

OFFICERS IAS ACADEMY

IAS ACADEMY RUN BY FORMER CIVIL SERVANTS

Daily MCQs: 10-10-2024

1. Consider the following statements regarding Jal Jeevan Mission (JJM).

- 1) JJM aims to provide Functional Household Tap Connection to every rural household by 2024.
- 2) JJM is entirely funded by the Central Government.
- 3) JJM also implements source sustainability measures.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 only
- C. 1 and 3 only
- D. 3 only

2. Consider the following statements regarding the Protection of Children from Sexual Offences (POCSO) Act.

- 1) POCSO Act provides for harsher penalties for sexual offenses committed by those in positions of trust or authority.
- 2) POCSO Act has a provision for punishment for failure to report a case or false complaint.
- 3) The maximum punishment under POCSO Act is a life sentence.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. 1 and 3 only

3. Consider the following pairs, with reference to fundraising operations in the stock market

1. Initial Public Offering (IPO)	Existing shareholders sell their shares to the public without the company raising additional capital.
2. Follow-on Public Offering (FPO)	A private company sells shares to the public for the first time.
3. Offer for Sale (OFS)	A company that is already listed on the stock market sells new shares to raise more capital.

How many of the pair(s) given above is/are correctly matched?

- A. Only one

OFFICERS IAS ACADEMY

IAS ACADEMY RUN BY FORMER CIVIL SERVANTS

- B. Only two
- C. All three
- D. None

4. Consider the following statements about Gold.

- 1) Globally, India accounts for the largest gold production.
- 2) China has the most gold reserves in the world.
- 3) Karnataka has the majority of gold reserves.

Which of the statements given above is/are correct?

- A. 1 only
- B. 3 only
- C. 1 and 3 only
- D. 2 and 3 only

5. Alphafold and Alphafold2 are mentioned in the context of

- A. Production of bio fertilizers using zero carbon techniques.
- B. AI-based protein structure prediction tool.
- C. Clonal propagation of crop plants that can withstand harsh conditions.
- D. None of the above

Solutions:

1. Answer: C

Explanation

- Launched in 2019, the chief objective of the Mission is to provide **Functional Household Tap Connection (FHTC) to every rural household by 2024** and thereby ensuring potable water supply in adequate quantity i.e. @ **55 lpcd** (litres per capita per day) of prescribed quality on a long-term and regular basis. Hence, **statement 1 is correct.**
- This Mission is under the **Department of Drinking Water and Sanitation, Ministry of Jal Shakti.**
- The Mission also aims to provide **functional tap connections to Schools, Anganwadi centres, Gram Panchayat buildings, Health centres, wellness centres and community buildings.**

Implementation:

- JJM adopts a **'bottom up' approach** where community plays a vital role from planning to implementation, management, operation and maintenance.
 - To achieve this, **Village Water & Sanitation Committee (VWSC)/ Pani Samiti** are being constituted and strengthened; **Village Action Plans** are developed through community engagement; **Implementation Support Agencies (ISAs)** are engaged to support village communities in programme implementation and create awareness among people.

OFFICERS IAS ACADEMY

IAS ACADEMY RUN BY FORMER CIVIL SERVANTS

- The programme also implements **source sustainability measures** as mandatory elements, such as recharge and reuse through greywater management, water conservation and rainwater harvesting. Hence, **statement 3 is correct**.
- JJM looks to create a **Jan Andolan** (People's Movement) for water, thereby making it everyone's priority.
- Every water supply asset created under Jal Jeevan Mission is **geo-tagged**.
- States will carry out **inspections by empanelled third party agencies** for all infrastructures created under the JJM.

Fund Sharing:

- The **fund sharing pattern** is **90:10 for Himalayan and North-Eastern States; 50:50 for other States and 100% for Union Territories**. Hence, **statement 2 is incorrect**.

Why in News?

- Tap water has reached 78.58% of rural households under the Jal Jeevan Mission.

2. Answer: C

Explanation

- The POCSO Act, which came into force in **2012**, is the first comprehensive law in the country **dealing specifically with sexual abuse of children**.
- Under the Act, any person below the **age of 18 years** is defined as a "**child**".
- The Act **increased the scope** of reporting offences against children, which were not earlier covered under the Indian Penal Code. This included **aggravated penetrative sexual assault** to include punishment for **abuse by a person in position of trust or authority** including public servants, police, armed forces, management or staff of an educational or religious institution. This Act provides for **more severe punishment** when a sexual offense is committed by someone in a **position of trust or authority**. Hence, **statement 1 is correct**.
- It also defined the procedure for reporting of cases, including a provision for punishment for **failure to report a case or false complaint**. Hence, **statement 2 is correct**.
- It provided **procedures for recording of the statement of a child** by the police and court, laying down that it should be done in a **child-friendly manner**, and by the setting up of **special courts**.
- Each district shall designate a Sessions Court to be a **Special Court**. The Court shall, as far as possible, **complete the trial within one year**. The trial shall be held in camera and in the presence of the child's parents or any person trusted by the child.
- The Act also includes penalties for **use of children for the purpose of pornography and abetment of an offence**.
- The Act was amended in **2019** to enhance punishment under various sections of the Act including punishment for aggravated penetrative sexual assault to be increased to include **death penalty**. Hence, **statement 3 is incorrect**.

3. Answer: D

OFFICERS IAS ACADEMY

IAS ACADEMY RUN BY FORMER CIVIL SERVANTS

Explanation

- Initial Public Offering is when a private company sells shares to the public for the first time. Hence, **1 is incorrectly paired.**
- Follow-on Public Offering is when a company that is already listed on the stock market sells new shares to raise more capital. Hence, **2 is incorrectly paired.**
- Offer for Sale is when existing shareholders sell their shares to the public, and the company itself does not raise any additional capital. Hence, **3 is incorrectly paired.**

4. Answer: B

Explanation

- The **largest gold producer** today is **China**, though **South Africa was the leading producer historically**. Hence, **statement 1 is incorrect.**
- The country with the **most gold reserves is the United States**, holding 8,133 tonnes followed by Germany and Italy. (India in 9th position with approx 800 tonnes). Hence, **statement 2 is incorrect.**
- **Australia** has the **largest gold mine reserves** in the world.
- The majority of India's gold reserves are located in the state of **Karnataka** and account for 88% of the total, a further 12% are situated in **Andhra Pradesh** and an insignificant amount (less than 0.1t) are found in **Jharkhand**. Hence, **statement 3 is correct.**

5. Answer: B

Explanation

- AlphaFold is an AI-based protein structure prediction tool. Hence, **answer is option B.**
- It is based on a computer system called deep neural network.
- Inspired by the human brain, neural networks use a large amount of input data and provide the desired output exactly like how a human brain would. The real work is done by the black box between the input and the output layers, called the hidden networks.
- AlphaFold is fed with protein sequences as input. When protein sequences enter through one end, the predicted three-dimensional structures come out through the other.

Why in news?

- Recently, AlphaFold 2 received the Nobel prize in Chemistry.