

Daily Current Affairs Prelims Quiz 25-11-2024 & 24-11-2024 (Online Prelims Test)

- 1) Consider the following statements with respect to National Gopal Ratna Award
 - 1. The objective of the award is to recognize and encourage individuals and organizations working in the livestock sector.
 - 2. The Award consists of a cash prizes along with a Certificate of merit and memento.
 - 3. In India, livestock sector comprises one third of the agriculture.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

Answer: c

National Gopal Ratna Award (NGRA), 2024

Recently, the department of Animal Husbandry and Dairying has announced the winners of the National Gopal Ratna Award, 2024.

- National Gopal Ratna Award is one of the highest National Awards in the field of livestock and dairy sector.
- The winners of the National Gopal Ratna Awards (NGRA) are declared by the Department of Animal Husbandry and Dairying (DAHD).
- The objective of the award is to recognize and encourage all individuals and organisation working in the sector of animal husbandry and dairying.
- The individuals and organisation include like Farmers rearing indigenous animals, AI Technicians and Dairy cooperative societies / Milk Producer Company / Dairy farmers Producers Organizations.

Livestock sector is a crucial sector of the Indian economy, comprising one third of the agriculture and allied sector GVA and having over 8% CAGR.

- The Award is conferred in 3 categories, which are:
 - 1. Best Dairy Farmer Rearing Indigenous Cattle/buffalo Breeds
 - 2. Best Artificial Insemination Technician (AIT)
 - 3. Best Dairy Cooperative/ Milk Producer Company/ Dairy Farmer Producer Organization
- From this year (2024) onwards, the Department has incorporated a Special award for North Eastern Region (NER) States, in all the three categories under the Awards, so as to encourage and boost the dairy development activities in NER.
- The Award consists of a cash prize, along with a Certificate of merit and memento.

- The Award consists of a cash prize of Rs. 5 lakh for 1st rank, Rs. 3 lakh for 2nd rank, Rs. 2 lakh for 3rd rank and Rs. 2 lakh for Special Award for North Eastern Region.
- 2) Consider the following statements with respect to Commission for Air Quality Management
 - 1. The objectives of it is to issue directions and entertain complaints, for the purpose of protecting and improving the quality of air in the National Capital Region (NCR) and adjoining areas.
 - 2. It was established in 2020 through ordinance, by replacing the EPCA (Environmental Pollution (Prevention and Control) Authority).

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

Answer: c

Commission for Air Quality Management (CAQM)

Recently the Supreme Court has questioned the Commission for Air Quality Management (CAQM) due to its inadequate pollution control response in Delhi

- Commission for Air Quality Management (CAQM) the government's monitoring agency, on its inadequate pollution control response.
- CAQM in the National Capital Region (NCR) and adjoining areas came into existence through an ordinance in 2020, which was later replaced by an Act of Parliament in 2021.
- It replaced the EPCA (Environmental Pollution (Prevention and Control) Authority), which was formed in 1998 by the Supreme Court.
- CAQM was established under the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021.
- The Act gives CAQM the power to take all measures, issue directions and entertain complaints, as it deems necessary, for the purpose of protecting and improving the quality of air in the NCR and adjoining areas.
- Under Section 14 of the Act, the CAQM can initiate stringent actions against officers for not following its orders.
- Core Powers and Mandates of the CAQM include:
 - Issue binding directions for air quality improvement
 - Take necessary measures for pollution control
 - Entertain complaints
 - Initiate action against non-compliant officers (Section 14)
 - Implement Graded Response Action Plan (GRAP)
- Key Challenges:
- **Systemic Issues** Gap between directive authority and implementation.
- While CAQM can issue orders, ground implementation depends on various agencies.
- Lack of effective enforcement mechanisms despite statutory powers
- **Reactive vs. Proactive Approach** Supreme Court criticism of delayed GRAP Stage IV implementation.
- Waiting for air quality deterioration rather than preventive action.
- Need for more accurate pollution forecasting methods.
- **Focus Imbalance** Historical overemphasis on stubble burning.
- Insufficient attention to other pollution sources (dust, vehicles).
- Coordination Challenges Multiple stakeholders across states

- Complex inter-agency dependencies
- Need for better ground-level action enabling
- **Enforcement Weaknesses** Non-compliance with CAQM directions.
- Inadequate use of statutory powers against officers.
- Limited translation of efforts into tangible pollution reduction.
- 3) Consider the following statements with respect to Transit of Venus
 - 1. It is an astronomical event that occurs when Venus passes between the Earth and the sun.
 - 2. It occurs in pairs periodically.

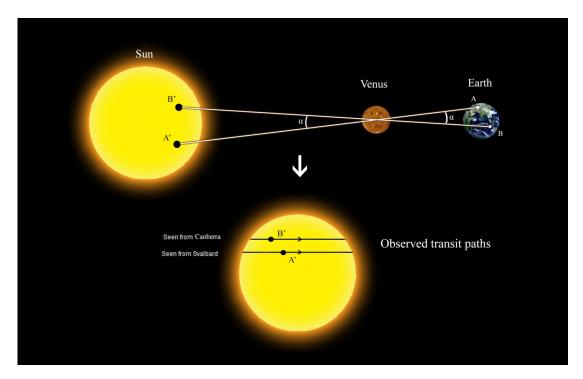
Which of the statements given above is/are correct?

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

Answer: c

Transit of Venus

- Transit of Venus is a rare astronomical event that occurs when Venus passes between the Earth and the sun.
- Venus appears as a small black circle that moves across the face of the sun during the transit of Venus.
- Even though *it is much bigger than our moon*, it appears as a dot and doesn't cause an eclipse like our moon does as it is much farther away from our Earth.
- The transit of Venus occurs in pairs periodically.
- After a pair *occurs eight years apart* around December, there's *a gap of 121.5 years before* the next pair occurs.
- This pair, which takes place eight years apart around the month of June, is then followed by a gap of 105.5 years, before the pair of Venus transits in December takes place again.
- The 243-year cycle (8+121.5+8+105.5) keeps repeating itself, with the dates advancing just by a couple of days.
- Studying Venus transits helps scientists better understand the atmosphere of our neighbouring planet and also learn more about the elements that layer above its surface.



- 4) Consider the following statements with respect to International Cooperative Alliance (ICA)
 - 1. It serves as the apex body for the cooperative movement, providing a global platform for collaboration, knowledge exchange, and coordinated action.
 - 2. Regional Assembly is the highest policy body of the International Cooperative Alliance Asia-Pacific (ICA-AP).

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

Answer: c

International Cooperative Alliance (ICA)

The Global Conference of the International Cooperative Alliance (ICA) is to be held in New Delhi, India from 25 to 30 November 2024.

- The International Cooperative Alliance (ICA) is the global organization that unites, represents and serves cooperatives around the world.
- It was founded in **1895**, London, England during the 1st Cooperative Congress it is one of the oldest and largest non-governmental organizations, representing 1 billion cooperative members globally.
- It is the leading voice for cooperatives, advocating for their interests and supporting the sharing of expertise across the sector.
- The International Cooperative Alliance (ICA) has over 306 member organizations across 105 countries.
- The International Co-operative Alliance (ICA) *first expanded into the Asia-Pacific region* with the establishment of the Regional Office & Education Centre for South-East Asia in *1960*.
- Governance Structure of ICA- Asia Pacific (ICA-AP) It operates within the larger framework of ICA's global governance structure.
- **Regional Assembly** Is the highest policy body, where all ICA member organizations

participate.

- It is responsible for guiding the regional office and discussing regional and global issues, making recommendations to the ICA General Assembly.
- **Regional Board** It supports the implementation of policies and decisions made by the Regional Assembly, ensuring that ICA-AP's goals are effectively pursued.
- **Sectoral and Thematic Committees** These committees focus on specific areas such as agriculture, finance, housing, and sustainable development.
- Their work is central to addressing regional needs and promoting cooperative solutions.
- India's participation in these bodies has ensured that its interests are well-represented and that it continues to lead efforts in shaping the cooperative movement in the region.
- Global Conference of the International Cooperative Alliance (ICA) Is to be held in New Delhi, India from 25 to 30 November 2024.
- An important ICA General Assembly will also be held, as well as meetings of ICA's Sectoral Organisations, Regional Offices and Thematic Committees.
- This event will be **hosted by the Indian Farmers Fertilizer Cooperative (IFFCO)** who has been a member of the ICA since 1980, and the 18 ICA member organizations in India representing close to 800,000 cooperatives and 290 million co-operators.
- The conference **theme** is "Cooperatives Build Prosperity for All" where there will be four plenary sessions, each accompanied by four parallel sessions, to create an Action Agenda for Cooperatives to accelerate the SDGs.
- 5) Consider the following statements with respect to Dendrites
 - 1. They are branch-like extensions of a neuron that act as its main receiving structures.
 - 2. Their primary job is to collect signals from other neurons and pass them to the neuron's main body, called the soma, for processing.
 - 3. A single neuron can classify inputs that are traditionally seen as too complex for one cell to handle.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

Answer : c

Dendrites

Scientists have detected a first-of-its-kind signal in human brain that focuses on receiving and transmitting signals in Dendrites.

- Dendrites are branch-like extensions of a neuron (nerve cell) that act as its main receiving structures.
- Their primary job is to collect signals from other neurons and pass them to the neuron's main body, called the *soma*, for processing.
- **New findings** Researchers have for the first time uncovered a unique type of electrical signal in the human brain, offering fresh insights into how our brains process information.
- The discovery focuses on branch-like structures in neurons that are crucial for receiving and transmitting signals.
- Until now, most of what scientists knew about the electrical activity of dendrites.
- However, researchers recently examined layer 2/3 (L2/3) pyramidal neurons from human brain tissue, specifically from the cerebral cortex, which plays a key role in advanced thinking and problem-solving.
- The study revealed a previously unknown class of electrical signals, called *calcium-mediated dendritic action potentials* (*dCaAPs*).

- Unlike the typical "all-or-none" signals seen in neurons, these dCaAPs showed a "graded" response.
- These dendritic signals allow individual neurons to solve problems that scientists previously thought required entire networks of brain cells.
- Essentially, a single neuron can classify inputs that are traditionally seen as too complex for one cell to handle, redefining our understanding of brain computation.
- This finding challenges long-held beliefs about how neural networks function and highlights the sophistication of the human brain compared to that of other animals.
- The researchers suggest that these unique dendritic properties may be one of the factors that set the human brain apart, contributing to our advanced cognitive abilities.
- The study not only deepens our understanding of human brain function but also opens new avenues for exploring neurological disorders and potential treatments.
- By understanding how these unique signals work, scientists could gain valuable insights into conditions where brain computation goes awry.

