding will be through provision of **grants to the Industry**.
- The project cost of **up to INR 10 Cr** will be considered for funding, subject to a maximum of 90% of the total project cost.
- Industry may work in collaboration with academia or research institutions.
- The work involvement of academia cannot exceed 40% of the total project cost.
- **Project Duration:** Maximum development period will be two years.

EUROPEAN UNION'S LANDMARK DEAL ON ARTIFICIAL INTELLIGENCE REGULATION

Why in the News?

- European Union policymakers agreed a provisional deal on landmark rules governing the use of artificial intelligence (AI).

Global Governance Stand on Artificial Intelligence:

- The rapidly evolving pace of Artificial Intelligence development has led to diverging global views on how to regulate these technologies.
- In May 2023, members of the European Parliament reached a preliminary deal on a new draft of the European Union's ambitious **Artificial Intelligence Act**.
    - The Act envisages establishing an EU-wide database of high-risk AI systems and setting parameters so that future technologies can be included if they meet the high-risk criteria.
- The **U.S. does not currently have comprehensive AI regulation** and has taken a fairly hands-off approach.
- On the other end of the spectrum, **China over the last year came out with some of the world's first nationally binding regulations** targeting specific types of algorithms and AI.
- It enacted a law to regulate recommendation algorithms with a focus on how they disseminate information.

India's Stand on Artificial Intelligence:

- Earlier, the Union Minister for Electronics and Information Technology said that the **government is not considering any law to regulate the growth of AI in India**.
- However, before G20 summit in September 2023, Indian govt indicated that it might regulate to AI.
- Officials said the upcoming Digital Personal Data Protection Bill 2022 will apply to AI developers who develop and facilitate AI technologies.
- As AI developers will be collecting and using massive amounts of data to train their algorithm to enhance the AI solution, they might be classified as data fiduciaries and will be held responsible for how personal data is used.

- PM Modi recently said India is looking to "**take a giant leap in AI to empower its citizens and is poised to be an active contributor to its evolution**".
- India is set to host the **Global Partnership on Artificial Intelligence** (GPAI) Summit 2023 in New Delhi from December 12-14.
- India is a co-founder of GPAI, which brings along 28 member countries and the EU as its members to guide the responsible development and use of AI.

EU AI Office:

- Under the Act, the EU will be able to monitor and sanction those who violate the law through a new body called the EU AI office that will be attached to the commission.
- The office will have the power to slap a fine worth seven percent of a company's turnover or 35 million euros, whichever is larger.

- The law will still need to be formally approved by member states and the EU parliament.

Way Ahead:

- The new regulations will be closely watched globally. They will affect not only major AI developers but other businesses that are expected to use the technology in areas such as education, health care and banking.
- The law sets a global benchmark for countries seeking to harness the potential benefits of the technology, while trying to protect against its possible risks, like automating jobs, spreading misinformation online and endangering national security.

NAVY PLANS TO GET UNDERSEA CHARIOTS, MADE IN INDIA, FOR SPECIAL OPERATIONS

Why in news?

- The Indian Navy is planning to acquire indigenously-made swimmer delivery vehicles — also known as underwater chariots and midget submarines.

- This is part of efforts to modernise and strengthen the capabilities of its Marine Commandos (MARCOS) for special undersea operations.

Marine Commandos (MARCOS)

- **About**
  - It is a special operations force of the Indian Navy that conducts operations in air, water, and land.
  - MARCOS was founded in February 1987 and is also known as the Marine Commando Force (MCF).
    - MARCOS are modelled after the US Navy SEALs and the Royal Marines.
- **Function**
  - MARCOS are trained to conduct the following operations:
    - Maritime and amphibious warfare
    - Counter-terrorism
    - Unconventional warfare
    - Rescue missions
    - Reconnaissance
    - Raids
    - Swift and stealthy response in denied territories

The chariots

- **About**
  - The chariots are highly specialised platforms used by almost all advanced navies in the world.
  - These are **self-propelled vehicles** which can be launched from ships or submarines, depending on their size and the roles they are to perform.
  - In World War II, manned human torpedoes were referred to as chariots.
  - These chariots come in very handy if the Navy has to operate in shallow waters.

ELECTRIC EEL

Recently, a research group from Nagoya University in Japan found electric eels can release enough electricity to genetically modify small fish larvae.

About Electric eel:

- The scientific name of this species is **Electrophorus Electricus** which is a fish that only lives in **freshwater areas.**
- They can release up to 860 volts, which is enough to run a machine.
- They emit a weak electric signal, which they use like radar to navigate, to **find a mate**, and **to find prey.**

Appearance:

- It has a slender, snake-like body and flattened head.
- It has three specialized electric organs—the main electrical organ, the **Hunter's organ and the Sachs' organ** which make up about 80 percent of this fish's body.
- It can deliver a shock because its nervous system contains a number of disc-shaped electrogenic (electricity-producing) cells called electrocytes.
- **Habitat:** They dwell **mainly on the muddy bottoms of rivers** and occasionally swamps, prefering deeply shaded areas.
- **Distribution:** Its range spans across Brazil, the Guianas, Suriname, Venezuela, Colombia, Ecuador and Peru.
- **Conservation status**
- **IUCN: Least concern**

What is Electroporation?

- Electroporation uses an electric field to create temporary pores in the cell membrane. This lets molecules, like DNA or proteins, enter the target cell.