Q: Consider the following statement regarding Dengue:

- 1. It is a vector-borne disease.
- 2. It is found in tropical and sub-tropical climates.
- 3. Only a female mosquito, Aedes Aegypti, transmits it.

Choose the correct option from the codes given below:

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

Ans: a

Explanation:

- Dengue is a vector-borne disease or viral infection, which is transmitted by mosquitoes caused by four serotypes of dengue viruses (DENV) -- DENV 1, DENV 2, DENV 3 and DENV 4, according to the World Health Organization (WHO).
- Dengue is found in tropical and sub-tropical climates worldwide, mostly in urban and semi-urban areas.
- Dengue is a viral mosquito-borne disease which is transmitted primarily by a female mosquito, Aedes Aegypti, and to some extent by A. albopictus.
- The human infections occur due to the bite of an infected mosquito (which is picked up while biting a dengue-infected person) and are sustained by human-mosquito-human transmission.

Q: Recently, the INS Arihant carried out a successful test of a submarine-launched ballistic missile (SLBM) in the Bay of Bengal. Consider the following statement:

- 1. INS Arihant is a Russian leased nuclear submarine.
- 2. India is among just six countries in the world to have the capability to fire a nuclear missile from land, air and undersea.
- 3. The INS Arihant is designed to carry K-5 or K-4 missiles.

Choose the correct option from the codes given below:

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

Ans: b

Explanation:

- INS Arihant, based on the Russian Akula-1 class submarine, was launched on July 26, 2009.
- INS Arihant is the first of three indigenously built nuclear submarines.
- The INS Arihant is designed to carry 12 K-5 or four K-4 missiles.
- India is among just six countries in the world to have the capability to fire a nuclear missile from land, air and undersea.
- The others being the United States, Russia, China, France and the United Kingdom.

Q: Consider the following statement:

- 1. Barium is two and half times heavier than iron.
- 2. Barium salts are used in fireworks to generate green lights.

Choose the correct option from the codes given below:

- a) 1 Only
- b) 2 Only
- c) 1 and 2
- d) None of the above

Explanation:

- Recently, scientists have detected barium in the upper atmosphere of two giant exoplanets for the first time, noted a new study. Barium, two and half times heavier than iron, is the heaviest-ever detected element.
- This discovery of barium is surprising because heavy elements like barium are expected to quickly fall into the lower layers of the atmosphere, given these exoplanets have high gravity.
- Barium salts are used in fireworks to generate green lights.

O: Consider the following statement regarding the Global Hunger Index 2022:

- 1. India is ahead of its neighbouring countries.
- 2. India is the worst performing South Asian country in this index.

Choose the correct option from the codes given below:

- a) 1 Only
- b) 2 Only
- c) 1 and 2
- d) None of the above

Ans: d

Explanation:

- India ranks 107 out of 121 countries on the Global Hunger Index in which it fares worse than all countries in South Asia barring war-torn Afghanistan.
- With a score of 29.1, which falls in the 'serious' category of hunger, India was ranked behind its neighbours Nepal (81), Pakistan (99), Sri Lanka (64), and Bangladesh (84).
- Afghanistan (109) is the only country in South Asia that performs worse than India on the index.
- India has been recording decreasing GHI scores over the years. In 2000, it recorded an 'alarming' score of 38.8, which reduced to 28.2 by 2014. The country has started recording higher scores since then.

Q: Which among the following is not one among the following indicator used to measure Global Hunger Index?

- a) Female infanticides
- b) Undernourishment
- c) Child Stunting
- d) Child Mortality

Ans: a

Explanation:

- a) Undernourishment (which reflects inadequate food availability): calculated by the share of the population that is undernourished (that is, whose caloric intake is insufficient);
- b) Child Wasting (which reflects acute undernutrition): calculated by the share of children under the age of five who are wasted (that is, those who have low weight for their height);
- c) Child Stunting (which reflects chronic undernutrition): calculated by the share of children under the age of five who are stunted (that is, those who have low height for their age);
- d) Child Mortality (which reflects both inadequate nutrition and unhealthy environment): calculated by the mortality rate of children under the age of five (in part, a reflection of the fatal mix of inadequate nutrition.