

## Daily Current Affairs Prelims Quiz 28-03-2024 (Online Prelims Test)

- 1) Consider the following statements with respect to Magnetofossils:
  - 1. They are fossilised remains of particles created by magnetotactic bacteria.
  - 2. Magnetotactic bacteria are prokaryotic organisms that arrange themselves along the earth's magnetic field.
  - 3. Magnetofossils in the Bay of Bengal is the youngest giant magnetofossil.

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

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

Answer: c

## Magnetofossils



Goa scientists find 50,000-year-old magnetic fossils in Bay of Bengal.

- Magnetofossils are the fossilised remains of particles created by magnetotactic bacteria or magnetobacteria.
- Magnetofossils are found preserved within the geological records.
- $\bullet$  The magnetotactic bacteria create tiny crystals made of the iron-rich minerals magnetite or greigite.
- The crystals help them navigate the changing oxygen levels in the water body they reside in.
- The fossils left behind by the crystal-creating bacteria help scientists glean conditions that prevailed millions of years ago and which contributed to the sediment magnetic signal.
- **Sources** Previous studies on magnetofossils ascertained their origins to be hyper-thermal vents, comet impacts, changes in oceanic ventilation, weathering or the presence of oxygen-poor regions.
- Most giant magnetofossils have been found in sediments dating to the late Paleogene period, some 56 million years ago, suggesting they formed only during periods of extreme warming.
- **Bay of Bengal Sediment** Scientists found the sediment in the Bay of Bengal to be from the late Quaternary period, or about 50,000 years ago, making it the youngest giant magnetofossil to have been found yet.
- The three-metre-long sediment core from the southwestern Bay of Bengal consisted mainly of pale green silty clays.

## Magnetotactic bacteria (MTB)

- MTB are a group of phylogenetically diverse and morphologically varied microorganisms with a magneto responsive capability called magneto taxis or microbial magneto reception.
- Magnetotactic bacteria are mostly prokaryotic organisms that arrange themselves along the

earth's magnetic field.

- These unique creatures were first described in 1963, by Salvatore Bellini, an Italian doctor and then again in 1975 by Richard Blakemore.
- These organisms were believed to follow the magnetic field to reach places that had optimal oxygen concentration.
- The bacteria contained novel structured particles, rich in iron in small sacs that essentially worked as a compass.
- 2) Consider the following statements with respect to Mushk Budiji:
  - 1. It is wheat variety indigenous to the Himalayas.
  - 2. Kashmir has bagged the GI tag for Mushk Budiji.

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

## Mushk Budiji

Study unravels the recipe that gives Kashmiri rice variety, Mushk Budiji its unique aroma.

- The Kashmir Himalaya is known for the cultivation of mushk budiji, an indigenous rice variety distinguished for its rich aroma and unique taste.
- Mushk budiji was on the verge of extinction for some time due to various factors.
- Chief among them was the prevalence of rice blast disease, its low yield, and lack of profitability.
- However, a revival programme launched in 2007 by the Sher-e-Kashmir University of Agricultural Sciences and Technology (SKUAST) scientists saw the crop make a slow comeback.
- Mushk Budiji received a Geographical Indication (GI) tag in August 2023.
- The niche crop is grown under specific climatic conditions.
- 3) Consider the following statements with respect to the Investment Facilitation for Development (IFD) Agreement:
  - 1. It is an initiative of the World Bank.
  - 2. The agreement aims to create legally binding provisions to facilitate investment flows.
  - 3. India is a member to the IFD Agreement.

How many of the above statement(s) is/are **incorrect**?

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

Answer: b

# **Investment Facilitation for Development (IFD) Agreement**

India and South Africa formally opposed the adoption of IFD agreement for consideration

during the 13th Ministerial Conference (MC13) of WTO.

- **IFD** A most-favoured-nation-based, plurilateral agreement of World Trade Organization (WTO).
- The agreement explicitly excludes market access, investment protection and investor-state dispute settlement.
- **Launch** Originally launched in 2017 on a plurilateral basis by few WTO countries through a process known as the Joint Statement Initiative.
- It was finalized in 2023.
- **Aim** To create legally binding provisions to facilitate investment flows.
- To develop predictable, transparent and open investment rules that will contribute to more efficient investment flows and increased business confidence.
- Membership Open for all WTO members to join.
- Currently, it has 120 of 166 WTO member countries (more than 70% of the membership).
- India is not a member as it opined that investment-related issues can't be brought under the WTO's ambit.



- **Plurilateral agreement** The 120 countries wanted to include the IFD Agreement as a plurilateral agreement (PA) within Annex 4 of the WTO Agreement.
- While the WTO is a multilateral trade organisation, Article II.3 of the WTO Agreement categorically allows for PAs.
- According to the Marrakesh Agreement (the WTO's constitution), a new PA can only be adopted through 'Annexure 4' rules, by explicit consensus of all WTO Members.
- Unlike multilateral agreements, PAs under the WTO are binding only on those members that have accepted them.
- 4) Match the following pairs of colored carbons and their sources:

#### **Colored Carbons**

#### Sources

1. Blue Carbon - Carbon stored in freshwater and wetland environments.

2. Black Carbon - Carbon released by incomplete combustion of organic matter.

3. Red Carbon - Carbon captured through the air or industrial emissions.

How many of the above pairs are matched correctly?

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

Answer: d

#### **Colored Carbons**

- Scientists use color to classify carbon at different points in the carbon cycle based on carbon function, characteristics, and location.
- Blue Carbon stored in ocean plants and sediments.
- Green Carbon stored in terrestrial plants.
- **Brown** Carbon released by incomplete combustion of organic matter.
- **Red** Carbon released through biological particles on snow and ice that reduce albedo.
- **Gray** Carbon released through industrial emissions.
- **Teal** Carbon stored in freshwater and wetland environments.
- **Purple** Carbon captured through the air or industrial emissions.
- **Black** Carbon emitted alongside other pollutants when biomass and fossil fuels are not fully combusted.

## 5) Consider the following statements:

- 1. Capital account records a country's transactions with the rest of the world in goods, services, income, and transfers.
- 2. Current account inflows and outflows reflect changes in the value of an asset through investments, loans, bank balances, and property value.

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: c

### **Current Account**

- A current account records a country's transactions with the rest of the world in goods, services, income, and transfers.
- Most of the traditional forms of international trade are included in the current account.
- These transactions are usually more immediate and visible than those recorded in the capital account.

### **Capital Account**

- Capital account inflows and outflows reflect changes in the value of an asset through investments, loans, bank balances, and property value.
- It is not as immediate and invisible as the current account.
- When there is an imbalance in trade in goods and services between two nations, these imbalances are financed by offsetting financial and capital flows.
- A country with a large trade balance deficit will have large investment surpluses from foreign countries and large demands on foreign assets.