

By



SOURCES

















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Important News Articles

GS I

1. Karnataka's Hoysala Temples on UNESCO World Heritage List - Indian Express/ PM hails inclusion of Sacred Ensembles of Hoysalas in UNESCO **World Heritage List - PIB**

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

News:

- Recently, the Hoysala temples at Belur, Halebidu and Somanathapur in Karnataka were declared as UNESCO World Heritage Sites.
- The nominations were entered as 'The Sacred Ensembles of Hovsalas'.
- All the three temples are protected by the **Archaeological Survey** of India (ASI).

Chennakeshava Temple, Belur

- Construction of the temple **commenced in 1117 AD** during the period of **king Vishnuvardhana** and took 103 years to complete.
- Dedicated to Lord Vishnu known as Chennakesava, which means beautiful (chenna) Vishnu (Keshava).
- The exterior of the temple narrates scenes from the life of Vishnu, his reincarnations and the epics Ramayana and Mahabharata.
- However, some of the representations of Shiva are also included.

Hoysaleshwara Temple, Halebidu

- It is the **most exemplary architectural ensemble** of the Hoysalas extant today.
- Commenced in 1121CE during the reign of the Hoysala King, Vishnuvardhana Hoysaleshwara.
- The temple, dedicated to Shiva, was sponsored and built by wealthy citizens and merchants of Dorasamudra.
- Well-known for the more than 240 wall sculptures that run all along the outer wall.
- Halebid has a walled complex containing three Jaina basadi (temples) of the Hoysala period as well as a stepped well.

Keshava Temple, Somanathapura

- Commissioned by Somanatha Dandanayaka during the regime of Narasimha III in 1268 CE.
- A Trikuta temple dedicated to Lord Krishna in three forms namely Janardhana, Keshava and Venugopala.
- Unfortunately, the main Keshava idol is missing, and the Janardhana and Venugopala idols are damaged.

Hovsala Architecture

- It is the building style developed under the rule of the Hoysala Empire between the 11th and 14th centuries, mostly concentrated in southern Karnataka.
- They are known for evolving a distinct style that is ornate with temple architecture following a stellate plan built on a raised platform.
 - Stellate-plan: multiple shrines grouped around a central pillared hall and laid out in the shape of an intricately-designed star.
- The material used in temple construction is choloritic schist (soapstone), so, the artists were able to carve their sculptures intricately.
 - This can be seen particularly in the **jewellery of the gods** that adorn their temple walls.



- Hovsala Architecture
- UNESCO World Heritage Sites
- Archaeological Survey of India (ASI)











GS II

2. Women's Bill in the works again - Indian Express/ Two House panels on women's Bill: Govt should decide quota within quota, review after 15 yrs - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

News:

- The Union Cabinet, which held an unscheduled meeting recently, is said to have cleared the women's reservation Bill, stuck for 27 years.
- Prelims Takeaway
- Women's Reservation Bill
- Reservation
- It reserves 33 percent seats for women in Parliament and legislative Assemblies.

Need for the Women Reservation

- The move comes when the **number of women candidates** contesting Lok Sabha elections has **slowly and steadily increased**.
 - o From just 45 in the 2nd Lok Sabha elections of 1957 to 726 in 2019.
- Women's turnout has also been steadily increasing.
 - o 46.6% of the women electors turned out to vote in 1962.
 - o Women had **left men behind**, at **67.2% voting** compared to **6**7%, by the time of the **2019 polls**.
- Correspondingly, the number of women candidates in the Parliament has also risen.
- However, their share in the Lok Sabha ranks remains low.
 - o In the 1st Lok Sabha, there were 22 women MPs (4.41%)
 - The figure of **78** elected in the **2019 Lok Sabha** elections is the **highest ever**, but it is **still only 14.36% of the total.**
 - o That makes it **less than half of the 33% seats envisioned t**o be kept aside for women by the Women's Reservation Bill.

Pros and Cons of the Bill

Pros

- o It will lead to the **empowerment of women.**
- For instance, the 73rd Constitutional Amendment Act led to gender sensitive decisions, increased responsiveness, etc.
- Decriminalisation of politics, as there will be fewer criminal charges against women legislators.
- Cons
 - o Distracts **attention away from major electoral reforms** such as intra-party democracy, etc.
 - Limits voters' choice.
 - o Rotation of reserved constituencies may limit an MP's incentive to work.

3. IRDAI plans committee to create Bima Sugam platform, to appoint project consultant - Indian Express

Relevance: Statutory, regulatory and various quasi-judicial bodies. **News:**

 IRDAI recently formed a steering committee, which will act as the apex decision making body for creation of its ambitious Bima Sugam platform.

Bima Sugam Platform

- It is envisioned as a **trusted platform by the IRDAI**.
- It will be an online portal that will be a one-stop shop for
 - o insurance related queries
 - o policy purchase
 - claim settlement

Prelims Takeaway

- Insurance Regulatory and Development Authority of India
- Bima Sugam Platform











- o insurance advice
- o grievance redressal
- Web aggregators, brokers, insurance agents, bank agents, etc would act as facilitators on this
 platform for selling insurance policies.
- The portal would provide all such facilities to policyholders having an e-insurance account (E-IA).
- It will further act as a window to view all policies, details and renewal details.

Significance

- Help in **eliminating the need to fill lengthy forms**.
- Help to **cut down commissions** paid to intermediaries.
- Allow for a speedy acceptance of new/sandbox products.
- It will **simplify and digitise the insurance marketplace**, right from buying policies to renewals, claim settlement and agent and policy portability.

Insurance Regulatory and Development Authority of India

- It is an autonomous and statutory body established under the IRDA Act 1999.
- It is the apex body that supervises and regulates the insurance sector in India.
- **Objective:** To protect the interests of policyholders, to regulate, promote and ensure orderly growth of the insurance industry in India.
- **10-member body**: a Chairman, five full-time members and four part-time members appointed by the Government of India.
- **Nodal Ministry:** Ministry of Finance

GS III

4. Solar storm alert! A CME just hit the Earth today and more are coming Hindustan Times

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

News:

- Recently, on September 17th, Earth was hit by a Coronal Mass Ejection (CME) that was spewed out by the Sun earlier.
- **Solar activity has been on the rise,** with recent developments stoking concerns about **potential repercussions** for our planet.

Prelims Takeaway

- Coronal Mass Ejections (CMEs)
- Solar Flares
- Auroras

Coronal Mass Ejections (CMEs)

- These are large expulsions of plasma and magnetic fields from the Sun's corona that propagate outward into interplanetary space.
- During a CME, the Sun releases a **colossal amount of material** that **travels at high speeds into space**.
 - o These include electrons, protons, and heavier ions as well as magnetic fields.

Causes

- CMEs are typically triggered by the **destabilisation of the Sun's magnetic fields**.
- They often involve the **reconfiguration or disruption of magnetic loops** on the Sun's surface.
- CMEs are **distinct from solar flares**, although they often occur together.
 - Solar flares are sudden and intense bursts of energy and radiation.
 - CMEs involve the expulsion of solar material.

Impacts on Earth

- Geomagnetic Storms
 - The interaction between the CME's magnetic fields and Earth's magnetosphere can lead to geomagnetic storms.
 - o These can disrupt satellite communications, navigation systems and even power grids.
- Auroras
 - CMEs can also lead to auroras by energising particles in Earth's atmosphere.











Radiation Hazards

Astronauts in space or passengers on high-altitude flights can be exposed to elevated levels of radiation during a CME event.

5. New 'string' technology could revolutionise lithium production - Indian **Express**

Relevance: Science and Technology- developments and their applications and effects in everyday life. News:

- The researchers at the **University of Princeton** have developed a new "string-based" technique for extracting lithium.
- It can drastically **reduce the amount of land and time** needed for the **production of Lithium**.

Prelims Takeaway

Prelims Takeaway

Ozone Laver

Montreal Protocol

Kigali Agreement

- Lithium
- String Technology
- Lithium-ion Batteries

String Technology

- Researchers used a set of porous fibres twisted into strings and engineered them to have a waterloving (hydrophilic) core and water-repelling surface.
- When one end is dipped in a salt-water solution, the water travels up the string because of capillary action.
- Then, the water evaporates quickly from the string's surface leaving behind salt ions like sodium and lithium.
- The water will continue to evaporate like this as the salts become increasingly concentrated, eventually forming sodium chloride and lithium chloride crystals.
- Also, since lithium and sodium have different physical properties, they crystallise at different **locations** on the strings.
- **Sodium**, with its low solubility, **crystallises on the lower part**, while the highly soluble **lithium** salts crystallise near the top.

Current Technology

- A large majority of the lithium produced in the world is extracted from "brine reservoirs" located in salt flats.
- It relies on a series of massive evaporation ponds that concentrate lithium from saltwater reservoirs and salt flats of underground aquifers.
- This method of production can require hundreds of square kilometres.
- And it often takes months or even years to produce lithium that can be used in batteries.
- It is **commercially viable in a few locations** around the world.

6. Montreal Protocol: Fixing the Ozone Layer and Reducing Climate Change PIB

Relevance: Conservation, environmental pollution and degradation

The Ministry of Environment, Forest and Climate Change (MoEFCC) recently celebrated the 29th World Ozone Day.

World Ozone Day

- It is celebrated on **16th September each year** to commemorate the signing of the Montreal Protocol.
- It aims to spread awareness among people about the depletion of the Ozone Layer and the measures taken or to be taken to preserve it.
- The theme for World Ozone Day 2023 is "Montreal Protocol: fixing the ozone layer and reducing climate change".

Ozone Layer

- It is a special form of oxygen made up of three oxygen atoms (0_3) .
- It is both a **natural and a man-made product** that occurs in the Earth's
 - Upper atmosphere (the stratosphere)
 - Lower atmosphere (the troposphere)
- About 90% of ozone occurs naturally in the Earth's upper atmosphere (Stratosphere).



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- There, it **forms a protective layer** that shields us from the **sun's harmful ultraviolet rays**.
- This "good" ozone is **gradually being destroyed** by man-made chemicals called **Ozone-Depleting Substances (ODS).**
 - o It includes CFCs, HCFCs, halons, methyl bromide, carbon tetrachloride, and methyl chloroform.
- Ozone layer depletion leads to an uptick in the incidence of skin cancer and cataracts in humans.
- **Ground-level ozone** is formed primarily from **photochemical reactions between two major classes of air pollutants** viz. volatile organic compounds (VOC) and nitrogen oxides (NOx).

Montreal Protocol

- Adopted in **1987**, it is a worldwide agreement to **phase out the production and consumption of substances causing ozone-depletion.**
 - o Primarily chlorofluorocarbons (CFCs), halons, carbon tetrachloride and other chemicals
 - Used commonly in refrigeration, air conditioning, and aerosol propellants.
- It is the only UN treaty ever that has been ratified by every country on Earth all UN Member States.
- It has led to the **phase-out of 99% of ozone-depleting chemicals** in refrigerators, air-conditioners and many other products.
- India is a party to the Montreal Protocol since June 1992.

Kigali Agreement

- Adopted on October 15, 2016, it is an amendment to the Montreal Protocol.
- It addresses the phase-down of Hydrofluorocarbons (HFCs) used as replacements for the ozone-depleting substances.
- **Objective:** To reduce the production and consumption of HFCs with the aim of mitigating their contribution to global warming.

7. Inflows in Gold ETF hit 16-month high at ₹1,028 crore in August - Indian Express

Relevance: Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

News:

- According to data, Gold exchange-traded funds (ETFs)
 attracted Rs 1,028 crore in August, making it the highest
 inflow in 16 months.
- Apart from inflow, the asset base of Gold ETFs and investors' account or folio numbers increased in the period under review.

Prelims Takeaway

- Exchange Traded Fund (ETF)
- Gold Exchange Traded
 Funds

Gold Exchange Traded Funds

- They are commodity-based exchange-traded funds with an underlying asset as gold.
- They are passive investment instruments that are based on gold prices and invest in gold bullion.
- Gold ETFs are **units representing physical gold** which may be in paper or dematerialised form.
 - one Gold ETF unit is equal to 1 gram of gold and is backed by physical gold of very high purity.
- They combine the **flexibility of stock investment** and the **simplicity of gold investments**.
- They are **listed and traded on the National Stock Exchange of India (NSE)** and **Bombay Stock Exchange Ltd. (BSE)** like a stock of any company.
- It can be bought and sold continuously at market prices.
- There is a **complete transparency on the holdings** of a Gold ETF due to its **direct gold pricing**.
- ETFs have **much lower expenses** as compared to physical gold investments.

Exchange Traded Fund (ETF)











- An ETF is a **collection of investments** such as equities or bonds.
- It is a basket of securities that trades on an exchange just like a stock does.
- ETF **share prices fluctuate all day** as the ETF is bought and sold, unlike **mutual funds**, which only **trade once a day after the market closes**.
- They have **cheaper fees than other types of funds.**

8. 'Stabilising core inflation shows ease in price pressures across economy' Indian Express

Relevance: Indian Economy and issues relating to planning, mobilisation, of resources, growth, development and employment.

News:

- Recently RBI said that retail inflation, which eased in August, is expected to decline sharply in September driven by corrections in vegetable prices.
- However, **core inflation remained steady** at 4.9 percent in August.

Prelims Takeaway

- Inflation
- Inflation Targeting
- Retail Inflation
- Core Inflation

Inflation

- A **long-term increase** in the **general price level** of goods and services in a given economy.
- It considers the **pricing of most everyday or standard products and services,** such as food, clothes, housing, recreation, transportation, consumer staples, etc.
- It is positive when it helps improve consumer demand and consumption, and operate economic growth.
- Even inflation is meant to keep deflation in check and is a drag on the economy.

Inflation Targeting

- It is a central banking policy that focuses on altering monetary policy to attain a set annual inflation rate.
- It is founded on the assumption that **preserving price stability**, which is achieved by managing inflation, is the greatest way to **generate long-term economic growth.**
- Under the RBI Act, 1934, the **Central Government, in consultation with the RBI**, determines the **inflation target** in terms of the **Consumer Price Index (CPI), once in five years.**
- It provides for the constitution of a **six-member Monetary Policy Committee (MPC)** to determine the **policy rate required to achieve the inflation target.**
- Currently, the RBI aims to keep inflation at 4% but will tolerate inflation between the range of 2% to 6%.

Retail Inflation

- Also known as **Consumer Price Index (CPI) inflation**.
- It is the rate at which the **prices of goods and services** that **consumers buy for personal use** increase over time.
- It measures the change in the cost of a basket of goods and services that are typically purchased by households.
 - o These include food, clothing, housing, transportation and medical care.

Core Inflation

- It is the change in the costs of goods and services but does not include those from the food and energy sectors.
- Food and energy prices are **exempt** from this calculation because their **prices can be too volatile or fluctuate wildly.**









Editorials, Gists and Explainers

1. A WIN-WIN FOR ALL - Indian Express

Relevance: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Context

- The Digital India Programme had three main vision areas viz. Connectivity, Software and services on demand and Digital empowerment of citizens.
- Fortunately, the **connectivity landscape has been transformed** in the last seven years due to **multiple factors** like the **boom in mobile telephony, 4G coverage,** significant **reduction in tariffs** and increased **smartphone penetration.**

Recent rise in digitisation across different sector and concern

- Along with significant rise in digital connectivity and technologies, government's enabling policies like Net Neutrality and focus on building Digital Public Infrastructure (DPI), particularly Digital ID and UPI, have further contributed to the Digital India vision, resulting in a massive increase in digital transactions.
- However, this growth has also been accompanied by a huge surge in demand for data.
- Today, India's per capita data consumption stands at a whopping 19.5 GB per month and the total data volume transported by mobile networks is more than the mobile networks of US and China combined
- Thus, the gap between demand and affordable supply still remains quite wide, especially for poor households and rural India

Government's initiatives to promote digital data availability (PM-WANI)

- The creation of inter-operable public Wi-Fi hotspots was one such idea proposed by TRAI in which would foster a shared infrastructure as a last-mile distribution of broadband in sachet-sized packages of Rs 5-10.
- The idea was successfully piloted and submitted to the Department of Telecom (DOT) as Wi-Fi Access Network Interface (WANI), in March 2017.
- As a result, government launched PM-WANI scheme. In this No licence or permit was needed for operations to start.
- Start-ups who had participated in the initial pilot started work. Then
 Covid brought everything to a grinding halt. Now, the operators, called
 Public Data Office Aggregators (PDOAs), have started work again.
- It has been a game changer as In the last year alone, more than 1.5 lakh
 Wi-Fi hotspot have been installed by Public Data Office Aggregators
 (PDOAS) and more than a million people are getting unlimited internet
 daily by paying just Rs 5-10.

PM-WANI is going to strengthen the India's digital infrastructure

- By introducing various entities such as PDO, PDOA, app providers, and a central registry, an open and scalable framework has been created.
- . In the way UPI transformed the financial space in India, PM WANI is going to become a unique Digital Public Infrastructure in connectivity.
- This framework offers a compelling business opportunity for aggregators as it allows unbundling of internet distribution at the last mile, eliminating the need for additional licensing fees.
- It provides a robust foundation for delivering affordable internet access to a significant portion of society. Currently, India's home broadband penetration is one of the lowest in the world.
- PM-WANI presents a golden opportunity to accelerate high-speed unlimited internet penetration, bridging the digital divide and empowering communities nationwide.
- Moreover, many large Internet Service Providers are hesitant to enter underserved areas. This presents a golden opportunity for the PM-WANI framework to flourish. It also benefits ISPs and Telcos as they end up selling more bandwidth by making their end customers retailers.
- Therefore, by creating a win-win situation for all key stakeholders, PM-WANI also nurtures the growth of local nano entrepreneurs.
 These last-mile providers, found in small shops, local establishments, and even households, augment their monthly earnings while promoting internet usage.

Conclusion

- Therefore, PM-WANI needs to be promoted by all stakeholders.
- It is uniquely Indian in its approach of interoperability, openness, and scalability.
- Hopefully, it will accelerate like UPI and the other DPIs being built in our country.









2. Corridor to a new world - Indian Express

Relevance: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

Context

- Historically, India has been the pivot of connectivity from ancient Red Sea route, Rome to Indian
 Ocean and Punjab that was significant from socio-culture, economic and connectivity point of
 view.
- And, recently, on September 10 in New Delhi, the Prime Minister of India, President of the United States, Chancellor of Germany, Crown Prince of Saudi Arabia, President of UAE, Prime Minister of Italy and the President of the EU unanimously agreed to establish the India-Middle East-Europe Economic Corridor (IMEC).

India-Middle East-Europe Economic Corridor (IMEC)

- The IMEC will be a route in the historic sense of the word (with the geopolitical and economic significance that entails), providing transport connectivity to accelerate the development and integration of Asia, the Arabian Gulf, and Europe as a new locus of global power.
- MEC is envisioned two corridors
 - An eastern corridor linking India to the Arabian Gulf and a northern corridor linking the Arabian Gulf to Europe. Both ends have robust port, rail, and road infrastructure.
 - o India, whose connectivity infrastructure has helped it become the world's fastest-growing major economy, has a massive, well-integrated railroad network, mega ports, and highways on the eastern end of IMEC.
- Mega infra projects for augmenting capacities dedicated rail freight corridors, highways, expressways and ports - are at various stages of development.
- On the western end of IMEC, beyond Haifa, the sea route across the Mediterranean is also a well-charted path to Greece, Italy, France, and Spain, and well served by hinterland connectivity to Europe by rail and roads.

Importance of IMEC

- Promote better connectivity: It envisions a reliable, cost-effective railway and ship-to-rail transit network to supplement maritime and road routes, enabling goods and services to move between India, the UAE, Saudi Arabia, Jordan, Israel and the EU. IMEC is India's moment.
- Development and employment generation in the region due to infrastructure development.
- It will also be the cornerstone of economic progress across the region by supercharging regional trade, and connecting Asia with Europe through a region that has never, since the ancient Red Sea route, been considered for such connectivity despite its game-changing potential in terms of shorter transits, accessibility, and multimodal connectivity.
- It will save time compare to existing one route:
- The maritime corridor between Asia and Europe currently remains rooted in the saturated Suez Canal and Mediterranean shipping routes despite being longer and involving additional logistics costs.
- It takes 11 days to sail from JNPT in Maharashtra to Suez port, and six days to Dammam. An additional 24-hour transit by railway could land consignments at Haifa, saving three to four days of transit.
- It will strengthen the supply chain among the partner nations.
- IMEC, which promises shorter routes. It links major ports of western India including JNPT, Kochi, Kandla and Mundra with major shipping ports of the Gulf, including Jebel Ali, Fujairah, Ras Al-Khair, Dammam, Duqm, and Salalah
- It will help in countering the China's hegemony of Belt and Road Initiative in the Asia and European region.

Way forward

- As commitment of resources from stakeholders and multinational financial institutions like the World Bank will not be an issue
 as the financial returns on investments promise to be high.
- The green and sustainable growth corridor will envisage the laying of cables for electricity and a pipeline for transporting clean hydrogen. The greening of this project will contribute to the global effort to lower greenhouse gas emissions.
- IMEC has incredible potential to integrate India, West Asia, and Europe on a collective path to growth at an unprecedented scale.
 - And it is a historic moment for India as a regional leader that can bring up an entire regional economy through the combination of its technical leadership and outward-looking approach.
- As the next step, a working group of experts from the railway sector, ports and shipping, and communications needs to develop
 a plan of action to address physical and non-physical barriers, design, financing, legal and other regulatory requirements.

Conclusion

- A mega global initiative like IMEC is only the beginning.
- This new corridor will trigger regional and global cooperation initiatives for socio-economic development across continents, benefitting millions.









Quick Look

1. Broadnose Sevengill Shark

- It is a large seven-gilled with a wide head and short, blunt snout shark.
- It is related to sharks that lived in the Jurassic Period about 300 million years ago.
- They prefer tropical, temperate, shallow waters
- It is found in all oceans except the North Atlantic and the Mediterranean Sea.
- In the eastern Pacific Ocean, they are found from southeastern Alaska to southern Baja California, Mexico and from Colombia to Chile.
- They feed on anything, such as other sharks, rays, chimaeras, bony fish, hagfish, dolphins and porpoise meat, seals, shark egg cases and sea snails.
- IUCN Red List: Vulnerable

2. Pralay ballistic missiles

- It is a quasi-ballistic surface-to-surface missile developed by the Defence Research Development Organisation (DRDO).
- It can hit targets 150-500 km away and can carry 350-700 kg of high-grade explosives.
- It is powered by a solid propellant rocket motorand other new technologies.
- The missile guidance system includes state-of-the-art navigation and integrated avionics.
- It can change its path after covering a certain range in mid-air.

3. Tungareshwar Wildlife Sanctuary

- Location: Palghar district of Maharashtra
- It forms a corridor between Sanjay Gandhi National Park and Tansa Wildlife Sanctuary.
- Characterised by hilly terrain, dense forests, and small rivers or streams.
- Vegetation: Dry Deciduous, Moist Deciduous and Semi Evergreen.
- It is home to several species of trees, including teak, bamboo, and mango.
- Some commonly spotted animals in the sanctuary include Leopard, Wild Boar, Barking Deer, Langur, Bonnet and Rhesus Macaque, and Black-naped Hare.
- A multitude of birds, including the Crested Serpent-eagle, Jungle Owlet, White-eyed Buzzard, Oriental Honey-buzzard, Emerald Dove and Heart-spotted Woodpecker, can be found here.
- Several ancient temples are within its boundaries including the Tungareshwar Temple, dedicated to Lord Shiva.

4. Narmada River

- It is the largest west-flowing river in peninsular India.
- It rises from Narmada Kund, located at Amarkantak, in the Anuppur district of Madhya Pradesh in the Maikala range.
- The river flows through Madhya Pradesh, Maharashtra and Gujarat between Vindhya and Satpura hill ranges before falling into the Gulf of Cambay in the Arabian Sea.
- The river has numerous waterfalls, notably the Dhuandhar Falls, southwest of Jabalpur.
- Tributaries: Tawa, Barna, Hiran and Orsang

5. P-7 Heavy Drop Parachute System

- It is a military parachute system primarily used for the airdrop of heavy equipment, vehicles, and supplies from aircraft.
- It was indigenously designed and developed by the Defence Research and Development Organisation (DRDO).
- Weighing approximately 500 kg, the parachute guarantees the secure delivery of heavy cargo, even under challenging conditions.
- It comprises a platform and a specialised parachute system, promising to enhance the operational capabilities of the armed forces.











- It boasts eight main canopies, three extractor parachutes, one drogue parachute, and a suite of electrical, electronic, and mechanical systems.
- Its compact design allows seamless integration onto various aircraft, including the C-17, C-130, and other cargo aircraft of the IAF, providing versatility in deployment.

6. Samudra Prahari

- It is an Indian Coast Guard Ship (ICGS) specially designed for pollution control.
- It is the first pollution control vessel of its kind in Southeast Asia.
- It is equipped with the most advanced pollution Response and Control equipment for mitigating oil spills in the Exclusive Economic Zone.
- It has tanks and inflatable barges for storage of oil spills.
- The ship is capable of unhindered oil recovery operations with a storage capacity of 500 KL.
- The vessel is designed to operate a twin-engine Advanced Light Helicopter and to operate and embark Chetak helicopter.
- Special features include
 - o integrated platform management system
 - o power management system
 - o high power external fire fighting system
 - o one indigenous gun mount with fire fighting system
- The ship has unmanned machinery operation capabilities.

7. Operation Sajag

- It is a coastal security drill conducted by the Indian Coast Guard along the west coast.
- It involved all stakeholders of the Indian coastal security construct.
- The drill facilitates revalidation of the coastal security mechanism and brings awareness among the fishermen at sea.
- During the drill, extensive checking and verification of documents and crew passes of all fishing boats, barges and craft at sea was undertaken.
- Biometric card readers have also been issued to security agencies.
- Besides monitoring of dhows, island security and community interaction programmes have been institutionalised under the coastal security construct.











Prelims Track Question

Q1. Consider the following statements, with respect to Hoysala Architecture

- 1. These have multiple shrines grouped around a central pillared hall and laid out in the shape of an intricately-designed star.
- 2. Soapstone was primary used as building material for the temple.

Which of the statements given above is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

Q2. Consider the following pairs of UNESCO World Heritage Sites and their Locations

- 1. The Sacred Ensembles of Hoysalas: Tamil Nadu
- 2. Kakatiya Rudreshwara (Ramappa) Temple: Andhra Pradesh
- 3. Rock Shelters of Bhimbetka: Madhya Pradesh
- 4. Group of Monuments at Pattadakal: Kerala

How many of the pairs given above is/are correctly matched?

- A. Only one
- B. Only two
- C. Only three
- D. All four

Q3. With reference to Bima Sugam Platform, consider the following statements

- 1. It will be an online portal that will be a one-stop shop for all insurance related queries and policy purchase only.
- 2. Web aggregators, brokers, insurance agents, bank agents, etc would act as facilitators on this platform for selling insurance policies.
- 3. It will help to cut down commissions paid to the intermediaries.

How many of the statements given above is/are correct?

- A. Only one
- B. Only two
- C. All three
- D. None

Q4. Which among the following causes is the primary cause of Coronal Mass Ejections (CMEs)?

- A. Sudden changes in Earth's magnetic field
- B. Disruption of magnetic loops on the Sun's surface
- C. Realignment of the planets in the solar system
- D. Merger of Black holes

Q5. With reference to Lithium, consider the following statements

- It is a soft metal that belongs to the alkali metal group of the periodic table.
- 2. It has the lowest density amongst all metals.
- 3. It occurs as a metal in nature.
- 4. It reacts vigorously with water.

How many of the statements given above is/are not correct?

- A. Only one
- B. Only two
- C. Only three
- D. All four

Q6. Consider the following statements

- 1. The Montreal Protocol aimed to phase out the production and consumption of Hydrofluorocarbons (HFCs).
- 2. The Kigali amendment to the Montreal Protocol addresses the phase-down of ozone depleting substances.

Which of the statements given above is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

Q7. With reference to Gold Exchange Traded Funds(ETFs), consider the following statements

- 1. They are active investment instruments that are based on gold prices and invest in gold bullion.
- 2. They combine the flexibility of stock investment and the simplicity of gold investments.





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Which of the statements given above is/are incorrect?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

Q8. Consider the following statements with reference to Core Inflation

Statement I: It is the change in the costs of goods and services excluding the food and energy sectors.

Statement II: Food and energy prices are exempted because their prices can be too volatile or fluctuate wildly.

Which one of the following statements is correct?

- A. Statement I is correct but statement II is incorrect
- B. Statement I is incorrect but Statement II is correct
- C. Both Statement I and Statement II are correct and Statement II is the correct explanation for Statement I
- D. Both Statement I and Statement II are correct and Statement II is not the correct explanation for Statement I

Q9. Consider the following statements about PM-WANI Scheme

 It is formulated by the Ministry of Communications to increase Wi-fi access throughout the country.

- 2. The Public Data Office (PDO) will perform the functions relating to Authorization and Accounting.
- 3. It was first recommended by the Telecom Regulatory Authority of India.

How many of the statements given above is/are not correct?

- A. Only one
- B. Only two
- C. All three
- D. None

Q10. Consider the following countries

- 1. Egypt
- 2. USA
- 3. Oman
- 4. Germany

How many of the countries mentioned above is/are a part of India-Middle East-Europe Economic Corridor?

- A. Only one
- B. Only two
- C. Only three
- D. All four











Prelims Track Answer

Ans. 1 Option C is correct Explanation

- Hoysala Architecture is the building style developed under the rule of the Hoysala Empire between the 11th and 14th centuries, mostly concentrated in southern Karnataka.
- They are known for evolving a distinct style that is ornate with temple architecture following a stellate plan built on a raised platform.
- Stellate-plan: Multiple shrines grouped around a central pillared hall and laid out in the shape of an intricately-designed star. **Hence, statement 1 is correct.**
- The material used in temple construction is choloritic schist (soapstone), so, the artists were able to carve their sculptures intricately. Hence, statement 2 is correct.
- This can be seen particularly in the jewellery of the gods that adorn their temple walls.

Ans. 2 Option A is correct Explanation

- The Sacred Ensembles of Hoysalas: Karnataka
- Kakatiya Rudreshwara (Ramappa) Temple: Telangana
- Rock Shelters of Bhimbetka: Madhya Pradesh
- Group of Monuments at Pattadakal: Karnataka

Ans. 3 Option B is correct Explanation

- Bima Sugam Platform will be an online portal that will be a one-stop shop for
- insurance related queries, policy purchase, claim settlement, insurance advice and grievance redressal. Hence, statement 1 is incorrect.
- Web aggregators, brokers, insurance agents, bank agents, etc would act as facilitators on this platform for selling insurance policies.
 Hence, statement 2 is correct.
- The portal would provide all such facilities to policyholders having an e-insurance account (E-IA).
- It will further act as a window to view all policies, details and renewal details.
- It will help in eliminating the need to fill lengthy forms.

- It will help to cut down commissions paid to intermediaries. **Hence, statement 3 is correct.**
- It will allow for a speedy acceptance of new/sandbox products.
- It will simplify and digitise the insurance marketplace, right from buying policies to renewals, claim settlement and agent and policy portability.

Ans. 4 Option B is correct Explanation

- Coronal Mass Ejections (CMEs) are large expulsions of plasma and magnetic fields from the Sun's corona that propagate outward into interplanetary space.
- During a CME, the Sun releases a colossal amount of material that travels at high speeds into space including electrons, protons, and heavier ions as well as magnetic fields.
- CMEs are typically triggered by the destabilisation of the Sun's magnetic fields.
- They often involve the reconfiguration or disruption of magnetic loops on the Sun's surface. **Hence, option B is correct.**
- CMEs are distinct from solar flares, although they often occur together.

Ans. 5 Option A is correct Explanation

- Lithium is a soft, silvery-white metal that belongs to the alkali metals group of the periodic table of the elements. Hence, statement 1 is correct.
- It has the lowest density of all metals. **Hence, statement 2 is correct.**
- It is the lightest of the solid elements.
- It reacts vigorously with water. Hence, statement 4 is correct.
- It does not occur as a metal in nature but is found combined in small amounts in igneous rocks. **Hence, statement 3 is incorrect.**
- Its reserves are majorly concentrated in the lithium triangle in South America i.e. Argentina, Bolivia & Chile with 50% of the deposits concentrated in these regions.

Ans. 6 Option D is correct Explanation

• Montreal Protocol is a worldwide agreement to phase out the production and consumption





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of substances causing ozone-depletion. **Hence, statement 2 is incorrect.**

- It is the only UN treaty ever that has been ratified by every country on Earth - all UN Member States.
- Kigali Agreement is an amendment to the Montreal Protocol that addresses the phasedown of Hydrofluorocarbons (HFCs) used as replacements for the ozone-depleting substances. Hence, statement 1 is incorrect.
- It aims to reduce the production and consumption of HFCs with the aim of mitigating their contribution to global warming.

Ans. 7 Option A is correct Explanation

- Gold Exchange Traded Funds are commoditybased exchange-traded funds with an underlying asset as gold.
- They are passive investment instruments that are based on gold prices and invest in gold bullion. Hence, statement 1 is incorrect.
- Gold ETFs are units representing physical gold which may be in paper or dematerialised form.
- They combine the flexibility of stock investment and the simplicity of gold investments. Hence, statement 2 is correct.
- It can be bought and sold continuously at market prices.
- There is a complete transparency on the holdings of a Gold ETF due to its direct gold pricing.

Ans. 8 Option C is correct Explanation

- Retail Inflation is the rate at which the prices of goods and services that consumers buy for personal use increase over time.
- Core Inflation is the change in the costs of goods and services but does not include those from the food and energy sectors. Hence, statement I is correct.
- Food and energy prices are exempt from this calculation because their prices can be too

volatile or fluctuate wildly. **Hence, statement II is correct.**

Ans. 9 Option A is correct Explanation

- PM WANI (Wi-Fi Access Network Interface) is a scheme formulated by the Ministry of Communications meant to increase Wi-fi access throughout the country. Hence, statement 1 is correct.
- The move is aimed at helping accelerate the uptake of broadband Internet services.
- It was first recommended by the Telecom Regulatory Authority of India (TRAI) in 2017. **Hence, statement 3 is correct.**
- This will involve multiple players, including PDOs, Public Data Office Aggregators (PDOA), app providers, and a central registry.
- Public Data Office (PDO) will establish, maintain, and operate only WANI compliant Wi-Fi Access Points and deliver broadband services to subscribers. Hence, statement 2 is incorrect.
- Public Data Office Aggregator (PDOA) will be an aggregator of PDOs and perform the functions relating to Authorization and Accounting.
- It will not require the PDOs to get a license or pay a fee.
- Central Registry will maintain the details of App Providers, PDOAs, and PDOs.

Ans. 10 Option B is correct Explanation

- India-Middle East-Europe Economic Corridor project includes India, the UAE, Saudi Arabia, the European Union, France, Italy, Germany and the US. Hence, Option B is correct.
- The project will aim to enable greater trade among the involved countries, including energy products.
- It will include a railway and ship-rail transit network and road transport routes.
- The corridor will include a rail link as well as an electricity cable, a hydrogen pipeline and a high-speed data cable.
- In the coming times, it will be a major medium of economic integration between India, West Asia and Europe.











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