



## UPSC CURRENT AFFAIRS MCQS 12-12-2023

### 1. Consider the following statements about Truth and Reconciliation Commission:

1. The Truth and Reconciliation Commission promote reparative justice but doesn't include financial reparations.
2. The first TRC was established in South Africa to seek truths behind apartheid.
3. India had last formed a TRC after the National Emergency in 1978.

### How many of the above statements are correct?

- (A) Only one
- (B) Only two
- (C) All three
- (D) None

**Answer:** (A)

### Explanation:

In the context of transitional justice, truth commissions often align with restorative justice models, placing a stronger emphasis on reconciliation than punitive measures. These initiatives prioritize healing and rebuilding relationships over retribution. Additionally, truth commissions actively advocate for reparative justice by endorsing actions such as financial compensations, official apologies, and commemorative efforts. This approach seeks to address historical injustices and contribute to the overall process of societal healing. Hence statement 1 is incorrect.

The South African TRC was established in 1995. Before that TRCs were formed in Uganda (1974), Argentina (1983), etc. Hence statement 2 is incorrect. India has never had a TRC formed till now. In a recent Supreme Court judgement, Justice Sanjay Kaul suggested establishing a Truth and Reconciliation Commission to investigate reported human rights violations by state and non-state entities in J&K. Hence statement 3 is incorrect.

### 2. Consider the following sources of carbon emission:

1. Land use and forestry
2. Road transportation
3. Industries



4. Agriculture
5. Petroleum refining

**Arrange them in the decreasing order of their overall carbon footprint.**

- (A) 3,4,2,1,5
- (B) 4,3,5,2,1
- (C) 1,2,3,4,5
- (D) 3,2,5,4,1

**Answer:** (A)

**Explanation:** A carbon footprint encapsulates the entirety of Greenhouse Gas (GHG) emissions, primarily consisting of carbon dioxide (CO<sub>2</sub>) and methane, discharged into the atmosphere as a result of human activities. This measure extends to various entities such as individuals, organizations, products, and events. The World Health Organization (WHO) defines the carbon footprint as a metric quantifying the impact of activities on CO<sub>2</sub> production through the combustion of fossil fuels. Essentially, it serves as a comprehensive gauge of the environmental consequences associated with diverse human undertakings.

**3. AMRIT (Arsenic and Metal Removal by Indian Technology) is a water purification technology developed by:**

- (A) IIT Delhi
- (B) IIM Ahmedabad
- (C) Ministry of Earth Sciences
- (D) IIT Madras

**Answer:** (D)

**Explanation:** 'AMRIT' (Arsenic and Metal Removal by Indian Technology) has been innovated by IIT-Madras to tackle water quality concerns, with a specific focus on eliminating arsenic and metal ions. The technology utilizes nano-scale iron oxy-hydroxide, demonstrating a selective capacity to extract arsenic as water courses through it. 'AMRIT' is versatile in its application, serving as a water purification solution for both domestic and community-level usage. This development showcases the potential for advanced technological solutions to address critical issues related to water quality.



**4. Consider the following statements about Down's Syndrome:**

1. Down syndrome is a non-communicable disease caused by genetic disorder.
2. It is also called Trisomy 21, which means an extra copy of chromosome at 21st position.
3. Zolgen Sma is the world's first vaccine to cure Down's Syndrome.

**How many of the above statements are not correct?**

- (A) Only one
- (B) Only two
- (C) All three
- (D) None

**Answer:** (B)

**Explanation:** Down syndrome stems from a genetic disorder originating from abnormal cell division, leading to an additional full or partial copy of chromosome 21. This surplus genetic material contributes to the distinctive developmental alterations and physical characteristics associated with Down syndrome. Hence statement 1 is incorrect and statement 2 is correct.

Syndromes refer to specific groups of symptoms that occur simultaneously and may be identified by healthcare providers. Once a syndrome is recognized, it can lead to further classification of the condition as either a disorder or a disease.

Disorders encompass a set of symptoms that interfere with normal bodily functions or result in significant impairment. For instance, if you exhibit symptoms like joint pain indicative of arthritis, your healthcare provider might diagnose it as an arthritis disorder. Without pinpointing the precise cause, the diagnosis may be framed as an arthritis disorder.

Diseases, on the other hand, are medical conditions with clear, identifiable causes. Once the cause of a condition like arthritis is determined, it transforms from a disorder to a disease. In cases like rheumatoid arthritis, the immune system attacking the joints is the established cause of the disease.

There is no cure for Down Syndrome. ZOLGENSMA is a gene therapy utilizing an adeno-associated virus (AAV) vector. It is approved for treating spinal muscular atrophy (SMA) in pediatric patients under 2 years old who have



bi-allelic mutations in the survival motor neuron 1 (SMN1) gene. Hence statement 3 is incorrect.

**5. The boundary between North and South Korea is generally addressed to as:**

- (A) 38th parallel
- (B) 40th parallel
- (C) 48th parallel
- (D) 49th parallel

**Answer:** (A)

**Explanation:** Korea, known as Hanguk in South Korea and Joseon in North Korea, is a peninsular region located in East Asia. Since 1945, it has been divided along the 38th parallel, now called the Korean Demilitarized Zone. In 1948, two independent states emerged, each asserting sovereignty over the entire Korean territory. South Korea, officially the Republic of Korea, controls the southern half, while North Korea, officially the Democratic People's Republic of Korea, governs the northern portion. The region encompasses the Korean Peninsula, Jeju Island, and several smaller islands in proximity. The peninsula shares borders with China (Manchuria) to the north and Russia to the northeast, with the Amnok and Duman rivers forming natural boundaries. It is separated from Japan to the southeast by the Korea Strait.