

EVM AND VVPAT FACTUAL FILE

Q1. What is EVM?

An electronic voting machine (EVM) is a portable instrument for the purpose of conducting elections to the parliament, legislature and local bodies like panchayats and municipalities.

The voting data recorded in EVMs **can be retained for years** and **can be extracted** if necessary.

Q2. What is the working Module of EVM?

An EVM consists of a **control unit and a balloting unit** connected together by a **five-metre cable**.

The control unit is kept in the polling station with the Presiding Officer and is placed inside the voting compartment as the votes are counted through it whereas the balloting units are kept in the voting compartment for electors to cast their votes.

EVMs can even be used in areas with **no electricity**, as they can be operated on **alkaline batteries**.

The balloting unit presents the voter with blue buttons horizontally labelled with corresponding **party symbols and candidate names**. The Control Unit, on the contrary, provides the officer-in-charge with a 'Ballot' marked button to proceed to the next voter, instead of issuing a ballot paper to them.

***The name of the candidates are set on the Ballot Unit (EVM) in alphabetic order in 3 groups - Recognized Parties, Unrecognized Registered Parties, and Independent only after finalisation of candidates.**

Q3. Who Manufactures EVM in India?

In 1989, the **Election Commission (EC) developed India's indigenous Electronic Voting Machines (EVMs)** in alliance with two central government undertakings - **the Electronics Corporation of India (ECIL) and Bharat Electronics Limited (BEL)**.

State Election Commission (**SECs**), **procure their own machines. ECI is not responsible for the functioning of EVMs used by SECs in PRIs elections.**

Q4. Where does India export EVM?

Namibia, Fiji, Nepal, Bhutan, and Kenya are some of the countries where EVM export is done from India.

Q5. Introduction of EVMs in India

The **first use** of EVMs occurred in the general election in **Kerala** in May 1982; however, the absence of a specific law prescribing its use led to the Supreme Court striking down that election.

Subsequently, in **1989, the Parliament amended the Representation of the People Act, 1951** to create a provision for the use of EVMs in the elections. A general consensus on its introduction could be reached only in 1998 and these were used in 25 Legislative Assembly constituencies spread across three states of Madhya Pradesh, Rajasthan and Delhi.

EVMs were used for the first time in the general elections (**entire state**) to the Assembly of **Goa** in 1999.

In 2004, in the General Election to the Lok Sabha, the EVMs (more than one million) were used in all 543 Parliamentary Constituencies in the country.

There were technical upgrades between 2001 and 2006. The lifecycle of EVMs is divided into three eras: M1 EVM (in use before 2006), M2 EVM (between 2006 and 2010) and **M3 EVM (since 2013)**. The 2013 upgrade allowed the voter to pick the "None of the Above" (NOTA) option.

Q6. What is the maximum number of votes that can be cast in EVMs?

A maximum of 3840 votes could be cast on the old version EVMs and 2000 votes in the case of the new version EVMs.

Q7. What is the maximum number of candidates that EVMs can cater to?

Each ballot unit accommodates up to **16 candidates**. If there are more than 16 candidates, a second unit can be connected to the first. Likewise, if the number exceeds 48, a fourth unit can be added to handle up to 64 candidates, including NOTA.

As against the M2 EVMs, which could connect only 4 BUs (ballot units) catering to 64 candidates, the M3 EVMs could connect 24 BUs catering to **384 candidates (including NOTA)**.

However, the Ballot Paper voting system would apply in the constituency if more than 384 candidates (including NOTA) are running for that one seat.

Q8. What is VVPAT?

Voter Verifiable Paper Audit Trail is an **independent system** attached with the Electronic Voting Machines that allows the voters to verify that their votes are cast as intended. **VVPAT runs on a power pack Battery**

Facts on VVPAT:

When a vote is cast, a slip is **printed** by the VVPAT printer. It shows the **serial number, name, and symbol of the candidate**. This slip remains visible through a transparent window for **7 seconds**.

Thereafter, this printed **slip automatically gets cut and falls in the sealed drop box** of the VVPAT.

VVPAT consists of a Printer and a VVPAT Status Display Unit (VSDU). However, in the M3 VVPAT, there is no VSDU and the status of VVPAT displays on the Control Unit of M3 EVM.

VVPAT runs on a power pack (Battery) of 22.5 volts.

The Control Unit and VSDU are kept with the Presiding Officer/Polling Officer and Balloting Unit and Printer are kept in the voting compartment.

No voter can take the VVPAT slip back home, as it is later used to verify votes cast in five randomly selected polling booths.

Q9. Where was VVPAT used first?

VVPATs were first used in a bye-election to the Noksen Assembly Constituency of Nagaland held in 2013. By 2017, there was 100% adoption of VVPATs.

Q10. VVPAT can be checked in how many polling booths in a constituency?

In 2018, the EC mandated the counting of VVPAT slips of one randomly selected polling station per Assembly constituency. This was increased to five polling stations per Assembly seat, following a Supreme Court judgement in 2019 on a petition filed by TDP leader Chandrababu Naidu. **The five polling stations are selected by a draw of lots by the Returning Officer concerned, in the presence of candidates/ their agents.**

Q11. What is a Symbol Loading Unit?

Symbol Loading Unit (SLU) is used to load the symbols of the candidates onto the VVPAT. It is a matchbox-sized device that is first connected to a laptop or personal computer, from which a symbol loading application is used to load a bitmap file containing the candidates' names, serial numbers, and symbols.

The SLU is then connected to the VVPAT to transfer that file on to the paper audit machine. This is done under the supervision of a district election officer.