Syllabus subtopic:


Prelims and Mains focus: about the highlights of the training programme; about Gaganyaan mission and its significance

News: The four Indian pilots chosen as candidate-astronauts began their 12-month training at the Gagarin Research and Test Cosmonaut Training Centre (GCTC) in Moscow, Russian space business company Glavkosmos has announced.

Background

In June 2019, the Human Space Flight Centre of the Indian Space Research Organisation and the Russian government-owned Glavkosmos signed a contract for the training, which includes Russian support in the selection of candidates, their medical examination, and space training.

About the training programme

- The 12-month training programme includes comprehensive and biomedical training of the Indian candidates, combined with regular physical practices. They will study in detail the systems of the Soyuz manned spaceship, as well as be trained in short-term weightlessness mode aboard the II-76MDK aircraft.

- The II-76MDK is an Ilyushin-78 military transport plane specially re-designed for parabolic flights of trainee astronauts and space tourists. The candidates will also be trained to take appropriate actions during emergencies — for example should the spacecraft make an abnormal landing in (unplanned) climate and geographic zones.
• Much of the training will take place at the GCTC facilities. The full programme includes basic or generic astronaut training followed by activities specific to the first Indian human space mission, Gaganyaan.

• The four candidates are fighter pilots from the Indian Air Force and were chosen from among hundreds of applicants over the last few months. At the end of all training modules in India and Russia, one or two of the four will be finally named to circle the earth in the first crewed Gaganyaan, which is planned around 2022.