4. Digital Public Infrastructure (DPI)

Why in News?

- Recently, Public infrastructure has been a cornerstone of human progress, but it has plagued the previous generation, making it imperative for the third type of public infrastructure called Digital Public Infrastructure (DPI), with more open and democratic principles built in it.

Highlights

- Digital public infrastructure (DPI) refers to blocks or platforms such as digital identification, payment infrastructure and data exchange solutions that help countries deliver essential services to their people, empowering citizens and improving lives by enabling digital inclusion.

- DPIs mediate the flow of people, money and information. First, the flow of people through a digital ID System. Second, the flow of money through a real-time fast payment system. And third, the flow of personal information through a consent-based data sharing system to actualize the benefits of DPIs and to empower the citizen with a real ability to control data. These three sets become the foundation for developing an effective DPI ecosystem.

- Each DPI layer fills a clear need and generates considerable value across sectors.

- India, through India Stack, became the first country to develop all three foundational DPIs, Digital identity (Aadhar), Real-time fast payment (UPI) and Account Aggregator built on the Data Empowerment Protection Architecture (DEPA).

- DEPA creates a digital framework that allows users to share their data on their own terms through a third-party entity, who are known as Consent Mangers

- India Stack is a set of APIs (Application programming interface) that allows governments, businesses, startups and developers to utilize a unique digital Infrastructure to solve India's hard problems towards presence-less, paperless, and cashless service delivery.

- It aims to unlock the economic primitives of identity, data, and payments at population scale.

- The vision of India Stack is not limited to one country; it can be applied to any nation, be it a developed one or an emerging one.

- This project was conceptualized and first implemented in India, where its rapid adoption by billions of individuals and businesses has helped promote financial and social inclusion and positioned the country for the Internet Age.