

**GOVERNANCE****National Summit on Good, Replicable Practices & Innovations**

The Union Minister of Health and Family Welfare digitally inaugurated the 7th National Summit on Good, Replicable Practices & Innovations through a video conference.

The New Health Management Information System (HMIS) along with the Operational Guidelines for Tuberculosis services at Ayushman Bharat-Health and Wellness Centres and the Operational Guidelines 2020 on Active Case Detection and Regular Surveillance for Leprosy was launched at the Summit.

**Key Points****About the Summit:**

- The Ministry of Health & Family Welfare holds the National Summit on Good, Replicable Practices and Innovations in Public Healthcare Systems in India.
- The first such summit was held in 2013 at Srinagar to recognize, showcase and document various best practices and innovations in the public healthcare system.
- The practices and innovation presented in these summits span across programmatic areas ranging from RMNCH+A (Reproductive, Maternal, Neonatal, Child Health and Adolescent Health) to communicable diseases (including Tuberculosis, Malaria and other vector borne diseases and Leprosy) to new areas of Non-Communicable Disease control programmes.
- They also include innovations that apply systems thinking to health problems such as the use of information technology to strengthen continuum of care, and to address human resource shortages and challenges in capacity building.

**Highlights of the 7th National Summit:**

- In the year 2020, 210 new initiatives were uploaded by the States and UTs in the National Healthcare Innovation Portal.
- National Health Innovation Portal was launched to serve as a platform in the public domain to facilitate collection and dissemination of good practices and innovations that are found to be replicable.
- The Covid-19 pandemic has made the country self-reliant in the area of manufacturing of PPE kit, Ventilator, mask, vaccine etc.
- More than 1 million tele-consultations have been done on the e-Sanjeevani digital platform of the Health Ministry.
- e-Sanjeevani is a doctor to doctor telemedicine system, being implemented under the Ayushman Bharat Health and Wellness Centre (AB-HWCs) programme.
- Department of Health and Family Welfare has won the Digital India award 2020 under the Open Data Champion category for the e-Sanjeevani digital platform.
- The National Informatics Centre (NIC), under Ministry of Electronics and IT (MeitY), has been conducting the biennial Digital India Awards to promote innovation in eGovernance and digital transformation of government service delivery mechanism.
- Digital transformation has enabled the country to develop a national digital health ecosystem that supports Universal Health Coverage in an efficient, accessible, inclusive, affordable, timely and safe manner.
- There is a need to involve and integrate the grassroots healthcare workers for brainstorming on the innovations in the healthcare ecosystem, and benefit from the collective wisdom which emanates from years of experience and expertise of working with people's health delivery systems.

**Recent Examples of Health Digitisation:****National Digital Health Mission (NDHM):**

- The NDHM is a complete digital health ecosystem. The digital platform will be launched with four key features: health ID, personal health records, Digi Doctor and health facility registry.

**Aarogya Setu App:**

- It has an objective of enabling bluetooth based contact tracing and mapping of likely hotspots and dissemination of relevant information about Covid-19.

**Health Management Information System**

- It is a Government to Government (G2G) web-based Monitoring Information System to monitor the National Health Mission and other Health programmes and provide key inputs for policy formulation and appropriate programme interventions.

- HMIS was launched in October 2008. Currently, around 2 lakh health facilities (across all States/UTs) upload facility wise service delivery data on monthly basis, training data on quarterly basis and infrastructure related data on annual basis on HMIS web portal.
- HMIS has been utilised in Grading of Health Facilities, identifications of aspirational districts, review of State Programme Implementation Plan (PIPs), etc.
- The analytical reports generated through HMIS also provide gap analysis and evidence based course correction.

**HMIS captures facility-wise information as follows:**

- Service Delivery (Reproductive, Maternal and Child Health related, Immunisation, family planning, Vector borne disease, Tuberculosis, Morbidity and Mortality, OPD, IPD Services, Surgeries etc.) data on a monthly basis.
- Training Data (Trainings imparted to Medicals and Paramedics staff at District and State level data) on quarterly basis.
- Infrastructure (Manpower, Equipment, Cleanliness, Building, Availability of Medical Services such as Surgery etc., Super Specialties services such as Cardiology etc., Diagnostics, Para Medical and Clinical Services etc.) data on annual basis.
- The HMIS Portal facilitates the flow of physical performance from the Facility level to the Sub-district, District, State and National level using a web based Health Management Information System (HMIS) interface.
- The new HMIS provides a seamless online platform through the provision of a wide range of data, information and infrastructure services, duly leveraging open, interoperable, standards-based digital systems.

**INDIAN ECONOMY**

**Dedicated Freight Corridor**

Recently, the Prime Minister of India has inaugurated a 351-km section of the Eastern Dedicated Freight Corridor (EDFC) and an Operation Control Centre (OCC) between Khurja and Bhaupur in Uttar Pradesh.

- EDFC is a 1,839-km project billed as the largest rail infrastructure being built in independent India and has been in the making since 2006.

**Key Points**

**Dedicated Freight Corridor (DFC):**

- It is a high speed and high capacity railway corridor that is exclusively meant for the transportation of freight, or in other words, goods and commodities.
- DFC involves the seamless integration of better infrastructure and state of the art technology.

**DFC consists of two arms:**

**Eastern Dedicated Freight Corridor (EDFC):**

- It starts at Sahnewal (Ludhiana) in Punjab and ends at Dankuni in West Bengal.
- The EDFC route has coal mines, thermal power plants and industrial cities. Feeder routes are also being made for these.
- The EDFC route covers Punjab, Haryana, Uttar Pradesh, Bihar, Jharkhand and West Bengal
- The World Bank is funding a majority of the EDFC.
- The 351-km-long 'New Bhaupur-New Khurja section' will decongest the existing Kanpur-Delhi main line and double the speed of freight trains from 25 kmph to 75 kmph.

**Western Dedicated Freight Corridor (WDFC):**

- The other arm is the around 1,500-km WDFC from Dadri in Uttar Pradesh to Jawaharlal Nehru Port Trust in Mumbai, touching all major ports along the way.
- The WDFC covers Haryana, Rajasthan, Gujarat, Maharashtra and Uttar Pradesh.
- It is being funded by the Japan International Cooperation Agency.
- Connecting Link for Eastern and Western Arm: It is under construction between Dadri and Khurja.
- The industrial corridor of Delhi-Mumbai and Amritsar-Kolkata are also being developed around both these DFCs.

**PROJECT MAP**



AS  
C/OPSC

**Significance:**

**Increased Capacity:**

- The DFC shall reform the transportation sector and will create more capacity on trunk routes of Indian Railways as goods trains shall be able to run freely on DFC without any restrictions imposed by movement of passenger trains.

**Decongestion:**

Around 70% of the freight trains currently running on the Indian Railway network are slated to shift to the freight corridors, leaving the paths open for more passenger trains.

**Business Generation:**

- Tracks on DFC are designed to carry heavier loads than most of Indian Railways. DFC will get track access charge from the parent Indian Railways, and also generate its own freight business.

**Punctuality:**

- The new section means on the Indian Railway main line, more passenger trains can be pumped in and those trains can, in turn, achieve better punctuality.

**Benefits:**

- Logistics costs will be reduced.
- Higher energy efficiency.
- Faster movement of goods.
- It is environmentally friendly.
- It will provide ease of doing business.
- Helps in generating more employment.
- Dedicated Freight Corridor Corporation of India Ltd.

DFCCIL under the Ministry of Railways is a special purpose vehicle tasked with planning and completion of 3,306 kms of DFCs.

It is headquartered in New Delhi and is a Public Sector Undertaking (PSU).

It engages in the planning and development, deployment of monetary resources, building, upkeep, and the operation of the DFCs.

## SCIENCE & TECHNOLOGY

### Digital Ocean

Recently, the Ministry of Earth Sciences inaugurated the web-based application DigitalOcean developed by Indian National Centre for Ocean Information Services (INCOIS) in a Virtual Meeting held in New Delhi.

#### **Key Points**

##### **About Digital Ocean:**

- Digital Ocean is a new state of the art data platform for Ocean Data Management.
- It is the first such platform to provide ocean data related services at one place.
- It includes a set of applications developed to organize and present heterogeneous oceanographic data by adopting rapid advancements in geospatial technology.
- It facilitates an online interactive web-based environment for data integration, 3D and 4D (3D inspace with time animation) data visualization, data analysis to assess the evolution of oceanographic features, etc.

##### **Significance:**

- Digital Ocean is a big step towards Prime Minister's vision of Digital India that is to transform India into a digitally empowered society and knowledge economy.
- It will serve as a one stop-solution for all the data related needs of a wide range of users including research institutions, operational agencies, strategic users, academic community, maritime industry, policy makers and the public.
- It will also contribute to the vision of Atmanirbhar Bharat.
- It will play a central role in sustainable management of the oceans and expanding the government's Blue Economy initiatives.
- It will be promoted as a platform for capacity building on Ocean Data Management for all Indian-Ocean Rim countries.

##### **Other Related Initiative:**

##### **Deep Ocean Mission:**

- Launched in 2018.
- The mission proposes to explore the deep ocean.
- The focus of the mission is on deep-sea mining, ocean climate change advisory services, underwater vehicles and underwater robotics related technologies.

##### **Two key projects planned in the Mission are:**

- A desalination plant powered by tidal energy.
- A submersible vehicle that can explore depths of at least 6,000 metres.

**Significance:** It will enable India to develop capabilities to exploit resources in the Central Indian Ocean Basin (CIOB).

##### **Indian National Centre for Ocean Information Services**

- It is an autonomous organization under the Ministry of Earth Sciences (MoES).
- It is located in Hyderabad & was established in 1999.
- It is a unit of the Earth System Science Organization (ESSO), New Delhi.
- The ESSO operates as an executive arm of the Ministry of Earth Sciences (MoES) for its policies and programmes.
- ESSO's aim is to develop and improve capability to forecast weather, climate and hazard related phenomena for social, economic and environmental benefits including addressing aspects relating to climate change science, and climate services.
- It is mandated to provide the best possible ocean information and advisory services to society, industry, government agencies and the scientific community through sustained ocean observations and constant improvement through systematic and focused research.
- It has adopted and developed various state-of-the-art technologies and tools that includes Potential Fishing Zone (PFZ) advisories, Ocean State Forecast (OSF), High Wave Alerts, Tsunami early warnings, Storm Surge and Oil-Spill advisories, etc.
- It has been serving as the National Argo Data Centre and Regional Argo Data Centre of the International Argo Programme.

**BIODIVERSITY & ENVIRONMENT****Ladakh's Tso Kar Wetland Complex: Ramsar Site**

Recently, India has added Tso Kar Wetland Complex in Ladakh as its 42nd Ramsar site, a conservation status conferred by International Ramsar Convention on Wetlands.

Previously, the Lonar lake in Maharashtra and Sur Sarovar (also known as Keetham lake) in Agra were added to the list of Ramsar sites.

**Key Points****About Tso Kar Wetland Complex:**

- The Tso Kar Basin is a high-altitude wetland complex, consisting of two principal waterbodies:
- Startsapuk Tso, a freshwater lake of about 438 hectares to the south,
- Tso Kar itself, a hypersaline lake of 1800 hectares to the north, situated in the Changthang region of Ladakh.
- It is called Tso Kar, meaning white lake, because of the white salt efflorescence found on the margins due to the evaporation of highly saline water.
- It is an A1 Category Important Bird Area (IBA) as per Bird Life International and a key staging site in the Central Asian Flyway.

**Important Bird Area (IBA):**

- The IBA programme of the Bird Life International aims to identify, monitor and protect a global network of IBAs for conservation of the world's birds and associated biodiversity.
- Bird Life International is a global partnership of non-governmental organizations that strives to conserve birds and their habitats.

**Central Asian Flyway (CAF):**

- It covers a large continental area of Eurasia between the Arctic and Indian Oceans and the associated island chains.
- The Flyway comprises several important migration routes of waterbirds, most of which extend from the northernmost breeding grounds in the Russian Federation (Siberia) to the southernmost non-breeding (wintering) grounds in West and South Asia, the Maldives and the British Indian Ocean Territory.
- It covers at least 279 populations of 182 migratory waterbird species, including 29 globally threatened species.
- The site is also one of the most important breeding areas of the near threatened Black-necked Crane (*Grus nigricollis*) in India.
- It is the major breeding area for Great Crested Grebe (*Podiceps Cristatus*), Bar-headed Geese (*Anser Indicus*), Ruddy Shelduck (*Tadornaferruginea*), Brown-headed Gull (*Larus Bunocephalus*), Lesser Sand-Plover (*Charadrius Mongolus*) and many other species.

**Importance of Wetlands:**

- Wetlands are defined as "lands transitional between terrestrial and aquatic eco-systems where the water table is usually at or near the surface or the land is covered by shallow water".
- Wetlands provide a wide range of important resources and ecosystem services such as food, water, fibre, groundwater recharge, water purification, flood moderation, erosion control and climate regulation.
- They are, in fact, a major source of water and the main supply of freshwater comes from an array of wetlands which help soak rainfall and recharge groundwater.

### Ramsar Site

- Ramsar Convention on Wetlands is an intergovernmental treaty adopted in 1971 in the Iranian city of Ramsar, on the southern shore of the Caspian Sea.
- It came into force for India on 1st February, 1982.
- Those wetlands which are of international importance are declared as Ramsar sites.
- The Convention's mission is the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world.
- The Montreux Record is a register of wetland sites on the List of Wetlands of International Importance where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference.
- It is maintained as part of the Ramsar List.

### At present, two wetlands of India are in Montreux Record:

- Keoladeo National Park (Rajasthan) and
- Loktak Lake (Manipur).

Chilika Lake (Odisha) was placed in the record but later removed from it.

### Kolar Leaf-Nosed Bat

The Karnataka Forest Department, along with the Bat Conservation India Trust (BCIT), is getting prepared to save the Kolar leaf-nosed bat from extinction.

BCIT is a non-profit organization which was conceived for the protection of bat species in India by protecting their habitat. It is headquartered in Bengaluru, Karnataka.



### Key Points

- Scientific Name: *Hipposideros hypophyllus*
- Geographic Range: It is endemic to India. It is presently known only from one cave in Hanumanahalli village in Kolar district, Karnataka.

### Threats:

- Habitat loss from land use change, hunting, and stone quarrying in the region.
- Till several years ago, the Kolar Leaf-Nosed Bat was found in only two caves in the village of Hanumanahalli. For reasons that are still unknown, the bat became locally extinct in one of the two caves.

### Protection Status:

- IUCN Red List: Critically Endangered
- Wildlife Protection Act, 1972: It has not been accorded legal protection under the Act.

### Conservation Efforts:

- The government had notified the 30 acres around the caves as a protected area.
- Any development work here, including construction of new infrastructure, will need the permission of the National Board for Wildlife.
- The Bat Conservation Indian Trust has been awarded a grant to conduct further research on this species of bats.
- It is running an intensive awareness campaign in the nearby communities and they have come to understand the threat to the species and have started guarding this area from encroachers.

### Concerns:

- Bats are one of the least studied mammals in the country, though there are 130 species in India.
- Bats are vital for the ecology as they are pollinators, their main diet being nectar.
- Bats also help in insect control and therefore, help in the protection of crops.
- They are very adaptable creatures and therefore can often be found near human habitation or even in urban settlements, which makes them vulnerable.
- They also have a bad image in the public eye, as carriers of diseases.

**Suggestions:**

There is an urgent need to curb illegal granite mining and quarrying within five to ten kilometre radius of the roost (resting-place) to ensure the quality of other subterranean caves in the area.

Meanwhile, widespread cave explorations and acoustic sampling are recommended to understand the distribution of the species.

**IMPORTANT FACTS FOR PRELIM****Mission Sagar-III**

Recently, the Indian Naval Ship (INS) Kiltan has arrived at Sihanoukville Port, Cambodia as part of ongoing Mission Sagar-III.

**Key Points**

- The ship will deliver 15 tons of Humanitarian Assistance and Disaster Relief (HADR) stores for the flood-affected people of Cambodia, which will be handed over to Cambodia's National Disaster Management Committee (NDMC).
- Earlier, the ship delivered 15 Tons of HADR Stores for the flood-affected people of Central Vietnam.
- Mission Sagar-III is part of India's HADR assistance to friendly foreign countries during the ongoing Covid-19 pandemic.
- In November 2020, as part of Mission Sagar-II, INS Airavat delivered food aid to Sudan, South Sudan, Djibouti and Eritrea.
- Launched in May 2020, 'Mission Sagar' was India's initiative to deliver Covid-19 related assistance to the countries in the Indian Ocean Littoral states. The countries included were Maldives, Mauritius, Madagascar, Comoros and Seychelles.
- This Mission is being undertaken in accordance with the Security And Growth for All in the Region (SAGAR) vision and reiterates India's position as a dependable partner, and the Indian Navy as the Preferred Security Partner and First Responder.
- The Mission also highlights the importance accorded to the Association of Southeast Asian Nations (ASEAN) countries and further strengthens the existing bonds.
- Cambodia and Vietnam are member nations of the ASEAN.

**INS Kiltan**

- It is a Kamorta-class anti-submarine warfare corvette.
- It is part of the Indian Navy's Eastern Naval Command, based at Visakhapatnam.
- INS Kiltan, along with the INS Sahyadri, is the latest, indigenously designed and built multi-role ships of the Indian Navy.

The two ships are equipped with a versatile array of weapons and sensors and can carry multi-role helicopters representing the 'coming of age' of India's warship building capabilities.

**Security and Growth for All in the Region**

- Launched in 2015, it is India's strategic vision for the Indian Ocean Region (IOR).
- Through SAGAR, India seeks to deepen economic and security cooperation with its maritime neighbours and assist in building its maritime security capabilities.
- Further, India seeks to safeguard its national interests and ensure the IOR to become inclusive, collaborative and respect international law.
- The key relevance of SAGAR emerges when seen in conjunction with India's other policies impacting the maritime domain like Act East Policy, Project Sagarmala, Project Mausam, focus on Blue Economy etc.

**100<sup>th</sup> Kisan Rail**

Recently, the Prime Minister has flagged off the 100th "Kisan Rail" service from Sangola in Solapur district of Maharashtra to Shalimar in West Bengal via video-conferencing.

**Key Points**

- In August 2020, the first 'Kisan Rail' dedicated to agriculture and farmers was begun to connect farmers and markets across the country.
- The government has invested crores of rupees in modernising the country's supply chain, of which the Kisan Rail service is a new experiment.
- Announcements regarding modernising agriculture were made in the Budget 2020-21 which had envisaged the Kisan Rail service and the Krishi Udaan scheme.
- Krishi Udaan was launched by the Ministry of Civil Aviation on international and national routes to assist farmers in transporting agricultural products so that it improves their value realisation.

- Under the scheme, financial incentives in terms of concessions from the Centre, state governments and airport operators are extended to selected airlines to encourage operations from unserved and underserved airports, and keep airfares affordable.
- Despite the challenges posed by the Covid-19 pandemic, the 'Kisan Rail' network has expanded in the past four months.
- Earlier, the Kisan Rail was being run only once a week but now, due to increased demand, it is being run thrice a week currently.

**Significance:**

- This experiment will prove especially beneficent for the country's 80% small and marginal farmers.
- The service would transform the economics of Indian agriculture while strengthening the country's cold supply chain.
- The lack of cold storage facilities had often resulted in losses for farmers.
- Indian farmers can now transport their produce to far-flung places within the country as well as gain access to international markets.
- According to the government, the Kisan Rail service along with the amended farm laws would help protect farmers against the fluctuations in demand and supply.

**DAILY ANSWER WRITING PRACTICE**

**Qns Mathura school was a great centre of art and sculptures during the early historic period. How did it differ from the Gandhara school? (150 words)**

Ans:

- The first century CE onwards, Gandhara (now in Pakistan) and Mathura in northern India emerged as important centres of art production.
- Buddha in the symbolic form got a human form in Mathura and Gandhara. The sculptural tradition in Gandhara had the confluence of Bactria, Parthia and the local Gandhara tradition.
- The local sculptural tradition at Mathura became so strong that the tradition spread to other parts of northern India.
- The best example in this regard is the stupa sculptures found at Sanghol in the Punjab.
- The Buddha image at Mathura is modelled on the lines of earlier Yaksha images whereas in Gandhara it has Hellenistic features.

**Difference between Mathura and Gandhara school of art**

- Area: The Gandhara school of art mostly flourished in areas of Afghanistan and present North-west India whereas Mathura school of art developed and flourished in Mathura and areas of Uttar Pradesh.
- Time period: The Gandhara school of art flourished from first century BC to fifth century AD whereas the Mathura school of art originated in the first century BC and flourished till twelfth century AD.
- External influence: Gandhara school of art was influenced by Greek and possibly Macedonians whereas Mathura school of art was purely indigenous with no external influence.
- Religious influence: Gandhara school of art was influenced by Buddhism while Mathura school of art was influenced by Hinduism, Buddhism and Jainism.
- Material used: Gandhara school of art used bluish Grey and grey sandstone whereas Mathura school of art used spotted red sandstone.
- Expression: The expression of calmness is the centre point of attraction of Gandhara Buddha whereas Mathura Buddha is delighted in mood, seated in Padmasana and right hand in Abhaya mudra and left hand on left thigh showing masculinity.
- Halo: The Halo around the head of Buddha was not decorated generally in Gandhara school of art while it was largely decorated in Mathura school of art.

**Conclusion**

The other two famous schools were Amaravati School and Sarnath School of art. All these art schools were mostly inspired by religion and have left behind a rich heritage.

The Art of India constitutes a unique chapter in the history of human endeavour. It unveils the deepest recesses of the human mind and offers a mirror to the Indian soul. The spiritual and religious dimensions of India's creative genius has found full and perfect expression in the myriad aesthetic creations.

**DAILY QUIZ**

1. Consider the following statements regarding Madan Mohan Malaviya:

1. He was given the title of Karmayogi by Mahatma Gandhi.
2. He served as a member of the Imperial Legislative Council.
3. He played an important role in ending the Indian indenture system.

Which of the statements given above is/are correct?

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

2. Consider the following statements:

1. Chlorophyll is found in plants and algae only.
2. Protochlorophyllide is the intermediate in the synthesis of chlorophyll.
3. Excess of protochlorophyllide in plants leads to photobleaching.

Which of the statements given above is/are correct?

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

3. With reference Direct-To-Home (DTH) and Over the top (OTT), consider the following statements:

1. DTH is a satellite service that provides Television viewing service while OTT requires internet connection.
2. DTH signals are analog while OTT has digital signals carriers.

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

4. Which of the following statements is/are correct regarding Atal Bihari Vajpayee?

1. He participated in the Quit India Movement.
2. He has been conferred the second-highest civilian honour, the Padma Vibhushan.

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) **Both 1 and 2**
- d) Neither 1 nor 2

5. Consider the following statements:

1. It is a Central Sector Scheme.
2. It is implemented by the Ministry of Agriculture and Farmers Welfare.
3. Rs. 6,000 per year are given to the farmers through direct benefit transfers.

The above statements most appropriately explains which of the following schemes?

- a) **PM KISAN**
- b) PM KUSUM
- c) PM SUMAN
- d) None of the Above

**VANIK-IAS** wishing all of you a successful and prosperous  
**Happy New Year 2021**