

# **Spardhaguru India Private Limited** Space & Astronomy:

#### 10 Years of Excellence



spardhaguru2022



Spardhaguru Current affairs



Spardhaguru1



SpardhaGuru



Spardha.guru 🌐



www.spardha.guru



## Space & Astronomy:

### **Orbital Missions and Spacecraft**

SpaceX's Dragon cargo capsule is set to dock with the International Space Station (ISS) today, completing its CRS-33 resupply mission. The capsule is carrying over 5,000 pounds of food, supplies, and scientific experiments.

A key experiment on board will be testing 3D printing of metal parts and bioprinting tissue in microgravity, technologies that could prove vital for future missions to the Moon and Mars. In addition, the Dragon capsule will perform engine burns to help maintain the ISS's altitude, a task traditionally performed by Russian Progress cargo vehicles.

NASA is also targeting a launch attempt for the TOMEX+ sounding rocket mission today, with a launch window set for 10 p.m. to 3 a.m. EDT.

NASA's Astronomy Picture of the Day for August 25, 2025, features a stunning image of a bright meteor streaking across the Pleiades star cluster (M45), captured by chance during a long-exposure photograph.

#### Dear Aspirants,

Stay updated with important lessons, tutorials, and announcements by subscribing to our official WhatsApp Channel!

Scan the QR code below to join and never miss an update!

Thank you for your continued support and enthusiasm.

Let's keep learning and growing together!

### Celestial Events

The nights of August 24-25 are providing exceptional skywatching opportunities due to a "Black Moon," which is a new moon that creates very dark, star-filled skies. This provides ideal conditions for observing the final act of the Perseid meteor shower, which is still active.

A multi-planet parade is also underway. At dawn, skywatchers can observe a conjunction of Venus and Jupiter. While Venus shines brightly as the "Morning Star," Jupiter is also visible in the east. Other planets, including Mercury, Mars, Saturn, and Neptune, are also visible at various times of the night.

www.spardha.guru



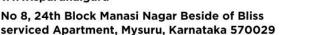
Spardhaguru Competitive Exam Coaching Institute

WhatsApp ಚಾನಲ್





Copyright © All Rights Reserved | https://www.spardha.guru



Spardhaguru I





# **Spardhaguru India Private Limited** Space & Astronomy:

#### 10 Years of Excellence



spardhaguru2022



Spardhaguru Current affairs



Spardhaguru1



SpardhaGuru



Spardha.guru (11)



www.spardha.guru

## **MCQS**

- 1. What is the main purpose of the SpaceX Dragon cargo capsule's current mission to the **International Space Station?**
- A) To perform a spacewalk to repair the ISS.
- B) To test a new solar panel deployment system.
- C) To resupply the station with food, supplies, and scientific experiments.
- D) To transport astronauts to the ISS.

**Answer:** C) To resupply the station with food, supplies, and scientific experiments.

The news states, "The capsule is carrying over 5,000 pounds of food, supplies, and scientific experiments," as part of its CRS-33 resupply mission.

- 2. What kind of celestial event is described as a "Black Moon" in the news?
- A) A lunar eclipse that makes the Moon appear
- B) A new moon that occurs when the side of the Moon facing Earth is completely unlit, making it
- C) A phenomenon where the Moon appears unusually dark due to atmospheric conditions.
- D) A rare alignment of planets that blocks moonlight.

**Answer:** B) A new moon that occurs when the side of the Moon facing Earth is completely unlit, making it invisible.

The text defines a "Black Moon" as a new moon that creates very dark, star-filled skies because it's invisible to observers on Earth.

- 3. Which of the following planets are visible in a conjunction at dawn, according to the news?
- A) Mars and Saturn
- B) Mercury and Neptune
- C) Venus and Jupiter

D) Uranus and Mercury

**Answer:** C) Venus and Jupiter

The news mentions that "At dawn, skywatchers can observe a conjunction of Venus and Jupiter."

- 4. What is the primary purpose of the NASA TOMEX+ sounding rocket mission?
- A) To study the mesopause, a layer of Earth's atmosphere.
- B) To deploy a new weather satellite.
- C) To collect samples from the upper atmosphere.
- D) To test a new rocket propulsion system.

**Answer:** A) To study the mesopause, a layer of Earth's atmosphere.

According to the provided information, the mission aims to "study the mesopause, one of the most dynamic layers Earth's atmosphere."

Dear Aspirants,

Stay updated with important lessons, tutorials, and announcements by subscribing to our official YouTube Channel!

Scan the QR code below to subscribe and never miss an update!

Thank you for your continued support and enthusiasm. Let's keep learning together!

Page | 2





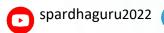


Copyright © All Rights Reserved | https://www.spardha.guru



# **Spardhaguru India Private Limited** Space & Astronomy:

#### 10 Years of Excellence



Spardhaguru Current affairs



Spardhaguru1



SpardhaGuru





www.spardha.guru







Spardhaguru India Private Limited

Page | 3

