

SCIENCE & TECHNOLOGY

❖ **A Foucault pendulum swings inside the new Parliament**

➤ **CONTEXT:** One of the features of the new Parliament building in New Delhi, inaugurated on May 28, is a Foucault pendulum suspended from its 'Constitutional Gallery' area. It has been designed and installed by the **National Council of Science Museums (NCSM), Kolkata.**

- The pendulum hangs from a skylight at the top of the Constitution Hall, and signifies the "integration of the idea of India with the idea of the cosmos".
- Created by the National Council of Science Museum (NCSM) in Kolkata, the pendulum is being dubbed as the largest such piece in India, 22 metre in height, and weighing a staggering 36 kg.
- On the ground, a circular installation has been created to allow the pendulum's movement, with a short grill around it, allowing the visitors to stand around. At the latitude of the Parliament, it takes 49 hours, 59 minutes, and 18 seconds for the pendulum to complete one rotation, as per the details displayed at the installation.

➤ **What is a Foucault's pendulum?**

- The original Foucault's pendulum, named after 19th century French scientist Leon Foucault, is a simple experiment to demonstrate earth's rotation. When Foucault carried out this experiment for the public in 1851, it was the first direct visual evidence of the fact that the earth rotates on its axis.
- The experimental set-up involves a heavy object hung from a height with a string, free to swing in any direction. Once set in to-and-fro motion, the pendulum is seen to change its orientation slowly over time. For example, if the initial motion imparted to it was in the north-south direction, after a few hours it could be seen moving in the east-west direction.
- Actually, it is not the pendulum that changes its plane of motion, but the ground beneath it. Observers standing on the ground do not notice the earth's rotation, because they too are rotating with the earth, but can notice the change in orientation of the pendulum.
- At the north and south poles, when the pendulum is aligned with the axis of rotation of the earth, the pendulum's back-and-forth motion comes back to its original plane in exactly 24 hours. That is, if it starts swinging in the north-south direction, it then slowly turns in the northeast-southwest direction, then in the east-west direction. It keeps on changing its orientation, till it is back in its original orientation after 24 hours.
- At other latitudes, it takes longer for the pendulum to return to its original orientation of swinging. That is because the pendulum is not aligned with the axis of rotation of the earth. At the equator, the pendulum is perpendicular to the axis of rotation, and hence it never changes its orientation of the swing. Meaning, a Foucault's pendulum at the equator would not show any deviation from its original course. At other latitudes it will, and would return to the original course after fixed time periods.
- Foucault's pendulum is a standard fixture in many science museums across the world, meant to be an educational tool for children to learn about the rotation of the earth. Till quite recently, the Earth's spherical shape, and its rotation on the axis, were not intuitively accepted by most people. That is why experiments like Foucault's pendulum also represent the spirit of scientific inquiry and scientific temper.
- If the pendulum is installed at the North Pole, the pendulum will basically be swinging as the earth rotates 'below'. But someone standing on the earth's surface doesn't notice the planet's rotation (without e.g. looking up at the sky from time to time); instead, to them, the plane of the swing will seem to rotate by a full circle as the earth completes one rotation.
- If the pendulum is installed over the equator, the plane won't appear to shift at all because it will be rotating along with the earth. On any other latitude, the plane will shift through 360° in "one sidereal day divided by the sine of the latitude of its location".
- A Foucault pendulum is not a simple matter of setting up a pendulum with large parts. It must be designed, installed, and set swinging in such a way that the bob's motion is influenced to the extent possible only by gravity.

➤ In 1991, the then-new Inter-University Centre for Astronomy and Astrophysics, Pune, commissioned the country's first Foucault pendulum for public display from NCSM. After several studies and failed tests, NCSM installed the setup in 1993. NCSM subsequently installed another Foucault pendulum in the Queensland Science Museum, Brisbane.

PUBLIC HEALTH

❖ **India sees Reduction in Stunting; but Wasting, Obesity are Concerns:**

➤ **CONTEXT:** An inter-agency team of UNICEF, WHO and the World Bank has released the Joint Child Malnutrition Estimates (JME) report for 2022.

➤ **Key Highlights of the JME Report 2022:**

- **Stunting:**
 - ✓ Child stunting refers to a child who is too short for his or her age and is the result of chronic or recurrent malnutrition.
 - ✓ Globally, stunting declined from a prevalence rate of 26.3% in 2012 to 22.3% in 2022.
 - ✓ India continues to show a reduction in stunting and recorded 1.6 crore fewer stunted children under five years in 2022 as compared to 2012.
 - ✓ Stunting among children under five years dropped from a prevalence rate of 41.6% in 2012 to 31.7% in 2022.

- **Wasting:**
 - ✓ Child wasting refers to a child who is too thin for his or her height and is the result of recent rapid weight loss or the failure to gain weight.
 - ✓ The overall prevalence of wasting in 2022 was 18.7% in India.
 - ✓ India contributes 49% of the global burden of wasting.
 - ✓ In India, two-thirds of children at 12 or 24 months had wasting at birth or at one month of age. This means two-thirds of the wasting is caused by maternal malnutrition.
- **Overweight:**
 - ✓ Childhood overweight occurs when children's caloric intake from food and beverages exceeds their energy requirements.
 - ✓ There are now 37 million children under five living with overweight globally, an increase of nearly 4 million since 2000.
 - ✓ India had an overweight percentage of 2.8 per cent in 2022, compared to 2.2 per cent in 2012.
- **Comments on India:**
 - Going by the JME data, UNICEF concludes that India has shown promising progress when it comes to stunting.
 - According to UNICEF India officials, multi-sectoral responses under Poshan Abhiyaan in 2018 and continued Poshan 2.0 in 2022 seem to be contributing to the positive shift in the indicators.
- **About Joint Child Malnutrition Estimates (JME) Report:**
 - JME is an annual report published jointly by UNICEF, WHO and World Bank.
 - The report covers measures of child malnutrition used to track progress towards the child nutrition targets of Sustainable Development Goal 2.
 - The report covers child stunting, overweight, underweight, wasting and severe wasting.
- JME released in 2023 reveal insufficient progress to reach the 2025 World Health Assembly (WHA) global nutrition targets and **UN-mandated Sustainable Development Goal target 2.2**. Only about a third of all countries are 'on track' to halve the number of children affected by stunting by 2030.
- All forms of malnutrition are preventable. To stop malnutrition before it starts, children and their families need access to nutritious diets, essential services and positive practices to set them on the path to survive and thrive.
- But today, these vital pathways to good nutrition are under growing threat, as many countries plunge deep into a global food and nutrition crisis fuelled by poverty, conflict, climate change and the COVID-19 pandemic.
- As the world responds to the crisis, urgent action is critical to protect maternal and child nutrition – especially in the most affected regions – and secure a future where the right to nutrition is a reality for every child.

NATIONAL ISSUES

- ❖ **India's new Parliament**
- **CONTEXT:** In the 75th year of Independence, PM Modi inaugurated the new Parliament building, and installed the 'Sengol' near Lok Sabha Speaker's chair. 19 opposition parties boycotted the inauguration event, accusing the central government of sidelining President Droupadi Murmu – the country's first tribal head of state.
- **Old parliament building:**
 - At the coronation of George V as Emperor of India on December 12, 1911, the monarch decided to transfer the seat of the Government of India from Calcutta to the ancient Capital of Delhi.
 - In 1913, Edwin Lutyens and Herbert Baker signed on to be the architects for the Imperial City at New Delhi. Initially, they were asked to design President's House and North and South Block only.
 - In 1919, the British Parliament passed the Government of India Act which provided for a bicameral legislature for India.
 - The parliament building's construction took six years (and Rs 83 lakhs) – from 1921 to 1927, and its circular shape is believed to be inspired by the Chausath Yogini temple at Mitawli village in MP's Morena district.
 - In the 1919 plan for the construction of the Parliament, it was decided to have a council house, comprising:
 - ✓ Legislative Assembly Chamber (which later became the Lok Sabha),
 - ✓ Council of States Chamber (which is now the Rajya Sabha) and
 - ✓ Chamber of Princes (later became Library Hall).
 - The goal of the architecture was to project the strength of British imperialism and rule over India. Hence, both the architects agreed to highlight the superiority of European classicism, upon which Indian traditions had to be based.
 - The foundation for the existing Parliament was laid by the Duke of Connaught on February 12, 1921. It was inaugurated in January 18, 1927, by then Governor General of India Lord Irwin. Sir Bhupendra Nath Mitra, a member of the Governor-General's Executive Council and in charge of the Department of Industries and Labour, invited Viceroy to inaugurate the building.
 - Now The building will not be demolished and will be converted into a 'Museum of Democracy' after the new Parliament House becomes operational.
- **New Parliament building**
 - In 2019, the central government announced the redevelopment project to give a new identity to the 'power corridor' of India. This project is known as Central Vista redevelopment project.
 - The plan includes: the construction of a new parliament, Prime minister and vice-president's residences along with 10 building blocks that will accommodate all government ministries and departments.

- Piloted by the Ministry of Housing and Urban Affairs, the plan aims to change the face of the Lutyens' Delhi. Lutyens' Delhi shows off India's iconic buildings such as South and North blocks of Central Secretariat, Parliament House, and Rashtrapati Bhavan.
- It is designed by Ahmedabad-based HCP Design, Planning and Management under architect Bimal Patel and has been built by Tata Projects Ltd.

➤ **Main features of the new building**

- Built-up area of about 65,000 sq m, triangular in shape, and incorporates architectural styles from around India;
- The New Lok Sabha hall with a capacity of up to 888 seats, and Rajya Sabha hall with a capacity of upto 384 seats; The Lok Sabha may accommodate up to 1,272 seats for joint sessions of Parliament.
- The Lok Sabha hall is based on the peacock theme, India's national bird. The Rajya Sabha is based on the lotus theme, India's national flower.
- A "Platinum-rated Green Building", the new Sansad Bhavan will embody India's commitment towards environmental sustainability.
- The new Parliament is divyang friendly where people with disabilities will be able to move around freely.
- A state-of-the-art Constitutional Hall symbolically and physically puts the Indian citizens at the heart of our democracy.
- A Central Lounge that will complement the open courtyard (with a banyan – the national tree) will be a place for members to interact with each other.
- Ultra-modern state-of-the-art features like a digitised voting system, well-engineered acoustics and audiovisual systems in the two chambers.
- Murals depicting maps of ancient India-protected monuments of ASI and UNESCO, etc. on display.
- 3 ceremonial entrance halls with huge brass images of Mahatma Gandhi, Chanakya, Gargi, Sardar Vallabhbhai Patel, B.R. Ambedkar, and the Chariot Wheel from the Sun Temple at Konark are on display.
- Reflecting the cultural diversity of India in line with the "Made in India" initiative Tripura's epitome bamboo wood flooring and carpets from UP's Mirzapur embellished the new Parliament.

➤ **Need for new Parliament building**

- Current building is 96-years-old: As per the Ministry of Housing and Urban Affairs, the current building is 96-years-old and poses structural safety concerns.
- Narrow seating space for MPs:
 - ✓ The present building was never designed to accommodate a bicameral legislature for a full-fledged democracy.
 - ✓ The number of Lok Sabha seats is likely to increase significantly from the current 545 after 2026, when the freeze on the total number of seats lifts.
 - ✓ The Central Hall has seating capacity only for 440 persons.
 - ✓ When the Joint Sessions are held, the problem of limited seats amplifies.
- Distressed infrastructure: The addition of services like water supply and sewer lines, fire fighting equipment, CCTV cameras, etc., have led to seepage of water at several places.
- Fire safety is a major concern at the building.
- Obsolete communication structures: Communications infrastructure and technology is antiquated in the existing Parliament, and the acoustics of all the halls need improvement.
- Safety concerns: The current Parliament building was built when Delhi was in Seismic Zone-II; currently it is in Seismic Zone-IV. This raises structural safety concerns.

PRELIMS

1. **External Auditor of WHO**

- **IN NEWS:** The Comptroller and Auditor General of India, CAG, Girish Chandra Murmu has been re-elected as the External Auditor of the World Health Organisation (WHO) for a four-year term from 2024 to 2027.
- The CAG is already holding this position in the WHO since 2019 for a four-year term from 2019 to 2023.
 - The election was held in the Seventy-sixth World Health Assembly in Geneva. The CAG was re-elected, with an overwhelming majority of 114 out of 156 votes in the first round of voting.
 - After the election, in his address to the World Health Assembly, Mr Murmu outlined his vision as an External Auditor for the WHO while emphasising the process improvement for better outcomes, transparency and a professional approach.
 - This is the second major international audit assignment for the CAG this year following his selection for the post of External Auditor of the International Labour Organisation, earlier in March this year.

2. **Chandrayaan-3**

- **IN NEWS:** Indian Space Research Organisation ISRO chairman S Somanath today said that Chandrayaan-3 will be launched in July this year.
- He made these remarks after the successful launch of the second-generation navigation satellite NSV-01 from Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.
 - Chandrayaan-3 is a follow-on mission to **Chandrayaan-2** to demonstrate end-to-end capability in safe landing and roving on the moon. It consists of an indigenous lander module, a propulsion module, and a rover. The lander and the rover will have scientific payloads to carry out experiments on the lunar surface.

➤ **About Chandrayaan-3 Mission:**

- Chandrayaan-3 is India's third moon mission and is a follow-up of Chandrayaan-2 of July 2019, which aimed to land a rover on the lunar South Pole.

- The subsequent failure of the Vikram lander led to the pursuit of another mission to demonstrate the landing capabilities needed for the Lunar Polar Exploration Mission.
 - The Mission will have three major modules- the Propulsion module, Lander module and Rover.
 - ✓ The propulsion module will carry the lander and rover configuration till 100 km lunar orbit.
 - ✓ The Lander will have the capability to soft land at a specified lunar site and deploy the Rover which will carry out in-situ chemical analysis of the lunar surface during the course of its mobility.
- 3. Central Vigilance Commissioner**
- **IN NEWS:** Vigilance Commissioner Praveen Kumar Srivastava was sworn in by President Droupadi Murmu, as the Central Vigilance Commissioner (CVC) on Monday.
 - Since December last year, Mr. Srivastava had been working as the acting Central Vigilance Commissioner (CVC) following the completion of his predecessor Suresh N. Patel's tenure. The 1988-batch Indian Administrative Service officer of Assam-Meghalaya cadre had retired as Secretary (Coordination), Cabinet Secretariat, on January 31, 2022.
 - **About Central Vigilance Commission (CVC)**
 - The CVC was set up by the Government in February, 1964 on the recommendations of the Committee on Prevention of Corruption, headed by Shri K. Santhanam. In 2003, the Parliament enacted CVC Act conferring statutory status on the CVC.
 - The CVC is not controlled by any Ministry/Department. It is an independent body which is only responsible to the Parliament.
 - It is not an investigating agency. The CVC either gets the investigation done through the CBI or through chief vigilance officers (CVO) in government offices.
 - It is empowered to inquire into offences alleged to have been committed under the Prevention of Corruption Act, 1988 by certain categories of public servants.
 - It is a Multi-member Commission consists of a Central Vigilance Commissioner (Chairperson) and not more than two Vigilance Commissioners (Member).
 - The Central Vigilance Commissioner and the Vigilance Commissioners are appointed by the President on the recommendations of a Committee consisting of the Prime Minister (Chairperson), the Minister of Home Affairs (Member) and the Leader of the Opposition in the House of the People (Member).
 - The term of office of the Central Vigilance Commissioner and the Vigilance Commissioners is four years from the date on which they enter their office or till they attain the age of 65 years, whichever is earlier.
- 4. One District One Product (ODOP) Initiative**
- **IN NEWS:** The Ministry of Youth Affairs and Sports is presenting Khelo India University Games (KIUG) winners with 'One District One Product' gifts.
 - **About One District One Product (ODOP) Initiative:**
 - It was launched by the Ministry of Food Processing Industries in 2018.
 - Objective: To help districts reach their full potential, foster economic and socio-cultural growth, and create employment opportunities, especially, in rural areas.
 - The initiative aims to select, brand, and promote at least One Product from each District of the country for enabling holistic socioeconomic growth across all regions.
 - ODOP Initiative aims to turn every district in India, into an export hub through promotion of the product in which the district specialises.
 - The initiative plans to accomplish this by scaling manufacturing, supporting local businesses, finding potential foreign customers and so on, thus helping to achieve the 'Atmanirbhar Bharat' vision.
 - The ODOP Initiative has identified a total of 1102 products from 761 districts across the country.
 - This initiative is carried out with the 'Districts as Exports Hub' initiative by the Directorate General of Foreign Trade (DGFT), Department of Commerce.
 - **Process:**
 - ✓ Under the ODOP initiative, all products have been selected by States/UTs by taking into consideration the existing ecosystem on the ground, products identified under Districts as Export Hubs (DEH), and GI-tagged products.
 - ✓ The finalized list is communicated to the Department for Promotion of Industry and Internal Trade (DPIIT) by the relevant Department of States/UTs.
 - ✓ All activities including exhibitions, capacity building, etc. are undertaken at the State/UT and district level, in consultation and coordination with the States/UTs.
- 5. 'Mo Ghara' housing scheme**
- **IN NEWS:** In a major relief to economically and socially weaker households, the Naveen Patnaik Government on May 29 announced the launch of '**Mo Ghara**' (**My House**) to provide credit-linked financial assistance to beneficiaries who face fund crunch to complete or upgrade their houses.
 - The State Cabinet chaired by Odisha CM gave its consent to the credit-linked housing scheme which is fully funded from State budget. The applications for **availing loan will open from June 15, 2023.**
 - The Scheme will cover all such families who were left out in the existing housing schemes either due to stringent eligibility criteria or insufficient allocation, and those who had received housing assistance of smaller amount in the past and now want to upgrade or expand their houses.
 - Under the scheme, a beneficiary **can avail housing loan up to Rs. 3 lakh which can be repaid in 10 years excluding one year moratorium period in easy installments.** They can opt for one of the four slabs of loan amount – Rs. 1 lakh, Rs. 1.5 lakh, Rs. 2 lakh and Rs. 3 lakh,

- The family which is staying in kutcha (thatched) house or one pucca room with concrete roof would be eligible for the loan. Those having monthly income below Rs.25,000 and who have availed housing assistance of Rs.70,000 or below in the past would be considered for loan under 'Mo Ghara' scheme.
- The State Government will release capital subsidy to the loan account of the beneficiaries on completion of the house. Enhanced capital subsidy will be available to vulnerable categories scheduled caste and scheduled tribe or families led by persons living with disability.
- The State government would pay **highest Rs.60,000 subsidy** for Rs.3 lakh loan slab while vulnerable groups would get subsidy of Rs.70,000.
- Banks have been asked not to charge any processing fee from the beneficiary for sanction of the loan. In order to further reduce the financial burden for beneficiaries, the registration fee and stamp duties required during mortgage title deed have been waived off by the State government.
- The Naveen Patnaik government had earlier promised to convert all left out kutcha houses into pucca ones. Housing for rural households remained a key poll plank for political parties. Odisha government is now implementing Biju Pucca Ghar Yojna (BPGY) in addition to Centre's Prime Ministers Awas Yojna – Gramin.

ANSWER WRITTING**Q. Discuss the key features of the FAME (Faster Adoption and Manufacturing of Electric Vehicles) scheme and its impact on the growth of the electric vehicle market in India.**

The FAME (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles) India Scheme is a government initiative launched in 2015 to promote the adoption and manufacturing of electric and hybrid vehicles in the country. It aims to reduce vehicular pollution, reduce dependence on fossil fuels, and promote the use of indigenous technology for the manufacturing of electric vehicles.

The scheme has undergone several updates and revisions since its launch, including the recent FAME-II phase having the key features like:

- **Financial Incentives:** FAME II- subsidies are provided based on the battery capacity of the vehicle. Higher subsidies are offered for electric vehicles with larger battery capacities, encouraging the adoption of vehicles with longer ranges and greater efficiency.
- **Charging Infrastructure Development:** FAME II provides financial support for the establishment of charging stations, including both slow-charging and fast-charging facilities. The scheme encourages the setting up of charging infrastructure in public spaces, residential complexes, workplaces, and other suitable locations to enhance the accessibility and convenience of charging for electric vehicle owners.
- **Demand Aggregation:** It promotes demand aggregation to drive economies of scale and reduce the cost of electric vehicles. It encourages government organizations, public transportation agencies, and fleet operators to adopt electric vehicles in bulk.
- **Pilot Projects and Demonstrations:** It showcases the feasibility and benefits of electric vehicles in different sectors and regions. These projects help generate awareness, build confidence among consumers, and gather data on the performance and viability of electric vehicles in various use cases. The insights gained from such initiatives inform policy decisions and further promote electric vehicle adoption.
- **Skill Development and Training:** It emphasizes skill development and training programs for technicians, engineers, and other professionals involved in the electric vehicle ecosystem.
- **Research and Development Support:** It encourages innovation and indigenous development of electric vehicle technologies.

These features of the FAME scheme work together to create a supportive ecosystem for electric vehicles in India.

Impact of the FAME scheme on the growth of the electric vehicle market:

- **Increase in Electric Vehicle Sales:** According to the Society of Manufacturers of Electric Vehicles (SMEV), the sales of electric vehicles in India grew by 37% in the fiscal year 2020-2021. This growth can be attributed to the incentives and subsidies provided under the FAME scheme.
- **Expansion of Charging Infrastructure:** Under FAME II, the government has sanctioned the installation of 2,636 charging stations across 62 cities in India.
- **Adoption in Public Transportation:** Bangalore Metropolitan Transport Corporation (BMTC) introduced electric buses under the FAME scheme, reducing pollution levels and providing a sustainable transport solution.
- **Promotion of E-Rickshaws and E-Cycles:** As a means of last-mile connectivity and short-distance transportation, these have not only provided livelihood opportunities for many individuals but have also reduced pollution levels. In Delhi, for example, the FAME scheme contributed to the adoption of over 1 lakh e-rickshaws, positively impacting air quality.
- **Technological Advancements:** It has incentivized research and development activities, leading to improvements in battery technology, range, and performance of electric vehicles. For instance, Ola Electric, an Indian electric mobility company, introduced the Ola Electric Scooter with a removable battery pack, promoting convenience and ease of use.
- **Domestic Manufacturing of Electric Vehicles:** For example, Tata Motors launched the Tata Nexon EV, an all-electric SUV manufactured in India, which has gained popularity among consumers.

Challenges associated with the FAME scheme:

- **High Initial Cost:** Electric vehicles typically have a higher upfront cost compared to conventional vehicles. This higher cost acts as a deterrent for price-sensitive consumers, limiting the adoption of electric vehicles.

- **Limited Charging Infrastructure:** It hampers the widespread adoption of electric vehicles as consumers may fear being stranded with no charging options.
- **Range Anxiety:** This range limitation makes potential buyers hesitant to opt for electric vehicles, particularly for inter-city or long-distance travel.
- **Battery Technology and Cost:** Lithium-ion batteries, commonly used in electric vehicles, contribute to a significant portion of the vehicle's cost which itself is the costliest part of EVs.
- **Limited Domestic Manufacturing:** India relies on imports for a large portion of lithium-ion batteries used in electric vehicles. This reliance on imports hampers the development of a robust domestic manufacturing ecosystem and can impact the cost competitiveness of electric vehicles.
- **Addressing these challenges is crucial to accelerate the adoption of electric vehicles in India and ensure the long-term success of the FAME scheme.** Recently, the government announced the slashing of subsidies for the electric 2-wheelers segment - a step which might drag India's EV revolution. A gradual transition with sustained subsidies would have been ideal to ensure market growth and reach the international benchmark of 20% EV adoption. Production-Linked Incentive schemes in automobile and battery cells can also help in bringing enhanced investments and cutting costs for manufacturers.

MCQs

1. A US Congressional Committee recently recommended strengthening Nato Plus by including India in the five-member grouping. Currently, which one of the following countries is not a member of NATO Plus groupin
 - a) Australia
 - b) Japan
 - c) **Ukraine**
 - d) South Korea
2. A person in the US recently died from the rare Powassan virus, marking the first fatal case in the US this year. Consider the following statements regarding Powassan Virus Disease:
 1. It is a rare, yet often serious disease that is spread by the bite of Mosquitoes.
 2. There are no medications to prevent or treat Powassan-virus infection.
 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
3. Consider the following statements regarding Chytridiomycosis:
 1. It is an infectious disease that affects amphibians worldwide.
 2. It is caused by a FUNGUS.
 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. Consider the following statements with reference to One District One Product:
 1. It was launched by the Union Ministry of Commerce and Industry.
 2. It aims to turn every district in India, into an export hub through promotion of the product in which the district specialises.
 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
5. Consider the following statements:
 1. Rice Fortification is a cost-effective and complementary strategy to increase vitamin and mineral content.
 2. Anemia is a problem of not having enough healthy red blood cells or hemoglobin to carry oxygen to the body's tissues.
 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
6. Considered the following statement regarding "jugalbandi"
 1. It is a AI-driven chatbot called Jugalbandi
2. The chatbot is being developed by Microsoft.
3. The chatbot will operate over the WhatsApp messaging service.

Which of the following statement is/ are correct?

 - a) Only 1
 - b) Only 2
 - c) 2 and 3
 - d) **All of the above**
7. Considered the following statement regarding supercomputer?
 1. The International Supercomputing Conference (ISC 2023) in Germany,
 2. The AI Supercomputer 'AIRAWAT', situated at C-DAC, Pune, ranking of 75th on the Global Supercomputing List.
 3. Indigenously developed 'AIRAWAT' in India.
 Which of the following statement is/ are correct?
 - a) Only 1
 - b) Only 2
 - c) 2 and 3
 - d) **All of the above**
8. Consider the following statements regarding Diatom:
 1. It is a photosynthetic, multi-celled organism.
 2. They are found in almost every aquatic environment including fresh and marine waters.
 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
9. Recently, Odisha Government launch of 'Mo Ghara' (My House) scheme.
 1. Under the scheme, a beneficiary can avail housing loan up to Rs. 3 lakh which can be repaid in 10 years.
 2. Odisha CM gave its consent to the credit-linked housing scheme which is fully funded from State budget.
 3. The scheme will cover all such families who were left out in the existing housing schemes.
 Which of the following statement is/ are correct?
 - a) Only 1
 - b) Only 2
 - c) 2 and 3
 - d) **All of the above**
10. Recently, the Great Himalayan National Park (GHNP) is in news, it is situated in which of the following state/UT?
 - a) Jammu and Kashmir
 - b) Ladakh
 - c) **Himachal Pradesh**
 - d) Uttarakhand