



Daily Current Affairs Prelims Quiz 12-07-2024 (Online Prelims Test)

1) Consider the following statements with respect to Government e Marketplace (GeM)

1. It facilitates online procurement of common use of Goods & Services required by various Government Departments, Organisations and Public Sector Undertakings.
2. GeMAI is a program to reach out to the last mile sellers and simplify public procurement.
3. GeM SAHAYAK is a generative AI-based Chabot to be deployed by GeM.

How many of the statements given above are correct?

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

Answer : a

Government e Marketplace (GeM)

The Government e Marketplace has reported significant achievements and initiatives in the first quarter of FY 24-25, showing a 136% quarter-on-quarter growth in Gross Merchandise Value compared to last year.

- Government e Marketplace (GeM) facilitates online procurement of common use Goods & Services required by various Government Departments, Organisations and PSUs.
- GeM aims to enhance transparency, efficiency and speed in public procurement.
- It provides the tools of e-bidding, reverse e-auction and demand aggregation to facilitate the government users, achieve the best value for their money.
- The purchases through GeM by Government users have been authorised and made mandatory by **Ministry of Finance** through General Financial Rules, 2017.
- **GeM SAHAYAK** - Is a **program to reach out to the last mile sellers and simplify public procurement**.
- It aims at creating a PAN INDIA network of 6-7000 trained and certified accredited trainers.
- The trainers would offer their services to potential and existing GeM Sellers in navigating on GeM and enhancing business opportunities.
- Buyers too will benefit from the services of these SAHAYAKS in terms of creation of bids and other value-added services.
- **GeMAI** - GeM is all set to deploy its **generative AI-based** chatbot called "GeMAI" in the coming quarter.
- The AI tool has been trained to provide solutions based on a nuanced analysis of queries raised by Buyers and Sellers through various complaint and feedback mechanisms.
- Conversational analytics and business intelligence using generative AI are also being harnessed to build a robust AI-powered chat bot.
- **The Aabhar Collection** - GeM launched its signature initiative called "The Aabhar Collection" as part of its 'Vocalforlocal' outlet store marketplace.

- The Aabhar collection showcases over 120 exquisite and hand-crafted gift items and hampers, featuring select products from One District One Product (ODOP) and Geographical Indication (GI) categories.
- It marks an important milestone in enhancing visibility of indigenous arts & crafts and showcasing the rich tapestry of Indian heritage and culture.

2) Consider the following statements with respect to Order of St Andrew the Apostle

1. It is the France's highest civilian honour.
2. Prime Minister Narendra Modi received this award for "exceptional services in promoting special & privileged strategic partnership between countries.

Which of the above statement(s) is/are correct?

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

Answer : b

Order of St Andrew the Apostle

Prime Minister Modi was recently honoured with Order of St Andrew, highest civilian award of Russia.

- Order of St Andrew the Apostle is the highest civilian honour of **Russia**.
- The award is given to:
 - Prominent government and public figures, military leaders
 - Outstanding representatives of science, culture, art and
 - Various sectors of the economy for exceptional services to Russia.
- It can also be awarded to heads of foreign states for outstanding services to the Russian Federation.
- Its name comes from Saint Andrew, who is believed to be one of the apostles or 12 original followers of Jesus.
- The order was abolished in 1918 following the Russian Revolution, which overthrew the Tsarist regime.
- It was re-established in 1998 by an Executive Order of the President of Russia.
- *The award for the Prime Minister Narendra Modi was announced in 2019.*
- It is given to the Prime Minister for his exceptional services in promoting special & privileged strategic partnership between Russia and India and friendly relations between the Russian and Indian peoples.

3) Talacauvery Wildlife Sanctuary, sometimes seen in the news recently, is situated at?

- a. Karnataka
- b. Kerala
- c. Tamil Nadu
- d. Goa

Answer : a

Talacauvery Wildlife Sanctuary

The National Green Tribunal (NGT) has taken suo moto cognizance about alleged illegal

tree felling and burning near the Talacauvery Wildlife Sanctuary in Kodagu district.

- Talacauvery Wildlife Sanctuary is located in Kodagu district of **Karnataka**.
- It is **part of Mundrote Forest Range**.
- The affected area, Mundrote Forest Range, is known for its rich biodiversity, including 6,000 species of trees and plants.
- The area is part of a UNESCO World Heritage Site and consists of dense evergreen forests.
- The NGT order highlights potential violations of the Environment Protection Act, 1986, and the Forest (Conservation) Act, 1980.

4) Leggett Garg Inequalities, sometimes seen in the news recently, is associated with?

- a. It probes the entanglement between spatially separated systems.
- b. A set of mathematical expressions that compare the predictions of quantum mechanics with those of classical physics.
- c. A correlation-type inequality for four functions on a finite distributive lattice.
- d. A relation which makes a non-equal comparison between two numbers or other mathematical expressions.

Answer : b

Leggett Garg Inequalities

Indian scientists have used LGI violation in a completely new way - to generate truly unpredictable random numbers and this concept could solve to a practical cybersecurity problem.

- **Classical (vs) Quantum World** - In the classical world (the world we see every day), objects have definite properties at all times.
- For example, a coin is always either heads or tails, even if we're not looking at it.
- In the quantum world (the world of very small particles), things behave differently.
- Objects can be in multiple states at once until they're measured.
- **Leggett Garg Inequalities (LGI)** - LGI tests whether a system behaves classically or quantum-mechanically.
- It is a litmus test for quantumness in a system in a loophole free manner.
- The team achieved a loophole-free violation of LGI, which adds an extra layer of security and reliability to the random number generation process.
- It does this by looking at how the system changes over time, rather than at a single moment.
- **Single-Particle System** - Unlike traditional two-particle systems, this method uses a single-particle setup, making it potentially more practical for real-world applications.
- **The Test** - LGI sets up a mathematical inequality based on these time-based measurements.
- If the system obeys this inequality, it's behaving classically.
- If it violates the inequality, it's showing quantum behaviour.
- **Significance** - LGI helps us understand if a system is truly quantum or not.
- This is crucial for technologies that rely on quantum effects, like the random number generator in this research.

5) Consider the following statements:

1. *Salvinia molesta* is an invasive exotic fern from South America that invades ponds and lakes.
2. *Cyrtobagus salvinia* is a beetle from Brazil that act as a biocontrol agent.
3. Tawa River is a tributary of Tapi River.

How many of the statements given above are correct?

- a. Only one

- b. Only two
- c. All Three
- d. None of the above

Answer : b

Salvinia Molesta & Cyrtobagus Salvinia

An exotic beetle, Cyrtobagus salvinia, helps completely eliminate Salvinia Molesta in 18 months from Satpura dam in Madhya Pradesh.

- Salvinia molesta, an invasive aquatic fern, had completely covered the 2,800-acre Sarani reservoir in Betul district, Madhya Pradesh.
- It caused significant ecological and economic damage, including depleting fish populations and affecting local livelihoods.
- Scientists introduced ***Cyrtobagus salvinia, a beetle from Brazil, as a biocontrol agent.***
- This beetle specifically targets Salvinia molesta.
- Within 15-18 months, the beetle population multiplied and completely eradicated the invasive weed.
- This method was far more cost-effective than manual removal, estimated at Rs 15 crore (150 million rupees).
- The beetle only feeds on Salvinia molesta and dies naturally when its food source is exhausted, posing no threat to the environment.
- The weed's eradication has brought relief to local fishermen who had been facing a livelihood crisis for five years.
- Fish populations are expected to recover, potentially restoring normal income levels for fishermen by next year.
- This represents one of the largest and most successful applications of biological control for invasive aquatic weeds in India.
- It demonstrates the potential of carefully researched and applied biological control methods in ecosystem management.
- **Tawa River** in the Betul district of Madhya Pradesh is a **tributary of the Narmada River.**