

## Successful flight of Small Satellite Launch Vehicle (SSLV)

- The Small Satellite Launch Vehicle (SSLV) successfully launched three satellites into their intended orbits.
  - EOS-07,
  - Janus-1 and
  - AzaadiSAT-2
- It took-off from the first launch pad at Satish Dhawan Space Centre, Sriharikota



- SSLV is the new small satellite launch vehicle developed by ISRO to cater the launch of small satellites up to 500 kg to Low Earth Orbits on 'launch-on-demand' basis.

- It is configured with three solid stages 87 t, 7.7 t and 4.5 t respectively.

- SSLV is a 34 m tall, 2 m diameter vehicle having a lift-off mass of 120 t. A liquid propulsion-based Velocity Trimming Module (VTM) achieves desired velocity for the insertion of the satellites into the intended orbit.

- SSLV is capable of launching **Mini, Micro, or Nanosatellites (10 to 500 kg mass) to a 500 km orbit**. It provides low-cost access to Space, offers low turn-around time, facilitates flexibility in accommodating multiple satellites and demands minimal launch infrastructure.

- In its first developmental flight on August 7, 2022, SSLV-D1 had marginally missed placing the satellites.

- SSLV-D2 implemented the recommendations made by the expert committee that analysed the shortcomings of SSLV-D1 flight.

- With this successful launch India has got a new launch vehicle which was aimed to commercialise the small satellite launches through Industry on demand basis.

- ISRO looks forward for catering to the increasing global need of launching smaller satellites into Space.