

Chapter - 11 | Keeping Time with the Skies

QUIZ-01

1. What causes the phases of the Moon?
 A. The Earth's shadow falling on the Moon
 B. The Moon's distance from the Earth
 C. The rotation of the Moon on its axis
 D. The relative positions of the Sun, Moon, and Earth (D)

Explanation: We see different phases of the Moon due to changes in the portion of the illuminated Moon that is visible from Earth as it revolves around us.

2. What is the duration of one full cycle of Moon phases?
 A. 15 days
 B. 29.5 days
 C. 7 days
 D. 365 days (B)

Explanation: A complete cycle of the Moon's phases, from one full Moon to the next, takes about 29.5 days.

3. What is meant by "Shukla Paksha"?
 A. Waning phase of the Moon
 B. Lunar eclipse period
 C. Waxing phase of the Moon
 D. Dark Moon period (C)

Explanation: Shukla Paksha refers to the waxing phase of the Moon when the illuminated portion increases.

4. Why doesn't the Moon rise at the same time every day?
 A. The Sun blocks it
 B. It rotates very fast
 C. The Moon moves ahead in its orbit each day
 D. The Earth's orbit changes (C)

Explanation: The Moon revolves around the Earth and moves slightly ahead each day, causing it to rise about 50 minutes later each day.

5. What is the basis of a solar calendar?
 A. Moon's orbit
 B. Phases of the Moon
 C. Earth's revolution around the Sun
 D. Position of stars (C)

Explanation: A solar calendar is based on Earth's revolution around the Sun, which defines the year and seasons.

6. Which Indian calendar starts on 22nd March and is used for official purposes?
 A. Gregorian calendar
 B. Vikram Samvat
 C. Islamic calendar
 D. Indian National Calendar (D)

Explanation: The Indian National Calendar starts on March 22 and is used officially alongside the Gregorian calendar.

7. What happens in a leap year in the Indian National Calendar?
 A. Magha month has 31 days
 B. Chaitra has 31 days
 C. February has 30 days
 D. A new month is added (B)

Explanation: In a leap year, one extra day is added to Chaitra, making it 31 days.

8. Which festivals follow the lunar calendar and thus fall on different Gregorian dates every year?
 A. Holi and Diwali
 B. Makar Sankranti and Pongal
 C. Vaisakhi and Bihu
 D. Christmas and Easter (A)

Explanation: Festivals like Holi and Diwali are based on the lunar calendar and their dates change each year in the Gregorian calendar.

9. What is the purpose of adding an intercalary month (Adhika Maasa) in luni-solar calendars?
 A. To match lunar and solar years
 B. To celebrate extra festivals
 C. To adjust leap years
 D. To match with Western calendars (A)

Explanation: Luni-solar calendars add an intercalary month to keep lunar months aligned with the solar year.

10. What is the role of artificial satellites like Cartosat and AstroSat?
 A. To predict Moon phases
 B. For studying tides
 C. For mapping, observation, and research
 D. For observing eclipses (C)

Explanation: Satellites like Cartosat are used for mapping and disaster monitoring, while AstroSat is used for celestial research.