

### Daily Current Affairs Prelims Quiz 20-06-2024 (Online Prelims Test)

- 1) Consider the following statements with respect to Vadhavan Port
  - 1. It will be developed as an all-weather Greenfield deep draft major port in Maharashtra.
  - 2. On completion it will facilitate EXIM trade through India Middle East Europe Economic Corridor (IMEEC).

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

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer: c

#### **Vadhavan Port**

- The Vadhavan Port project will be developed as an all-weather, Greenfield deep draft major port in Vadhavan, Maharashtra.
- It will be constructed by Vadhavan Port Project Limited (VPPL), an SPV with 74% stake from Jawaharlal Nehru Port Authority (JNPA) and 26% from Maharashtra Maritime Board.
- Core infrastructure, terminals and other commercial facilities will be developed on PPP mode.
- It will facilitate EXIM trade via India Middle East Europe Economic Corridor (IMEEC) and International North-South Transport Corridor (INSTC) corridors with state-of-the-art facilities for mega vessels.
- Aligns with PM Gati Shakti objectives, estimated to create around 10 lakh direct/indirect jobs.
- Upon completion, Vadhavan aims to be one of the top 10 ports globally.



- 2) Consider the following statements with respect to National Forensic Infrastructure Enhancement Scheme (NFIES)
  - 1. It is a central sector scheme that aims to bolster forensic capabilities nationally through modern infrastructure and skilled manpower.
  - 2. Establishment of new campuses of the National Forensic Sciences University (NFSU) across the country is one of the component under the scheme.

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

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer: c

### **National Forensic Infrastructure Enhancement Scheme (NFIES)**

The Union Cabinet chaired by Prime Minister has recently approved "National Forensic Infrastructure Enhancement Scheme" (NFIES).

- The National Forensic Infrastructure Enhancement Scheme (NFIES) is a central sector scheme that aims to **bolster forensic capabilities** nationally through modern infrastructure and skilled manpower.
- It has three main components:
  - Establishment of new campuses of the National Forensic Sciences University (NFSU) across the country.
  - Setting up new Central Forensic Science Laboratories
  - Enhancing the existing infrastructure of NFSU's Delhi campus
- It leverages advancements in technology to aid efficient criminal justice process.
- It underscores the importance of high-quality trained forensic professionals leveraging technological advancements.
- The scheme emphasizes significant investment in enhancing national forensic infrastructure to meet the heightened demand.
- 3) Consider the following statements with respect to Snow Persistence
  - 1. Snow persistence is the fraction of time snow is on the ground.
  - 2. In the river basins of the Hindu Kush Himalaya (HKH), it is the biggest source of water in the streams.
  - 3. The primary reason for the lower persistence in 2024 was weak western disturbances.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

Answer: b

#### **Snow Persistence**

According to a recent report, the Hindu Kush Himalaya is experiencing significantly lower

snow persistence this year, raising serious concern over water security for downstream communities.

- Snow persistence is the fraction of time snow is on the ground.
- When this snow melts, it provides water to people and ecosystems.
- In the river basins of the <u>Hindu Kush Himalaya (HKH)</u>, snowmelt is the biggest source of water in the streams.
- Snowmelt accounts for around 23% of the total water flow of 12 major river basins originating in the HKH.
- Overall, it contributes 23% of the runoff to the region's 12 major river basins every year.
- Key findings of the recent report released by the International Centre for Integrated Mountain Development (ICIMOD):
- In India, snow persistence in the Ganga, the Brahmaputra, and the Indus river basins *dropped* significantly in 2024.
- The Ganga river basin noted its lowest snow persistence in 22 years, 17% below the long-term historical average.
- In 2024, snow persistence dropped significantly in the Ganga, Brahmaputra and Indus basins in India.
- The Ganga basin saw its lowest persistence in 22 years, 17% below normal.
- Outside India, the Amu Darya and Helmand basins recorded their lowest persistence levels in 2024.

### Reasons for lower persistence in 2024

- The primary reason for the lower persistence in 2024 was weak western disturbances.
- *Western disturbances* are low-pressure systems that originate over the Mediterranean Sea, the Caspian, and the Black Seas and bring rain and snow to the HKH region in winter.
- Exacerbated by global warming and prolonged La Nina conditions affecting weather patterns.

#### **Implications for India**

- Lower snow persistence can affect water availability, especially in the Indus basin.
- Snowmelt contributes 10-40% of annual river flows, more than glacier melt.
- 4) Consider the following statements:

**Statement-I**: The absorption of liquid in any material depends on the macroscopic forces and nature of the material.

**Statement-II**: Super-absorbent Polymer (SAP) is a type of macro molecular synthetic water absorbing polymer material.

Select the correct answer using the codes given below:

- a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c. Statement-I is correct but Statement-II is incorrect
- d. Statement-I is incorrect but Statement-II is correct

Answer: d

## **Super-absorbent Polymer (SAP)**

- Absorption, whether in a diaper or other materials, is *influenced by microscopic forces* and the nature of the material involved.
- Super Absorbent Polymers, also known as SAP is a new type of macro molecular

#### synthetic water absorbing polymer material.

- SAPs are generally white sugar-like hygroscopic materials that swell in water to form a clear gel made of separate individual particles and can retain moisture even under pressure without risk of conflagration or rupturing/blasting.
- SAP is a compound that can absorb a large amount of water, at times more than its own weight.
- The key component in SAP is sodium ions, which have a strong affinity for water molecules due to their charge.
- It is more efficient than cotton.
- The molecular structure of SAP is a complex network that readily interacts with water.
- 5) Which of the following countries have legalised the same sex marriage?
  - 1. Australia
  - 2. India
  - 3. Thailand
  - 4. Taiwan
  - 5. Russia

Select the correct answer using the code given below:

- a. Only two
- b. Only three
- c. Only four
- d. All five

Answer: b

# Same-sex Marriage



Thailand recently become third Asian country to legalise same-sex marriage.

- Same-sex marriage is the practice of marriage between two men or between two women.
- The first same-sex marriages took place in the *Netherlands* in 2001.
- Thailand has become the first country in south Asia to legalise same-sex marriage.
- According to LGBTQ+ rights advocacy Human Rights Campaign, currently, same-sex marriage is legal in 36 countries (not including Thailand) globally which includes:
- Andorra, Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Luxembourg, Malta, Mexico, the Netherlands, New Zealand, Norway, Portugal, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, the United Kingdom, the United States of America and Uruguay.
- India and Russia have not yet legalized the Same-sex Marriage.
- A five-judge Bench of the Supreme Court of India refused to alter the Special Marriage Act (SMA) of 1954 to give legal recognition to same-sex marriages, putting the onus on Parliament to legislate marriage equality.