



## Biological Research Regulatory Approval Portal

**For Prelims:** Government Policies & Interventions, Portal BioRRAP, GDP

**For Mains:** Governance, Government Policies & Interventions, Gross Domestic Product (GDP), Employment, India's Status Biological Fields, Startup Growth Scenario in India

### Why in News?

In keeping with the spirit of "**One Nation, One Portal**", the Union Minister recently launched a Single National Portal for Biotech researchers and Start-ups, i.e., **Biological Research Regulatory Approval Portal (BioRRAP)**.

- **Biotechnology** has fast emerged as an academic and livelihood avenue **for youngsters in India**.

### What is the Startup Growth Scenario in India?

- India is a **hotspot for startups**. In 2021 alone, Indian startups have raised **more than \$23 billion**, spread over 1,000+ deals, with 33 startups entering the coveted unicorn club. So far, the year 2022 has added 13 more startups to the **unicorn club**.
  - After the United States (US) and China, India has emerged as the **world's third-largest startup ecosystem**.
    - Currently, India is witnessing rapid growth in the number of startups. According to the **India Venture Capital Report 2021** published by Bain and Company, the number of cumulative start-ups has grown at a **CAGR** of 17% since 2012 and crossed 1,12,000.
- As of 2021, India's biotech industry clocks in about US\$ 12 billion in annual revenue.

### What is the Significance of Biological Research Regulatory Approval Portal?

- **A Gateway for Researchers:** The portal will serve as a gateway and will help researchers to see the stage of **approval of their applications** for regulatory clearances and to see preliminary information on all the research work being undertaken by the particular researcher and/or organization.
- **Transparency & Accountability:** This portal will strengthen interdepartmental synergies and bring accountability, transparency, and **efficacy in the functioning of agencies** regulating various aspects of biological research and issuing permission.
- **BioRRAP ID:** To provide more credibility and recognition to such biological research, the Government has developed a web system under which each research, requiring regulatory oversight, will be identified by a **unique ID** called "BioRRAP ID".
  - Using this BioRRAP Id, a further submission process to respective regulatory agencies has to be initiated based on the research application.
- **Ease of Doing Research:** This unique portal of **DBT (Direct Benefit Transfer)** is a step

towards **Ease of Doing Science and Scientific research and Ease of Start-ups in the Country.**

- There is also a need to link the applications submitted to various regulatory agencies for approval so that the status of the application may be seen **in one place.**
- **To Collect Information:** This portal will not only help in understanding scientific strength and expertise but also in the **formulation of enabling policies** to garner the fruits of scientific research.

## What is India's Status in Biological Fields Researches?

- India is **among the top 12 destinations** for biotechnology globally and the **3<sup>rd</sup> largest biotechnology destination** in the Asia Pacific region.
  - At present, the industry comprises over 2,700 biotech start-ups and more than 2,500 biotech companies are present in India.
- Other than biotechnology, biological work related to biodiversity, the latest methods of conservation and protection of flora and fauna, forest and wildlife, bio-survey, and bio-utilization of biological resources are also **gaining momentum in India** due to the effect of climate change on them.
  - Research in the various biological fields is **continuously expanding** its vista in India supported by grants from the various public and private sectors.
- India will be recognized as a **Global Bio-manufacturing Hub by 2025** and will figure among the top 5 countries of the world.
  - By 2025, the contribution of the Indian biotechnology industry in the global biotechnology market is **expected to grow to 19% from 3% in 2017.**
  - The Bio Economy's contribution to the **national GDP (Gross Domestic Product)** has also grown steadily in the past years.
    - While the Bio-Economy contributed to 1.7% of the GDP in 2017, this share has grown to 2.7% in 2020.
    - The Indian bioeconomy grew from US\$ 62.5 billion in 2019 to US\$ 70.2 billion in 2020 at a growth rate of 12.3%.
  - India will touch new heights after 25 years of Bio-economy journey in the Centenary year of **2047.**

## What is Bio Economy?

- The concept of Bioeconomy was started by USA, Canada, and **European Union (EU)** and Australia to boost the economy by **using bio-resources.**
- The term '**bioeconomy**' refers to the production of renewable biological resources and the conservation of these resources and waste streams into value added products, such as food, feed, bio-based products and bioenergy.

## Civil Services Examination, Previous Year's Questions (PYQs)

### Q. What does venture capital mean? (2014)

- (A) A short-term capital provided to industries
- (B) A long-term start-up capital provided to new entrepreneurs
- (C) Funds provided to industries at times of incurring losses
- (D) Funds provided for replacement and renovation of industries

**Ans: (B)**

**Exp:**

- Venture capital is a form of fund for a new or growing business. It usually comes from venture capital firms that specialize in building high-risk financial portfolios.
- With venture capital, the venture capital firm gives funding to the startup company in exchange for equity in the startup.
- The people who invest this money are called venture capitalists (VCs). Venture capital investment is also referred to as risk capital or patient risk capital, as it includes the risk of losing the money if the venture does not succeed and takes a medium to long term period for the investments to fructify.
- **Therefore, option B is the correct answer.**

[Source: PIB](#)

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## World Bee Day

**For Prelims:** World Bee Day, Beekeepers, Climate Change, Bee, FAO

**For Mains:** Doubling Farmers' Income, Sweet Revolution, Promoting Apiculture

### Why in News?

World Bee Day is celebrated annually on 20<sup>th</sup> May.

- Earlier, the **Khadi and Village Industries Commission (KVIC)** had launched the [country's first Mobile Honey Processing Van](#) at Village in Uttar Pradesh.

### What do we Know about World Bee Day?

- **About:**
  - The day marks the **birth anniversary of Anton Janša**, a pioneer of modern apiculture.
  - Anton Janša hailed from a **family of beekeepers in Slovenia**, where beekeeping is an important agricultural activity with a long-standing tradition.
    - Anton enrolled in the **first bee-keeping school in Europe** and worked full-time as a beekeeper.
    - His book 'Discussion on Bee-keeping' was also published in German.
- **Theme for 2022:**
  - Bee Engaged: Celebrating the diversity of bees and beekeeping systems.

### What is the Significance of Beekeeping?

- **Most Important Pollinators:**
  - Bees are **some of the most important pollinators, ensuring food and food security, sustainable agriculture, and biodiversity.**
- **Contribute to the Mitigation of Climate Change:**
  - Bees **significantly contribute to the mitigation of [climate change](#)** and the conservation of the environment.
  - In the long-term, the protection of bees and the beekeeping sector can help reduce poverty and hunger, as well as preserve a healthy environment and biodiversity.

- **Sustainable Agriculture and Creating Rural Jobs:**
  - Beekeeping is **also important in terms of sustainable agriculture and creating rural jobs.**
  - By pollinating, they **increase agricultural production, thus maintaining diversity and variety in the fields.**
  - In addition, **they provide millions of people with jobs** and are an important source of farmers' income.
- **Achieving India's Target of Doubling Farmers Income:**
  - As per [Food and Agricultural Organization](#) database, in 2017-18, **India ranked eighth in the world in terms of honey production** (64.9 thousand tonnes) while China stood first with a production level of 551 thousand tonnes.
  - Further, **beekeeping can be an important contributor in achieving the 2022 target** of doubling farmer incomes.

## What is the Status of the Apiculture in India?

- The globally apiculture market is **estimated to register a [Compounded Annual Growth Rate \(CAGR\) of 4.3% during the period 2020-25](#)**, with Asia-Pacific as the dominant producer.
- The Indian apiculture market size is expected to reach a value of Rs 33,128 million by 2024, expanding at a CAGR of nearly 12% by 2024.
- India is the sixth major natural honey exporting country.
  - During 2019-20, the recorded export of natural honey was 59,536.75 MT for Rs 633.82 crore. The major export destinations were the **USA, Saudi Arab, Canada, and Qatar.**
  - The demand for organic honey in the international market could be leveraged for promoting organic beekeeping guidelines.
- For propagating the sector, **the landscape for beekeeping and the species** could be expanded on a commercial scale.

## What are Related Initiatives?

- **'Sweet Revolution':**
  - It is an ambitious initiative of the Government of India for **promoting apiculture, popularly known as 'beekeeping'.**
  - To provide a booster shot to Sweet Revolution, the government launched the **National Beekeeping and Honey Mission in 2020** (under the Ministry of Agriculture and Farmers Welfare).
    - **National Beekeeping and Honey Mission** aims to **establish 5 big regional and 100 small honey** and other Bee Products testing laboratories.
    - Out of the total target, **3 world class state-of-the-art laboratories have been setup**, whereas 25 small laboratories are in the process of being set up.
- **Assistance for Setting up of Processing Units:**
  - India is also **providing assistance to the beekeepers for setting up of Processing Units.**
  - **More than 1.25 lakh metric tonnes of honey** is being produced in the country, out of which more than 60 thousand metric tonnes of natural honey is exported.
- **Adopting Scientific Techniques:**
  - In order to bring qualitative upgradation of domestic honey to attract the world market, the Government of India and the State Governments are making concerted efforts and focusing on capacity building of beekeepers for production of honey by adopting scientific techniques.

## What are the Highlights of Bee?

- There are almost **20,000 different species** of bees in the world.
- Bees live in colonies and in each colony, there are three types of bees, the queen bee, the worker bee, and the drone.
  - The worker and the queen bee both are females, but only the queen bee can reproduce. All drones are male.

- The worker bees clean the hive, collect pollen and nectar to feed the colony and take care of the offspring. The drone only mates with the queen bee.
- **India is home to four of the seven known bee species.**
  - Two of these are domesticated, **Apis cerana (oriental honey bee) and Apis mellifera (European honey bee)**, and the other two are wild, Apis dorsata (giant/rock honey bee) and Apis florea (dwarf honey bee).

## UPSC Civil Services Examination, Previous Year Questions

**Q. Consider the following kinds of organisms: (2012)**

1. Bat
2. Bee
3. Bird

**Which of the above is/are pollinating agent/agents?**

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

**Ans: (d)**

**Exp:**

- Pollination is the transfer of pollen from the male part of a plant to the female part of a plant, thus, enabling fertilisation and production of seeds, most often by an animal or by wind.
- Pollinating agents are animals such as insects, birds, bees and bats; water; wind; and even plants themselves, when self-pollination occurs within a closed flower. **Hence, 1, 2 and 3 are correct.**
- Pollination often occurs within a species. When pollination occurs between species, it can produce hybrid offsprings in nature and in plant breeding.

[Source: PIB](#)

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## Competition Commission of India (CCI)

**For Prelims:** Competition Commission of India(CCI), Competition Act 2002

**For Mains:** Issues and achievements of Competition Commission of India (CCI), Various types of Statutory bodies

**Why in News?**

Recently, Finance Minister participated in the 13<sup>th</sup> Annual Day commemoration of the Competition Commission of India (CCI).

- Finance Minister also inaugurated the regional office at Kolkata and launched an upgraded website of CCI.

## What is Competition Commission of India (CCI)?

- **About:**
  - Competition Commission of India (CCI) is a **statutory body** of the **Government of India** responsible for enforcing **the Competition Act, 2002**, it was duly constituted in March 2009.
  - The **Monopolies and Restrictive Trade Practices Act, 1969 (MRTP Act)** was repealed and replaced by the **Competition Act, 2002**, on the recommendations of the **Raghavan committee**.
- **Composition:**
  - The Commission consists of **one Chairperson and six Members** who shall be appointed by the Central Government.
  - The commission is a **quasi-judicial body** which gives opinions to statutory authorities and also deals with other cases. The Chairperson and other Members shall be whole-time Members.
- **Eligibility criteria of members of CCI:**
  - The Chairperson and every other Member shall be a person of ability, integrity and standing and who, has been, or is qualified to be a judge of a High Court, or, has special knowledge of, and professional experience of not less than fifteen years in international trade, economics, business, commerce, law, finance, accountancy, management, industry, public affairs, administration or in any other matter which, in the opinion of the Central Government, may be useful to the Commission.

## What is the Competition Act, 2002?

- The Competition Act was passed in 2002 and has been amended by the **Competition (Amendment) Act, 2007**. It follows the philosophy of modern competition laws.
  - The Act **prohibits anti-competitive agreements**, abuse of dominant position by enterprises and regulates combinations, which causes an appreciable adverse effect on competition within India.
  - In accordance with the provisions of the Amendment Act, **the Competition Commission of India** and the **Competition Appellate Tribunal** have been established.
  - The government replaced the Competition Appellate Tribunal (COMPAT) with the **National Company Law Appellate Tribunal (NCLAT)** in 2017.

## What are the Functions and Role of CCI?

- **To eliminate practices having adverse effects on competition**, protect the interests of consumers and ensure freedom of trade in the markets of India.
- **To give opinion on competition issues** on a reference received from a statutory authority
- **To undertake competition advocacy**, create public awareness and impart training on competition issues.
- **Consumer Welfare:** To make the markets work for the benefit and welfare of consumers.
- **Ensure fair and healthy competition in economic activities** in the country for faster and inclusive growth and development of the economy.
- **Implement competition policies** with an aim to effectuate the most efficient utilization of economic resources.
- **Effectively carry out competition advocacy** and spread the information on benefits of competition among all stakeholders to establish and nurture competition culture in the Indian economy.

## What are the Achievements of CCI till now?

- The Commission has **adjudicated more than 1,200 antitrust cases i.e., case disposal rate is 89 % in antitrust cases.**
- It has also **reviewed more than 900 mergers and acquisitions till date**, cleared most of them, **within a record average time of 30 days.**
- The Commission has also come up with several innovations like the **'Green Channel' provision for automated approval on combinations/transactions and** cleared more than 50 of such transactions.

## What are the Challenges?

- **Challenges Posed by Digitization:** As we didn't have a robust digital economy at the time of enactment of the Act (2002), CCI should understand the technological nuances of the new digital era.
- **Need For New Market Definition:** India's Commission needs to update its definition of market now. Since there are **no boundaries in the digital space, defining relevant markets has been a tough task for regulators** around the globe.
- **Threat From Cartelization:** There is a possibility of threat from cartelization. Since there is a global shortage of commodities due to the pandemic, and now, following **the war in Eastern Europe**, the supply chain has been adversely affected.
  - There is a need to look into these and ensure that there are no monopolistic/duopolistic tendencies leading to **price rises and supply side manipulations.**

## Way Forward

- With the advent of [Web 3.0](#), [AI](#), [IoT](#), [Blockchain](#) and other technological developments, and emergence of issues like **data protection and privacy, platform neutrality, deep discounting, killer acquisitions, etc, the need for a robust competition law**, attuned to meet the needs of present-day techno-legal world, is important for India, which enables a true level playing field for the digital market players.
  - CCI should understand the technological nuances of the new digital era and whether these markets are being fairly, effectively, and transparently used for the benefit of consumers.
- **FAQs** can become a permanent tool of advocacy which should be used to disseminate information on a ready-to-use basis.
  - This would strengthen CCI's position as a proactive and progressive regulator, and such guidance will help market players take preventive measures.

[Source: PIB](#)

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## Raja Ram Mohan Roy

**For Prelims:** Reforms by Raja Ram Mohan Roy

**For Mains:** Raja Ram Mohan Roy and his Contributions

## Why in News?

Recently, the Ministry of Culture has organized an inaugural Ceremony to commemorate [Raja Ram Mohan Roy](#) on his 250<sup>th</sup> Birth Anniversary.

- The inaugural ceremony was organized at the Raja Ram Mohan Roy Library Foundation, Salt Lake, Kolkata, and at Science City Auditorium, Kolkata.
- It is an year long celebration which will continue till next 22<sup>nd</sup> May.
- It was the 250<sup>th</sup> birth anniversary of Raja Ram Mohan Roy and the 50<sup>th</sup> foundation day of the Raja Ram Mohan Roy Library Foundation.
- The Ministry of Culture has inaugurated an **Iconic Statue of Raja Ram Mohan Roy at the Raja Ram Mohan Roy Library Foundation.**



## Who Was Raja Ram Mohan Roy?

- **About:**
  - Raja Ram Mohan Roy was the **father of Modern India's Renaissance** and a tireless social reformer who inaugurated the age of enlightenment and liberal reformist modernisation in India.
- **Life:**
  - Raja Ram Mohan Roy was born on 22<sup>nd</sup> May 1772 in Bengal. His early education included the **study of Persian and Arabic at Patna** where he read the Quran, the works of Sufi mystic poets and the Arabic translation of the works of Plato and Aristotle.
  - In Benaras, he studied Sanskrit and read Vedas and Upanishads.
  - From 1803 to 1814, he worked for East India Company as the personal diwan first of Woodforde and then of Digby.
  - In 1814, he resigned from his job and moved to Calcutta in order to devote his life to religious, social and political reforms.
  - In November 1830, he sailed for England to be present there to counteract the possible nullification of the Act banning Sati.
  - Ram Mohan Roy was given the title of 'Raja' by the titular Mughal Emperor of Delhi, Akbar II whose grievances the former was to present before the British king.
  - In his address, entitled 'Inaugurator of the Modern Age in India,' Tagore referred to Ram Mohan as 'a luminous star in the firmament of Indian history'.
- **Ideology:**
  - Ram Mohan Roy was greatly influenced by **western modern thought and stressed on rationalism and modern scientific approach.**
  - Ram Mohan Roy's **immediate problematique was the religious and social degeneration** of his native Bengal.
  - He believed that **religious orthodoxies have become causes of injury and detrimental to social life** and sources of trouble and bewilderment to the people, instead



of tending to the amelioration of the condition of society.

- Raja Ram Mohan Roy concluded that religious reform is both social reform and political modernisation.
- Ram Mohan believed that each sinner must make restitution for his sins and it is to be done through self-purification and repentance and not through sacrifices and rituals.
- He believed in **social equality of all human beings** and thus was a strong opposer of the caste system.
- Ram Mohan was **attracted to Islamic monotheism**. He said that monotheism is also the **fundamental message of Vedanta**.
  - His idea of a single, unitarian god was a corrective to the polytheism of orthodox Hinduism and to Christian trinitarianism. He believed that monotheism supported one universal model for humanity.
- Raja Ram Mohan Roy believed that unless women were freed from unhuman forms of oppression like illiteracy, child marriage, sati, purdah, Hindu society can not progress.
  - He characterised sati as the violation of every humane and social feeling and as symptomatic of the moral debasement of a race.

## What are the Contributions?

### ▪ Religious reforms:

- Raja Ram Mohan Roy's first published work **Tuhfat-ul-Muwahhiddin** (a gift to deists) published in 1803 exposed irrational religious beliefs and corrupt practices of the Hindus as the belief in revelations, prophets, miracles etc.
- In 1814, he founded Atmiya Sabha in Calcutta to campaign against idolatry, caste rigidities, meaningless rituals and other social ills.
- He criticized the ritualism of Christianity and rejected Christ as the incarnation of God. In **Precepts of Jesus** (1820), he tried to separate the moral and philosophical message of the New Testament, which he praised, from its miracle stories.

### ▪ Social reforms:

- Raja Ram Mohan Roy conceived reformist religious associations as instruments of social and political transformation.
  - He founded the Atmiya Sabha in 1814, the Calcutta Unitarian Association in 1821, and the Brahmo Sabha in 1828 which later became the Brahmo Samaj.
- He campaigned against the caste system, untouchability, superstitions and use of intoxicants.
- He was well known for his pioneering thought and action on the emancipation of women and especially on the abolition of sati and widow remarriage.
- He attacked child marriage, illiteracy of women and the degraded state of widows and demanded the right of inheritance and property for women.

### ▪ Educational reforms:

- Roy did much to disseminate the benefits of modern education to his countrymen. He supported David Hare's efforts to found the Hindu College in 1817, while Roy's English school taught mechanics and Voltaire's philosophy.
- In 1825, he established Vedanta college where courses in both Indian learning and Western social and physical sciences were offered.

### ▪ Economic and Political Reforms:

- **Civil liberties:** Roy was impressed and admired the British system of constitutional government for the civil liberties it gave to the people. He wanted to extend the benefits of that system of government to Indian people.
- **Press freedom:** Through his writings and activities, he supported the movement for free press in India.
  - When press censorship was relaxed by Lord Hastings in 1819, Ram Mohan found three journals- The Brahmanical Magazine (1821); The Bengali weekly, Samvad Kaumudi (1821); and the Persian weekly, Mirat-ul-Akbar.
- **Taxation reforms:** Roy condemned oppressive practices of Bengali zamindars and demanded fixation of minimum rents. He also demanded the abolition of taxes on tax-free lands.
  - He called for a reduction of export duties on Indian goods abroad and the abolition

- of the East India Company's trading rights.
- **Administrative reforms:** He demanded the Indianisation of superior services and separation of the executive from judiciary. He demanded equality between Indians and Europeans.

### Civil Services Examination, Previous Year's Questions (PYQs)

**Q. In collaboration with David Hare and Alexander Duff, who of the following established Hindu College at Calcutta? (2009)**

- (a) Henry Louis Vivian Derozio
- (b) Ishwar Chandra Vidyasagar
- (c) Keshab Chandra Sen
- (d) Raja Rammohan Roy

**Ans: (d)**

**Exp:**

- The Hindu College was the earliest institution of higher learning in Asia in terms of modern sense which was established on January 20, 1817 and the college was transformed into Presidency College in 1855, which was given the status of an independent university in 2010 as Presidency University.
- The college was set up by Raja Ram Mohan Roy, Radhakanta Deb, David Hare, Justice Sir Edward Hyde East, Baidyanath Mukhopadhyay and Rasamay Dutt.
- The junior section of Hindu College was renamed as Hindu School and the Mahapathsala wing was renamed as Presidency College in 1855.
- The girls were permitted to join the college in 1944 and since then the college turned into a co-educational institution. **Therefore, option (d) is the correct answer**

**Q. Which of the following statements is/are correct regarding Brahmo Samaj? (2012)**

1. It opposed idolatry.
2. It denied the need for a priestly class for interpreting the religious texts.
3. It popularized doctrine that the Vedas are infallible.

**Select the correct answer using the codes given below:**

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

**Ans: (b)**

**Exp:**

- In August 1828, Raja Ram Mohan Roy founded the Brahmo Sabha which was later renamed 'Brahmo Samaj' (The society of God) Objective of the Brahmo Samaj was the worship and adoration of the eternal, unsearchable, immutable God.
- It opposed idol worship and stayed away from the practice of priesthood and sacrifice. **Hence, statements 1 and 2 are correct.**
- The worship was performed through prayers, meditation, and readings from the Upanishads.
- Great emphasis was laid on "promotion of charity, morality, benevolence, and strengthening of the bonds of union between men of all religious persuasions and creeds".
- Arya Samaj, which was founded by Dayanand Saraswati, promoted values, and practices based on the belief in the infallible authority of the Vedas. Members of the Arya Samaj believe in one God and reject the worship of idols. Brahmo Samaj did not believe in the infallibility of the Vedas.

Hence, statement 3 is not correct.

[Source: PIB](#)

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## Central Advisory Board on Archaeology

### Why in News?

Recently, the Government has re-constituted the **Central Advisory Board on Archaeology (CABA)**.

### What is CABA?

- It has been constituted to **strengthen contacts between the [Archaeological Survey of India \(ASI\)](#) and those in the field of archaeological research.**
- The board will include **“five persons nominated in their personal capacities by the Government of India”** and former **Director-Generals of ASI.**
- The board will meet **once a year and its functions would include advising the Centre on “matters relating to archaeology”** referred to by its members.
- It will promote **closer contacts of the Archaeological Survey of India with Indian Universities** conducting Archaeological Research.
- It will promote the studies related to application of archaeological principles, training future Archaeologists, and closer association of **learned societies in India and of the State Governments with the activities of the ASI.**

### What is the Archaeological Survey of India?

- Archaeological Survey of India (ASI), under **the Ministry of Culture**, is the **premier organization for the archaeological research and protection of the cultural heritage** of the nation.
- It administers more than 3650 ancient monuments, archaeological sites and remains of national importance.
- Its activities **include carrying out surveys of antiquarian remains, exploration and excavation of archaeological sites, conservation and maintenance** of protected monuments etc.
- It was **founded in 1861 by Alexander Cunningham**- the first Director-General of ASI. Alexander Cunningham is also known as the **“Father of Indian Archaeology”**.

[Source: TH](#)

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## 7th Annual Meeting of NDB

### Why in News?

Recently, the Union Minister of Finance & Corporate Affairs and India's Governor for the **New Development Bank (NDB)** chaired the 7<sup>th</sup> Annual Meeting of Board of Governors of NDB (New

Development Bank).

- The meeting was also attended by Governors/Alternate Governors of Brazil, China, Russia, South Africa and the newly joined members Bangladesh and United Arab Emirates (UAE).
- Theme for the Annual Meeting was **“NDB: Optimising Development Impact”**.

## What are the Highlights of the Meeting?

- The Finance Minister (FM) underscored the **importance of multilateralism and the spirit of global cooperation for economic recovery**.
- In this regard FM acknowledged that the **NDB has successfully established itself as a reliable development partner** for [Emerging Market Economies](#).
- Highlighting that India is celebrating 75 years of Independence this year, the Union Finance Minister mentioned that **India’s economic growth in the current financial year has been robust and is estimated to be 8.9 %** which is the highest among all large economies.
  - This reflects **India’s strong resilience and speedy recovery**.
- The FM expressed **confidence that India will continue to achieve a high growth rate** in the current and next financial year.

## What is New Development Bank?

- **About:**
  - It is a **multilateral development bank jointly founded by the BRICS countries** (Brazil, Russia, India, China and South Africa) at the 6<sup>th</sup> BRICS Summit in Fortaleza, Brazil in 2014.
  - It was formed to support infrastructure and sustainable development efforts in BRICS and other underserved, emerging economies for faster development through innovation and cutting-edge technology.
  - It is **headquartered at Shanghai, China**.
  - In 2018, the NDB received observer status in the [United Nations General Assembly](#), establishing a firm basis for active and fruitful cooperation with the UN.
- **Objectives:**
  - Fostering the development of member countries.
  - Supporting economic growth.
  - Promoting competitiveness and facilitating job creation.
  - Building a knowledge sharing platform among developing countries.

## UPSC Civil Services Examination, Previous Year Questions

### Q. Consider the following statements: (2016)

1. New Development Bank has been set up by APEC.
2. The headquarters of New Development Bank is in Shanghai.

### 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

**Ans: (b)**

**Exp:**

- The New Development Bank (NDB) was formerly referred to as the BRICS Development Bank.
- It is a multilateral development bank established by the BRICS states (Brazil, Russia, India, China and South Africa). **Hence, statement 1 is not correct.**

- The bank is headquartered in Shanghai, China. **Hence, statement 2 is correct.**
- During the sixth BRICS Summit in Fortaleza (2014), the New Development Bank (NDB) was established by the Fortaleza Declaration to strengthen cooperation among BRICS and supplement the efforts of multilateral and regional financial institutions for global development.
- It had an initial authorized capital of US\$ 100 billion, with an initial subscribed capital of US\$ 50 billion, equally shared among founding members.

**Q. The 'Fortaleza Declaration', recently in the news, is related to the affairs of (2015)**

- (a) ASEAN
- (b) BRICS
- (c) OECD
- (d) WTO

**Ans: (b)**

**Exp:**

- Fortaleza Declaration was proclaimed in the 6<sup>th</sup> BRICS summit in 2014. It included:
  - Agreement for setting up the New Development Bank (NDB) with \$100 billion corpus, which will distribute the funds equally among all the BRICS nations for mobilizing resources for infrastructure and sustainable development projects in BRICS.
  - BRICS Contingent Reserve Arrangement (CRA) with an initial size of \$100 billion to tackle short-term liquidity demands.
- **Therefore, option (b) is the correct answer.**

**Source: PIB**

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## World Metrology Day 2022

### Why in News?

**CSIR-National Physical Laboratory**, New Delhi in association with **Metrology Society of India (MSI)** organized the World Metrology Day (May 20<sup>th</sup>).

- Metrology is **the science of measurement and its application.**

### What are the key highlights of the World Metrology Day?

- **About**
  - World Metrology Day is celebrated in commemoration of the anniversary of the signing of the **Metre Convention in 1875.**
  - This treaty provides the basis for a worldwide coherent measurement system.
  - World Metrology Day recognizes and celebrates the contribution of all the people that work in intergovernmental and national metrology organizations and institutes throughout the year.
- **Theme**
  - Theme - **"Metrology in the Digital Era".**
  - This theme was chosen because **digital technology is revolutionizing our community and** is one of the most exciting trends in society today.

- The theme was announced jointly by the [International Bureau of Weights and Measures \(BIPM\)](#) and the **International Organisation of Legal Metrology (OIML)**.

## What is International Bureau of Weights and Measures (BIPM)?

- The **signing of the Metre Convention in 1875** created the **BIPM** and for the first time formalized international cooperation in metrology.
- The Convention established the BIPM and laid the foundations for worldwide uniformity of measurement.
- The BIPM is the hub of a worldwide network of national metrology institutes (NMIs) which continue to realize and disseminate the chain of traceability to the **International System of Unit (SI)** into national accredited laboratories and industry.

## What is International Organisation of Legal Metrology (OIML)?

- In 1955 the **OIML** was established as **an Intergovernmental Treaty Organization** in order to promote the global harmonization of legal metrology procedures with the Bureau International de Métrologie Légale (BIML) as the Secretariat and Headquarters of the OIML.
- The OIML has developed a worldwide technical structure whose primary aim is to harmonize the regulations and metrological controls applied by the national metrological services, or related organizations.

## What is CSIR-National Physical Laboratory?

- CSIR-National Physical Laboratory (NPL-India) is mandated to be **India's "National Metrology Institute" (NMI)** by the act of Parliament and is the custodian of "National Standards" with a responsibility of the dissemination of measurements to the needs of the Country.
- It maintains standards of SI units in India and calibrates the national standards of weights and measures.

[Source:PIB](#)

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## Maya's Pit Viper

### Why in News?

Recently, a new venomous green snake named **Trimeresurus mayaae** or **Maya's Pit viper** was discovered from **Umroi Military station in Ri-Bhoi district of Meghalaya**.

### What are the Key characteristics of Pit Viper?

- **About Maya's Pit viper**
  - The snake measures about 750 mm in length
  - It looked very similar to Pope's Pit Viper but the colour of the eyes was different.
  - This snake and the Pope's Pit Viper have very different hemepenis, the copulatory organ.



- According to a herpetologist, this new species was relatively common in Meghalaya, Mizoram and even in Guwahati.
- **About Pit Viper**
  - **Pit viper**, any species of viper (subfamily Crotalinae) that has, in addition to two movable fangs, a heat-sensitive pit organ between each eye and nostril which together help it accurately aim its strike at its warm-blooded prey.
  - Pit vipers are found from deserts to rainforests.
  - They may be terrestrial, arboreal, or aquatic. Some species lay eggs; others produce live young.
  - The venomous pit vipers species includes hump-nosed pit viper, Mangrove pit viper and Malabar Pit Viper.
  - Russell's Viper and Saw-scaled Viper are two most venomous vipers species found in India and member of big four poisonous and deadliest snakes in India.
  - These snake species are responsible for the majority of [snake bites](#) in India.
- **Significance**
  - In a country where around 1.2 million people have lost their lives owing to snakebite and many more have lost their limbs in the last two decades; a discovery of a new venomous snake means a lot in the context of public health.
  - **Venom is a complex protein**, mostly typical to a species and thus unravelling a new species will help understanding its venom and its impact on human life.

### Civil Services Examination, Previous Year's Questions (PYQs)

**Q. King Cobra is the only snake that makes its own nest. Why does it make its nest? (2010)**

- (a) It is snake-eater and the nest helps attract other snakes
- (b) It is a viviparous snake and needs a nest to give birth to its offspring
- (c) It is an oviparous snake and lays its eggs in the nest and guards the nest until they are hatched
- (d) It is large, cold blooded animal and needs a nest to hibernate in the cold season

**Ans: (c)**

**Exp:**

- King cobras are venomous snakes that are found in South and Southeast Asia. They can grow up to 18 feet long which makes it the longest venomous snake in the world. They are threatened by habitat destruction and have been listed as vulnerable in the IUCN Red List since 2010.
- Being an oviparous (who lays eggs) reptile, it makes nests to lay eggs and guard them. Therefore, option (c) is the correct answer.

**Source: TH**