

**DATE: 07.10.2026**

1) Consider the following statements:

1. The IceCube Neutrino Observatory is designed to detect neutrinos originating from high-energy astrophysical sources.
2. Neutrinos can travel vast cosmic distances with relatively little interaction with matter.
3. Neutrinos carry an electric charge and are therefore strongly affected by electromagnetic fields.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

2) With reference to the 'SME Growth Fund' in India, consider the following statements:

1. It is a category of Alternative Investment Fund (AIF) registered under the Companies Act, 2013.
2. It primarily aims to provide growth capital to Small and Medium Enterprises (SMEs) to scale up operations and listed SME platform growth.
3. The fund focuses only on providing working-capital support to SMEs and does not support expansion or technology adoption.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 only
- (d) 1, 2 and 3

3) Consider the following pairs:

Vessels	Categories
1.INS Visakhapatnam	A. Aircraft Carrier
2.Surya (FSS-1)	B. Destroyer
3.INS Shivalik	C.Fleet Support Ship
4.INS Vikrant	D. Frigate

Which of the following is the correct matching?

- (a) 1-B, 2-C, 3-D, 4-A
- (b) 1-D, 2-B, 3-C, 4-A



- (c) 1-B, 2-D, 3-A, 4-C
(d) 1-C, 2-A, 3-D, 4-B

- 4) Which of the following is correct about the Index of Services Production (ISP)?
- It measures only the industrial output of the services sector.
 - It uses 2014–15 as its base year and is designed as a monthly indicator of services sector output.
 - It is compiled exclusively using GST data.
 - It is published annually with a lag of one year.
- 5) Consider the following statements regarding the Siang River:
- The Siang Upper Multipurpose Project is proposed on the Siang River in Arunachal Pradesh and is intended to serve multiple purposes, including hydropower generation and water management.
 - The river is known as the Yarlung Tsangpo in Tibet and enters India through Arunachal Pradesh as the Siang.
 - The Siang subsequently joins the Subansiri and Kameng rivers in Assam to form the Brahmaputra.

Which of the statements given above is/are correct?

- 1 and 2 only
- 2 and 3 only
- 1 and 3 only
- 1, 2 and 3

Explanation

1) Answer: (A)

- Statement 1 is correct:** The IceCube Neutrino Observatory (embedded in the ice at the South Pole) is specifically designed to detect high-energy cosmic neutrinos coming from extreme astrophysical sources across the universe, such as active galactic nuclei, black holes, and supernovae.
- Statement 2 is correct:** Neutrinos possess an extremely small mass and interact with other matter only through gravity and the weak nuclear force. Because they experience very little interaction or absorption by matter, they can travel vast cosmic distances unhindered and in straight lines.
- Statement 3 is incorrect:** Neutrinos are **electrically neutral subatomic particles** (hence the name *neutrino*, meaning "neutral one"). Because they carry **no electric charge**, they are entirely unaffected by electromagnetic fields.
- Therefore, option A is the correct answer.**

2) Answer: (C)

- Statement 1 is Incorrect:** Alternative Investment Funds (AIFs) in India are regulated and registered under the **SEBI (Alternative Investment Funds) Regulations, 2012** established by the Securities and Exchange Board of India (SEBI), not under the Companies Act, 2013.
- Statement 2 is Correct:** SME Growth Funds (often categorized under **Category I or Category II AIFs** such as Venture Capital or Growth Funds) primarily focus on providing equity, quasi-equity, or debt capital to Small and Medium Enterprises.



The primary objective is to enable SMEs to scale operations, enhance capacity, and list on SME exchange platforms (e.g., BSE SME or NSE Emerge).

- **Statement 3 is Incorrect:** SME Growth Funds are not limited to short-term working capital. Their primary objective is providing long-term growth and expansion capital, facilitating technology adoption, market expansion, capacity upgrades, and preparing the entity for listing on stock exchanges.
- **Therefore, option C is the correct answer.**

3) Answer: (A)

- **INS Visakhapatnam — Destroyer:** a major surface combatant used for air defence, surface warfare and anti-submarine warfare.
- **Surya (FSS-1) — Fleet Support Ship:** India's first indigenously built FSS, designed to replenish warships at sea with fuel, water, ammunition and other supplies.
- **INS Shivalik — Frigate:** a stealth multi-role frigate used for escort, surveillance and anti-submarine warfare.
- **INS Vikrant — Aircraft Carrier:** India's first indigenously built aircraft carrier and a sea-based airbase for naval aircraft.
- **Therefore, option A is the correct answer.**

4) Answer: (B)

The **Index of Services Production (ISP)** is India's first high-frequency indicator for measuring short-term changes in the output of the formal services sector. Developed by **MoSPI**, it uses **2024–25 as the base year** and is released monthly with a lag of around 60 days. The index initially covers **19 service sub-sectors**, accounting for about 60% of the services sector. It uses **GST data, administrative data and ASISSE**, with WPI and CPI-based deflators to convert nominal values into real output. It excludes areas such as public administration, defence, government health and education, and certain informal or non-market services. Its methodology draws on **OECD and Eurostat** international practices.

5) Answer: (A)

- **Statement 1 – Correct:** The Siang Upper Multipurpose Project is proposed in **Arunachal Pradesh** and is a multipurpose hydropower project. Government sources identify Upper Siang as a major hydropower project with **flood-moderation benefits**.
- **Statement 2 – Correct:** The river originates in Tibet as the **Yarlung Tsangpo** and enters India through Arunachal Pradesh, where it is known as the **Siang/Dihang**. [C](#)
- **Statement 3 – Incorrect:** The Siang does **not** join the Subansiri and Kameng to form the Brahmaputra. Near Sadiya, it joins the **Dibang and Lohit**, after which the river is known as the **Brahmaputra**. Subansiri and Kameng are later tributaries of the Brahmaputra.
- **Hence, the correct answer is (a) 1 and 2 only.**



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