



VAJIRAM & RAVI
Institute for IAS Examination

The Analyst

CURRENT AFFAIRS Handout

21st March 2026



Our Water Challenge is stark



CONTEXT: On World Water Day, and in the context of increasing pressure on finite resources in a resource-constrained world, it is time to look for new water solutions for India.

World Water day:

- Held on **22 March** every year since **1993**, is an annual **United Nations Observance** focusing on the importance of **fresh water**.
- **Aims:** To raise awareness of the **2.1 billion people** living without access to safe water.
 - To support the achievement of **SDG 6:** water and sanitation for all by 2030.
- **Theme:** Every year, **UN-Water** (UN's coordination mechanism on water and sanitation) sets the theme for World Water Day.
 - **2024:** "Leveraging Water for Peace"
 - **2025:** "Glacier Preservation"
 - **2026:** "Water and Gender"

Water crisis refers to a situation where there is **insufficient access to clean, safe, and reliable water** to meet the needs of populations.

World Bank - annual per-capita availability is **less than 1000 cubic metres**.

Water Crisis Situation in India:

- **Limited Freshwater Resources:** India holds **18% of the world's population** but only **4% of its freshwater**.
- **Per Capita Water Availability:** dropped from **1,816 cubic metres in 2001 to roughly 1,486 in 2021**.
 - **By 2050**, we will approach the scarcity threshold of **1,000 cubic metres**.

- **Water Stress:** NITI Aayog's *Composite Water Management Index report*
 - India is experiencing the worst water crisis in its history, with nearly **600 million people facing high to extreme water stress**.

Reasons:

- **Climate Change:**
 - **11 % of tehsils, Indo-Gangetic plains**, have seen critical declines during the June-July sowing window.
 - **More than 80% of India's population** now lives in districts *vulnerable to hydro-meteorological disasters*.
 - crucial river flows in the **Indus and Ganga basins** could face severe reductions by the 2050s.
- **Less attention on "green water":**
 - India's water policy has **traditionally focused on blue water** i.e. rivers, lakes, and aquifers.
 - Globally, around **60 % of rainfall is stored in soils** as green water.
 - chemical-intensive farming leading to **loss of moisture memory**.



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- **Farm sector water-insecure:** Ministry of Jal Shakti - "Annual Ground Water Quality Report 2024"
 - **Water intensive Crops: 87% of extracted groundwater is used in agriculture** and 11% is used for domestic purposes.
 - **crop water productivity**- \$0.52 per cubic metre (a third of China's)
- **Limited focus on Circular Water Economy:** " We treat used water as a waste & not as a resource."
 - **Only 28% of urban used water is treated** today & reuse remains negligible.
- **Cities as concrete sinks rather sponges:**
 - **built-up area has increased by nearly a third since 2005**, creating impervious surfaces that block groundwater recharge and magnify flood risks.
 - **E.g.** Over half of Delhi's 1,300 water bodies have been lost to encroachment.
 - **Bengaluru's lakes** dwindled from **262 in 1961 to just 81.**

- **Water Contamination:** "Composite Water Management Index", 2018
 - India is placed at 120th amongst 122 countries in the water quality index, with nearly **70% of water being contaminated.**

Towards advancing Water Security in India :

- **Jal Jeevan Mission :** provide safe and adequate drinking water through **individual household tap connections by 2024** to all households in **rural India.**
 - **JJM 2.0 (Extended to 2028):** "Sujalam Bharat" - every village digitally mapping the complete drinking water supply system from source to tap.
- **Atal Bhujal Yojana:** *World Bank-funded project* targeting behavioral change and community-led water budgeting in water-stressed blocks.
 - villages draft their **own "Water Security Plans"** based on real-time data from local digital monitoring stations.



National Geographic

<https://www.nationalgeographic.com> › Science

Why Bangalore, India's Bellandur Lake Catches Fire

14 Feb 2018 — About 40 percent of the city's **untreated sewage flows into Bellandur Lake every day.** Industries discharge effluents directly into the water. [Read more](#)



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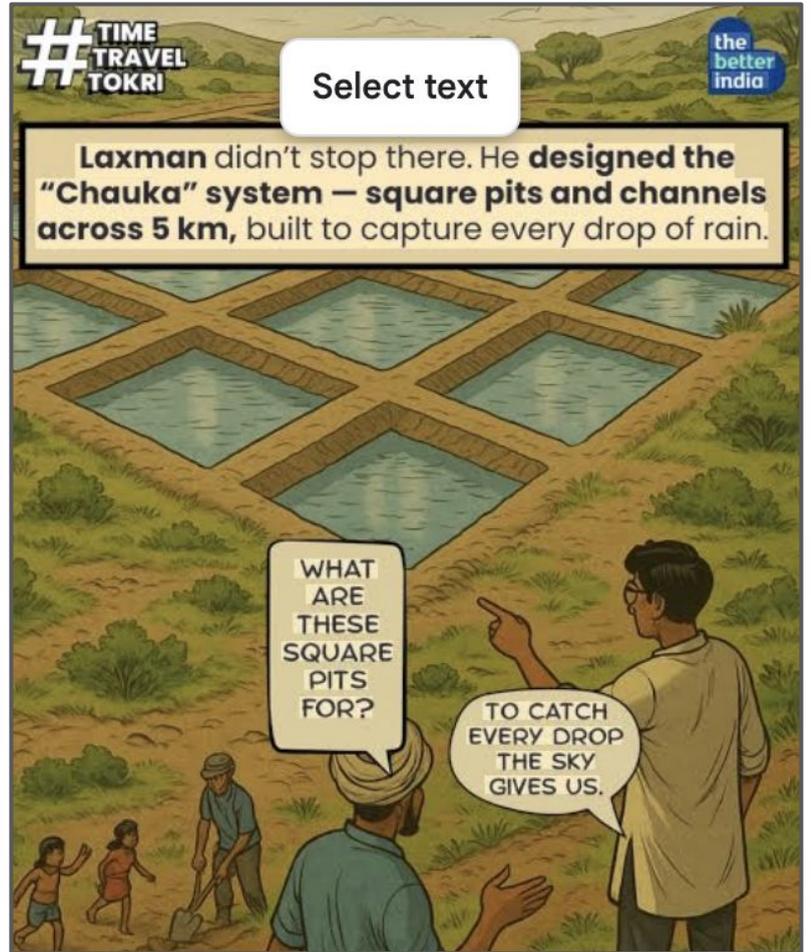
- **Smart Water Grids:** Union Budget 2025–26 prioritized "Smart Water Grids," which are now being scaled to ensure real-time tracking of water quality and distribution in **urban areas**.
 - **River Interlinking:** Ken–Betwa River Linking Project
 - **National Aquifer Mapping and Management Programme 2.0:** moved from mapping aquifers to implementing aquifer-level management plans (hydrogeological knowledge to policy action) – *identify recharge zones, and assess groundwater sustainability*.
 - **"Per Drop More Crop" scheme:** incentivized the widespread *adoption of drip and sprinkler irrigation systems*.
- Way Ahead:**
- **National Green Water Mission:** *Healthy soil organic carbon is the **cheapest and most effective** water storage system.*
 - Transitioning to regenerative practices – mulching, no-till farming, cover cropping.
 - **Crop diversification:** Shifting just **3.6 million hectares** from rice to millets and pulses could **save 29 billion cubic metres of water annually**, roughly a **fifth of India's household water use**.
 - **Triple dividend:** Better nutrition, environmental relief, and fiscal savings on subsidies.
- **Blue-green infrastructure in Cities:** *reimagine cities as sponges rather than concrete sinks.*
 - wetlands, urban forests, permeable surfaces
 - **National Circular Water Economy Mission:** to treat used water as a resource, not waste.
 - But a treated used-water economy could unlock a market worth **Rs 3.2 lakh crore by 2047**.
 - city-specific reuse targets, & shift in mindset from disposal to recovery.
 - **Reform water governance:**
 - Tariffs must move toward cost recovery for those who can pay, with direct subsidies for the vulnerable (poor pay high rates to unregulated tankers)
 - India's world-class digital public infrastructure can enable real-time water accounting and bulk water trading.
 - **Key Case Studies of Effective Water Management in India:**
 - **Laporiya, Jaipur (Rajasthan):** "Chauka" System Innovation
 - series of **shallow, rectangular pits (Chaukas) connected by embankments** that slow down runoff, allowing water to meander and percolate into the soil rather than causing erosion.



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- **Thuruthikkara, Ernakulam (Kerala): The "Oorja Nirmala Haritha" Model**– A community-led, science-based model where households adopted rooftop rainwater harvesting and well recharge systems, ensuring year-round water availability.
- **Sitamarhi District (Bihar): The "Soak Pit" Revolution**
 - by channelling greywater from hand-pumps and schools into scientifically designed pits that act as Artificial Recharge Structures.



Mains Practise Question

“Critically examine the nature and extent of the water crisis in India. Discuss the measures taken so far to address water scarcity and suggest further steps required for sustainable water management.”

(15 Marks, 250 words)



Unsafe to eat: India's chronic food adulteration problem



CONTEXT: Recently various instances of foods adulteration has come up.

Unsafe to eat: India's chronic food adulteration problem:

LIST OF FOOD ADULTRANTS		
ADULTERANTS		HARMFUL EFFECTS
<ul style="list-style-type: none">Unhygienic waterChalk powderSoap powderHydrogen peroxideUrea	MILK 	<ul style="list-style-type: none">Food poisoningHeart problemsCancerVomitingNausea
<ul style="list-style-type: none">Papaya seeds	BLACK PEPPER 	<ul style="list-style-type: none">Liver disordersStomach disorders
<ul style="list-style-type: none">Argemone seeds	OIL 	<ul style="list-style-type: none">Epidemic dropsySevere glaucoma
<ul style="list-style-type: none">Vegetable oilAnimal body fats	GHEE 	<ul style="list-style-type: none">AnaemiaEnlargement of Heart
<ul style="list-style-type: none">Brick powderSaw dust	CHILLY POWDER 	<ul style="list-style-type: none">Stomach problemsArtificial colors can cause cancer
<ul style="list-style-type: none">Yellow aniline dyeNon-permitted colourants like metanil yellow	TURMERIC POWDER 	<ul style="list-style-type: none">CarcinogenicStomach disorders

Food adulteration:

- Process of *deliberately adding harmful, inferior, or non-authentic substances* to an original product, usually to **increase the quantity or reduce the cost**. The ingredients added to adulterate a product are known as adulterants.
- Under the **Food Safety and Standards Act, 2006, FSSAI** regulates standards and enforcement to ensure safe food for consumers.

State of Food Adulteration in India:

- September, 2025:** Delhi Police seized nearly 6,800 units of adulterated ghee and sweets during six separate raids.
- Spice Contamination:** presence of **ethylene oxide** in chilli peppers (**MDH and Everest spices**)
 - Singapore and several EU nations** that rejected and returned consignments of Indian spices. The **US** was the latest to do so.
- Observer Research Foundation:** India records a staggering 100 million cases of foodborne illnesses annually, leading to approximately 1,20,000 deaths.
- National Survey on Milk Adulteration in 2011** revealed that 70 per cent of the milk samples that were tested in India did not meet the standards of food safety.



Unsafe to eat: India's chronic food adulteration problem



CONTEXT: Recently various instances of foods adulteration has come up.

- **No added MSG" claim by Maggi:**



NDTV

<https://www.ndtv.com> > All India

Maggi Noodles Being Tested by Maharashtra, Gujarat After ...

21 May 2015 — Maggi noodles contain not only monosodium glutamate, or MSG, but it also contains extremely high levels of lead - nearly seven times the ...

Why Food Adulteration Persists in India?

- **Ineffective risk communication:** Technical terms such as **MRLs (maximum residue limits)** and **ADIs (acceptable daily intake)** are expressed in minute quantities (parts per million, or ppm, or parts per billion, or ppb) – that are *difficult for consumers to understand*.
- **Deceptive marketing:** “So-called “health foods” or supplements for children contain high levels of sugar.
- **Informal food sector:** In contrast, packaged foods allow for stricter enforcement of traceability, transparency, and reliability standards, due to clearer labelling and standardised processing protocols.
 - reuse of cooking oil, that not only diminishes the nutritional value of the food but can also lead to the formation of harmful trans fats.
- **Weak Enforcement:** *Rajamahendravaram in Andhra Pradesh* involving the mass poisoning of consumers by milk contaminated with ethylene glycol (*operating without a valid food safety licence for 11 years*)

- **Ineffective Deterrence:** the current law allowed a **maximum jail term of six months only** for the “unsafe food” category, which was insufficient to deter offenders.

Steps Taken :

- **Food Safety and Standards Act of 2006:** establishes the FSSAI along with outlining strict regulations on manufacturing, storing, selling, and importing food items, with severe penalties for any violation.
- **Drawing on international best practices:** *Codex Alimentarius Commission*
 - **FSSAI adopted a risk-based approach to food safety.**
 - Setting *maximum residue limits for pesticides*, defining safe levels for food additives, and adopting standards for contaminants.
- **Hyderabad Food Adulteration Surveillance Team (H-FAST):** outlined the unit’s operational focus, with an emphasis on tracking adulterated food products to their source and targeting manufacturing units and suppliers across the city.



Unsafe to eat: India's chronic food adulteration problem

CONTEXT: Recently various instances of foods adulteration has come up.

- **A toll-free number – 8712661212** has been set up for the *public* to report cases of food adulteration and unsafe food practices.
- **Food Safety on Wheels:** 305 mobile testing labs deployed across 35 States/UTs for instant, on-site adulteration checks.

Way Forward :

- **Monitoring e-commerce “dark stores”** (quick commerce outlets). "There are 277 such stores in the State and all of them must obtain license from FSSAI.
- **Streamline the Supply Chain:** Initiatives like Repurpose Used Cooking Oil (RUCO) should be promoted to prevent the continuous reuse of frying oil, which leads to harmful health effects.
- **Subsidised testing kits** and cooperative chilling facilities can thus reduce the risk at small dairies.

• Eat Right India movement:



- **Safe-harbour provisions:** that ease penalties for dairy operators *who report contamination at their facilities*; this could also encourage early disclosure, giving authorities time to save lives.



Unsafe to eat: India's chronic food adulteration problem



CONTEXT: Recently various instances of foods adulteration has come up.

Way Forward :

- **H- FAST :** Hyderabad Fast Adulteration Surveillance Team - Toll free number for Public
- **FSSAI + BMC** - Food Safety Training (Safe food handling & Storage protocols)
- **FSSAI - DART manual** - Detect adulteration with Rapid test

Mains Practise Question :

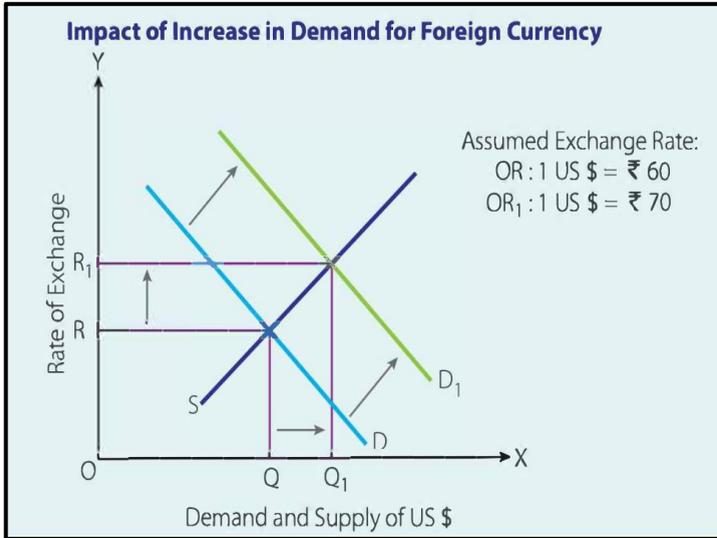
"Discuss the socio-economic and institutional factors contributing to food adulteration in India. Critically assess the effectiveness of initiatives such as Food Safety on Wheels and suggest a way forward." (10 Marks, 150 words)



SYLLABUS : PRELIMS: Exchange rate

Newspaper: Indian Express Page Number: 17

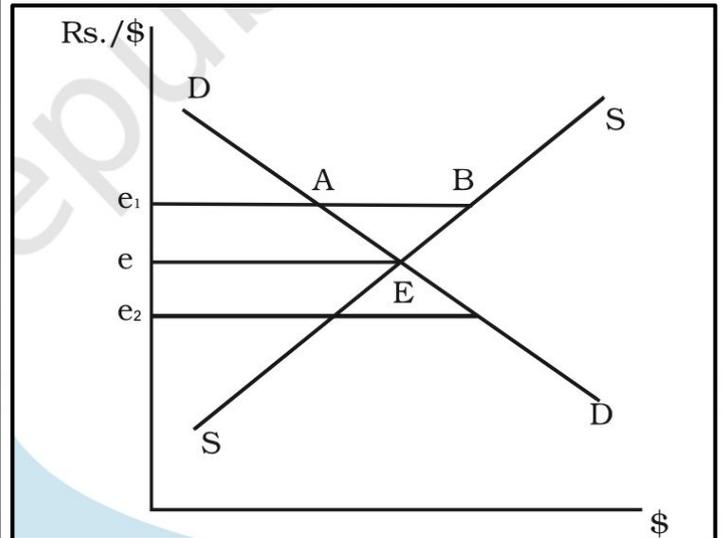
- **Definition of Exchange Rate:** "Price of one currency in terms of another" i.e. \$ 1= ₹ 80
- **Flexible Exchange Rate Regime:**



Managed Floating Exchange Rate Regime :

- Mixture of flexible exchange rate system and fixed rate system.
- Central banks intervene to buy and sell foreign currencies in an attempt to moderate exchange rate movements.

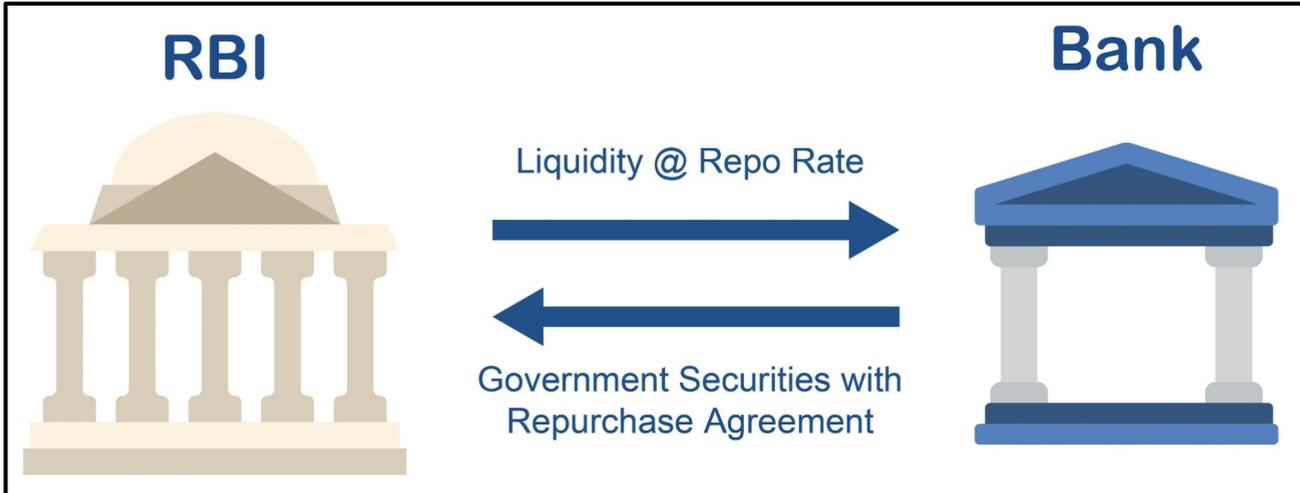
Fixed Exchange Rate Regime :



SYLLABUS : PRELIMS: *Economy*

Newspaper: *The Hindu* Page Number: 13

Repo rate :



Variable repo rate :

- **Why there is liquidity deficit?**
 - ◆ Intervention in Forex market
- **When it is done ?**
 - ◆ **Weighted average call money rate** (Inter-bank Money market) > **Repo Rate**
 - ◆ Inject short-term liquidity against collaterals
- **Tenure:** less than 14 days
- **Interest Rate Determination:**
 - ◆ determined through an *auction process* rather than being fixed in advance (*Repo Rate is a fixed rate set by the MPC*).
 - ◆ Generally **lower than Repo Rate** (though **not less than Reverse Repo Rate**).



SYLLABUS : PRELIMS: *Important events of National Importance*

Newspaper: *The Hindu* Page Number: 1

About Premium Petrol and Normal Petrol

Criteria	Premium Petrol	Normal Petrol
Octane Rating	91-93 or higher	87-89
Price	More expensive	More affordable
Engine Additives	Contains cleaning additives	No additives
Recommended for	High-compression, high-performance engines	Standard cars, bikes
Mileage	Slight improvement in mileage for high-end cars	Standard mileage for regular cars
Engine Performance	Smoother performance, less knocking	Adequate for normal driving conditions
Emission Levels	Slightly lower due to additives	Standard emissions

- **Higher the Octane number:** the better the fuel can **resist "knocking"** (a loud, harmful metallic sound in the engine).
- **Additives:** They mix in special chemicals (detergents) that *clean the engine's internal parts while you drive.*

Trade: Who Buys and Sells it?

- **Exporters (Sellers):**
 - ◆ The **USA, Saudi Arabia, and Russia** are the biggest exporters of oil products.

- **India is also a top exporter** because it has some of the world's largest refineries.
- **Importers (Buyers):** *China and India* are the biggest importers of crude oil, which they then turn into premium fuel for their citizens.

→ Where is it used?

- Luxury Cars: Brands like BMW, Mercedes, and Audi.
- Sports Cars: High-speed cars with powerful engines.
- Bikes: High-end sports bike



SYLLABUS : PRELIMS: *Constitutional bodies*

Newspaper: *The Hindu* Page Number: 1

Chief Election Commissioner and Other Election Commissioners Act, 2023

- ❖ **Qualifications:** For CEC or EC the person must
 - be holding or have held a post **equivalent to Secretary to the Government of India.**
 - possess integrity and experience in managing and conducting elections.
- ❖ **Select Committee:**
 - **Composition**
 - **Headed** by the Minister of Law and Justice.
 - Includes two members (**rank of Secretary** or higher).
 - **Functions:** Prepares a **panel of 5 candidates** for selection.
- ❖ **Select Committee:**
 - **Composition**
 - **Prime Minister** (Chairperson).
 - **Leader of Opposition** in the House of the People (Member).
 - **Union Cabinet Minister** to be nominated by the Prime Minister (Member)
 - **Functions:** Recommends the eligible candidates to the **President** for the appointment of CEC and EC.
- ❖ **Term of Office of CEC and EC:**
 - **Tenure:** 6 years or until 65 years of age, whichever is earlier
 - If an EC becomes the CEC, **combined tenure cannot exceed 6 years.**
 - **Re-appointment** is not allowed.
- ❖ **Salary** is equivalent to that of a **Supreme Court Judge.**
- ❖ **Resignation:** CEC or EC, can resign by **writing to the President.**
- ❖ **Removal**
 - **CEC:** Can be removed like a **Supreme Court Judge.**
 - **ECs:** Require the **recommendation of the CEC** for removal.



SYLLABUS : PRELIMS: Statutory bodies

Newspaper: The Hindu Page Number: 13

About APEDA :

- APEDA is a **statutory body** under the **Ministry of Commerce and Industry**.
- It was established under the **Agricultural and Processed Food Products Export Development Authority Act of 1985**.
- It is the apex body for agricultural export promotion in India.
- **Objective:** To develop and promote the **export of scheduled products**.
- The products specified under the APEDA ACT are called scheduled products, and exporters of such scheduled products are required to **register** under APEDA.
- **Scheduled products:** include fruits, vegetables, meat, dairy products, alcoholic and non-alcoholic beverages, etc.
- It provides financial assistance, information, and guidelines for the development of scheduled products.
- In addition, APEDA has been entrusted with **monitoring sugar imports**.
- Serves as the **Secretariat to the National Accreditation Board**.
- It plays a crucial role in accreditation Certification Bodies for the **National Programme for Organic Production** – Organic Products for export are to be certified only if Produced, Processed and Packed as per the standards laid down in the document of NPOP.

• **Functions:**

- **Setting the standards** and specifications for the scheduled products.
- **Registration of exporters of the scheduled products** on payment of required fees.
- **Improving packaging and marketing** of the Scheduled products.
- **Carrying out an inspection** of products to ensure the quality of such products.
- **Training** in various aspects of the industries connected with the scheduled products.
- Development of industries relating to the scheduled products and undertaking **surveys, feasibility studies, etc.**
- **Collection of statistics** from the owners of factories or establishments and publication of such statistics.
- APEDA is **headed by a Chairman appointed by the Central Government**.
- **Headquarters: New Delhi**



Q1. With reference to Fixed and Flexible Exchange Rate systems, consider the following statements:

1. Under a fixed exchange rate system, the currency value is officially pegged to gold or another currency with full government control.
2. Under a flexible exchange rate system, the exchange rate fluctuates freely based on demand and supply conditions.
3. Fixed exchange rate systems require large foreign exchange reserves to maintain stability.

Which of the statements given above are correct

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All of the above

Answer: d

Q2. Consider the following statements regarding the Repo Rate :

1. Repo Rate is the interest rate at which the central bank lends short-term funds to commercial banks against government securities.
2. An increase in Repo Rate can make borrowings cheaper & thus consumption expenditure increases significantly.

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: a

Q3. Which of the following statements regarding the provisions of the Chief Election Commissioner and Other Election Commissioners Act, 2023, is not correct?

- a) The term of Office for the Chief Election Commissioner (CEC) will be 6 years or until the age of 65 years.

- a) If an Election Commissioner becomes CEC, the combined tenure can exceed 6 years.
- b) The selection committee for CEC would be headed by the Prime Minister.
- c) The salary of a CEC is equivalent to that of a High Court Judge.

Answer: d

Q4. Consider the following statements:

1. Normal Petrol used in daily transport has a lower octane rating than the premium petrol used in high-performance engines.
2. The knocking in the vehicle significantly decreases with increasing octane number.

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

Q5. Consider the following statements regarding the Agricultural & Processed Food Products Export Development Authority (APEDA):

1. It is a statutory body under the Ministry of Commerce and Industry.
2. It is the apex body for agricultural export promotion in India.
3. It plays a crucial role in accrediting Certification Bodies for the National Programme for Organic Production.

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

- a) Only One
- b) Only Two
- c) All three
- d) None

Answer: c





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