

## 18<sup>th</sup> March Prelims Daily Solutions

Q.1) Consider the followings statements:

1. Large hydro projects greater than 25MW are not designated as renewable energy projects.
2. India's total renewable energy capacity is 34.4% of the overall energy mix.

Which of the given statements is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Inspired by: New hydro policy to help meet renewables target

<https://www.civildaily.com/news/new-hydro-policy-to-help-meet-renewables-target/>

Answer: (b)

### New Hydroelectric Policy

- According to the new policy, large hydro projects will also be designated as renewable energy projects.
- So far, only small hydro projects of a capacity of less than 25 MW were treated as renewable energy. Large hydro projects were treated as a separate source of energy.
- The tag allows these to qualify as part of the framework for non-solar Renewable Purchase Obligation (RPO) of the states.
- Under this, power purchasers will have to source a portion of electricity from large hydro projects.
- India's renewable energy sector had an installed capacity of 75,055.92 MW as of February 2019, according to data with the Central Electricity Authority.
- With the inclusion of large hydro in renewable energy, the energy mix changes drastically. Renewable energy capacity would now be 1, 20,455.14 MW or 34.4% of the overall energy mix.

Q.2) Consider the following statements:

1. According to the 2011 national census, West Bengal is the most-populous state in India.
2. West Bengal had a population density of 1,029 inhabitants per square km making it the second-most densely populated state in India, after Bihar.

Which of the given statements is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

Inspired by: Migration in Bengal delta driven by livelihood issues, social factors

<https://www.civildaily.com/news/migration-in-bengal-delta-driven-by-livelihood-issues-social-factors/>

Answer: (b)

### Population surge in Bengal

- According to the 2011 national census, West Bengal is the fourth-most-populous state in India with a population of 91,347,736 (7.55% of India's population).

- As of 2011, West Bengal had a population density of 1,029 inhabitants per square km making it the second-most densely populated state in India, after Bihar
- Economic reasons are the precipitating factor for migration in the Indian Bengal Delta that comprises the Sunderbans reveals an international study.
- The study is titled Deltas Vulnerability and Climate Change: Migration and Adaptation (DECMA).
- It points out that there is huge gender disparity when it comes to those migrating from the region.
- The study reveals that 64% people migrate because of economic reasons, unsustainable agriculture, lack of economic opportunities and debt;
- 28 % of the migration from the region is for social reasons and about 7% for environmental reasons like cyclones and flooding.

Q.3) The term Solar Tsunami, sometimes seen in news is directly caused by?

- a) Sun's magnetic field
- b) Nuclear fusion reaction
- c) El-Nino
- d) None of these

Inspired by: Solar tsunami can trigger the sunspot cycle

<https://www.civildaily.com/news/solar-tsunami-can-trigger-the-sunspot-cycle/>

Answer: (a)

### Solar Tsunami

- The sun's magnetic field, from which sunspots get generated, wraps around the sun in the east-west direction.
- These magnetic fields behave like rubber bands on a polished sphere. They tend to slip towards the poles.
- Holding these fields in their place requires that there is extra mass (plasma mass) pushing at the bands from higher latitudes.
- Thus, a magnetic dam is formed which is storing a big mass of plasma.
- At the end of a solar cycle, this magnetic dam can break, releasing huge amounts of plasma cascading like a tsunami towards the poles.
- These tsunami waves travel at high speeds of about 1,000 km per hour carrying excess plasma to the mid-latitudes.
- There they give rise to magnetic flux eruptions.
- These are seen as the bright patches that signal the start of the next cycle of sunspots.

Q.4) The Theatre Level Operational Readiness Exercise (TROPEX 19) recently seen in news is a:

- a) Bilateral Military Exercise
- b) Humanitarian Assistance and Disaster Relief (HADR) Exercise
- c) Counter-terrorism exercise
- d) None of these

Inspired by: <https://www.thehindu.com/news/national/as-india-pakistan-tensions-mounted-navy-deployed-aircraft-carrier-and-nuclear-submarines/article26560583.ece>

Answer: (d)

- The TROPEX is an inter-service military exercise involving the participation of the Indian Army, Air Force, Navy and the Coast Guard.
- It is designed to test the combat readiness of the Indian naval units, as well as the Indian Air Force, Indian Army and the Indian Coast Guard.

Q.5) The Schools Strike for Climate is a global, growing movement of students demanding more action from authorities regarding global warming and climate change. It began in:

- a) Austria
- b) Norway
- c) Sweden
- d) Denmark

Inspired by: <https://www.thehindu.com/sci-tech/energy-and-environment/what-is-schools-strike-for-climate/article26534098.ece>

Answer: (c)

The Schools Strike for Climate is a global, growing movement of students demanding more action from authorities regarding global warming and climate change. The movement began last year as a solo protest by a 15-year-old Swedish girl Greta Thunberg outside the Swedish Parliament building. It has since grown, and on March 15, thousands of students from across continents are expected to skip school and take part in protests. It is said to be the largest such protest.