



## UPSC CURRENT AFFAIRS MCQS 10-11-2023

### 1. Consider the following statements, with reference to the WHO's Global Tuberculosis (TB) Report 2023:

1. In 2022, tuberculosis overtook Covid-19 as the largest cause of death from a single infectious pathogen.
2. In 2022, 30 high-burden TB nations will account for 87% of global TB cases, with India being one of them.
3. Despite being a high-burden country, India has a TB death rate of less than 5%.

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

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

### Answer: (A)

Explanation: Recently, the World Health Organization (WHO) released the Global Tuberculosis (TB) Report 2023, highlighting the high burden of TB worldwide in 2022. It was the world's second leading cause of death from a single infectious agent in 2022, following Covid-19. Hence, statement 1 is not correct. TB caused almost twice as many deaths as HIV-AIDS. More than 10 million people continue to fall ill with TB every year. 30 high-burden TB countries collectively accounted for 87% of the world's TB cases in 2022.

Among the top eight high-burden countries, besides India, are Indonesia, China, the Philippines, Pakistan, Nigeria, Bangladesh, and the Democratic Republic of Congo. Hence, statement 1 is correct. India reported a case fatality ratio of 12%, indicating that 12% of TB cases in the country resulted in death. The report estimates that 3,42,000 TB-related deaths occurred in India in 2022, with 3,31,000 among HIV-negative individuals and 11,000 among those with HIV. Hence, statement 3 is not correct.



## 2. Consider the following statements regarding Deepfake:

1. Deepfake generators and discriminators are components of generative adversarial networks.
2. Deepfakes can help restore people's lost voices, improve artistic expression, and improve medical training and simulation.
3. Sections 67 and 67A of the Information Technology Act (2000) contain laws that address all aspects of deep fakes.

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

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

### Answer: (B)

Explanation: Deepfakes are synthetic media that use AI to manipulate or generate visual and audio content, usually with the intention of deceiving or misleading someone. Deepfakes are created using a technique called generative adversarial networks (GANs), which involve two competing neural networks: a generator and a discriminator. The generator tries to create fake images or videos that look realistic, while the discriminator tries to distinguish between the real and the fake ones.

The generator learns from the feedback of the discriminator and improves its output until it can fool the discriminator. Hence, statement 1 is correct. Positive Applications of Deep Learning: Deep learning technology has enabled positive advancements, such as restoring lost voices and recreating historical figures. Deep learning techniques have been applied in comedy, cinema, music, and gaming to enhance artistic expression. It enhances medical training and simulation by generating diverse and realistic medical images. It also creates virtual patients and scenarios for simulating medical conditions and procedures, improving training efficiency. Hence, statement 2 is correct.



India does not have specific laws or regulations that ban or regulate the use of deepfake technology. India has called for a global framework for the expansion of “ethical” AI tools. Existing laws such as Sections 67 and 67A of the Information Technology (IT) Act (2000) have provisions that may be applied to certain aspects of deep fakes, such as defamation and publishing explicit material. The Information Technology Rules, 2021, mandate the removal of content impersonating others and artificially morphed images within 36 hours. None of the provisions or sections of the IT Act 2000 deal with each and every aspect of the Deepfakes. Hence, statement 3 is not correct.

**3. With reference to Worker and Labour Productivity, consider the following statements:**

1. Productivity in each sector is measured in terms of the labor-output ratio or the change in Net Domestic Product per worker, with working hours assumed to be 8 hours per day.
2. The distinction between Worker Productivity and Labour Productivity is that 'work' in worker productivity refers to mental activities, whereas 'labour' refers to manual tasks.

**Which of the above statements is/are correct?**

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2

**Answer: (C)**

Explanation: Productivity of activity is usually measured as the quantum of output value per unit of labour (time) cost at a micro level. At a macro level, it is measured in terms of the labor-output ratio or change in Net Domestic Product (NDP) per worker in each sector (where working hours are assumed to be 8 hours per day). The only conceptual difference between Worker Productivity and Labor Productivity is that the ‘work’ in worker productivity



describes mental activities. In contrast, the 'work' in labor productivity is mostly associated with manual activities. Hence, both statements are correct.

**4. Klyuchevskoy volcano, which has recently made the news, is located in:**

- (A) Crimean Peninsula
- (B) Iberian Peninsula
- (C) Yucatan Peninsula
- (D) Kamchatka Peninsula

**Answer: (D)**

Explanation: Klyuchevskoy volcano erupted recently in Russia's Kamchatka Peninsula. It is one of Kamchatka's most well-known volcanoes. With a height of 4,750 metres, it is one of the world's tallest active volcanoes. A truncated cone with a centre crater makes up the volcano. It is a stratovolcano. Since 1700, it has erupted more than 50 times. Hence, option (d) is correct.

**5. What is the primary purpose of the Indian Evidence Act Section 27?**

- (A) To make all confessions acceptable in court.
- (B) To protect individuals in police custody from self-incrimination.
- (C) Make an exemption for confessions that lead to the revelation of facts.
- (D) Prohibit the use of confessions obtained in police custody.

**Answer: (C)**

Explanation: The Supreme Court has ruled that for a fact discovered to be admissible under Section 27 of the Evidence Act, it must be a direct result of information obtained from a person in custody. Section 27 of the Evidence Act reveals an intriguing and difficult characteristic concerning the admitting of confessions within its legal framework. Sections 25 and 26 provide protection against self-incrimination and abuse of power by police authorities, making confessions made in police custody in the absence of a magistrate inadmissible in court. Section 27 introduces an exception by allowing the admission of confessions that result in the revelation of facts. Section 27 of the law reads:



"Provided that, when any fact is deposed to as discovered in consequence of information received from a person accused of any offence, in the custody of a police officer, so much of such information, whether it amounts to a confession or not, as relates distinctly to the fact thereby discovered, may be proved." In layman's terms, any confession made while in police custody that leads to the exposure of a fact is considered admissible in court. This theory is based on the principle that every part of a statement made at the request of the accused while in police custody must be verified by subsequent events of discovery in order for it to be acceptable in court. Hence, option (c) is correct.