

PRELIMS FOCUS -2018

GEOGRAPHY AND ENVIRONMENT

1. Tropical cyclones do not form over equator. This is because

1. Equator is a zone of wind convergence.
2. The temperature over equator is too high.
3. There are no fronts over equator.

Select the correct answer using the codes given below.

- a) 1 and 2 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) none

2. Monsoon in India is said to be essentially pulsating in nature. This means

- a) They are influenced by jet streams.
- b) They occur in wet spells of few days duration at a time.
- c) Ocean current like el-nino impacts the monsoon
- d) none

3. Deltas of eastern India are shrinking due to

1. huge amount of sediments being deposited.
2. groundwater mining.
3. construction of large dams.

Select the correct answer using the codes given below.

- a) 1 and 2 only
- b) 1 and 3 only

c) 2 and 3 only

d) 1, 2 and 3

4. The non-point pollution of river water involves discharge of pollutants through

a) urban sewage drains

b) industrial effluents

c) agricultural fields

d) both (a) and (b)

5. Biofuels are fuels extracted from plants and crops and these have various advantages. These include

1. increasing agricultural diversity.

2. reduced use of fertilizers.

3. renewable source of energy.

Select the correct answer using the codes given below.

a) 1 and 3 only

b) 3 only

c) 2 and 3 only

d) 1, 2 and 3

[Refer next page for Answers & Explanations]

Answer and Explanation

1. d) none

Tropical cyclone does not form over the equator because the coriolis force is zero at the equator. Even though equator is a zone of wind convergence, it has nothing to do with tropical cyclone as such.

Temperature is highest north and south of equator and not exactly at equator. Fronts are required for formation of temperate cyclone and not tropical ones. So even though statement 3 is correct it is not a reason.

2.b) They occur in wet spells of few days duration at a time.

3.c) 2 and 3 only

Deltas shrink due to lack of sediments and not due to huge amount of sediments. A proliferation of large dams that starve deltas of sediment, groundwater mining that causes land compaction, and artificial levees that affect river courses, have been responsible for the subsiding of major Indian deltas including

Ganga-Brahmaputra, Krishna-Godavari, Brahmani and Mahanadi. Read more –

<http://www.thehindu.com/sci-tech/energy-and-environment/indian-deltas-are-sinking/article5892566.ece>

4. c) agricultural fields.

Non-point sources of pollution are often termed ‘diffuse’ pollution and refer to those inputs and impacts which occur over a wide area and are not easily attributed to a single source. They are often associated with particular land uses, as opposed to individual point source discharges. Non-point source water pollution affects a water body from sources such as polluted runoff from agricultural areas draining into a river, or wind-borne debris blowing out to sea. Urban sewage drains and industrial effluents are point pollution sources of river water.

5.b) 3 only.

Biofuels may lead to monoculture where farmers will prefer cultivating such crops which can be used in making biofuels. Fertilizers used in such crops will only increase the fertilizer use. Biofuels are renewable source and this is their advantage compared to non-renewable fossil fuels. Use of Fertilizers: As biofuels are produced from crops and these crops need fertilizers to grow better. The downside of using fertilizers is that they can have harmful effects on surrounding environment and may cause water pollution.