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News: DART mission to be launched soon

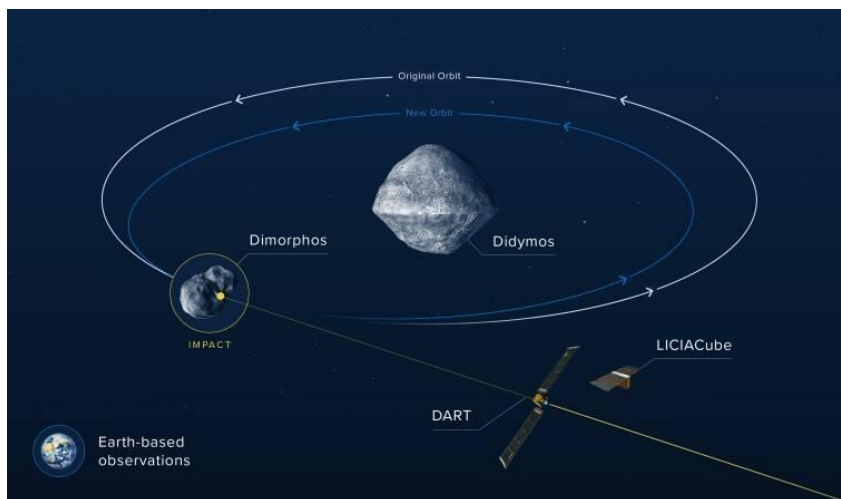
Double Asteroid Redirection Test (DART)

- DART, is an **American space mission designed to determine whether an asteroid** can be redirected with a high-speed collision.
- After the mission has collided with the asteroid, scientists will study its impact on the trajectory of the asteroid with a range of telescopes deployed on different regions of the planet.
- DART will be the first demonstration of the kinetic impactor technique to change the motion of an asteroid in space.
- SpaceX will launch the spacecraft towards **a small moonlet called Dimorphos (Greek for "two forms"), revolving around asteroid named Didymos about 4 million miles from Earth.** It will Dimorphos at about 13,000 mph.
- The DART spacecraft will be **launched on a SpaceX Falcon 9 rocket.**
- It is a **suicide mission and the spacecraft will be completely destroyed.**
- The **collision is expected to take place between 26th September and 1st October, 2022.**
- DART is a **low-cost spacecraft.**

- It has two solar arrays and uses hydrazine propellant for maneuvering the spacecraft.
- It also carries about 10 kg of xenon which will be used to demonstrate the agency's new thrusters called NASA Evolutionary Xenon Thruster–Commercial (NEXT-C) in space.
- NEXT-C gridded ion thruster system provides a combination of performance and spacecraft integration capabilities that make it uniquely suited for deep space robotic missions.
- The spacecraft carries a high-resolution imager called Didymos Reconnaissance and Asteroid Camera for Optical Navigation (DRACO).
- Images from DRACO will be sent to Earth in real-time and will help study the impact site and surface of Dimorphos (the target asteroid).
- DART will also carry a small satellite or CubeSat named LICIACube (Light Italian CubeSat for Imaging of Asteroids).
- LICIACube is expected to capture images of the impact and the impact crater formed as a result of the collision.

Reason for Choosing Dimorphos

- Didymos is a perfect system for the test mission because it is an **eclipsing binary**, which means it has a moonlet that regularly orbits the asteroid and which can be seen when it passes in front of the main asteroid.
- Earth-based telescopes can study this variation in brightness to understand how long it takes Dimorphos to orbit Didymos.



News: Norovirus outbreak

- Recently, **Kerala confirmed an outbreak of norovirus in Wayanad district.**

Norovirus

- Norovirus is a very **contagious virus that causes vomiting and diarrhea.**
- Norovirus are a group of viruses that cause **gastrointestinal illness.** It causes **inflammation of the lining of the stomach and intestines.**

- The most common symptoms are **Diarrhea, Vomiting, Nausea and Stomach pain.**
- **People of all ages can get infected** and sick with norovirus. But, the virus does not significantly affect healthy people, but it can be serious in young children, the elderly, and those with other comorbidities.
- Norovirus **spread from direct contact with infected persons and consuming contaminated food or water.**
- There is **no specific medicine to treat people** with norovirus illness.
- However, people are advised to consume liquid foods, to compensate for the loss from vomiting and diarrhea.

News: Lawyers oppose transfer of Madras High Court CJ

- Over 200 lawyers have made a common representation to the Supreme Court collegium, urging it to **reconsider its recommendation to transfer Madras High Court Chief Justice Sanjib Banerjee to the High Court of Meghalaya.**
- The lawyers said his **transfer, from a chartered High Court with a sanctioned strength of 75 judges, to one with a strength of just two judges raised questions.**

Appointment and Transfer of Supreme Court or High Court Judges are initiated by Collegium.

Appointment of HC Judges

- Article 217 of the Constitution states that the Chief Justice of a High Court shall be appointed by the President in consultation with the Chief Justice of India (CJI) and the Governor of the State.
- In the case of appointment of a Judge other than the Chief Justice, the Chief Justice of the High Court is consulted.
- Consultation Process: High Court judges are recommended by a Collegium comprising the CJI and two senior most judges.
- The proposal, however, is initiated by the Chief Justice of the High Court concerned, in consultation with two senior most colleagues.
- The recommendation is sent to the Chief Minister, who advises the Governor to send the proposal to the Union Law Minister.
- The Chief Justice of the High Court is appointed as per the policy of having Chief Justices from outside the respective States.
- The Collegium takes the call on the elevation.
- Ad-hoc Judges: The appointment of retired judges was provided for in the Constitution under Article 224A.
- Under the Article, the Chief Justice of a High Court for any State may at any time, with the previous consent of the President, request any person who has

held the office of judge of that court or of any other High Court to sit and act as a judge of the High Court for that State.

Collegium System

- Collegium is the system of appointment and transfer of judges that has evolved through judgments of the SC, and not by an Act of Parliament or by a provision of the Constitution.

Evolution of the System

- **First Judges Case (1981):** It declared that the “primacy” of the Chief Justice of India (CJI) recommendation on judicial appointments and transfers can be refused for “cogent reasons”.
- The ruling gave the Executive primacy over the Judiciary in judicial appointments for the next 12 years.
- **Second Judges Case (1993):** SC introduced the Collegium system, holding that “consultation” really meant “concurrence”.
- It added that it was not the CJI’s individual opinion, but an institutional opinion formed in consultation with the two senior-most judges in the SC.

- **Third Judges Case (1998):** SC on President's reference expanded the Collegium to a five-member body, comprising the CJI and four of his senior-most colleagues.