



Electron Mobility Transistor

Why in News

- Recently, the Indian Institute of Technology located in Indore, Madhya Pradesh has received a patent for the High Electron Mobility Transistor.

Key Points

- The **High Electron Mobility Transistor** (HEMT) is generally an OFF device, which can convert up to 4 amps of current and operate at 600 volts. HEMTs are used as digital on-off switches in integrated circuits.
- HEMT transistors are able to operate at higher frequencies up to millimeter wave frequencies than ordinary transistors.
- It will have the following benefits-
 - In devices related to 5G and 6G technology
 - in the manufacture of modern electronic equipment
 - In low power amplifiers and the defense industry
 - In high-frequency products, such as cell phones, satellite television receivers, voltage converters and radar equipment

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