**Syllabus subtopic:** Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Bio-technology and issues relating to Intellectual Property Rights.

**Prelims and Mains focus:** about cryptocurrencies: merits and demerits

**News:** In April 2018, the Reserve Bank of India (RBI) had barred regulated entities such as banks from dealing in bitcoins and other virtual currencies. The Supreme Court has now lifted the restriction.

**What exactly are cryptocurrencies?**

- Cryptocurrencies are **internet-based mediums of exchange**. They are digital currencies that can be exchanged between parties **without the need of a third entity**, like a bank.

- Many of them use a **decentralized blockchain**—an **encrypted ledger** for storing information.

- Over 3,000 crypto assets have entered the digital currency market since 2008. They are decentralized rather than being under the control of any nation or company. This can often lower transaction costs for global payments compared to **financial messaging systems such as SWIFT** (Society for Worldwide Interbank Financial Telecommunication), used for making transactions in different currencies.

**Do cryptocurrencies carry a lot of risk?**

- Cryptocurrencies are **vulnerable to cyber hacking and data privacy breaches** and increase the risk of money laundering. They do not have any fundamental value as **they are not legal tender**, and are **not backed by governments**, central banks or a pool of assets. This **reduces trust in them**, which is necessary for a credible medium of exchange.

- They are a **poor medium of exchange** also because their **valuation tends**
to be excessively volatile and susceptible to manipulation. They are seen as instruments of speculation and transactions that are below the radar of regulators and law enforcement agencies.

Are state-backed digital coins a better option?

Yes, as state-backed digital coins can combine the positives of digital and sovereign currencies. RBI has no plans to introduce digital coins, but China is likely to launch the Digital Currency Electronic Payment and Central Bank Digital Currency. Russia has been working on a state-backed cryptoruble. Sweden has its e-krona project.

Why is RBI worried about cryptos?

- Since 2013, RBI has been warning about the risks associated with virtual currencies. In the case of cryptocurrencies, it is not clear who is the lender of last resort, or who people should turn to if there is fraud or abuse of monopoly power.

- If cash issued by central banks or fiat currencies and retail deposits held with banks get shifted on a large scale to digital currencies, the effectiveness of monetary policy can erode. It may also trigger rupee depreciation. If they lead to capital flight, financial stability could be at risk.

What is the future of such currencies?

- Central banks may begin to strictly regulate virtual currencies. Dominance of the US dollar in the international trade and monetary system will weaken. Instead of accepting dollars as the settlement currency for trade, users may choose from a variety of currencies.

- Sovereign currencies may coexist with cryptocurrencies, digital currencies issued by central banks and private dollar-centric digital ones launched by private parties such as Facebook’s Libra.