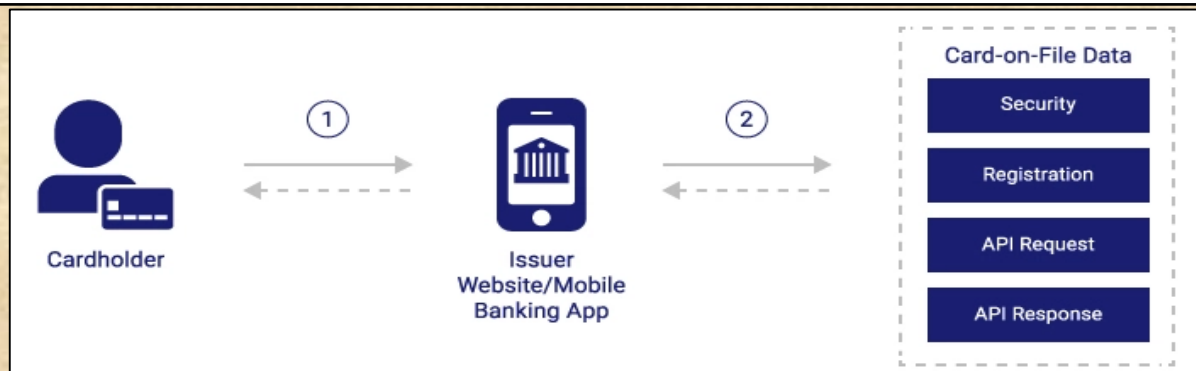


Card-on-File Tokenization

- In order to make digital payments more secure, safe and sound the Reserve Bank of India (RBI) has now enabled card-on-file tokenisation (CoFT) through card issuing banks and institutions.



❖ About

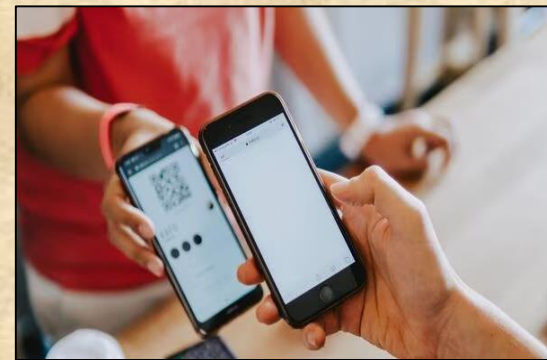
- ❑ Tokenization refers to replacement of actual credit and debit card details with an alternate code called the “token”, which will be unique for a combination of card, token requestor and device.
- ❑ This shall be unique for a combination of card, token requestor (i.e. the entity which accepts request from the customer for tokenization of a card and passes it on to the card network to issue a corresponding token) and the merchant (token requestor and merchant may or may not be the same entity).
- ❑ **Advantage**
 - A tokenized card transaction is considered safer as the actual card details are not shared with the merchant during transaction processing.
 - Customers who do not have the tokenisation facility will have to key in their name, 16-digit card number, expiry date and CVV each time they order something online.

❖ Card-on-File Transaction

- ❑ It is a transaction where cardholders authorize merchants to store their payment information securely and bill cardholders’ stored accounts for future purchases.
- ❑ This measure will enhance convenience for cardholders to get tokens created and linked to their existing accounts with various e-commerce applications.

UPI Tap and Pay

- Unified Payments Interface (UPI) members can go live with the UPI Tap and Pay functionality by January 31, 2024, NPCI said in a circular.
- In September, along with the launch of UPI Tap and Pay, other digital payment features were also rolled out. They include a credit line on UPI, HelloUPI, and Billpay



❖ Key Highlights

- ❑ The feature is currently live on Bharat Interface for Money or BHIM app along with Paytm where it is open for limited users.
- ❑ The feature utilises near-field communication (NFC) technology to capture details about a payee’s UPI ID or a Virtual Payment Address (VPA) without capturing a quick response (QR) code via a camera.
- ❑ Mobiles and devices, which have the NFC capability, can use the service.
- ❑ NPCI recommends UPI applications to have a separate call-to-action (CTA) button for the feature on a payment app’s homepage.
- ❑ It will be available to users on android and ios operating systems.
- ❑ If a user enables the UPI LITE account for the tap feature, transactions with a value of less than ₹500 will be processed through UPI LITE. Transactions of over ₹500 will require a UPI PIN.
- ❑ However, to expand the service of UPI Tap and Pay, merchants will need to have UPI Smart QRs or tags, which are certified for NFCs.

❖ Hello UPI

- ❑ With Hello UPI for instance, users will now be able to make real-time payments with the help of voice commands via both smartphones and feature phones.
- ❑ For smartphones, conversational UPI will be live on apps such as BHIM and PayZapp, among others.

❖ About NFC Technology

- ❑ NFC is a **short-range wireless** connectivity technology.
- ❑ It allows NFC-enabled devices to communicate with each other and **transfer information quickly and easily with a single touch** — whether to pay bills, exchange business cards, download coupons, or share a document.
- ❑ NFC **transmits data through electromagnetic radio fields**, to enable communication between two devices.
- ❑ Both devices **must contain NFC chips**, as transactions take place within a very short distance.
- ❑ NFC-enabled devices must be either **physically touching** or within **a few centimeters from each other for data transfer to occur**.

Conscientious Objector

- A person, Tal Mitnik, will spend 30 days in prison for refusing to join the Israeli military.

❖ Key Highlights

- ❑ Israeli law mandates that all citizens serve in the military for a certain duration.
- ❑ Those who refuse are socially ostracised and persecuted by the state.

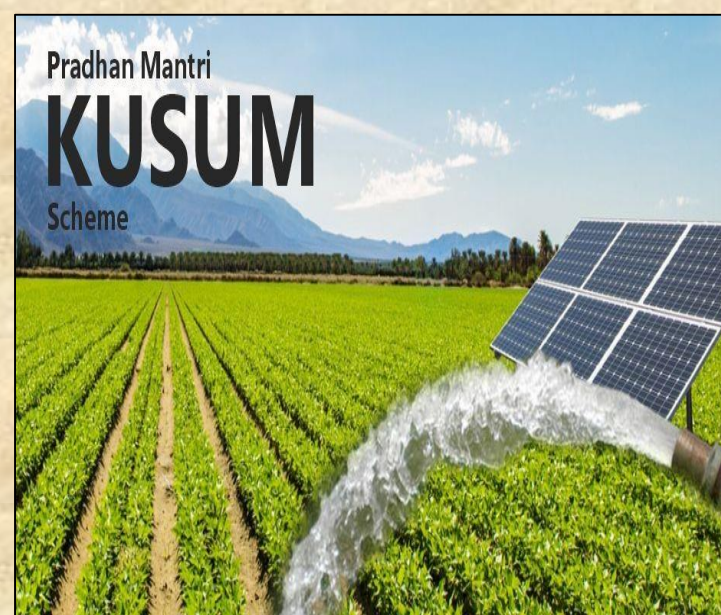
❖ About Conscientious Objector

- ❑ A conscientious objector is an individual who refuses to perform military service on the grounds of their conscience, often for ideological and religious reasons.
- ❑ Throughout history, armies across the world have been supplied manpower using conscription, or mandatory military service.
- ❑ Naturally, there have always been those who have refused this call to serve, citing their personal beliefs.



Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)

- The Union Minister for New & Renewable Energy and Power has informed about the main objectives of the Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) recently.
- They include de-dieselisation of the farm sector, providing water and energy security to farmers, increasing the income of farmers, and curbing environmental pollution.



❖ About PM-KUSUM Scheme

It was **launched in March 2019**.

- ❑ This Scheme is aimed at
 - Ensuring energy security for farmers in India.
 - Honoring India's commitment to increase the share of installed capacity of electric power from non-fossil-fuel sources to 40% by 2030 as part of Intended Nationally Determined Contributions (INDCs).
- ❑ The PM-KUSUM under which ₹34,422 crore will be spent by the Centre, has three parts:
 - Having farmers or farmer groups install **solar power plants** worth 10,000 MW.
 - Installing 20 lakh **solar-powered agriculture pumps** that aren't connected to the grid (off-grid).
 - **Converting 15 lakh agriculture pumps**, already connected to the grid, **into solar**.
- ❑ Each farmer will receive a 60% subsidy to set up tube wells and pump sets. They will also get 30% of the total cost as a loan from the Government
- ❑ **Nodal Ministry**- Ministry of New and Renewable Energy (MNRE).
- ❑ **Side Note** : Rajasthan, with 62.5 MW, led the States with installed power plants by a wide margin while Himachal Pradesh finished second with 19.7 MW.

OPEC

- In an unexpected move, Angola has decided to part ways with the Organisation of Petroleum Exporting Countries (OPEC), sending ripples through the intricate web of global oil alliances.

❖ About OPEC

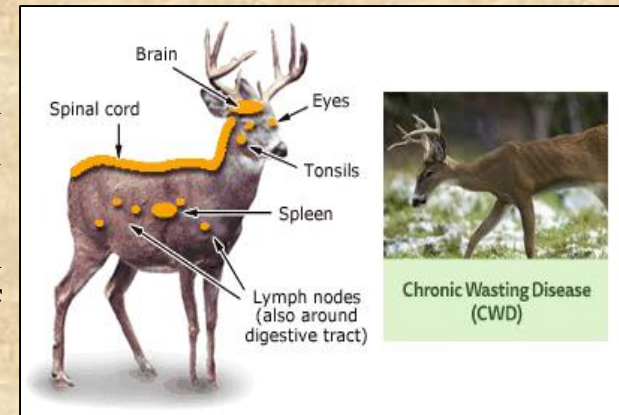
- ❑ Established in **1960**.
- ❑ OPEC is a **permanent, intergovernmental organization**.
- ❑ **Founding members**: Iran, Iraq, Kuwait, Saudi Arabia & Venezuela.
- ❑ OPEC has since expanded and now has **13 member states**.
- ❑ Other OPEC Members are
 - The UAE, Algeria, **Angola**, Equatorial Guinea, Gabon, Libya, Nigeria, and the Republic of the Congo.
- ❑ **Headquarter** - Vienna (Austria)
- ❑ The 13 member countries accounted for an estimated **44 percent of global oil production** and **81.5 percent of the world's proven oil reserves**.



- ❑ **OPEC membership is open to any country** that is a **substantial exporter of oil** and which shares the ideals of the organization.
- ❑ **Objectives**
 - **Coordinate and unify the petroleum policies** of its Member Countries.
 - Ensure the **stabilisation of oil markets** in order to secure an efficient, economic and regular supply of petroleum to consumers.
 - A **steady income to producers** and a fair return on capital for those investing in the petroleum industry.

Chronic Wasting Disease (CWD)

- Researchers in the United States have issued a warning against the spread of Chronic Wasting Disease (CWD), which is present among wildlife, in humans, reported the Independent.
- The CWD has been labelled by the experts as a "slow-moving disaster" and the governments are being strongly advised to prepare for the chances of its transmission to humans.



❖ About Chronic Wasting Disease (CWD)

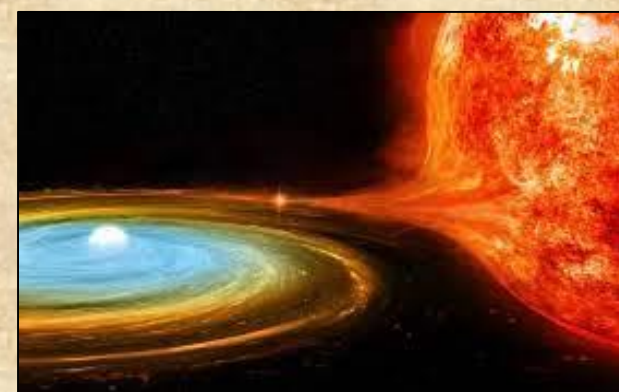
- ❑ The illness, which is also known as ‘Zombie Deer Disease’, leaves animals drooling and confused. It was first detected in November in Yellowstone National Park.
- ❑ The disease was discovered in 800 samples of deer, moose and elk across Wyoming.
- ❑ It is a fatal and contagious disease which affects cervids, which is a group of animals that includes elk, deer, moose, reindeer and caribou.
- ❑ The disease is caused by a malformed protein - known as prion - which gets accumulated in the tissues and the brain and causes behavioural and physiological changes, emaciation and ultimately death.
- ❑ The disease gets transmitted by direct animal-to-animal contact and also indirectly by getting in contact with infectious particles which are present in soil, vegetation or faeces.
- ❑ Animals can also get an infection if their pasture or feed is contaminated by the prions which are carrying it.
- ❑ As per the Centres for Disease Control and Prevention, it may take more than a year for the development of symptoms in the deer.
- ❑ It generally starts with the deer losing weight drastically, stumbling around, and eventually losing all the energy. At present, there is no cure or vaccine with CWD.

X-Ray Bursts

- India’s first multi-wavelength space-based observatory, AstroSat, has detected intense sub-second X-ray bursts emanating from a neutron star with an ultrahigh magnetic field, known as a magnetar.

❖ Key Highlights

- ❑ This discovery holds the potential to unravel the perplexing astrophysical conditions surrounding magnetars.
- ❑ Magnetars are neutron stars distinguished by an ultrahigh magnetic field, exceeding that of Earth by over one quadrillion times.
- ❑ The emission of high-energy electromagnetic radiation in these celestial objects results from the decay of their magnetic fields.



❖ About X-Ray Burst

- ❑ X-ray bursts occurs in low-mass X-ray binary systems where a neutron star and low-mass main sequence star are in orbit around one another.
- ❑ Due to their close proximity and the extreme gravity of the neutron star, the companion star overflows its roche-lobe and hydrogen is drawn into an accretion disk around the neutron star.
- ❑ This hydrogen is eventually deposited on the surface of the neutron star and immediately is converted into helium due to the extreme temperatures and pressures that exist there.
- ❑ A thin surface layer of helium is built up, and once a critical mass of helium is reached, it ignites explosively, heating the entire surface of the neutron star to several tens of millions of degrees releasing a sudden burst of X-rays.
- ❑ Once the outburst is over, the binary system temporarily returns to its quiescent state while the neutron star begins to re-accumulate the helium surface layer.
- ❑ The process repeats resulting in recurrent X-ray bursts.
- ❑ It generally occurs at regular intervals separated by several hours or days.