

1. Which Planet Has How Many Moons?

Why in News?

- ▶ Recently, the **International Astronomical Union's Minor Planet Center confirmed 20 new moons orbiting Saturn**, making it the planet with the most moons in our Solar System, at 82.

Key Facts:

- ▶ The newly discovered 20 moons around Saturn makes it the planet with the most moons in our Solar System, at 82.
- ▶ Until their confirmation, the planet with the most moons was Jupiter, at 79.
- ▶ A count of the moons listed on the NASA website shows that our Solar System's planets together have 205 confirmed moons now.
- ▶ Saturn and Jupiter, with 161 between them, account for nearly 80% of these.
- ▶ Another 20% are orbiting Uranus (27) and Neptune (14).
- ▶ Of the remaining three moons, one is Earth's own while the other two are with Mars.
- ▶ Mercury is so close to the Sun and its gravity that it wouldn't be able to hold on to its own moon.
- ▶ Any moon would most likely crash into Mercury or maybe go into orbit around the Sun and eventually get pulled into it.
- ▶ It is not yet clear, however, why Venus does not have a moon.
- ▶ The newly discovered moons of Saturn are about 5 km each in diameter.
- ▶ Seventeen orbit Saturn opposite to the planet's rotation, and three in the same direction as Saturn's rotation.

2. HKmap.live

Why in News?

- ▶ Apple removed an app called Hkmap.live from its app store after facing intense criticism from Chinese state media.

About:

- ▶ It is an app that tracks and displays the movement of police in Hong Kong.
- ▶ China's state media has accused Apple that the app "facilitates illegal behavior" by helping the rioters.

- ▶▶ HKmap.live publishes crowdsourced information on the location of armed police forces, vehicles, use of tear gas, and clashes and injuries on a map of Hong Kong that is regularly updated.
- ▶▶ A website version is available too, as also a version for Android, but the People's Daily instead concentrated its attack only on Apple.

3. GEMINI System to Aid Fishermen

Why in News?

- ▶▶ To avoid communication blackouts that led to 20 fishermen going missing in the aftermath of Cyclone Okchi in 2017, a slew of government departments, research agencies and private companies have developed GEMINI, a portable receiver linked to ISRO-satellites, that is "fail-proof" and warn fishermen of danger.

About GEMINI Device:

- ▶▶ This device has been devised by The Indian National Centre for Ocean Information Services (INCOIS), in collaboration with Accord, a private company. Gemini is a box-shaped receiver that has an antenna and in-built battery that can last three to four days.
- ▶▶ GEMINI works on GAGAN, developed by ISRO and the Airports Authority of India and is an India-made global positioning system and relies on the positioning system by ISRO's GSAT satellites.
- ▶▶ The device only allows one-way communication — it can't be used by fishermen to make calls, for instance.

Applications of GEMINI:

- ▶▶ When GEMINI is connected to an app, it lets fishermen to know the probability of fish-catch in the surrounding seas.
- ▶▶ With this device, fishermen outside the signal range of their phone companies can also access warnings and alerts.
- ▶▶ Mobile phone frequencies cannot be accessed 10-12 km beyond the coast but with GEMINI this range can increase to 300 nautical miles.

4. Pradhan Mantri Innovative Learning Programme (PMILP)- 'DHRUV'

Why in News?

- ▶▶ Union **Human Resource Development** Minister launched the Pradhan Mantri Innovative Learning Programme- 'DHRUV' from Indian Space Research Organisation (ISRO) Headquarters at Bengaluru.

About:

- ▶▶ The objective of the Pradhan Mantri Innovative Learning Programme program would be to allow talented students to realize their full potential and contribute to society.
- ▶▶ The programme will be called DHRUV (after the Pole Star) and every student to be called 'DHRUV TARA'. The students will thus both shine through their achievements and light a path for others to follow.
- ▶▶ It will cover two areas i.e. Science and Performing Arts. There will be 60 students in all, 30 from each area. The 60 students will come from across the country
- ▶▶ The students will be broadly from classes 9 to 12, from all schools including government and private.

5. World Mental Health Day

Context:

- ▶▶ October 10 is observed as the World Mental Health Day.

About:

- ▶▶ World Mental Health Day is **organized by the World Federation for Mental Health**. This year's Day is supported by WHO, the International Association for Suicide Prevention, and United for Global Mental Health.
- ▶▶ **World Mental Health Day 2019 theme is suicide prevention.**
- ▶▶ According to the WHO, every year about 800,000 people die due to suicide, which makes it one suicide every 40 seconds. Hence, this year's theme of World Mental Health Day is "40 seconds of action". The objective is to raise awareness about the surging numbers.
- ▶▶ In India, around 2.2 lakh people die by suicide every year. Most suicide deaths happen between people of age groups 15 to 39. Women are more likely to die by suicide. India has the third-highest female suicide rate (14.7%) in the world.