



## Daily Subjectwise Quiz Day 1 Geography I (Online Prelims Test)

1) Consider the following statements with respect to Earth's Rotation?

1. The Earth rotates faster at the Equator than it does at the poles
2. The Coriolis force is minimum at the poles and it is more affected by Earth's revolution than its rotation.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

- The Earth rotates faster at the Equator than it does at the poles, as the Earth is wider at the Equator.
- The invisible force that appears to deflect the wind is the Coriolis force, it applies to movement on rotating objects.
- The key to the Coriolis Effect lies in the Earth's rotation and not based on revolution.
- Earth's rotational effects on horizontally and freely moving objects are greatest at the poles; therefore, the Coriolis Effect is greatest at the poles.

2) Which of the following factors have an impact on Earth's shape?

1. Distribution of mass on Earth
2. Postglacial rebound
3. Gravitational pull of the moon and sun

Select the correct answer using codes given below

- a. 3 only
- b. 2 & 3 only
- c. 1 & 3 only
- d. All of the above

Answer : d

- The gravitational pull of the moon and sun not only cause ocean and atmospheric tides but earth tides as well.
- The changing weight of the oceans and atmosphere can cause deformations of the crust in the order of a centimetre or so.
- There's also postglacial rebound, with the crust and mantle that were depressed by the huge ice sheets that sat on the surface during the last ice age now rebounding upward on the order of a centimetre a year.
- Earth's imbalanced distribution of mass and stabilize its spin, the entire surface of the Earth will rotate and try to redistribute mass along the equator, a process called true polar wander.

3) Which of the following state capitals is/are located north of the Tropic of Cancer?

1. Shillong
2. Raipur
3. Bhopal
4. Imphal
5. Kolkata

Select the correct answer using codes below

- a. 1, 3, and 5 only
- b. 1 and 4 only
- c. 2 and 5 only
- d. All of above

Answer : b



4) Consider the following statements with respect to Intertropical Convergence Zone (ITCZ)?

1. It is an area encircling the Earth near the Equator, where the northeast and southeast trade winds converge.
2. It is characterized by high atmospheric pressures and has no effect on tropical cyclone formation.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2



Answer : a

- Intertropical Convergence Zone (ITCZ), known by sailors as the doldrums.
- It is characterized by low atmospheric pressures (low intertropical pressures), as a consequence of the upward movement induced by the trade winds convergence.
- It results in high atmospheric pressure in the upper troposphere.
- As the ITCZ migrates more than 500 kilometres (300 mi) from the equator during the respective hemisphere's summer season, increasing Coriolis force makes the formation of tropical cyclones within this zone more possible.
- Surges of higher pressure from high latitudes can enhance tropical disturbances along its axis.

5) Consider the following statements with respect to planets

1. Uranus has retrograde rotation and has sunrise in the west and not in the east as we have on the earth.
2. Mercury has the largest diurnal range of temperature, where Neptune has one of the lowest temperature.

Which of the above statement (s) is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

- Uranus and Venus are two planets of the solar system which have retrograde rotation.
- Mercury has the largest diurnal range of temperature, day and night temperatures at Mercury are the 430 degree Celsius and  $-180$  degree Celsius
- Whereas Neptune, being farthest from the sun has one of the lowest temperatures of  $-200$  degree Celsius.

