

## Daily Current Affairs Prelims Quiz 06-09-2024 (Online Prelims Test)

- 1) Consider the following statements with respect to NPS Vatsalya
  - 1. It is a modified version of the National Pension System (NPS) specifically designed for specially challenged persons.
  - 2. It has the potential to create significant wealth over time through compounding.

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: b

## National Pension System (NPS) Vatsalya

- NPS Vatsalya is a modified version of the National Pension System (NPS), designed specifically for *minors*.
- Under this scheme, parents or guardians will be able to open an NPS account for their children and make regular contributions until the child turns 18.
- The **primary advantage** of this NPS Vatsalya scheme is the potential to create significant **wealth over time through compounding**.
- **Features** The account will convert seamlessly into a regular NPS account, allowing the beneficiary to manage their investments and savings independently.
- The scheme is expected to offer the same diverse investment options as the traditional NPS, including a mix of equity, government securities, and corporate bonds, offering flexibility for different risk profiles.
- Subscribers can opt for either an automatic choice (which adjusts investments based on the age of the subscriber) or an active choice to manage their investments.
- Partial withdrawals will likely be allowed after three years of account creation, with a cap of 25% of the contributed amount.
- Withdrawals can be made for specified purposes, such as education or medical treatment.
- It is seen as a powerful tool for financial inclusion, encouraging families to think about future financial security from a young age.
- It was first *announced in the 2024-25 Budget*, is poised to be a transformational financial tool for Indian families, empowering them to start saving early and consistently.
- 2) Consider the following statements with respect to Semiconductors
  - 1. It is an integrated circuits that are made from pure elements, typically silicon or germanium or compounds such as gallium arsenide.
  - 2. At zero Kelvin, a semiconductor serves as an insulator.
  - 3. They are an essential component of electronic devices, enabling advances in communications, computing, healthcare and military systems.

How many of the statements given above are correct?

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

Answer: c

## **Semiconductors**

India and Singapore inked agreements on semiconductor and digital technology recently.

- Semiconductors, sometimes referred to as *integrated circuits (ICs) or microchips*, are made from pure elements, typically *silicon or germanium*, or compounds such as gallium arsenide.
- In a process called *doping*, small amounts of impurities are added to these pure elements, causing large changes in the conductivity of the material.
- They are an essential component of electronic devices, enabling advances in communications, computing, healthcare, military systems, transportation, clean energy, and countless other applications.
- Due to their role in the fabrication of electronic devices, semiconductors are an important part of our lives. Imagine life without electronic devices.
- **Properties At zero Kelvin**, **a semiconductor serves as an insulator** and it functions as a conductor as the temperature increases.
- They have higher resistivity than conductors but a lower resistivity than insulators.
- They have higher resistivity than conductors but a lower resistivity than insulators.
- As the temperature increases, the resistance of semiconductor materials decreases, and vice versa.
- 3) Consider the following statements with respect to Tibetan Plateau
  - 1. It is a high plateau situated on south-western China.
  - 2. The region is occupied with high air density relatively that enables the violet sudden storms are common occurrences.

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

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

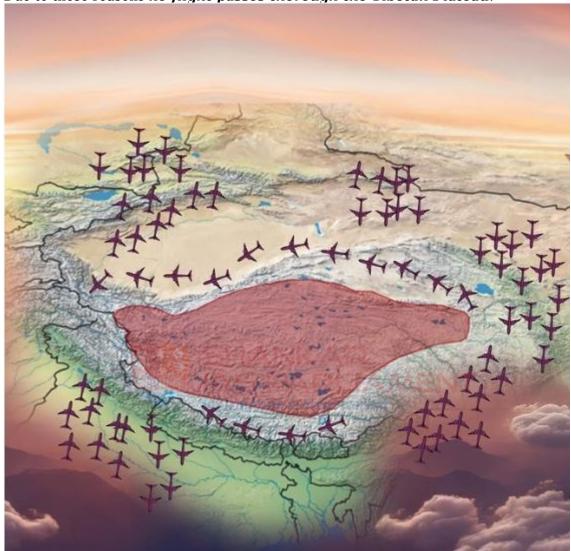
Answer: a

## Tibetan Plateau

- Historically, Tibet was much larger than the autonomous region, being made up of 3 major areas such as:
  - 1. U-Tsang
  - 2. Amdo
  - 3. Kham
- While most of U-Tsang is in China's Tibet Autonomous Region, the other two lie outside it.
- *Lhasa* is the capital of Tibet Autonomous Region and the languages spoken are Tibetan and Mandarin.

- The Tibetan Plateau stretches miles into the sky, creating an environment drastically different from the lower atmosphere.
- This extreme altitude translates to significantly *thinner air* and is occupied with *lower air density relatively*.
- Beyond the air's density, the Tibetan Plateau is a meteorological maelstrom.
- Violent wind patterns, unpredictable turbulence, and sudden storms are common occurrences.

• Due to these reasons **no flight passes thorough the Tibetan Plateau**.



- Tibet could be divided into *two broad geographic divisions* such as:
  - 1. 'Lake region' in the West
  - 2. 'River region' to the East and South
- The "lake region" is an arid and wind-swept desert.
- It has a very arid alpine climate on account of the very high mountain barriers with annual precipitation around 100 millimetres and has no river outlet.
- **Mountain Peaks** The prominent Mountain perks of Tibet are:
  - The Changtse, Lhotse, Makalu, Gauri Sankar, Gurla Mandhata, Cho Oyu, Mount Kailash, Namcha Barwa, Shishapangma and Yangra.
- **Rivers** Tibet is the principal water tank of Asia and the source of some of the world's largest rivers.
- Tibet accounts for 6% of the annual throughput of water in Asia with around 90% of this water flowing outside the region through the rivers that originate in this region.
- *Major Rivers* that originate in the Tibet include:
  - Yarlung Tsangpo (Brahmaputra in India),
  - o Machu (Yellow River in China) and Drichu (Yangtse in China),
  - Senge Khabab (Indus in India) and Phungchu (Arun in India),

- Gyalmo Ngulchu (Salween in Burma) and Zachu (Mekong in Thailand, Vietnam, Cambodia, Laos).
- Native Wildlife Tibetan antelope, wild yak, wild ass and Tibetan argali, blue sheep, black-necked crane, Tibetan gazelle, giant panda, red panda, golden monkey.



