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**SPECIAL
SUPPLEMENT**

**Current Affairs Compendium
for Prelims 2021**



**Current Affairs
To The Point
Target Mains
Academic Vitamins
Learning Through Maps**

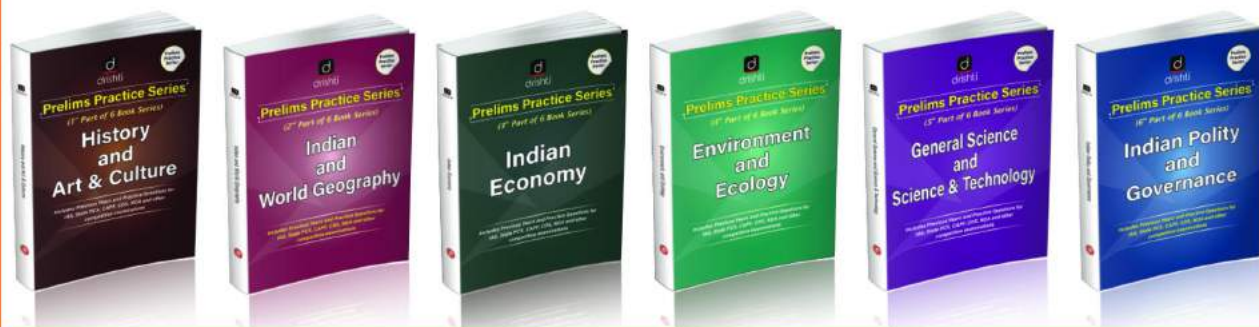
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THIS MAGAZINE IS A RESULT OF TEAM
COLLABORATION. WE EXPRESS OUR GRATITUDE
TO ALL OUR TEAM MEMBERS. APART FROM THE
GIVEN NAMES, SEVERAL FREELANCE WRITERS
HAVE ALSO MADE IMPORTANT CONTRIBUTIONS.**DEAR ASPIRANTS,**

The country is again reeling under the immense pressure created by the second wave of COVID-19. The second wave is found to be even more contagious and infectious. Almost all the populous states and cities are facing a burdened healthcare infrastructure. These are very hard times and one needs to be positive to cope with the situation. This is more so because negativity breeds panic which is the source of crisis. It has been found that a majority of COVID-19 cases can be cured at home but the panic creates pressure on the healthcare infrastructure as the demand outstrips the supply. Thus, one needs to be optimistic and act with reason, not compulsion. The quote, "You don't have to control your thoughts, you just have to stop letting them control you," mandates the positive approach that one is ought to keep in all circumstances.

Hard times need harder people to win over it. Those who show their vigour and strength, both physical as well as mental, and remain patient during such times, somehow have an upperhand. This holds equally true for the competitive examinations. Presently, the date of UPSC CSE 2021 Prelims is 27th June. It is still around 2 months away and its deferment will depend on the prevailing conditions. From an aspirant's perspective, one needs to continue the preparation keeping in mind the remaining time. This shall continue by keeping a good care of health.

With this perspective, we bring this edition of Drishti Current Affairs Today. It comprises a compendium of last one year's current affairs curated for the needs of the upcoming prelims. The other monthly current affairs coverage remains as usual.

We look forward to your feedback and suggestions.

With Best Wishes

(Dr. Vikas Divyakirti)

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Polity & Governance

The Juvenile Justice Amendment Bill, 2021

Recently, the Lok Sabha passed the **Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021** that seeks to strengthen and streamline the provisions for protection and adoption of children.

- The Bill amends the **Juvenile Justice (Care and Protection of Children) Act, 2015** and contains **provisions related to children in conflict with law and children in need of care and protection.**

Key Points

■ Need of the Amendment:

- The **National Commission for Protection of Child Rights (NCPCR)** audit of **Child Care Institutions (CCIs)** in 2020, 90% of which are run by NGOs, found that 39% CCIs were not registered, even after the 2015 amendment was brought in.
- It also found that less than 20% CCIs, especially for girls, had not been set up in some states, 26% child welfare officers were not there.
- Moreover, three-fifths have **no toilets**, one-tenth have **no drinking water** and 15% homes don't have provisions of separate beds, no diet plans.
- Rehabilitation of children is not a priority for childcare homes and children are reportedly kept in such institutions to get funds.

■ Key Amendments Proposed by the Bill:

- **Serious offences:** Serious offences will also include offences for which maximum punishment is imprisonment of more than seven years, and minimum punishment is not prescribed or is of less than seven years.
 - ◆ Serious offences are those for which the punishment under the Indian Penal Code or any other law for the time being is **imprisonment between three and seven years.**
 - ◆ Juvenile Justice Board inquires about a child who is accused of a serious offence.
- **Non-cognizable Offences:**
 - ◆ The present Act provides that an offence which is punishable with imprisonment between

three to seven years to be cognizable (where arrest is allowed without warrant) and non-bailable.

- ◆ The Bill amends this to provide that **such offences will be non-cognizable.**
- **Adoption:** Presently, the **adoption order issued by the court** establishes that the child belongs to the adoptive parents. The Bill provides that instead of the court, the **District Magistrate (including Additional District Magistrate) will issue** such adoption orders.
- **Appeals:** The Bill provides that any person aggrieved by an adoption order passed by the District Magistrate **may file an appeal before the Divisional Commissioner**, within 30 days from the date of passage of such order.
 - ◆ Such appeals should be disposed within four weeks from the date of filing of the appeal.
- **Additional Functions of the District Magistrate:** These include: (i) supervising the District Child Protection Unit, and (ii) conducting a quarterly review of the functioning of the **Child Welfare Committee.**
- **Designated Court:** The Bill proposes that all offences under the earlier Act be tried in children's court.
- **Child Welfare Committees (CWCs):** It provides that a person will **not eligible** to be a member of the CWC if he/she
 - ◆ has any record of **violation of human rights** or child rights,
 - ◆ has been **convicted of an offence** involving moral turpitude,
 - ◆ has been removed or dismissed from service of the central government, or any state government, or a government undertaking,
 - ◆ is part of the management of a child care institution in a district.
- **Removal of Members:** The appointment of any member of the committee shall be terminated by the state government after an inquiry if they fail

Nation & States

Shifting Health to the Concurrent List

The **Fifteenth Finance Commission** has suggested that **health should be shifted to the Concurrent list** under the Constitution. Presently, 'Health' is under the **State List**.

- The Commission also pitched for a **Developmental Finance Institution (DFI)** dedicated to healthcare investments.

Key Points

■ Arguments for Shifting 'Health' to the Concurrent List:

- **Centre with Greater Flexibility:** Bringing health into the Concurrent list would give the **Centre greater flexibility to enact regulatory changes** and **reinforce the obligation** of all stakeholders towards providing better healthcare.
- **Rationalisation and Streamlining of the Multiple Acts:** There is a multiplicity of Acts, rules and regulations, and mushrooming institutions, yet the regulation of the sector is far from adequate.
 - ◆ With the health in the concurrent list, uniformity of acts can be ensured.
- **Centre Expertise to States:** The Central government is also **technically better equipped** to come up with health schemes because it has the assistance of **multiple research bodies and departments** dedicated to the management of public health.
 - ◆ States on the other hand do not have the technical expertise to independently design comprehensive public health policies.

■ Arguments Against Shifting 'Health' to the Concurrent List:

- **Right to Health:** It is neither necessary nor sufficient to guarantee the provision of accessible, affordable and adequate healthcare for all.
 - ◆ Besides, the **right to health** is, arguably, already provided for via the Constitution's **Article 21** that guarantees protection of life and liberty.

- **Challenges Federal Structure:** Shifting ever more subjects from the states to the Centre would erode India's federal nature and impair efficiency by abandoning the **principle of subsidiarity**, which holds that any task should be left to the level of government best placed to do it.

- ◆ **Trust Cooperative Federalism:** The centre must direct its energies to design policy that would help states deliver on their constitutional mandate to provide adequate, accessible and affordable healthcare for all.

- **More Burden With Centre:** The Centre has onerous responsibilities of its own, for which it struggles to find resources. Taking more functions would help neither the states nor the Centre discharges their constitutional obligations.

- **Encourage States:** The Centre **devolves 41%** of the taxes it collects to the states. The Centre should encourage the states to do what they are supposed to do, while the Centre optimises the use of its own resources, focusing on its obligations.

- ◆ Health being a state subject does not preclude the Centre from offering constructive support.
- ◆ The NITI Aayog's Health Index, financial assistance through the insurance-based programme Ayushman Bharat, improved regulatory environment for healthcare providers and medical education are examples of such support that can nudge states in the right direction.

■ Developmental Finance Institution (DFI) for Health Care:

- A health sector-specific DFI is much needed on the same lines as that of DFIs for other sectors like **National Bank for Agriculture and Rural Development -NABARD (agriculture)**, **National Housing Bank- NHB (Housing)** and **Tourism Finance Corporation of India Ltd. - TFCI (tourism)**.
- Such a **DFI would increase health care access in tier-2 and tier-3 cities** and also come with **technical assistance** that ensures proper usage of funds.

Economic Scenario

Market Infrastructure Institutions

The Securities & Exchange Board of India (SEBI) has asked Market Infrastructure Institutions (MIIs) to begin operations from disaster recovery sites within 45 minutes of disruption to critical systems, including trading.

Key Points

■ SEBI's Latest Directive:

● New Framework for MIIs:

- ◆ SEBI has come out with a new framework for **Business Continuity Plan (BCP)** and **Disaster Recovery (DR)** of **Market Infrastructure Institutions (MIIs)** - stock exchanges, clearing corporations and depositories.
- ◆ Business Continuity (BC) and Disaster Recovery (DR) are closely related practices that **support an organization's ability to remain operational after an adverse event.**

● Guidelines:

- ◆ In the event of **disruption of any one or more of the 'critical systems'**, the **MII** would, **within 30 minutes** of the incident, **declare that incident as 'disaster'.**
- ◆ **Critical systems for an exchange or clearing corporation** would include **trading, risk management, collateral management, clearing and settlement and index computation.**
- ◆ **Critical systems' for a depository** shall include **systems supporting the settlement process and inter-depository transfer systems.**
- ◆ MIIs have been directed **to move to disaster recovery sites within 45 minutes** of declaring an incident a 'disaster'.
- ◆ A **disaster recovery site** is a place that a company can temporarily relocate to following a security breach or natural disaster.
- ◆ It ensures that **a company can continue operations until it becomes safe to resume work at its usual location** or a new permanent location.

- ◆ **Mobile- and cloud-based disaster recovery sites** are becoming increasingly popular.
- ◆ **The new guidelines should be implemented within 90 days.**

■ Market Infrastructure Institutions (MIIs):

- **Stock exchanges, depositories and clearing corporations** are collectively referred to as securities Market Infrastructure Institutions (MIIs).
- According to the **Bimal Jalan Committee (2010)**, these institutions are systemically important for the country's financial development and serve as the infrastructure necessary for the securities market.
- The **stock exchange** in India serves as a **market where financial instruments like stocks, bonds and commodities are traded.**
- **Depositories** may be organizations, banks, or institutions that hold securities and **assist in the trading of securities.**
- A **clearing corporation** is an **organisation/entity affiliated with a stock exchange** whose primary objective is to oversee the handling of confirmation, settlement, and delivery of transactions.

SEBI

- The Securities and Exchange Board of India was established on 12th April 1992 in accordance with the provisions of the Securities and Exchange Board of India Act, 1992.
- **Major Function:**
 - To protect the interests of investors in securities.
 - To regulate the securities market.

NSE

- The National Stock Exchange of India Limited (NSE) is India's largest financial market.
- Incorporated in 1992, the NSE has developed into a sophisticated, electronic market, which ranked fourth in the world by equity trading volume.
 - NSE was the first exchange in India to provide modern, fully automated electronic trading.
 - The NSE is the largest private wide-area network in India.
- The NIFTY 50 is the flagship index on the National Stock Exchange of India Ltd. (NSE). The Index tracks the behaviour of a portfolio of blue-chip companies, the largest and most liquid Indian securities. It includes 50 of the approximately 1600 companies listed on the NSE.

International Relations

17th BIMSTEC Ministerial Meeting

Recently, the External Affairs Minister of India participated in the **17th Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) Ministerial Meeting**.

- The meeting, **chaired by Sri Lanka**, was held in virtual mode.

Key Points

■ India's Stand at the Meeting:

● India's Commitment:

- ◆ To further **build the momentum of regional cooperation** under the **BIMSTEC framework** and make the organization stronger, vibrant, more effective and result-oriented.

● Progress:

- ◆ **Highlighted progress** achieved in sectors where India is the Lead Country viz Counter-Terrorism & Trans-national Crime, Transport & Communication, Tourism, and Environmental & Disaster management and other activities.

● Importance of Connectivity:

- ◆ **Robust connectivity is an essential prerequisite for the economic integration** of the region with smooth cross-border movement of people and goods.

■ The outcome of the Meeting:

- The meeting endorsed the **BIMSTEC Master Plan for Transport Connectivity** for adoption at the next BIMSTEC Summit, which will be held in Sri Lanka.
 - ◆ **India's northeastern states form a key part of the master plan**, with several road and river links passing through the region.
- Called for early **adoption of the BIMSTEC Charter**.
- The meeting also endorsed three MoUs/agreements relating to **the convention on Mutual Legal Assistance in Criminal matters, cooperation between diplomatic and training academies and establishment of the BIMSTEC Technology Transfer Facility in Colombo (Sri Lanka)**.

- Took note that the **BIMSTEC Centre for Weather and Climate**, being **hosted in India**, is fully functional with state of the art facilities to provide Disaster Early Warnings.

■ Concern:

- Cohesion among the members has been difficult to achieve mainly because of the **Rohingya refugee crisis** which created **bitterness between Myanmar and Bangladesh**.
- This affected the working of the organisation to some extent as it could not develop a common charter.

BIMSTEC

■ About:

- The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a **regional organization**.
- It comprises **seven countries**. Five of these seven countries- **India, Nepal, Sri Lanka, Bhutan and Bangladesh**— are from South Asia while the remaining two, **Thailand and Myanmar**, are from Southeast Asia.
- The group remained dormant for many years till it was revived a few years ago as an alternative to the **South Asian Association for Regional Cooperation (SAARC)**, which despite having the potential, has not been able to move forward due to friction between India and Pakistan.
- With a focus on intra-regional cooperation, the BIMSTEC has also **formed a platform with the SAARC and the Association of Southeast Asian Nations (ASEAN)** member countries.
- Currently, the BIMSTEC is **involved in 15 sectors** including trade, technology, agriculture, tourism, fisheries, energy and climate change among others, for sectoral cooperation.
 - ◆ In 1997, it started with just six sectors and later expanded to the remaining nine sectors in 2008.
- **Secretariat:** Dhaka, Bangladesh.

■ Objectives:

- Creating an **enabling environment for the rapid economic development** of the sub-region.
- Encouraging the spirit of **equality and partnership**.
- Promoting active **collaboration and mutual assistance** in the areas of common interests of the member countries.
- Accelerating **support for each other** in the fields of education, science, and technology, etc.

Environment & Ecology

Reducing Risk of Zoonosis in Food Production

The **World Health Organization (WHO)**, **World Organization for Animal Health** and the **United Nations Environment Programme** have laid down **fresh guidelines** for governments **to reduce the risk of transmission of zoonotic pathogens to humans** in food production and marketing chains.

- **Covid-19** has brought new attention to this threat, given the magnitude of its consequences.

Key Points

■ Zoonosis:

- A **zoonosis** is an infectious disease that jumps from a non-human animal to humans.
- Zoonotic pathogens may be bacterial, viral or parasitic.
- They can spread to humans through direct contact or through food, water and the environment.

■ Concern:

- Animals, particularly **wild animals**, are the source of **more than 70%** of all emerging infectious diseases in humans, many of which are caused by **novel viruses**.
- Most emerging infectious diseases – such as **Lassa fever**, **Marburg hemorrhagic fever**, **Nipah viral infections** and other viral diseases – have wildlife origins.
- Significant **problems can arise when traditional food markets allow the sale and slaughter of live animals**, especially wild animals, which cannot be properly assessed for potential risks – in areas open to the public.
 - ◆ Such environments provide the opportunity for animal viruses, including coronaviruses, to amplify themselves and transmit to new hosts, including humans.

■ WHO Guidelines:

- Emergency **regulations to suspend live wild animal sales in traditional food markets**.
- **Conducting risk assessments** for developing regulations to control the risks of transmission of

zoonotic microorganisms from **farmed wild animals and caught wild animals**.

- **Ensuring** that food inspectors are **adequately trained** to ensure that businesses comply with regulations to protect **consumers' health and are held accountable**.
- Strengthening **surveillance systems for zoonotic pathogens**.

Indian Scenario

■ Zoonotic Diseases:

- India is **among the top geographical hotspots** where zoonotic diseases are a major public health issue causing a high burden of morbidity and mortality.
- **Major public health zoonotic diseases in India** include Rabies, Brucellosis, Toxoplasmosis, Cysticercosis, Echinococcosis, Japanese Encephalitis (JE), Plague, Leptospirosis, Scrub typhus, Nipah, Trypanosomiasis, Kyasanur forest disease (KFD) and Crimean-Congo haemorrhagic fever (CCHF).

■ Challenges:

- **Large human population** and its frequent interactions with animals.
- **Poverty:** This leads to increased dependence on animal rearing as a means of livelihood. The intimate human-animal contact puts them at risk for this category of diseases.
- **Unawareness:** Large part of the population remains unaware of the basic hygiene routine to be followed.
- **Antimicrobial Resistance (AMR):** AMR occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death.
- **Lack of proper vaccination programmes**, poor sero-surveillance and lack of diagnostic facilities make the preventive and precautionary approach more difficult.

Science & Technology

National Supercomputing Mission

The **second phase of the National Supercomputing Mission (NSM) will be completed by September 2021**, taking India's total computational capacity to **16 Petaflops**.

Key Points

■ About the National Supercomputing Mission (NSM):

- **Launch:** NSM was announced in 2015, with an aim to connect national academic and R&D institutions with a grid of more than 70 high-performance computing facilities at an estimated cost of ₹4,500 crores over the period of seven years by 2022.
 - ◆ It supports the government's vision of 'Digital India' and 'Make in India'.
- **Implementation:** NSM is jointly steered by the Ministry of Electronics and IT (MeitY) and Department of Science and Technology (DST - Ministry of Science and Technology) and implemented by the Centre for Development of Advanced Computing (C-DAC), Pune and the Indian Institute of Science (IISc), Bengaluru.
- **Features:**
 - ◆ It is also an effort to improve the number of supercomputers owned by India.
 - ◆ These supercomputers will also be networked on the National Supercomputing grid over the National Knowledge Network (NKN). The NKN connects academic institutions and R&D labs over a high-speed network.
 - ◆ Under NSM, the long-term plan is to build a strong base of 20,000 skilled persons over the next five years who will be equipped to handle the complexities of supercomputers.

■ Progress of NSM:

- In the first phase, PARAM Shivay, PARAM Shakti, PARAM Brahma, PARAM Yukti and PARAM Sanganak were deployed at IIT (BHU), IIT Kharagpur, Indian Institute of Science Education and Research, Pune, and Jawaharlal Nehru Centre for Advanced Research.

- Recently, PARAM-Siddhi AI, has been ranked 63rd in the Top 500 list of most powerful supercomputers in the world. It was developed under the NSM.

■ Recent Development:

- In October 2020, C-DAC had inked MoUs with IITs along with IISc, National Agri-Food Biotechnology Institute and NIT, Tiruchirapalli — where a High Power Computing (HPC) system in each institute is currently being installed.
- So far, over 4,500 people have been trained in HPC and further training in Artificial Intelligence will be held at special NSM nodal centres established at four IITs — Kharagpur, Madras, Goa and Palakkad.

■ Challenges:

- The NSM envisages setting up a network of 70 high-performance computing facilities in the country but skewed funding for the mission during the initial years slowed down the overall pace of building supercomputers.
- Only 16.67% of the total budget of ₹4,500 crore, was utilised during the first four-and-a-half years for execution of the mission.

- **Global Scenario:** Globally, China has the maximum number of supercomputers and maintains the top position in the world, followed by the US, Japan, France, Germany, Netherlands, Ireland and the United Kingdom.

HGCO19: mRNA Vaccine Candidate

India's mRNA-based Covid-19 vaccine candidate - HGCO19-has received additional government funding for its clinical studies.

- This funding has been awarded under the 'Mission Covid Suraksha'.

Key Points

■ HGCO19:

- The novel mRNA vaccine candidate, HGCO19 has been developed by Pune-based biotechnology company Gennova Biopharmaceuticals Ltd. in collaboration with HDT Biotech Corporation, USA.

History, Art & Culture

Jyotirao Phule

The '**Tika Utsav (vaccination festival)**', which started on the **birth anniversary of Mahatma Jyotirao Phule** (11th April) will continue till the birth anniversary of **Babasaheb Ambedkar** on 14th April 2021.

- The aim of the four day festival is to vaccinate as many people as possible for the priority groups and zero wastage of **Covid-19** vaccine.

Key Points

■ Brief Profile:

- **Birth:** Phule was born on **11th April, 1827** in present-day Maharashtra and **belonged to the Mali caste of gardeners and vegetable farmers.**
- **Ideology:** His Ideology was based on: **Liberty; Egalitarianism; Socialism.**
 - ◆ Phule was **influenced by Thomas Paine's book titled The Rights of Man** and believed that the only solution to combat the social evils was the **enlightenment of women and members of the lower castes.**
- **Major Publications:** Tritiya Ratna (1855); Powada: Chatrapati Shivajiraje Bhosle Yancha (1869); Gulamgiri (1873), Shetkarayacha Aasud (1881).
- **Related Association:** Phule along with his followers formed **Satyashodhak Samaj in 1848** which meant '**Seekers of Truth**' in order to attain equal social and economic benefits for the lower castes in Maharashtra.
- **Municipal Council Member:** He was appointed commissioner to the Poona municipality and served in the position until 1883.
- **Title of Mahatma:** He was bestowed with the title of Mahatma on 11th May, 1888 **by a Maharashtrian social activist Vithalrao Krishnaji Vandekar.**

■ Social Reformer:

- In 1848, he taught his wife (**Savitribai**) how to read and write, after which the couple **opened the first indigenously run school for girls** in Pune where they both taught.
 - ◆ He was a **believer in gender equality** and he exemplified his beliefs by involving his wife in all his social reform activities.

- Jyotiba realised the pathetic conditions of widows and established an ashram for young widows and eventually became an advocate of the idea of **Widow Remarriage.**
- Jyotirao **attacked the orthodox Brahmins and other upper castes** and termed them as "hypocrites".
- In 1868, Jyotirao **constructed a common bathing tank** outside his house to exhibit his embracing attitude towards all human beings and wished to dine with everyone, regardless of their caste.
 - ◆ He started awareness campaigns that ultimately inspired the likes of **Dr. B.R. Ambedkar** and **Mahatma Gandhi**, stalwarts who undertook major initiatives against caste discrimination later.
- It is believed by many that **it was Phule who first used the term 'Dalit' for the depiction of oppressed masses** often placed outside the 'varna system'.
 - ◆ He **worked for abolishment of untouchability and caste system** in Maharashtra.
- **Death:** 28th November, 1890. His memorial is built in Phule Wada, Pune, Maharashtra.

B R Ambedkar: 130th Birth Anniversary

The nation celebrated the **130th birth anniversary of B R Ambedkar** on 14th April 2021.

- Dr. Ambedkar was a **social reformer, jurist, economist, author, polyglot** (knowing or using several languages) orator, a **scholar** and **thinker of comparative religions.**

Key Points

- **Birth:** Babasaheb Dr. Bhimrao Ambedkar was born in **1891 in Mhow, Central Province** (now Madhya Pradesh).
- **Brief Profile:**
 - He is known as the **Father of the Indian Constitution** and was **India's first Law Minister.**
 - He was the **Chairman of the Drafting Committee** for the new Constitution.
 - He was a **well-known statesman who fought for the rights of the Dalits** and other socially backward classes.

Social Issues

Anamaya: Tribal Health Collaborative

Recently, the **Ministry of Tribal Affairs** has launched **Tribal Health Collaborative (THC) 'Anamaya'**.

- In 2018, an expert committee released a **comprehensive report on tribal health** in India which highlighted the issues and concerns of tribal health.

Key Points

■ About:

- It is an initiative **bringing together** governments, philanthropists, national and international foundations, **Non-Governmental Organizations (NGOs)/Community Based Organizations (CBOs)** to **end all preventable deaths among the tribal communities of India**.
- It will **converge efforts of various Government agencies and organisations** to enhance the health and nutrition status of the tribal communities of India.

■ Aim:

- To **build a sustainable, high-performing health ecosystem** to address the key health challenges faced by the tribal population of India.

■ Stakeholders:

- It is a multi-stakeholder initiative of the **Ministry of Tribal Affairs** supported by **Piramal Foundation** and **Bill and Melinda Gates Foundation (BMGF)**.
 - ◆ **Piramal Foundation** is the philanthropic arm of Piramal Group. The foundation undertakes projects under the four broad areas – **healthcare, education, livelihood creation and youth empowerment**.

■ Operation:

- It will **begin its operations with 50 tribal, Aspirational Districts** (with more than 20% **Scheduled Tribe** population) across 6 high tribal population states.
- Over a **10-year period**, the work of the THC will be **extended to 177 tribal Districts** as recognised by the Ministry of Tribal Affairs.

■ Other Initiatives Related to the Tribal Communities:

- Programme for Capacity Building of Scheduled Tribe (ST) Representatives in Local Self Governments:
 - ◆ It is aimed at empowering tribal **Panchayati Raj Institution (PRI)** representatives by enhancing their decision making capabilities at local government level.
- **1000 Springs Initiative:**
 - ◆ The **1000 Springs Initiative** aims at improving access to safe and adequate water for the tribal communities living in difficult and inaccessible parts of rural areas in the country.
 - ◆ The initiative will help in harnessing the potential of perennial springs' water to address natural scarcity of water in tribal areas.
- **Tribal Health Cell:**
 - ◆ A 'Tribal Health Cell' is being set up in the **Ministry of Tribal Affairs**.
 - ◆ It will help central ministries and state governments to **facilitate and strengthen primary health care systems and invest in tribal health research**.

MANAS Mobile App

Recently, the government of India launched a mobile app, **MANAS (Mental Health and Normalcy Augmentation System)** to **promote mental wellbeing across age groups**.

- MANAS was endorsed as a national program by the **Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC)**.
 - **PM-STIAC:** It is an overarching Council that **facilitates the Principal Scientific Adviser's Office** to **assess the status in specific science and technology domains**, comprehend challenges in hand, formulate specific interventions, develop a futuristic roadmap and advise the Prime Minister accordingly.



DID YOU KNOW?

Danube Sturgeon

- According to a report released by the **World Wildlife Fund (WWF)**, illegal sale of **Danube Sturgeon**, one of the **most endangered species** in the world, is rampant in the lower Danube (River) region, especially in Bulgaria, Romania, Serbia and Ukraine.
- Sturgeons have **existed since the time of dinosaurs**, for about **200 million years**. Some of the species can grow up to **eight metre in length** and **live more than a century**.
- They are called '**living fossils**' because their appearance has altered very little over the years.
- **Living Fossil** is an organism that has **remained unchanged from earlier geologic times** and whose close relatives are usually extinct.
- Other than Sturgeons, **Horseshoe crab** and ginkgo trees are examples of living fossils.
- Because the sturgeons live for so many years, mature late and spawn with long intervals, they take a long time to recover from environmental and human pressures, according to WWF. This makes them **great indicators for the health of the river and other ecological parameters**.
- Danube sturgeons live mostly in the **Black Sea**, migrating up the Danube and other major rivers to spawn.
- **Protection Status: IUCN Red list:** There are **6 species of sturgeon in the Danube River**. Five of them are now listed as **critically endangered**. **CITES: Appendix-II**.

Baikal-GVD Telescope

- **Russian scientists** have launched **one of the world's biggest underwater neutrino telescopes** called the **Baikal-GVD (Gigaton Volume Detector)** in the waters of **Lake Baikal**, the world's deepest lake situated in **Siberia**.

- It will **study in detail the elusive fundamental particles called neutrinos** and to possibly determine their sources.
- It is **one of the three largest neutrino detectors in the world** along with the **IceCube at the South Pole** and **ANTARES in the Mediterranean Sea**.
- GVD is **designed to detect high-energy neutrinos** that may have come from the Earth's core, or could have been produced during nuclear reactions in the Sun.

Asteroid Apophis

- Recently, the **National Aeronautics and Space Administration (NASA)** has ruled out the possibility of the dreaded **asteroid Apophis** causing any damage to the Earth for the next 100 years.
- Apophis is a **near-Earth asteroid** with a relatively **large size** (about 335 meters wide).
- Named after the ancient **Egyptian god of chaos and darkness**, it was **discovered in 2004**, after which NASA had said that it was one of the asteroids that posed the greatest threat to Earth.
- Recently, the asteroid flew past Earth on **5th March 2021**, coming **within 17 million km of our planet**. During this approach, scientists used radar observations to study in detail the asteroid's orbit around the sun.

NASA's Ingenuity Mars Helicopter

- Recently, NASA's miniature **robot helicopter Ingenuity** performed a successful takeoff and landing on **Mars**. It was the **first powered, controlled flight on another planet**.
- The **first powered flight on Earth** was achieved by the **Wright brothers in 1903** in Kitty Hawk, North Carolina.
- Ingenuity is the **first helicopter to fly on Mars**. It was carried by **NASA's rover called Perseverance** that was launched in July 2020.
- It will help collect samples from the surface from locations where the rover cannot reach.

ACADEMIC VITAMINS

The draft Environment Impact Assessment notification, 2020 (EIA 2020) has caused a stir in civil society and amidst people threatened by forcible land acquisition and displacement in the name of ‘national development’.

- The new notification will help in smooth functioning of private industries and corporations by removing bureaucratic hurdles.
- Due to its pro business nature, the notification was widely criticized by civil societies or environment organisations.
- The trend towards increasingly moulding state policy in favour of business has a longer history and can be seen clearly in the growth of the neo-liberal state in India since the late 1980s and early 1990s.
- The neo-liberal turn, even as the discourse of development continues to wield a powerful moral force in a country of the global South such as India, is accompanied by an ever closer association between development and the interests of capital.

- There has been widespread reporting on the changes introduced by EIA 2020 to the 2006 EIA notification.
- It excludes a significant number of projects (classified as “B2” under EIA 2020) from requiring public consultations or preparation of an EIA report, presumably on account of their smaller size or “lesser” impact.
- Such projects do not need to be placed before an expert appraisal committee, but merely scrutinised based on an Environment Management Plan, to be prepared by private consultants hired by the project proponents themselves.
- This has been termed as Prior Environmental Permission (prior EP). This is to distinguish it from Prior Environmental Clearance (prior EC) that requires conducting public hearings and constituting an expert

- EIA 2020 reduces the notice period for response to the draft EIA report given to affected people and interested persons from 30 days to 20 days.
 - It makes provisions for *post facto* clearance of projects that began without the requisite clearance or permission.
- It strips agencies from citizens to file complaints and sets in place rules that only allow for complaints filed by official authorities or the project proponents themselves, to be taken cognisance of. It monetises violations such that on payment of a fine, the violation is undone.
- This fast pace of approving clearances and paving a smooth way for businesses to thrive, grow and expand is not a coincidence, neither an anomaly.
 - Instead, it is part of improving the “Ease of Doing Business” (EoDB) index propounded by the World Bank. From the 142nd rank (out of 190 countries) in 2014, India has jumped 79 positions to the 63rd rank in 2019 .
- The EIA 2020 can be understood as a further step in the institutionalisation and legalisation of processes of capital accumulation already underway.

- The neo-liberal state draws a natural and already assumed relationship between business ventures and the project of “development”, a project that continues to wield significant moral force in a developing country as India.
- All businesses create employment, require one or another form of infrastructure depending on the nature of business initiative, and earn profit and therefore, generate revenue.
 - Thus, these three elements are seen as important constituent elements of development, and hence, the correlation between establishment of new



GIST OF MAJOR ARTICLES FROM THE APRIL 2021 ISSUE

Water Security

India is facing many challenges in the water sector due to rising population over the years and increasing water demand.

Key points

- Water scarcity is already visible with the current population size of 1.3 billion which is projected to be increased to 1.6 billion by 2050.
- The water cycle is interrupted by rising population and climate change, which is a cause of concern.
- According to the Composite Water Management Index, 2018, by 2030 the country's water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people which will lead to a 6% loss in India's GDP.

Measures to solve water crisis

- India has made considerable progress especially in SDG 6: Clean water and sanitation by constructing over 11 crore toilets to become open defecation free (ODF) in five years through Swachh Bharat Abhiyan launched in 2014.
- The Namami Gange flagship programme was launched with the twin objective of effective abatement of pollution, conservation and rejuvenation of the National River Ganga.
- The National Ganga Council is chaired by Hon'ble PM and is working towards this goal by adopting a river basin approach to promote inter-sectoral coordination for comprehensive planning and management and maintain minimum ecological flows of the river Ganga to ensure water quality.
- The government is planning to update the 2012 version of National Water Policy and set up a National Bureau of Water Use Efficiency to bring a paradigm shift in water management.
- Jal Shakti Abhiyan was launched to make water conservation a Jan Andolan (people's movement) through asset creation and extensive communication.

- Atal Bhujal Yojana was launched with the purpose to improve groundwater management in seven states of India - Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.

Conclusion

India has overcome many challenges and that much is being done towards ensuring water security and strengthening water sector governance. It is high time to realise water's true multidimensional value for future survival and build a sustainable world.

Water Governance

Water is fundamental to life and it is limited in nature. Indiscriminate use of water led to the helm of the water crisis and imbalanced water governance.

Water governance issues

- About 78% of water utilised goes for agriculture, 6% water is utilised in the domestic sector and 8% in industries and 8% for other use.
- Given the above context, many issues for water governance arise.
 - Inadequate water quantity makes people's lives miserable and which is to be addressed to ensure water availability.
 - Improving the low water use efficiency in irrigation and industry because a drop of water saved is a drop added to the ecosystem.
 - Pollution of water bodies has to be tackled especially that of rivers.
 - Water has to be reused and recycled.

Approach

- The creation of Jal Shakti Ministry to give impetus to integrated management of water resources in India with a special focus on the demand side and supply side management has been seen as a paradigm shift in water governance.



GIST OF MAJOR ARTICLES FROM THE APRIL 2021 ISSUE

Nurturing India's Rich Cultural Heritage

India with its glorious past has bequeathed a remarkable variety of monuments and sites spread all across the length and breadth of the country.

About heritage and its relevance

- There are 38 UNESCO World Heritage Sites in India, of which 30 are cultural sites, seven are natural and one mixed site.
- Heritage is just not the brick and mortar but the culture and people who live around every day.
- There is history related to the place, culture, way of life, artisanship and economy developed based on the structure.
- They are not just reflectors of the past, but opportunities to generate employment and income in the present and future through heritage tourism.

Heritage structure and the rural economy

- There are various heritage structures with overwhelming cultural and historical significance in the rural hinterlands lying untapped and unattended.
- Government of India, in its budget 2020-21, has proposed five archaeological sites namely, Rakhigarhi (Haryana), Hastinapur (Uttar Pradesh), Shivsagar (Assam), Dholavira (Gujarat) and Adichanallur (Tamil Nadu) to be developed as iconic sites with on-site Museums.
 - **Rakhigarhi:** The site of a pre-Indus Valley Civilisation settlement, dating back to about 6500 BCE village is located in Hisar District in Haryana.
 - **Dholavira:** A site of ruins of ancient Indus Valley Civilisation is located near the Dholavira village in Gujarat.
 - **Adichanallur:** It is one of the oldest early Iron-Age cemeteries to exist in South Asia i.e. in a small village in Tamil Nadu.
- Ten Buddhist sites particularly major Ashokan edicts (Rock and Pillar), for example, 5 rock edicts - Girnar, Sopara, Dhauili, Jaugada, Sannati, Yerragudi - and five

pillar edicts, namely Kalsi, Delhi, Vaishali, Rampurva and Lauriya can be developed in a circuit manner.

- Similarly, reviving the lost traditional gardens, for example, the royal gardens of Bundelkhand can be a boost to the local economy.

Policy recommendations

- An overarching management plan is required to revive the heritage structures with creating a National Archaeological Database at the outset.
- Following the guidelines of the National Conservation policy, conservation works result in utilisation of over 70% of project costs for crafts people wages.
- The Policy also acclaims available traditional building materials, practices and skills as an integral part of the conservation process.
- The 'Adopt a Heritage' project under the Government of India aims to develop the heritage sites/monuments, making them tourist-friendly and enhancing the tourism potential.
- Under the 'Hunar se Rozgar Tak' programme of the Government of India, training can be imparted to the rural youth belonging to the economically weaker strata of the society to become tourist escorts, event facilitators, security guards, tour assistants, transfer assistants and office assistants.
- Projects can involve participation of the local community in reviewing design, maintenance etc. The posts of multi-tasking staff required for duties in monuments and gardens may be filled up through outsourcing by engaging local persons who feel more connected with the monuments located in their home state.

Conclusion

Rural community based programmes should be adopted on a regional basis where heritage structure helps in providing livelihood and employment generation. States like Tamil Nadu, Karnataka, Rajasthan where heritage tourism is the main factor behind State economy could be revalued and enhanced.



GIST OF MAJOR ARTICLES FROM 31 MARCH AND 15 APRIL ISSUES

MGNREGA and Water Conservation

The Mahatma Gandhi National Rural Employment Guarantee Act has shown what it can achieve by putting water conservation at its core.

Key points

- In a country where labour is the only capital for at least 50% of the workforce, the Act guarantees, through a legal framework, at least 100 days of waged employment a year to every household in rural India.
- This has made MGNREGA a much sought-after initiative for sustenance ever since it was implemented in 2006.
- MGNREGA is more than just a generator of employment opportunities. It also legally ties labour deployment with creation of productive assets - such as structures to harvest or conserve water, farm ponds and irrigation channels - to contribute to the overall development of the village.
- The programme mandates that at least 60% of the works undertaken must be related to land and water conservation.
- The legal requirement makes MGNREGA stand out from other welfare and poverty alleviation programmes.

Water conservation

- The 2018 Composite Water Management Index, developed by the government think-tank NITI Aayog, notes that water demand in the country will exceed supply by 2030.
- The 5th Minor Irrigation Census (the latest one, referring to the year 2013-14) said that there were just 21.7 million minor irrigation structures in the country.
 - Almost 95% of these use groundwater. But 60% of them are in disuse due to lack of water availability, indicating fast depletion of groundwater.

- The structures under MGNREGA aim to fix this decline by creating potential for water conservation and recharge of the aquifers.

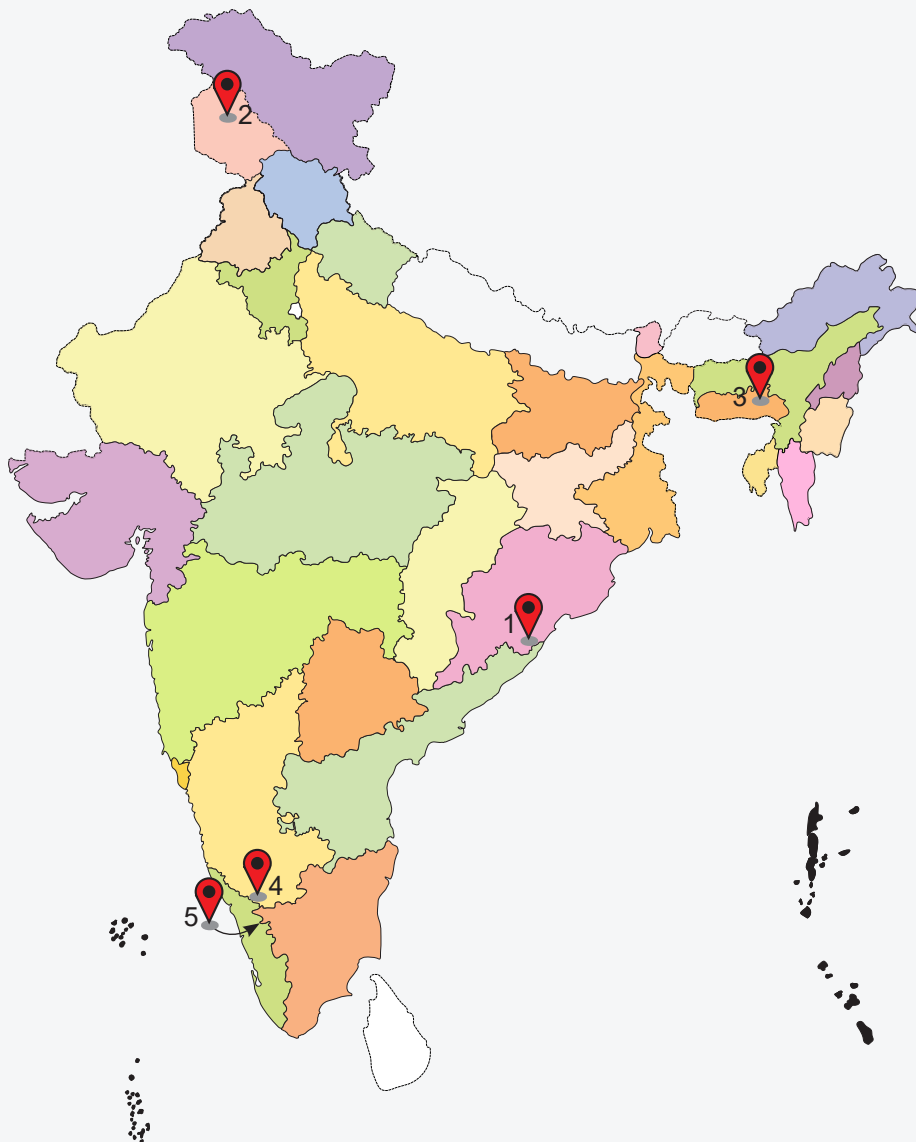
Some examples of changes by MGNREGA

- **Women well diggers:**
 - Kerala's second-largest river Bharathapuzha has already turned into a trickle in most parts of Palakkad, the state's traditional rice bowl to which the river is a lifeline.
 - To conserve the river, women well diggers under MGNREGA came into play. They dig along rain water harvesting structures to compensate for loss of groundwater.
- **Check dam:**
 - The residents of Himmatpura village in Jalaun district realised the importance of water conservation in 2005, when the village built a check dam on a nearby stream at the insistence of non-profit Parmarth Samaj Seva Sanstha.
 - But later on in 2014, it was defunct due to siltation. So, the panchayat decided to revive the dam. It was the village's first community intervention under MGNREGA.
 - For two years, the residents worked to restore the stream and repaired the dam. Today, the dam is the reason the three dug wells in the village have enough water to meet the drinking needs of 80% of the families.
- **Saline solution:**
 - Due to Tsunami in 2004, Nagapattinam district of Tamil Nadu lost its fertile land on the coast of river Cauvery and turned into saline soil and groundwater.
 - After this havoc, many people migrated or left the country but many decided to stay back when the MGNREGA in 2006 was launched.
 - Many tasks like rainwater storage in the pond reduced the salinity of the water. Construction of



LEARNING

MAP-1

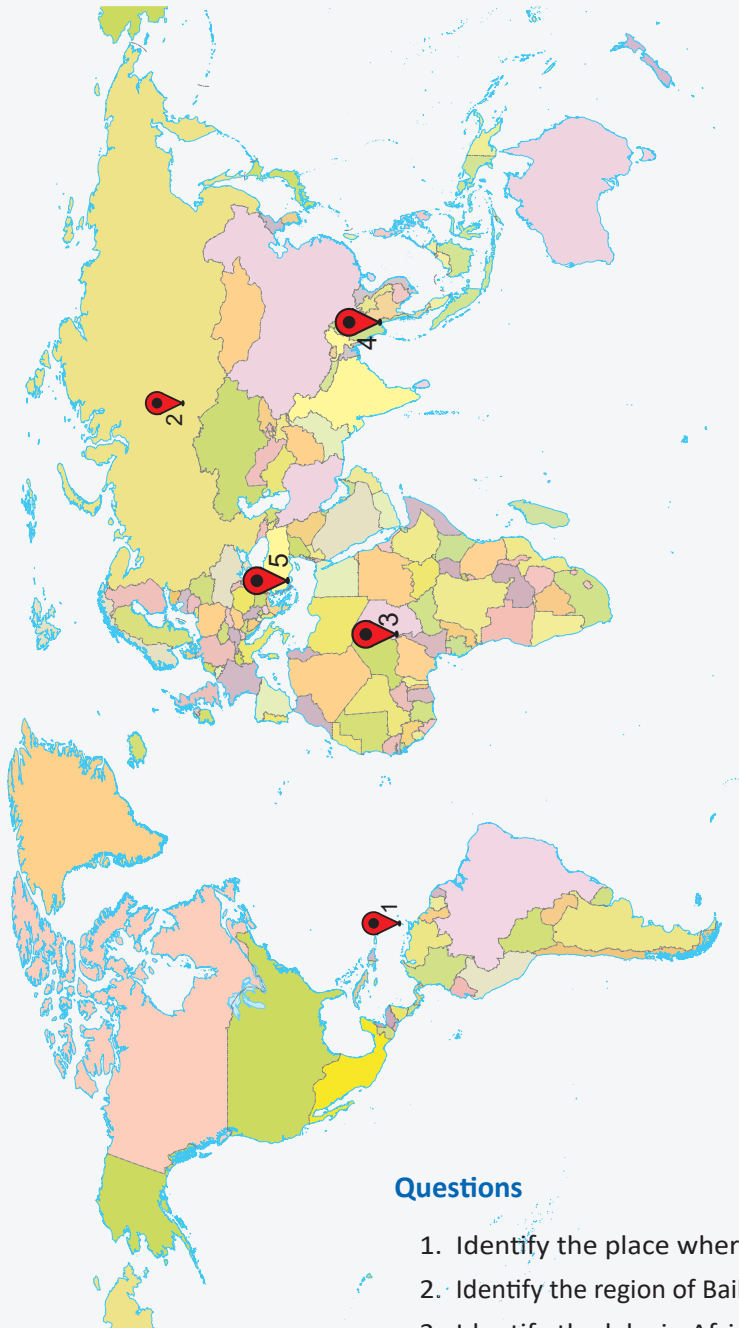


Questions

1. Identify Odisha's proposed second biosphere reserve.
2. Identify the mountain where the famous Tulip Garden is located.
3. Identify the state which has yielded India's first bamboo-dwelling bat with sticky disks.
4. Identify the state which has started 'Project RE-HAB' to mitigate human-elephant conflict.
5. Identify the state where Tholpavakkoothu shadow puppet play is practiced.

(Answers : Refer to Page No. 112)

THROUGH MAPS



Questions

1. Identify the place where La Soufriere volcano erupted recently.
2. Identify the region of Baikal Gigaton Volume Detector.
3. Identify the lake in Africa which has shrunk by 90%.
4. Identify the country associated with Karen rebels.
5. Identify the Turkish lake which hides secrets about Mars.

(Answers : Refer to Page No. 112)



ESSAY WRITING

COMPETITION

“A drop of ink may make a million think.”

- PAPER-I (250 Marks, UPSC CS Main Examination): “Essay: Candidates may be required to write essays on multiple topics. They will be expected to keep closely to the subject of the essay to arrange their ideas in orderly fashion and to write concisely. Credit will be given for effective and exact expression.” That is what the UPSC says about the Essay paper in the CSE notification. Through an essay, the commission wants to know if you will make the right civil servant who has balance of judgement, variety and depth of interest, logical exposition and other such bureaucratic qualities.
- Keeping this in mind, we present a forum where you are asked to practice your writing skills by writing essays on the given topics. The topics are decided keeping in view the thematic trends in CS (Mains) examination.
- If that is not all, the best essays shall be rewarded and published. We’ll judge the essay based upon four parameters viz. Structure of the essay, Content, Flow and Language.
- The prize details are as follows:

First Prize: 6 Months Subscription

Second Prize: 4 Months Subscription

Third Prize: 2 Months Subscription

Essay Writing Competition—61

Topic:

‘Glory is fleeting, but obscurity is forever.’

Terms and Conditions—

1. The essay shall be of length between 1000-1200 words.
2. It should be neatly written or printed on A4 sheets.
3. Only one entry per participant is allowed.
4. Entries are to be sent by Registered/speed post only on following address: EXECUTIVE EDITOR, DRISHTI CURRENT AFFAIRS TODAY, 641, FIRST FLOOR, DR. MUKHERJEE NAGAR, DELHI-110009. Please mention ‘For Essay Competition’ in capital letters on the envelope.
5. Remember to submit your personal details on the form printed on this page after neatly tearing it off the marked pointers. Submissions without this form shall not be entertained.
6. Your essay must reach the given address before **20th May, 2021**. Entries reaching us after the given date will not be accepted.
7. Essays should be original and not plagiarized or copied except for properly quoted references. Prior published or awarded essays will not be accepted.
8. All rights related to the results of the competition are secure with ‘Drishti Current Affairs Today’. The winners shall be announced in the subsequent issue of the magazine and the winners shall be contacted by email and telephone.
9. Copyrights of the rewarded essays will lie with the magazine which may be used in any way by ‘Drishti Publications’.



Form for Essay Competition-61

(Kindly cut and attach this form along with your essay. Use original form and not photocopy.)

Name of participant: Mobile no.

Address:

Pin code: Email ID:



TO THE POINT

Designed to hit the bull's eye: Point wise, short, crisp material in an easy-to-understand format.

Biofuels

India's energy policy priorities reflect the need to move towards more sustainable sources of energy while also ensuring energy security. Shift towards biofuels can help attain these objectives.

About biofuels

- Any hydrocarbon fuel that is produced from an organic matter (living or once living material) in a short period of time (days, weeks, or a few months) is considered a biofuel.
- Biofuels - also known as "drop-in" fuels - can serve as petroleum substitutes in existing refineries, tanks, pipelines, pumps, vehicles, and smaller engines.
- These fuels are usually blended with petroleum fuels (gasoline and distillate/diesel fuel and heating oil), but they can also be used on their own.
- Liquid biofuels such as bioethanol and biodiesel are by far the most widely adopted types of biofuels for transport purposes. Using ethanol or biodiesel reduces the consumption of gasoline and diesel fuel made from crude oil.

Biofuel types

- Depending on the raw material (feedstock) and conversion technology used, biofuels can be distinguished as first-, second-, third-, and fourth-generation biofuels.
- First generation biofuels, also known as conventional biofuels, are made from sugar, starch or vegetable oil. These are produced through processes, like fermentation, distillation and transesterification.
- The second generation biofuels are produced from non-food crops or portions of food crops that are not edible and considered as wastes, e.g. stems, husks, wood chips, and fruit skins and peeling.
- Third generation biofuels use specially engineered crops such as algae as the energy source. These algae are grown and harvested to extract oil within them.

- In the production of fourth generation biofuels, crops that are genetically engineered to take in high amounts of carbon are grown and harvested as biomass.

Challenges with biofuels

- First-generation biofuels can have several environmental and socioeconomic impacts. Major impacts include water overconsumption and pollution, deforestation, biodiversity loss, food security, energy security, public health, and social conflicts.
- The nature and the magnitude of impacts depend on the feedstock, the mode of feedstock production, the agricultural practices adopted during feedstock production, and the policies in place during biofuel production, use, and trade.
- The first-generation biofuels are derived from food reserves such as vegetable oils, sugars, and starches. This creates a food versus fuel scenario. Furthermore, the feedstocks for first-generation biofuel compete with food crops for land and water resources.
- Moreover, there is also the challenge of efficiency. To illustrate, fossil fuels produce more energy than some of the biofuels. For example, 1 litre of ethanol produces less energy as compared to 1 litre of gasoline (a fossil fuel).

Way forward

- Efforts for producing sustainable biofuels should be made by ensuring use of wastelands and municipal wastes that get generated in cities.
- A community-based biofuel distribution programme that benefits local economies, from the farmers growing the feedstock to local businesses producing and distributing the fuel to the end consumer, can be tried.
- It is also time to utilise the experiences from Brazil for mass production of high yielding feedstock such as energy cane using modern agri-technologies and create a new bioeconomy for the country, while addressing the environmental concerns.

D C A T

TARGET MAINS

General Studies-I

Question 1. *The roots of the disintegration of the Mughal empire may be found in the Indian economy and external incursion. Discuss.*

Answer: Disintegration of the Mughal empire was a decisive event in the history of India which gave birth to different regional powers and eventually led to the rise of British rule. The roots of disintegration may be found in the economic and external factors.

Economic Reasons:

- The economy of the empire deteriorated due to the Jagir crisis as many Jagirdars were contesting for a limited number of jagirs which in turn led to further political crisis among the nobles.
- To increase profit with a limited number of jagirs, the Jagirdars started to maintain less than expected number of troops which eventually weakened the army of the Mughal empire.
- Furthermore, due to the absence of any fixed rule of succession, the Mughal dynasty often had to face civil wars among the princes. These wars of succession became increasingly destructive and fierce during the 18th century which resulted in great loss of life and property.

External Incursions:

- After the death of Aurangzeb, the condition of Mughal empire with its incompetent rulers, weak administration and poor military strength attracted foreign invaders. Such invasions resulted in plundering much of the wealth of the empire. It worsened the economy of an already declining power.
- Nadir Shah, the ruler of Persia, attacked the empire in 1739. Nadir Shah's invasion gave a crushing blow to the already tottering Mughal Empire and hastened the process of its disintegration.
- In 1761, during the reign of Shah Alam II, Ahmad Shah Abdali, the independent ruler of Afghanistan, invaded India. It further weakened the Mughal Empire.

Thus, decline of economy and external incursions acted as termites in the strong wood of mughal empire.

Question 2. *The interlinking of rivers can provide viable solutions to the multi-dimensional inter-related problems of droughts, floods, and interrupted navigation. Critically examine.*

Answer: Interlinking of rivers envisions transferring water from water 'surplus' basins where there is flooding to water 'deficit' basins where there is drought/scarcity. For example, from the northern plains of India that are endowed with surplus water to the southern and western India that generally witness drought.

Proposed Benefits of the Interlinking of Rivers

- The northern rivers are mostly fed by the perennial Himalayan rivers while the southern and western rivers are mostly monsoon dependent. The interlinking will ensure that the surplus water from northern regions is utilised to meet the demand of deficit regions.
- As it would address the low levels of water in southern India's rivers, it would provide around year waterways connectivity. This will reduce the cost of transportation and help in economic development.
- Interlinking of rivers will also increase the country's total irrigation potential, preventing some of the surface runoff into the sea.

Associated Concerns with Interlinking of Rivers

- The spirit of federalism is ignored in the river interlinking project. Historically, there has been dissent on the part of the state governments regarding water sharing. For example, as evident from the ongoing disputes on rivers like Cauvery, Mahadayi.
- Rivers transcend national boundaries and any diversion of water will have repercussions for lower riparian countries. For example, Bangladesh being a lower riparian state is less likely to agree to India's interlinking project.
- The interlinking of rivers project, which is of a subcontinent magnitude, will incur a huge economic

- **Conflict of Interest:** Currently, the Ministry of Railways is effectively the policy maker, regulator and service provider. This is a clear conflict of interest and would undermine the fair competition between private and government railway operations.

The need of the hour is to find a balanced solution that would incorporate the pros of both private and government enterprises. As recommended by the Bibek Debroy committee, a regulatory mechanism to promote a healthy competition and to protect the interest of all stakeholders is an essential prerequisite.

Question 9. *The Minimum Support Price (MSP) scheme protects farmers from the price fluctuations and market imperfections. In the light of the given statement, critically analyse the efficacy of the MSP.*

Answer: The Minimum Support Price (MSP) is an agricultural product price set by the Government to purchase directly from the farmer. Reason behind the idea of MSP is to counter price volatility of agricultural commodities due to the factors like variation in their supply, lack of market integration and information asymmetry.

Advantages of MSP

- It ensures adequate food grain production in the country and hence, maintaining the food security.
- It protects the farmers from any sharp fluctuations in price. MSP is announced before the sowing season so that the farmers can make an informed decision.
- MSP increases the farmers' income and when they have more disposable income in hand, they can invest in new technology.

Constraints in MSP

- The MSP, though announced every year, does not rise in proportion to the rise in cost of production. However, transportation and storage costs of the FCI keep on increasing.
- Several regions in the country do not have effective implementation of the scheme. A lot of farmers do not have adequate knowledge about the MSP and end up being exploited by middlemen.
- Government interference in the market is seen as killing of the competition which disturbs the working

of open markets. The MSP scheme has been criticised at the WTO.

Way Forward

- The awareness among the farmers needs to be increased. It would increase the bargaining power of the farmers.
- MSP should be announced well in advance of the sowing season so as to enable the farmers to plan their cropping.
- Timely payment to farmers will encourage them to improve their production and create more marketable surplus

General Studies-IV

Question 10. *Highlight the differences between codes of ethics and codes of conduct.*

Answer: Code of ethics is the system of morals that covers many aspects of life. They usually consist of general obligations and admonitions, or what one should do and refrain from doing. Code of conduct is a document that expresses the practices and behavior of a person, required or restricted as a condition for becoming a member of the organization or profession.

- In other words, code of ethics is an aspirational document, issued by the board of directors containing core ethical values, principles, and ideals of the organization. On the other hand, code of conduct is a directional document containing specific practices and behaviour that are followed or restricted under the organization.
- Moreover, code of conduct originates from the code of ethics, and it converts the rules into specific guidelines that must be followed by the members of the organization. Therefore, the latter concept is wider than the former.
- Thus, code of ethics regulates the judgment of the organization while code of conduct regulates the actions. While code of ethics focuses on values or principles, the code of conduct is focused on compliance and rules.

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HISTORY, ART & CULTURE

Sree Narayana Guru

The Vice President of India had virtually launched “Not Many, But One”, an English translation of poems of Sree Narayana Guru.

Key points

- Sree Narayana Guru was born on 22nd August, 1856 in Chempazhanthy, a village near Thiruvananthapuram, Kerala.
- His family belonged to the Ezhava caste and was considered ‘avarna’ according to the social mores of the time.
- He gave the famous slogan “One Caste, One Religion, One God for All” (*Oru Jathi, Oru Matham, Oru Daivam, Manushyanu*).
- In 1888, he built a temple dedicated to Lord Shiva at Aruvippuram which was against the caste-based restrictions of the time.
- Narayana Guru organized an **All-Region Conference in 1923** at Alwaye Advaita Ashram, which was reported to be the first such event in India. This was an effort to counter the religious conversions Ezhava community was susceptible to.
- **Sree Narayana Guru** became one of the greatest proponents and re-evaluators of Advaita Vedanta, the principle of non-duality put forward by Adi Shankara.
- He wrote various **books** in different languages. Few of them are: Advaita Deepika, Asrama, Thevarappathinkangal, etc.

Purandara Dasa

The Karnataka government has planned to commence research work to end the **speculations regarding the birthplace of Purandara Dasa**.

Key points

- Purandara Dasa belonged to the **Vaishnava tradition** during the **Vijayanagara rule**.
- Prior to the adoption of Vaishnava tradition, he was a rich merchant and was called **Srinivasa Nayaka**.
- He is considered the **father of Carnatic Music**.
- He formalized the music system which was a blend of various traditions of South India and the musical science as explained in the Vedas.
- He identified 84 ragas and devised a system of teaching Carnatic music in graded lessons.

- He composed songs in **Kannada and Sanskrit** with the pen name **Purandara Vithala**.

New Anubhava Mantapa in Basavakalyan

Recently, the Chief Minister of Karnataka laid the foundation stone for the ‘**New Anubhava Mantapa**’ in **Basavakalyan**, the place where **12th century poet-philosopher Basaveshwara** lived for most of his life.

Key points

- The **New Anubhava Mantapa** will be a six-floor structure in the midst of the 7.5-acre plot and **represent various principles of Basaveshwara’s philosophy**.
- It will **showcase the 12th Century Anubhava Mantapa** (often referred to as the “**first Parliament of the world**”) established by Basaveshwara in Basavakalyan where philosophers and social reformers held debates.
- The building will adopt the **Kalyani Chalukya style of architecture**. Chalukyas of Kalyan or Kalyani Chalukyas form an integral part of early medieval period Karnataka. Kalyan Chalukya rulers patronised temple construction, dance and music, as their predecessors did.

Basaveshwara

- **Basaveshwara (1134-1168)** was an Indian philosopher, social reformer and statesman who attempted to create a casteless society and fought against caste and religious discrimination.
- This path **advocates a holistic approach of Lingangayoga** (union with the divine). This comprehensive discipline encompasses **bhakti (devotion), jnana (knowledge), and kriya (action)** in a well balanced manner. The **tradition of Lingayatism** is known to have been founded by him.
- His spiritual discipline was based on the **principles of Arivu (true knowledge), Achara (right conduct), and Anubhava (divine experience)** and it brought social, religious and economical revolution in the 12th century.
- He **established the Anubhava Mantapa**, which was a common forum for all to discuss the prevailing problems of socio, economic and political strata including religious and spiritual principles along with personal problems.

Key points

- This civilization **flourished around 2,500 BCE** in the **western part of South Asia**, in contemporary Pakistan, western India and parts of Afghanistan.
 - The civilization **declined around 1800 BCE but the actual reasons behind its demise are still debated.**
- In 1920, the **Archeological Survey of India** carried out excavations in the Indus Valley wherein the ruins

of the two old cities, viz. Mohenjo-Daro and Harappa were unearthed.

- It was a **trade based civilization** which had overseas trade links with **Mesopotamia** (region of Western Asia situated within the Tigris–Euphrates river system) attested by the discovery of Harappan seals there and Mesopotamian carnelian beads here.

Important Sites of IVC			
Site	Excavated by	Location	Important Findings
Harappa	Daya Ram Sahni in 1921	Bank of river Ravi in Montgomery district of Punjab (Pakistan)	Sandstone statues of Human anatomy Granaries Bullock carts
Mohenjo-Daro (Mound of Dead)	R.D. Banerjee in 1922	Bank of river Indus in Larkana district of Punjab (Pakistan)	Great bath Granary Bronze dancing girl Seal of Pasupathi Steatite statue of beard man A piece of woven cotton
Sutkagendor	Stein in 1929	In southwestern Balochistan province, Pakistan on Dast river	A trade point between Harappa and Babylon
Chanhudaro	N.G. Majumdar in 1931	Sindh on the Indus river	Bead makers shop Footprint of a dog chasing a cat
Amri	N.G. Majumdar in 1935	On the bank of Indus river	Antelope evidence
Kalibangan	Ghose in 1953	Rajasthan on the bank of Ghaggar river	Fire altar Camel's bones Wooden plough
Lothal	R. Rao in 1953	Gujarat on Bhogva river near Gulf of Cambay	First manmade port Dockyard Rice husk Fire altars Chess-playing
Surkotada	J.P. Joshi in 1964	Gujarat	Bones of horses Beads
Banawali	R.S. Bisht in 1974	Hisar district of Haryana	Beads Barley Evidence of both pre-Harappan and Harappan culture
Dholavira	R.S Bisht in 1985	Gujarat in Rann of Kachchh	Water harnessing system Water reservoir

POLITY AND GOVERNANCE

Article 32

Recently, the **Chief Justice of India (CJI)**, during a hearing of a plea, said that the court is trying to discourage petitions filed under Article 32.

Key points

- The CJI noted that there is a spate of Article 32 petitions and reiterated that the High Court can also uphold **fundamental rights (under article 226)**.
- **Article 32 of the Constitution (Right to Constitutional Remedies)** is a fundamental right, which states that individuals have the right to approach the Supreme Court (SC) seeking enforcement of other fundamental rights recognised by the Constitution.
- The SC has power to issue directions or orders or writs for the enforcement of any of the fundamental rights. The writs issued may include **habeas corpus, mandamus, prohibition, certiorari and quo-warranto**.
- The right to move the SC shall not be suspended except as otherwise provided for by the Constitution.
 - Thus, the Constitution provides that the President can suspend the right to move any court for the enforcement of the fundamental rights during a national emergency (**Article 359**).
- In case of the enforcement of Fundamental Rights, the jurisdiction of the SC is **original but not exclusive**. It is **concurrent with the jurisdiction** of the high court under Article 226.
 - **Original**, because an aggrieved citizen can directly go to the SC, not necessarily by way of appeal.
 - **Concurrent** means when the Fundamental Rights of a citizen are violated, the aggrieved party has the option of moving either the high court or the Supreme Court directly.
- Since the right guaranteed by **Article 32 (i.e., the right to move the SC where a fundamental right is infringed)** is in itself a fundamental right, the availability of alternate remedy is no bar to relief under Article 32.
- However, the SC has ruled that where relief through the high court is available under Article 226, the aggrieved party should **first move the High Court**.

- In the **Chandra Kumar case (1997)**, the SC ruled that the writ jurisdiction of both the high court and the Supreme Court constitute a part of the **basic structure** of the Constitution

Article 226 of the Constitution

- **Article 226** of the Constitution empowers a **high court** to issue writs including habeas corpus, mandamus, certiorari, prohibition and quo warranto for the enforcement of the **fundamental rights of the citizens and for any other purpose**.
- The phrase '**for any other purpose**' refers to the enforcement of an ordinary legal right. This implies that the writ jurisdiction of the **high court is wider than that of the SC**.
 - This is because the SC can issue writs only for the enforcement of fundamental rights and not for any other purpose, that is, it does not extend to a case where the breach of an ordinary legal right is alleged.
- The high court can issue writs to any person, authority and government **not only within its territorial jurisdiction** but also outside its territorial jurisdiction if the cause of action arises within its territorial jurisdiction.

Contempt of Court

Recently, the **Supreme Court of India suo moto** initiated the proceedings for **criminal contempt of court** against lawyer-activist Prashant Bhushan for his tweet criticising the current Chief Justice of India and the role of some Chief Justices of India in the last six years.

Key points

- As per the **Contempt of Courts Act 1971**, **contempt refers** to the offence of showing disrespect to the dignity or authority of a court. The Act divides contempt into **civil and criminal contempt**.
- **Civil contempt**: It is willful disobedience to any judgment, decree, direction, order, writ or other processes of a court or wilful breach of an undertaking given to the court.
- **Criminal contempt**: It is any act which may result in:
 - **Scandalising the court** by lowering its authority.
 - **Interference** in the due course of a judicial proceeding.
 - An **obstruction in the administration** of justice.
- The Contempt of Courts Act 1971 was **amended in 2006** to include **the defence of truth** under **Section 13** of the original legislation. Implying that the **court must permit justification by truth as a valid defence** if it is satisfied that it is in the public interest.

ECONOMIC SCENARIO

Seventh Trade Policy Review of India at the WTO

Recently, the final session of India's seventh **Trade Policy Review (TPR)** concluded at the **World Trade Organization (WTO)** in Geneva, Switzerland.

Key Points

- The **Trade Policy Review Mechanism (TPRM)** was an early result of the **Uruguay Round**.
- TPRM is the **main transparency instrument of the WTO**, affording opportunities for a process of collective evaluation of the trade policies and practices of individual members.
- **Objectives:**
 - Facilitating the smooth functioning of the multilateral trading system by enhancing the transparency of Members' trade policies.
 - To examine the impact of a Member's trade policies and practices on the multilateral trading system.
- **Mechanism:**
 - **Take place in the Trade Policy Review Body** which is actually the WTO General Council - comprising the WTO's full membership - operating under special rules and procedures.
- **Function:**
 - The trade policy review **allows members to put the overall trade and economic policies of a country under the scanner**.
 - The trade policies of developing countries are taken up for review every four years while developed ones face similar scrutiny every two years.
 - The mandate of the TPRM was **broadened to cover services trade and intellectual property**.
- **All WTO Members are subject to review** under the TPRM.
- The **TPR** is an **important mechanism under the WTO's monitoring function** in which member countries' trade and related policies are examined by the WTO with an aim to contribute towards **improved adherence** to WTO rules. India's last TPR took place in **2015**.

IFSCA Becomes Associate Member of IOSCO

The **International Financial Services Centres Authority (IFSCA)** has become an associate member of the **International Organization of Securities Commissions (IOSCO)**. **Securities and Exchange Board of India (SEBI)** is an **ordinary member** of IOSCO.

Key Points

- **International Financial Services Centres Authority (IFSCA):**
 - It was established in April 2020 under the **International Financial Services Centres Authority Act, 2019**. It is headquartered at **GIFT (Gujarat International Finance Tec-City)**, Gandhinagar in Gujarat.
 - It is a **unified authority for the development and regulation of financial products, financial services and financial institutions** in the **International Financial Services Centre (IFSC)** in India. An IFSC caters to customers outside the jurisdiction of the domestic economy.
 - It has been established to **promote ease of doing business** in IFSC and to **provide a world class regulatory environment**.
 - Its **objective is to develop a strong global connect and focus on the needs of the Indian economy** as well as to **serve as an international financial platform** for the entire region and the global economy as a whole.
- **International Organization of Securities Commissions (IOSCO):**
 - **Founded:** April 1983
 - **Headquarters:** Madrid, Spain
 - **IOSCO Asia Pacific Hub** is located in **Kuala Lumpur, Malaysia**.
 - It is the **international organization that brings together the world's securities regulators**, covering more than **95%** of the world's securities markets, and is the global standard setter for the securities sector.
 - It works closely with the **G20 (Group of Twenty)** and the **Financial Stability Board (FSB)** in setting up the standards for strengthening the securities markets.

ENVIRONMENT AND ECOLOGY

Golden Birdwing: India's Largest Butterfly

Recently, a **Himalayan butterfly** known as **Golden Birdwing** (*Troides aeacus*) has been discovered as **India's largest butterfly after 88 years**.

Key points

- The female was recorded from Didihat in **Uttarakhand**, the male was from the Wankhar Butterfly Museum in Shillong, Meghalaya.
- With a wingspan of 194 mm, the female of the species is marginally larger than the Southern Birdwing (190 mm).
 - The male Golden Birdwing is much smaller at 106 mm.
 - Earlier, the largest Indian butterfly that was recorded in 1932 was an individual of the Southern Birdwing (*Troides minos*), which was then treated as a subspecies of the Common Birdwing (*Troides helena*).

Two New Species of Butterfly

Recently, the lepidopterists have discovered two new species of butterfly i.e. **Striped Hairstreak** and **Elusive Prince** in the Changlang district of Arunachal Pradesh.

Key points

- **Striped Hairstreak:**
 - **Scientific Name:** *Yamamotozephyrus kwangtugenesis*
 - **Discovery:** It is found in Vijaynagar village of Changlang district of Arunachal Pradesh, bordering Myanmar.
 - It was first recorded in the Hainan province of China. It is also found in North America, from the Rocky Mountains.
- **Elusive Prince:**
 - **Scientific Name:** *Rohana tonkiniana*
 - **Discovery:** It is found in Miao subdivision situated on the periphery of the Namdapha National Park.
 - The Rohana Genus has been represented in India by two species — the Black Prince (*Rohana parisatis*) and the Brown Prince (*Rohana parvata*).

Rediscovered Snake Species

Recently, a snake species namely **Assam Keelback** and a rare plant species called ***Globba andersonii*** has been rediscovered.

Key points

- **Assam Keelback:**
 - The Assam keelback (*Herpetoreas pealii*), a snake **endemic to Assam**, has been found **129 years** after it was last spotted by the British tea planter Samuel Edward Peal in **1891**.
 - The snake was considered a **lost species since no sighting** had been reported since its discovery in 1891.
 - In 2018, it was found in the **Poba Reserve Forest (RF)** by a team of scientists from the Wildlife Institute of India (WII), who were retracing the steps of the **Abor Expedition**.
 - It is small - about 60 cm long, brownish, and has a patterned belly. It has a unique genus (*Herpetoreas*) belonging to a smaller group of four species, found in Eastern and Western Himalayas, South China and Northeast India.
 - It is categorised as '**data deficient**' in the International Union for Conservation of Nature IUCN Red List.
 - This is the worst category because there is practically **no information available** about it and it is difficult to determine its status.
- ***Globba andersonii*:**
 - The earliest records of the collection of this plant were dated between the period 1862-70 by the Scottish botanist Thomas Anderson from **Sikkim and Darjeeling**. Then, in 1875, the British botanist Sir George King had collected it from the Sikkim Himalayas.
 - The plant, known commonly as '**dancing ladies**' or '**swan flowers**' was thought to have been extinct until its "**re-collection**", for the first time **since 1875**.
 - The species has been listed as "**Endangered**" on the IUCN Red List of Threatened Species.

- The **Indian Ocean** region - the **Arabian Sea** and the **Bay of Bengal**, together reported five cyclones - **Amphan, Nisarga, Gati, Nivar and Burevi**.
- Of these, **Nisarga & Gati formed over Arabian Sea**, while the remaining 3 cyclones formed over the Bay of Bengal.

Heat Waves

The India Meteorological Department (IMD) has been forecasting the “**heatwave to severe heatwave conditions**” bulletin over the northwest, central and adjoining peninsular India along with heavy rain over northeast India.

Key points

- A heatwave is a period of **abnormally high temperatures**, more than the normal maximum temperature that occurs during the summer season in the North-Western and South Central parts of India.
- Heatwaves typically occur between **March and June**, and in some rare cases even extend till July.

Criteria for Heat Waves

- The heatwave is considered when the maximum temperature of a station reaches at least **40°C for plains** and at least **30°C for hilly regions**.
- If the normal maximum temperature of a station is **less than or equal to 40°C**, then an **increase of 5°C to 6°C** from the normal temperature is considered to be a heatwave condition.
- Further, an increase of 7°C or more from the normal temperature is considered a severe heatwave condition.
- If the normal maximum temperature of a station is **more than 40°C**, then an increase of 4°C to 5°C from the normal temperature is considered to be a heatwave condition.
 - Further, an increase of 6°C or more is considered a severe heatwave condition.
- Additionally, if the actual maximum temperature remains **45°C or more irrespective of normal maximum temperature**, a heatwave is declared.

SCIENCE AND TECHNOLOGY

Deep Fakes

Recently, cybercrime officials in India tracked certain apps and websites that produce nude photographs of innocent people using Artificial Intelligence (AI) algorithms. All this was done through deep fakes.

Key Points

- Deep fakes or deep nudes are **computer-generated images and videos**.
- Cybercriminals use AI softwares to superimpose a digital composite (assembling multiple media files to make a final one) onto an existing video, photo or audio.
- Deep Fakes are **created by machine learning models (application of AI)**, which use neural networks to manipulate images and videos.
- Using AI algorithms a person's words, head movements and expressions are transferred onto another person in such a seamless way that it becomes difficult to tell that it is a deep fake, unless one closely observes the media file.
- Initially, an individual with advanced knowledge of machine learning and access to the victim's publicly-available social media profile could only make deep

fakes. Development of apps and websites capable of such editing has become more frequent and easily accessible to an average user.

- Deep fakes **first came into notice in 2017** when a Reddit user posted explicit videos of celebrities. After that several instances have been reported.

Human Challenge Trials

In the race to develop a vaccine for the novel coronavirus, many people have volunteered to take part in the Human Challenge Trials (HCTs). It involves **intentionally infecting volunteers with the novel coronavirus, in order to speed up the vaccination development**.

Key points

- **Vaccine Development:**
 - In most of the regulatory regimes, vaccines take several years to develop and their development typically proceeds through three phases of clinical trials.
 - **Phase 1:** Small groups of people receive the trial vaccine. This helps to rule out major safety problems, if any.

rely on the geomagnetic field. Therefore, computers, mobile phones and other devices could also face difficulties.

Swarm Constellation Mission

- Swarm is European Space Agency's first constellation of satellites for Earth observation.

- It consists of three satellites designed to identify and precisely measure the different magnetic signals that make up Earth's magnetic field.

- The mission is operated by ESA's European Space Operations Centre (ESOC), in Germany, via the primary ground station in Kiruna, Sweden.

MISCELLANEOUS

Human Development Index: UNDP

India **ranked 131 among 189 countries** on the Human Development Index (HDI) for 2019, slipping two places from the previous year, according to the Human Development Report (HDR) 2020 released by the United Nations Development Program (UNDP).

Key points

- HDI emphasizes that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone.
- It is based on three basic dimensions of Human Development:
 - A long and healthy life,
 - Access to knowledge, and
 - A decent standard of living.
- The 2020 Report has **introduced planetary pressures-adjusted Human Development Index**, which adjusts the standard **Human Development Index (HDI) by a country's per capita carbon dioxide emissions and material footprint**.
- The other indices that form the part of the Report are:
 - Inequality-adjusted Human Development Index (IHDI),
 - Gender Development Index (GDI),
 - Gender Inequality Index (GII) and
 - Multidimensional Poverty Index (MPI).

India's performance

- **Overall Performance:** HDI value for 2019 is 0.645, which puts the country in the medium human development category, positioning it at 131 out of 189 countries and territories. Between 1990 and 2019, India's HDI value increased from 0.429 to 0.645, an increase of 50.3%.
- **Long and Healthy Life:** Life expectancy for Indian's at birth was 69.7 years in 2019, slightly lower than the

south Asian average of 69.9 years. Between 1990 and 2019, India's life expectancy at birth increased by 11.8 years.

- **Access to Knowledge:** The expected years of schooling in India was 12.2 years, compared with 11.2 years in Bangladesh and 8.3 years in Pakistan. Between 1990 and 2019, mean years of schooling increased by 3.5 years, and expected years of schooling increased by 4.5 years.
- **Decent Standard of Living:** In terms of Gross National Income (GNI) per capita, India at USD 6,681 fared better than some others in 2019, despite a fall over the previous year. India's GNI per capita increased by about 273.9% between 1990 and 2019.

Other countries

- **Norway** topped the index, followed by Ireland and Switzerland. Hong Kong and Iceland complete the top five.
- **Singapore** was ranked 11, Saudi Arabia 40, and Malaysia was at 62 in the global index, representing the top bracket among the Asian countries with **"very high human development"**.
- Sri Lanka (72), Thailand (79), China (85) and Indonesia and Philippines (both 107), and Vietnam (117), among others, were **"high human development"** countries.
- **India**, Bhutan, Bangladesh, Myanmar, Nepal, Cambodia, Kenya and Pakistan were ranked among countries with **"medium human development"** with ranks between 120 and 156.

Planetary pressures-adjusted Human Development Index (PHDI)

- The PHDI adjusts the standard HDI by a country's level of carbon dioxide emissions and material footprint, each on a per capita basis.
- Norway, which tops the HDI, falls 15 places (in comparison to HDI ranking) if this metric is used, leaving Ireland at the top of the table.



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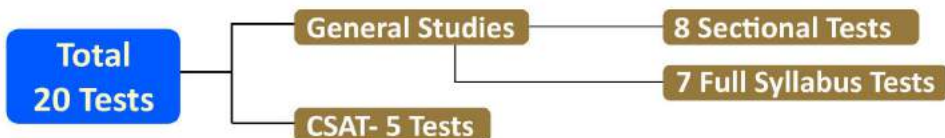
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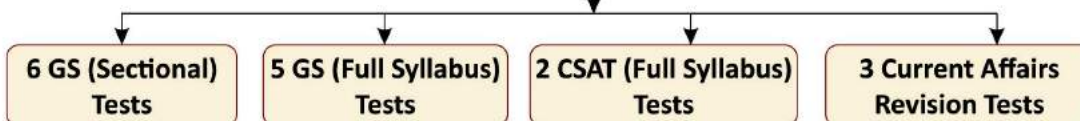


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