

Corrigendum/Explanation SFG FRC 2026 Test 19

There is 1 change in today's paper (Q.7). In Q.7, the correct answer is Option (b).
In Q.7) the correct answer is option (b).

Q.7) A doubt was raised whether Jet Streams absence over the equatorial region is because the Coriolis force is zero at the Equator.

Exp) It would be incorrect to say that Jet Streams absence over the equatorial region is because the Coriolis force is zero at the Equator. Jet streams are primarily due to - Thermal gradient between pole and equator, the pressure gradient between pole and the equator and a pressure gradient between the surface and the subsurface air over the poles. As these factors are missing at the equator, because of which Jet streams are largely absent over the equatorial region.

For Future Reference:

Q.7) Consider the following statements:

Statement I: Jet Streams are largely absent over the equatorial region

Statement II: The Coriolis force is zero at the Equator.

Which one of the following is correct in respect of the above statements?

- a) Both Statement I and Statement II are correct and Statement II explains Statement I
- b) Both Statement I and Statement II are correct, but Statement II does not explain Statement I
- c) Statement I is correct, but Statement II is not correct
- d) Statement I is not correct, but Statement II is correct

Ans) b

Exp) Option b is the correct answer.

Jet streams are narrow bands of very fast-moving winds found in the upper levels of the atmosphere, mainly in the troposphere.

Statement I is correct. Jet streams usually form in mid-latitudes where there is a strong temperature contrast between warm and cold air masses. Near the Equator, temperature differences between adjacent latitudes are small, so the conditions required for the formation of strong jet streams are weak. As a result, well-defined jet streams are generally not found over the equatorial region.

Statement II is correct. The Coriolis force arises due to Earth's rotation and depends on latitude. It is **zero at the Equator** and increases gradually toward the poles.

Statement II is does not explain statement I. Jet streams are primarily due to - Thermal gradient between pole and equator, the pressure gradient between pole and the equator and a pressure gradient between the surface and the subsurface air over the poles. As these factors are missing at the equator, because of which Jet streams are largely absent over the equatorial region.