Q: Consider the following statement regarding occurrence of cyclone in Arabian Sea:

- 1. There is an increase in cyclonic storms in Arabian Sea.
- 2. There is an increase in cyclonic storm during post monsoon period.
- 3. Bay of Bengal witness more cyclone than Arabian Sea.

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:

- The Arabian Sea side of the north Indian Ocean, however, saw a 52 per cent increase in cyclonic storms (63-88 km per hour) from 2001 -2019.
- The frequency increase in very severe cyclonic storms, extremely severe cyclonic storms and super cyclonic storms in the Arabian Sea was observed during the post-monsoon months. As an exception, 2019 witnessed five tropical storms over the Arabian Sea and three over the Bay of Bengal.
- In comparison to the Bay of Bengal, the proportion of Arabian sea cyclones was initially 1:4, but in current study, found that it has become 2:4 from 2001-2020.

Q: Consider the following statement regarding the Global TB Report 2022:

- 1. The report is released by UNICEF.
- 2. India's TB incidence for the year 2021 is 210 per 100,000 population.
- 3. India is placed at the 36th position in terms of incidence rates.

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:

- Recently, the WHO released the Global TB Report 2022.
- The Report notes the impact of the COVID-19 pandemic on the diagnosis, treatment and burden of disease for TB all over the world.
- India's TB incidence for the year 2021 is 210 per 100,000 population compared to the baseline year of 2015 (incidence was 256 per lakh of population in India); there has been an 18% decline which is 7 percentage points better than the global average of 11%.
- These figures also place India at the 36th position in terms of incidence rates (from largest to smallest incidence numbers).

Q: Consider the following statement:

- 1. Gilgit-Baltistan is the northernmost tip of Kashmir.
- 2. It provides a land route with China.

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: c

Explanation:

- Parts of Kashmir have been illegally occupied by Pakistan since 1947.
- Pakistan-occupied Kashmir (PoK) comprises two different regions, one which the neighbouring nation calls 'Azad Jammu and Kashmir' (AJK) and the other is Gilgit-Baltistan (GB).
- GB is the northernmost tip of Kashmir and covers part of Ladakh. It provides a land route with China, meeting Xinjiang Autonomous Region.
- To its south is the other part of PoK; to the east is Jammu and Kashmir and Afghanistan is to its west. The GB region makes up 86 per cent of PoK.

Q: Consider the following statement regarding SIMBEX Exercise 2022:

- 1. This exercise will be hosted by India at Visakhapatnam.
- 2. This exercise was initially known as Exercise Lion King.
- 3. It exemplifies the high level of cooperation between India and Singapore in the maritime domain.

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: d

Explanation:

- The Indian Navy is hosting the 29th edition of the Singapore-India Maritime Bilateral Exercise (SIMBEX) at Visakhapatnam.
- SIMBEX series of exercises began in 1994 and were initially known as Exercise Lion King.
- The exercise exemplifies the high level of cooperation between India and Singapore in the maritime domain.
- It also highlights the commitment and contribution of the two nations towards enhancing maritime security in the Indian Ocean Region.

Q: Consider the following statement regarding Thermal Inversion:

- 1. Thermal inversion is when the temperature increases along with the higher altitude.
- 2. Air parcels rising into this layer become cooler than the surrounding environment.
- 3. This phenomenon only occur in summer.

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:

- Temperature or thermal inversion is when the temperature increases along with the higher altitude.
- The cap is a layer of relatively warm air aloft (above the inversion). Air parcels rising into this layer become cooler than the surrounding environment, which inhibits their ability to ascend.
- The phenomenon mostly occurs in winter when "mist and fog become trapped in the cooler air low down", but inversions can happen throughout the year.