

Chapter – 1 | Locating Places On The Earth

QUIZ
PART-03

1. Through which ancient Indian city did the Madhya Rekha pass?
A. Jaisalmer
B. Ujjayini
C. Guwahati
D. Kolkata (B)

Explanation: The Madhya Rekha passed through Ujjayini, an ancient astronomical center in India.

2. How many degrees does the Earth rotate in one hour?
A. 10°
B. 15°
C. 30°
D. 45° (B)

Explanation: The Earth rotates 360° in 24 hours, which means it rotates 15° every hour.

3. What is the time difference between Indian Standard Time (IST) and Greenwich Mean Time (GMT)?
A. 3 hours 10 minutes
B. 4 hours 15 minutes
C. 5 hours 30 minutes
D. 6 hours 45 minutes (C)

Explanation: IST is 5 hours and 30 minutes ahead of GMT.

4. What is the longitude used for calculating Indian Standard Time?
A. 90°E
B. 75°E
C. $82^\circ30'\text{E}$
D. 60°E (C)

Explanation: IST is calculated from the $82^\circ30'$ East meridian, which passes through Mirzapur.

5. What is the International Date Line approximately located at?
A. 0° Longitude
B. 90°E Longitude
C. 180° Longitude
D. 150°W Longitude (C)

Explanation: The International Date Line is approximately at 180° longitude, opposite the Prime Meridian.

6. What happens when we cross the International Date Line eastward?
A. Add a day
B. Subtract a day
C. Add 12 hours
D. Subtract 12 hours (B)

Explanation: When crossing the International Date Line eastward, we subtract a day from the calendar.

7. Which direction does the Earth rotate on its axis?
A. East to West
B. North to South
C. West to East
D. South to North (C)

Explanation: The Earth rotates from west to east on its axis.

8. What is the reason for time being different in Porbandar and Tinsukia at the same moment?
A. Different altitudes
B. Different longitudes
C. Different temperatures
D. Different seasons (B)

Explanation: Porbandar and Tinsukia are located at different longitudes, so they experience daylight at different times.

9. Why are time zone boundaries not straight?
A. To follow coastlines
B. To avoid mountains
C. To follow international borders
D. To avoid large cities (C)

Explanation: Time zone lines often follow international borders to match each country's official standard time.

10. Which ancient Indian astronomer is known to have worked with the concept of the Madhya Rekha?
A. Aryabhata
B. Bhaskara
C. Varāhamihira
D. Chanakya (C)

Explanation: Varāhamihira was a well-known astronomer who worked in Ujjayini and understood the need for a prime meridian.