

TEST No. 13

TOPIC: Madden-Julian Oscillation and temperate cyclones

SUBJECT: PHYSICAL GEOGRAPHY

Explanation:

Question 1

Answer C

Explanation: the MJO is an eastward moving disturbance of clouds, rainfall, winds, and pressure that traverses the planet in the tropics and returns to its initial starting point in 30 to 60 days, on average. the Madden–Julian oscillation is a traveling pattern that propagates eastward, at approximately 4 to 8 m/s (14 to 29 km/h, 9 to 18 mph), through the atmosphere above the warm parts of the Indian and Pacific oceans. There can be multiple MJO events within a season, and so the MJO is best described as *intraseasonal* tropical climate variability (i.e. varies on a week-to-week basis).

Question 2

Answer A

Explanation: In the enhanced convective phase, winds at the surface converge, and air is pushed up throughout the atmosphere. At the top of the atmosphere, the winds diverge. Such rising air motion in the atmosphere tends to increase condensation and rainfall.

Question 3

Answer B

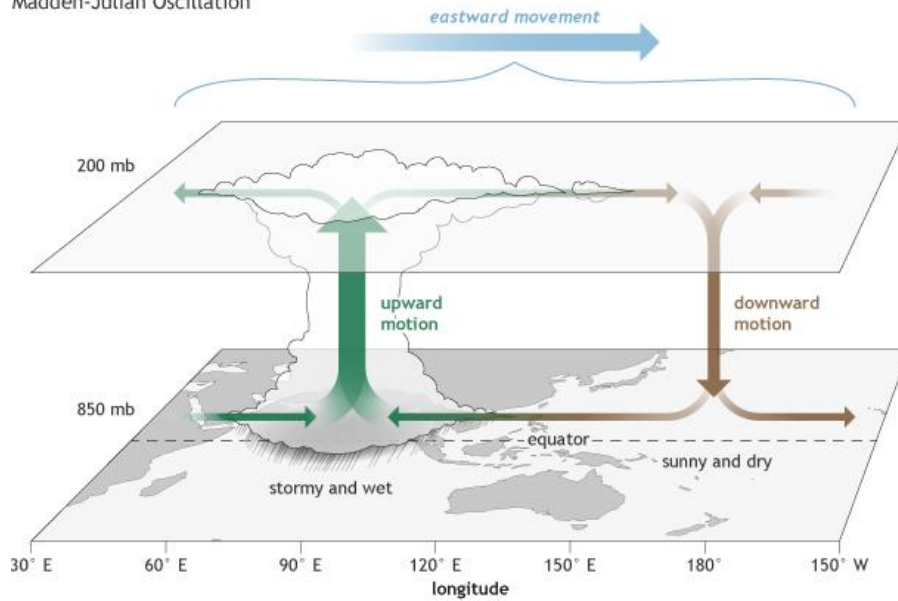
Explanation: The journey of MJO goes through **eight phases**. When it is over the Indian Ocean during the Monsoon season, **it brings good rainfall over the Indian subcontinent**. On the other hand, when it witnesses a **longer cycle and stays over the Pacific Ocean**, MJO brings bad news for the Indian Monsoon. It is linked with enhanced and suppressed rainfall activity in the tropics and is very important for the Indian monsoonal rainfall.

Question 4

Answer A

Explanation: Second statement is wrong. MJO affects both Indian and pacific ocean

Madden-Julian Oscillation



Question 5

Answer C

Explanation: BOTH statements are correct.

Question 6

Answer D

Explanation: all statements are correct.

Question 7

Answer c

Explanation: BOTH statements are correct

Question 8

Answer b

Explanation: cold air mass moves faster than warm air mass.