**Syllabus subtopic:**

- Salient Features of the Representation of People’s Act.
- Appointment to various Constitutional Posts, Powers, Functions and Responsibilities of various Constitutional Bodies.

**Prelims and Mains focus:** about the new technology: its working and significance

**News:** The Election Commission of India has collaborated with IIT Madras to work on a new technology for two-way remote voting in controlled environment **using blockchain technology.**

**What is it about?**

- The model of an **Aadhaar-linked electronic voting system** that would enable electors to cast their votes from any part of the country — irrespective of where they are registered to vote — or **even abroad.**

- It will allow electors to vote from far away cities **without going to the designated polling station** of their respective constituencies. **For example** the system would allow a Delhi-registered elector who happens to be in Hyderabad to cast his or her vote in elections in the Capital electronically.

- The voters will have to reach a designated venue during a pre-decided period of time to be able to use this facility.

- It **does not mean voting from home**, which is “anytime-anywhere-any device” and would require some more time and technological advancement.

- The **“two-way block chain remote voting” process** would involve voter identification and authorisation using a multi-layered IT enabled system working on the EC’s e-Governance award winning **Electoral Registration Officer Network (ERO Net)** using biometrics and web cameras.

- With the proposed linking of the Aadhaar biometrics with voter IDs at an
“advanced stage”, the two-way electronic voting system would be possible only when the linking is complete.

**How will the new system work?**

- After a voter’s identity is established by the system, a block chain enabled personalised e-ballot paper *(Smart Contract)* will be generated.

- When the vote is cast *(Smart Contract executed)*, the ballot would be securely encrypted and a block chain hashtag (#) will be generated. This hashtag notification would be sent to various stakeholders, in this case—the candidates and political parties.

- The encrypted remote votes so cast would **once again be validated at the pre-counting stage** to ensure that they have neither been decrypted, nor tampered with or replaced.

- The project is at present in the research and development stage with an aim to develop a prototype.

**What next?**

If the project is given the go-ahead by the ECI, **changes to the election laws would be required** for which the Law Ministry would be approached.

**Efforts made to increase voter turnout**

- There have been demands from various parties that the Election Commission should ensure that **migrant workers who miss out on voting as they cannot afford going home during elections** to exercise their franchise should be allowed to vote for their constituency from the city they are working in.

- **A Bill to allow proxy voting for overseas Indians** had **lapsed** following the dissolution of the previous Lok Sabha.
The Law Ministry had also recently tweaked election rules to allow One Way Electronically Transmitted Postal Ballot System (ETPBS), enabling service voters consisting of personnel belonging to the armed forces, central paramilitary forces and central government officers deployed at Indian missions abroad, to get their postal ballots electronically. They have to fill up the ballot papers and post them back.

The ECI had used a one-way electronic system for service electors for the first time in the 2019 Lok Sabha elections. The postal ballots were transmitted electronically to the service electors, which led to an increased turnout or 60.14%.