18. Highlighting the significance of data localization for India, discuss various challenges associated with data localization. (250 words) 15

Approach:

- Introduce by explaining the concept of data localization in brief.
- Highlight its significance for India.
- Discuss the various challenges associated with data localization.
- Conclude on the basis of the above points.

Answer:

Data localization is the act of storing data on any device that is physically present within the borders of a specific country where the data was generated. In case of India, most of these data are stored, in a cloud, outside India. So, in 2018 RBI, following the recommendations of B.N. Srikrishna committee, advised all the system providers to ensure that the data relating to payment systems operated by them be stored in India.

Significance of data localization for India:

- Digital data in India was around 40,000 petabytes in 2010; it is likely to shoot up to 2.3 million petabytes by 2020 twice as fast as the global rate. If India houses all this data, it will become the second largest investor in the data centre market and the fifth largest data centre market by 2050.
- "Data is the new oil" provides a backbone to much of the localisation drive. In the home of the largest open Internet market in the world, **national wealth creation** relies on in-house data storage.
- On-shoring global data may champion the cause of **domestic innovation**, and ability to harness India's digital economy by creating **domestic jobs and skills** in data storage and analytics.
- Global companies will become more accountable in India. The Indian government is of the view that
 if data is stored outside the sovereign boundaries of the country, its ability to monitor and regulate
 online activity is curtailed as the agencies need to rely on mutual legal assistance treaties (MLATs) to
 obtain access, delaying investigations.
- It will ensure **national security** by providing ease of investigation to India's law enforcement agencies as the incidences of data breaches and frauds are increasing.
- It will also minimize conflict of jurisdiction due to cross border data sharing.

Challenges associated with data localization:

- Ease of doing business and Investment: Global players will have to increase their investments in India, both on infrastructure and on timely execution.
- **Protectionism and conflict:** Data localisation may be perceived as a protectionist policy which may result into a fractured internet (splinternet) and increased conflict over data sharing.
- Affect domestic IT industry: A fractured internet will affect the cost and speed of information flows. It may backfire on India's own young startups and companies that process foreign data in India, such as Tata Consulting Services and Wipro.
- **Misuse of Data:** Critics not only caution against state misuse and surveillance of personal data, but also argue that security and government access is not achieved by localization. Even if the data is stored in the country, the encryption keys may still remain out of the reach of national agencies.
- **Ensuring cyber security:** Businesses in India are more at risk to cyber security attacks. This can put data of citizens in danger.
- Affects flexibility: Cloud computing softwares have taken advantage of the economies of scale and an infrastructural architecture across the world. Thus, when there is a threat presumed in one part of the world, the algorithm would move the data to another location or even in multiple locations. However, this flexibility may be hampered due to data localization.