

UPSC CURRENT AFFAIRS MCQS 19-04-2024

Q1:

Consider the following statements about the Indigenous Technology Cruise Missile (ITCM), recently seen in news:

- 1. It refers to a type of cruise missile developed entirely within a country's own research and development framework.**
- 2. The flight of the missile was monitored from the Su-30-Mk-I aircraft.**
- 3. The missile features an indigenous propulsion system.**
- 4. It is equipped with advanced avionics and software.**

How many of the statements given above are correct?

- A:** Only one
B: Only two
C: Only three
D: All four

Answer: D

Explanation:

Recently, the Defence Research and Development Organisation (DRDO) announced a successful flight test of a long-range subsonic indigenously developed cruise missile from the Integrated Test Range (ITR) in Chandipur, off the coast of Odisha. An Indigenous Technology Cruise Missile (ITCM) refers to a type of cruise missile developed entirely within a country's own research and development framework, without reliance on foreign assistance or technology. **Hence, statement 1 is correct.**

During the test, the missile's performance was monitored by various range sensors, including Radar and Electro Optical Tracking System (EOTS), ensuring complete coverage of the flight path. The flight of the missile was also monitored from the Su-30-Mk-I aircraft of the Indian Air Force. **Hence, statement 2 is correct.**



The missile features an indigenous propulsion system engineered by Gas Turbine Research Establishment (GTRE) in Bengaluru. **Hence, statement 3 is correct.**

Equipped with advanced avionics and software, the missile's performance reliability is enhanced, contributing to its effectiveness in various military applications. **Hence, statement 4 is correct.**

Q2:

With reference to the Aryabhata Satellite, consider the following statements:

- 1. It was India's first artificial satellite and built by the Indian Space Research Organisation.**
- 2. It was launched from the Volgograd Launch Station by a Soviet Kosmos-3M rocket.**
- 3. The area where Aryabhata was built was Peenya, on the outskirts of Bengaluru.**

How many of the statements given above are correct?

- A: Only one**
- B: Only two**
- C: Only three**
- D: All four**

Answer: C

Explanation:

The Aryabhata satellite was India's first artificial satellite, launched on April 19, 1975. The satellite was built by the Indian Space Research Organisation (ISRO) and named after the 5th century Indian astronomer and mathematician Aryabhata. **Hence, statement 1 is correct.**



The satellite was launched from the Volgograd Launch Station, which is now in Russia, by a Soviet Kosmos-3M rocket. The chairman of the Indian Space Research Organisation at the time of the launch of Aryabhata was Satish Dhawan. **Hence, statement 2 is correct.**

The two other Indian satellites launched onboard Soviet rockets, featured on the postage stamp issued by the USSR in 1984 along with Aryabhata, were Bhaskara-I and Rohini-I. The area on the outskirts of Bengaluru selected by U.R. Rao as the location for the Indian Scientific Satellite Project, where Aryabhata was built, is Peenya. **Hence, statement 3 is correct.**

Q3:

Consider the following statements about Avian Influenza (Bird Flu):

- 1. Avian Influenza is a respiratory illness primarily affecting humans.**
- 2. The most common way humans contract Avian Influenza is through close contact with infected birds or their droppings.**

Which of the statements given above is/are correct?

- A:** 1 Only
B: 2 Only
C: Both 1 and 2
D: Neither 1 nor 2

Answer: B

Explanation:

The Animal Husbandry Department in Kerala recently announced plans to cull around 21,000 ducks in avian flu-affected areas of Kuttanad, Alappuzha district, targeting hotspots like Edathua and Cheruthana. Avian influenza, also known as bird flu, is a disease caused by a virus that primarily affects birds. **Hence, statement 1 is incorrect.**

It spreads between wild and domesticated birds and from birds to humans who are in close contact with poultry or other birds. The most likely way for a human to catch bird flu is through exposure to birds, bird faces or feathers. Symptoms in people can range from mild upper respiratory tract infection (fever



and cough) to severe pneumonia, acute respiratory distress syndrome (difficulty breathing), shock and even death. **Hence, statement 2 is correct.**

Q4:

Consider the following statements about the Liver-Gut Axis:

Statement I: Bile produced by the liver plays a role in fat digestion and gut health.

Statement II: Metabolites from gut bacteria can influence liver function and inflammation.

Which of the following is correct in respect of the above statements?

A: Both Statement-I and Statement-II are correct and Statement –II is the correct explanation of 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: B

Explanation:

Today, on World Liver Day, the symbiotic relationship between the liver and the gut was emphasized. The liver-gut axis refers to the bidirectional communication system between the liver and the gut. The liver detoxifies harmful substances, synthesizes essential proteins, stores glycogen and metabolizes nutrients, regulating blood sugar and cholesterol levels. The gut hosts trillions of microorganisms collectively known as the gut microbiota, which aid in digestion, synthesis of vitamins and support the immune system. Bile produced by the liver aids in fat digestion and acts as a signaling molecule in the gut, affecting the composition of the gut microbiota.

Metabolites produced by gut bacteria can influence liver metabolism and inflammation, contributing to overall health. A healthy gut microbiome contributes to the integrity of the gut barrier, preventing harmful substances from entering the bloodstream and burdening the liver.



Here, statement I and II both are correct but Statement-II is not the correct explanation for Statement-I. Hence, option (b) is correct.

Q5:

Consider the following passage:

Recently, this country expelled three French diplomats over alleged "subversive activities," declaring them "persona non grata." It is a landlocked country located in West Africa. This country shares its borders with Niger to the Northeast, Mali to the Northwest, Togo and Ghana to the South, Benin to the Southeast, and Ivory Coast to the Southwest.

The above passage best describes which of the following countries?

A: Liberia

B: Chad

C: Burkina Faso

D: The Gambia

Answer: C

Explanation:

Recently, Burkina Faso expelled three French diplomats over alleged "subversive activities," declaring them "persona non grata." Burkina Faso is a landlocked country located in West Africa. Ouagadougou is the capital of Burkina Faso. Burkina Faso shares its borders with Niger to the Northeast, Mali to the Northwest, Togo and Ghana to the South, Benin to the Southeast, and Ivory Coast to the Southwest. The highest point in Burkina Faso is Tenakourou, also known as Mount Tenakourou. Burkina Faso is traversed by several rivers, including the Volta, Black Volta (Mouhoun), White Volta (Nakambe) and Red Volta (Nazinon). **Hence, option (c) is correct.**