



## Daily Current Affairs Prelims Quiz 21-01-2023 (Online Prelims Test)

1) Consider the following statements with respect to Plateaus:

1. A plateau that is eroded and broken into smaller raised sections are called outliers.
2. Crustal shortening plateau formation process is the thrusting of one block of crust over another by the folding of layers of rock.
3. Deccan Plateau in India is formed by the crustal shortening plateau formation process.

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

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : a

### Plateau



- A plateau is a flat-topped table land.
- Plateaus occur in every continent and take up a third of the Earth's land.
- They are one of the four major landforms, along with mountains, plains, and hills.
- Plateaus, like mountains may be young or old.
- The Deccan plateau in India is one of the oldest plateaus.

### Plateau Formation

- **Thermal Expansion** - Thermal expansion of the lithosphere means the replacement of cold mantle lithosphere by hot asthenosphere.
- Examples: The Yellowstone Plateau in the United States, the Massif Central in France, and the Ethiopian Plateau in Africa.
- **Crustal Shortening** - Crustal shortening is the process of plateau formation by the thrusting of one block or slice of crust over another or by the folding of layers of rock.
- Examples: They can be found in North Africa, Turkey, Iran, and Tibet, where the African, Arabian, and Indian continental masses have collided with the Eurasian continent.
- **Volcanic Flood Basalts** - Traps - Volcanic plateaus are commonly associated with eruptions that occurred during the Cenozoic or Mesozoic.
- Examples: Columbia Plateau in the north western United States, Deccan Traps of peninsular India, Laurentian Plateau or The Canadian Shield and the Siberian Traps of Russia.

2) Consider the following statements with respect to the International North-South Transport Corridor (INSTC):

1. It is a transportation route linking the Indian Ocean and the Persian Gulf to the Caspian Sea.
2. India is not a party to the International North-South Transport Corridor (INSTC).

3. At present, the Chabahar Port in Iran is part of the Corridor.

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

- a. 1 and 2 only
- b. 2 and 3 only
- c. 1 and 3 only
- d. 1, 2 and 3

Answer : b

### International North-South Transport Corridor (INSTC)

- Ministry of Ports, Shipping and Waterways, in association with India Ports Global Ltd, conducted a workshop on the Linking Chabahar Port with INSTC.
- The International North-South Transport Corridor (INSTC) is a multi-modal transportation route linking the Indian Ocean and the Persian Gulf to the Caspian Sea via Iran and onward to northern Europe via St. Petersburg in Russia.
- Countries associated with this Initiative: Armenia, Azerbaijan, Belarus, Bulgaria, India, Iran, Kazakhstan, Kyrgyz Republic, Oman, Russian Federation, Syrian Arab Republic, Tajikistan, Turkey, and Ukraine.
- The corridor encompasses sea, road and rail routes.
- The main purpose of the corridor was to reduce carriage costs and transit time between India and Russia.
- The transit time is expected to reduce to almost half, once the corridor becomes fully functional.
- Route with countries in INSTC - India, Iran, Azerbaijan, and Russia (Source and destination included).

### Chabahar Port

- It is located off the Gulf of Oman & is the only Iranian port with direct access to the ocean.
- The Port's deep draft of 16 m is suitable for handling large shipment vessels.
- The Port lies close to some of the busiest trade routes in the world.
- The region comes under the Asia-Europe, Asia-Asia trade route, which carries large cargo volumes.



3) Consider the following statements:

1. A pangenome is the full range of messenger RNA (mRNA) molecules expressed by an organism.

2. A transcriptome is the entire set of genes from all strains within a group of organism.
3. A pantranscriptome is a combination of both transcriptome and pangenome.

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

- a. 1 only
- b. 2 only
- c. 3 only
- d. None of the above

Answer : c

## Pantranscriptome

- The pantranscriptome-concept builds on the emerging concept of pangenomics in the genomics field.
- Pantranscriptome, which combines a transcriptome and a pangenome, a reference that contains genetic material from a cohort of diverse individuals, rather than just a single linear strand.
  - Cohort - a group of people with a shared characteristic.
- A transcriptome is the full range of messenger RNA, or mRNA, molecules expressed by an organism.
- The term transcriptome can also be used to describe the array of mRNA transcripts produced in a particular cell or tissue type.
- In the fields of molecular biology and genetics, a pan-genome (pangenome or supragenome) is the entire set of genes from all strains within a clade.
  - Clade - a group of organisms believed to comprise all the evolutionary descendants of a common ancestor.
- More generally, it is the union of all the genomes of a clade.

4) Trademark can be issued for which of the following?

1. Symbol
2. Design
3. Word
4. Phrase

Choose the correct code.

- a. 1 and 2 only
- b. 1, 3 and 4 only
- c. 2, 3 and 4 only
- d. 1, 2, 3 and 4

Answer : d

## Trademark

- A trademark is a symbol, design, word or phrase that is identified with a business.
- When a trademark is registered, its owner can claim exclusive rights on its use.
- The Trademark Act, 1999, governs the regime on trademark and its registration.
- The Act guarantees protection for a trademark that is registered with the Controller General of Patents, Designs, and Trademarks, also known as the trademark registry.
- A trademark is valid for 10 years, and can be renewed by the owner indefinitely every 10 years.

## Violation of trademark

- Using a registered trademark without authorisation of the entity that owns the trademark is a violation or infringement of the trademark.
- Using a substantially similar mark for similar goods or services could also amount to infringement.
- In such cases, courts have to determine whether this can cause confusion for consumers between the two.
- There are several ways in which a trademark can be infringed.
- However, the trademark owner has to show that the trademark has a distinct character.

5) Consider the following statements with respect to the Bhoj Wetland:

1. It is located in the State of Bihar on the banks of River Koshi.
2. The Chitrangudi bird sanctuary is located in this wetland.
3. It is part of the Ramsar wetland site of international importance.

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

- a. 1 and 2 only
- b. 2 only
- c. 3 only
- d. 1, 2 and 3

Answer : c

## Bhoj Wetland

- It is located in Bhopal, in the state of Madhya Pradesh.
- It has two lakes, Upper Lake, also called Bhojtal and Lower Lake or Chhota Talaab.
- It is also part of the Ramsar site of international importance.
- Small cruise vessels with passengers act as floating colonies that pollute water bodies with sewage, wastewater and other contaminants.
- The National Green Tribunal has directed the Central Pollution Control Board (CPCB) and Madhya Pradesh Pollution Control Board (MPPCB) to periodically monitor the activities of a cruise vessel polluting the Bhoj wetland.