

Q: Consider the following statement regarding INS Mormugao:

1. It is propelled by four powerful Gas Turbines.
2. The ship has enhanced stealth features resulting in a reduced Radar Cross Section.
3. The ship is not capable to fight under nuclear warfare condition.

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:

- Named after the historic port city of Goa on the west coast, the ship is equipped to fight under Nuclear, Biological and Chemical warfare conditions. It is propelled by four powerful Gas Turbines, in a Combined Gas and Gas configuration, capable of achieving speeds in excess of 30 knots.
- The ship has enhanced stealth features resulting in a reduced Radar Cross Section. INS Mormugao has a complement of about 300 personnel.
- With over 75% indigenous content, all her major weapons and sensors have been developed and manufactured in India either directly through design and development by **Indian Original Equipment Manufacturers (OEMs)** or through strategic tie-ups and Transfer of Technology with reputed foreign OEMs.

Q: Consider the following statement:

1. National Science Foundation (NSF)'s Science & Engineering Indicators 2022 report is published by World Intellectual Property Organization (WIPO).
2. India ranks third in the global ranking in scientific publications.
3. Global Innovation Index (GII) 2022 brought out by World Intellectual Property Organization (WIPO).

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:

- India has jumped to the third position in the global ranking in scientific publications.
- According to the National Science Foundation (NSF)'s Science & Engineering Indicators 2022 report of the United States, India's position globally in scientific publications, has improved from seventh position in 2010 to third position in 2020.
- According to the Global Innovation Index (GII) 2022 brought out by World Intellectual Property Organization (WIPO), India's GII ranking has also improved significantly from 81st in 2014 to 40th position in 2022.

Q: Consider the following statement:

1. The Citizenship Amendment Act (CAA), 2019, that intends to grant citizenship to undocumented (or illegal) migrants.
2. Hindu, Sikh, Parsi, Christian, Buddhist and Jain are included in minority list.

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:

- The Ministry of Home Affairs (MHA) is expected to rejig the citizenship portal to accept expired passports and visas as supporting documents to process the citizenship application **for members of six minority communities; Hindu, Sikh, Parsi, Christian, Buddhist and Jain from Pakistan, Afghanistan and Bangladesh.**
- The **Citizenship Amendment Act (CAA), 2019**, that intends to grant citizenship to undocumented (or illegal) migrants from these six non-Muslim communities from the three neighbouring countries who entered India before December 31, 2014, is **yet to come into force** as the rules that govern the law are yet to be notified.

- The CAA could have helped the documented minority migrants in fast-tracking their applications as it reduces the mandatory requirement of 11 years aggregate stay in India to five years, to be eligible for citizenship. Many Pakistani Hindus who entered India legally and have spent more than 11 years in India also await citizenship.

Q: Consider the following statement:

1. The study title “Striving for Clean Air: Air Pollution and Public Health in South Asia” is published by World Health Organisation.
2. According to the report, nearly 60 percent of South Asia countries population lives in areas where concentrations of PM2.5
3. In the densely populated Indo-Gangetic Plain, it is over 20 times the level that the WHO.

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:

- Recently, the World Health Organization’s (WHO) released a study titled, “Striving for Clean Air: Air Pollution and Public Health in South Asia”.
- Terming air pollution as a public health crisis for South Asia, the report highlights that this crisis not only imposes high economic costs but also cause nearly 2 million premature deaths each year.
- According to the report, in South Asia, nearly 60 per cent of the population lives in areas where concentrations of PM2.5 exceed an annual mean of 35 $\mu\text{g}/\text{m}^3$.
- In the densely populated Indo-Gangetic Plain, it is over 20 times the level that the WHO considers healthy (100 $\mu\text{g}/\text{m}^3$ in several locations).

Q: Consider the following statement regarding Deepfakes:

1. It is a compilation of artificial images and audio put together with machine-learning algorithms.
2. This technology is now being used for nefarious purposes like scams and hoaxes.
3. The term deepfake originated in Pakistan.

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:

- Deepfakes are a compilation of artificial images and audio put together with machine-learning algorithms to spread misinformation and replace a real person’s appearance, voice, or both with similar artificial likenesses or voices.
- It can create people who do not exist and it can fake real people saying and doing things they did not say or do.
- The term deepfake originated in 2017, when an anonymous Reddit user called himself “Deepfakes.” This user manipulated Google’s open-source, deep-learning technology to create and post pornographic videos. The videos were doctored with a technique known as face-swapping. The user “Deepfakes” replaced real faces with celebrity faces.
- Deepfake technology is now being used for nefarious purposes like scams and hoaxes, celebrity pornography, election manipulation, social engineering, automated disinformation attacks, identity theft and financial fraud.