1.Consider the following statements about National Clean Air Program

1) It aims to reduce particulate matter ($PM_{2.5}$ and PM_{10}) pollution by 20-30% in 122 cities by 2024, with 2017 as the base year for comparison.
2) The Central Pollution Control Board (CPCB) executes this programme.

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

2. Consider the following statements about the levels of Economic Integration

1) A customs union is defined as a type of trade block which is composed of a free trade area with no tariffs among members and with a common external tariff.
2) An economic union has the same features as a customs union, but, in addition, factors of production are mobile among members.

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

3. Which of the following indices can be used to understand the rising health care costs in the country?

a) Purchasing Managers' Index (PMI)
b) Producer Price Index (PPI)
c) Wholesale Price Index (WPI)
d) Consumer Price Index (CPI)

4. Which of the following pairs are correctly matched?

Missile/Missile system   Country

	Missile/Missile system		Country
1.	THAAD	:	USA
2.	S-400	:	Russia
3.	NAG	:	Bangladesh

Select the correct answer using the codes given below

a) 1 and 3 only
b) 2 and 3 only

c) 1 and 2 only
d) 1, 2 and 3

5. Which of the following is/are the tributaries of river Krishna?

1) Bhima
2) Kosi
3) Tungabhadra
4) Malaprabha

Select the correct answer using the codes given below

a) 1,3 and 4only
b) 2 and 4 only
c) 2,3 and 4 only
d) 1,2,3 and 4

1)Answer: C

Explanation

About NCAP

- NCAP is a pollution control initiative that was launched by the **Ministry of Environment, Forest and Climate Change** in January 2019. This is the first ever effort in the country to frame a national framework for air quality management with a time-bound reduction target.
- **Statement 1 is correct:** It aims to reduce particulate matter **($PM_{2.5}$ and PM_{10})** pollution by **20-30%** in **122 cities by 2024**, with 2017 as the base year for comparison.
- **Statement 2 is correct:** The **Central Pollution Control Board (CPCB)** executes this programme.

Implementation
- Under NCAP, **122 non-attainment cities** have been identified across the country based on the **Air Quality data from 2014-2018.**
- Apart from experts from the industry and academia, the programme is a collaboration between the Ministry of Road Transport and Highways, Ministry of Petroleum and Natural Gas, Ministry of New and Renewable Energy, Ministry of Heavy Industry, Ministry of Housing and Urban Affairs, Ministry of Agriculture, Ministry of Health, NITI Aayog, and Central Pollution Control Board.
- **City specific action plans** have been prepared which include measures for strengthening the monitoring network, reducing vehicular/industrial emissions, increasing public awareness etc.
- Implementation of the city specific action plans are regularly monitored by Committees at Central and State level namely Steering Committee, Monitoring Committee and Implementation Committee.

- Air quality of cities is monitored by **State Pollution Control Boards** which publishes their results from time to time.

Why in news?

- The analysis by NCAP Tracker, a joint project by news portal *Carbon Copy* and a Maharashtra-based start-up 'Respirer Living Sciences', designed to track India's progress in achieving the clean air targets, ranked **Ghaziabad in Uttar Pradesh as the most polluted city** out of the 132 non-attainment cities with highest levels of **PM 2.5 and PM 10.**

News in detail

- According to the analysis, Delhi and most of the other non-attainment cities under the National Clean Air Programme (NCAP)have shown **only a marginal improvement.**
- **Delhi was the second most polluted city** in the list of cities with the highest **PM 2.5 level** and **fourth in cities with the highest PM 10 level.**
- According to the three-year comparative analysis, Ghaziabad, with annual PM 2.5 level above 100, remained at the top of the table in the most polluted cities, except **in 2020, when Lucknow ranked first with an annual PM 2.5 level of 116.**

2) Answer: A

Explanation

- Economic integration takes the form of the Preferential Trade Area, Free Trade Area, Customs Union, Common Market and Economic Union.
- A **preferential trade area (PTA)** is a trading bloc that gives preferential access to certain products from the participating countries. This is done by reducing tariffs but not by abolishing them completely. A PTA can be established through a trade pact. It is the first stage of economic integration.
- A **free trade area** is the region encompassing a trade bloc whose member countries have signed a free-trade agreement (FTA). Such agreements involve cooperation between at least two countries to reduce/abolish trade barriers. e.g. South Asian Free Trade Area (SAFTA).
- **Statement 1 is correct:** A **customs union** is defined as a type of trade block which is composed of a free trade area with no tariffs among members and (zero tariffs among members) with a **common external tariff**. e.g. BENELUX (Belgium, Netherlands and Luxembourg).
- **Statement 2 is incorrect:** A **common market** has the same features as a customs union, but, in addition, factors of production (labour, capital and technology) are mobile among members. Restrictions on immigration and cross-border investment are abolished. e.g. European Common Market (ECM).
- An **economic union** is the last step in an economic integration process. In addition to free movement of goods, services and production factors, it also requires integration of economic policies, both monetary and fiscal. Under an economic union members harmonized monetary policies, taxation and government spending. (e.g. European Economic Union).

Why in News?
- India and the UK have formally launched negotiations for a Free Trade Agreement between two countries.

3) Answer: D

Explanation:

- CPI is an index which measures the weighted average of prices of a basket of consumer goods and services such as transportation, food and medical care.
- It is calculated by measuring price changes for each item in the predetermined basket of goods & services and averaging them.
- It is released by the Central Statistical Organisation (CSO) under the Ministry of Statistics and Program Implementation.
- The base year used to calculate CPI in India is 2011-2012.

What's in the news?
- Retail inflation rose to 5.59 % in December, mainly due to an uptick in food prices.
- The Consumer Price Index (CPI) based retail inflation was 4.91 % in November 2021 and 4.59 % in December 2020.
- As per the data released by the **National Statistical Office (NSO)**, food inflation rose to 4.05 % in December this fiscal compared to 1.87 % in the preceding month.
- The Reserve Bank, which mainly factors in the retail inflation while arriving at its bi-monthly monetary policy, expects the inflation print to be somewhat higher over the rest of the year as base effects turn adverse.

4) Answer: C

Explanation

Terminal High Altitude Area Defense (THAAD)

- It is an **anti-ballistic missile defense system** developed by the **USA.** It is a missile defence system that is designed to **intercept and destroy short and medium-range ballistic missiles** in their final flight phase. The THAAD cannot be used as a form of attack against an enemy. Its role, by use of a powerful radar, is to simply **track and destroy missiles** before they are launched.

S-400 Triumf

- The S-400 Triumf is a modern **long-range surface-to-air missile (MLR SAM) system developed by Russia.** First used in 2007, the S-400 is an upgrade of the S-300 series of missile systems put in place for the defence of Moscow. It is considered **way ahead of the American THAAD** (Terminal High Altitude Area Defense) system though both are different weapon systems.
- The missile system **integrates a multifunction radar, autonomous detection** and targeting systems, anti-aircraft missile systems, launchers, and command and control centre. It can provide a layered defence as it is capable of firing three types of missiles.

4

Plot No: 935,6ᵗʰ Avenue, Anna Nagar, Chennai-40
Ph: 044-40483555,9677120226,9677174226
Web: www.officersiasacademy.com

- The S-400 Triumf can engage **all types of aerial targets** such as aircraft, ballistic and cruise missiles, unmanned aerial vehicles (UAV) which are within the range of 400km, at an altitude of up to 30km

Nag

- Nag is a **third-generation, fire-and-forget, anti-tank guided missile** developed by India's state-owned **Defence Research and Development Organisation (DRDO)**
- One of the world's finest in its class, the **all-weather missile** with day and night capabilities comes in **four variants** that can be launched from land and air.
- **Nag variants (Range)**
  - ➢ **Prospina, the land version** meant for infantry, can be launched from a tracking-cum-launch vehicle known as **NAMICA (Nag Missile Carrier)**
  - ➢ **HeliNa is a helicopter-launched version** of NAG with an extended range. The launch system is mounted on HAL "Rudra" helicopter. The launch system is used by both Indian Army and Air Force
  - ➢ **Man Portable Anti-tank Guided Missile (MPATGM):** This version is lighter in comparison to other variants and can be launched from the shoulder. It has a strike range of 2.5 km.

5) Answer: A

Explanation

- Krishna river originates near **Mahabaleshwar** (Satara) in Maharashtra. It is the second biggest river in peninsular India after the Godavari River.
- It runs from four states Maharashtra (303 km), North Karnataka (480 km) and the rest of its 1300 km journey in Telangana and Andhra Pradesh before it empties into the Bay of Bengal.
- **Tributaries**: Tungabhadra, Mallaprabha, Koyna, Bhima, Ghataprabha, Yerla, Warna, Dindi, Musi and Dudhganga.
- Kosi is the tributary of river Ganga.

5

Plot No: 935,6th Avenue, Anna Nagar, Chennai-40
Ph: 044-40483555,9677120226,9677174226
Web: www.officersiasacademy.com