



Daily Current Affairs Prelims Quiz 18-05-2023 (Online Prelims Test)

1) Consider the following statements with respect to the Trimbakeshwar Temple:

1. It was constructed by third Peshwa Balaji Bajirao and consists one of the twelve Jyotirlingas.
2. It is located on the eastern banks of River Mahanadi, in the state of Odisha.
3. The temple is part of the UNESCO intangible heritage list.

Which of the above statement(s) is/are correct?

- a. 1 only
- b. 1 and 2 only
- c. 3 only
- d. 2 and 3 only

Answer : a

Trimbakeshwar Temple

- It is located in the state of Maharashtra.
- It is located near the mountain named Brahamagiri from which the river Godavari flows.
- It was constructed by third Peshwa Balaji Bajirao (1740-1760) on the site of an old temple.
- Trimbakeshwar Temple is a religious centre having one of the twelve Jyotirlingas.
- It is not part of the UNESCO intangible heritage list.

2) The government has developed an AI & Facial Recognition powered Solution for Telecom SIM Subscriber Verification (ASTR), to bring down cyber frauds. Consider the following statements with respect to ASTR:

1. It is developed by the department of communications, Ministry of Science and Technology.
2. Telangana is using the ASTR feature to verify the beneficiaries of public distribution system (PDS).

Which of the above statement(s) is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : d

Artificial Intelligence and Facial Recognition powered Solution for Telecom SIM Subscriber Verification (ASTR)

- The Department of Telecommunications (DoT), the Ministry of Communications, has developed an artificial-intelligence-based facial recognition tool.

- The tool has the capability of running checks on subscriber databases of telecom operators to deduce whether it contains multiple connections associated with the same person.

Working of ASTR

- Human face images are encoded using convolutional neural network (CNN) models in order to account for the tilt and angle of the face, opaqueness and dark colour of the images.
- After that, a face comparison is carried out for each face against all faces in the database, and similar faces are grouped under one directory.
- Two faces are concluded to be identical by ASTR if they match to the extent of at least 97.5%.
- ASTR is capable of detecting all SIMs against a suspected face in less than 10 seconds from a database of 1 crore images.
- The DoT allows an individual to take nine legitimate mobile phone connections using a single identity proof.
- In essence, what the ASTR does is:
 1. It looks up if there are more than nine connections against a single individual's photograph;
 2. It runs a search through the database to see if the same person has taken SIMs under different names.

3) Consider the following statements with respect to the Rasht-Astara Railway Project:

1. It is part of the International North-South Transport Corridor (INSTC).
2. The project passes through India, Iran, Azerbaijan, and Russia.
3. The project connects the Baltic Sea, Caspian Sea, Indian Ocean and the Black Sea.

Which of the above statement(s) is/are **incorrect**?

- a. 1 only
- b. 2 only
- c. 2 and 3 only
- d. 1, 2 and 3

Answer : c

Rasht-Astara Railway Project

- Russia and Iran sign deal for railway corridor intended to rival Suez Canal.
- Rasht-Astara railway is seen as an important link in the corridor, meant to connect India, Iran, Russia, Azerbaijan and other countries via railways and sea.
- The project is part of the International North-South Transport Corridor (INSTC).
- The 162km railway along the Caspian Sea coast would help to connect Russian ports on the Baltic Sea with Iranian ports in the Indian Ocean and the Gulf.



4) Consider the following statements with respect to London Interbank Offered Rate (LIBOR):

1. It is a global interest rate at which major global banks lend to one another in the international interbank market for short-term loans.
2. The interest rate is calculated only for currencies such as the Euro, US dollars, Swiss Franc, Japanese Yen and UK Pound Sterling.
3. India has its own benchmark interest rate called the Secured Overnight Financing Rate (SOFR).

Which of the above statement(s) is/are correct?

- a. 1 and 3 only
- b. 1 and 2 only
- c. 2 and 3 only
- d. 1, 2 and 3

Answer : b

London Interbank Offered Rate (LIBOR)

- LIBOR is a global benchmark interest rate that combines individual rates at which banks opine they may borrow from each other at the London interbank market.
- In other words, it is the benchmark interest rate at which major global banks lend to one another in the international interbank market for short-term loans.
- It is used as a benchmark to settle trades in futures, options, swaps and other derivative financial instruments in over-the-counter markets and on exchanges globally.
- Further, consumer lending products including mortgages, credit cards and student loans, among others, too use it as a benchmark rate.
- LIBOR is calculated for five currencies such as the U.S. dollar, Euro, Pound, Swiss Franc and Japanese Yen.
- The Secured Overnight Financing Rate (SOFR) is a benchmark interest rate for dollar-denominated derivatives and loans that will replace LIBOR.

5) Consider the following statements:

1. Dengue is transmitted by the Aedes mosquito species, which is also responsible for the spread of Chikungunya and Zika virus.

2. India has its indigenous recombinant type of vaccine for dengue.
3. The recombinant vaccine is similar to Covaxin, which uses the non-structural proteins of the dengue virus.

Which of the above statement(s) is/are **incorrect**?

- a. 1 and 2 only
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1, 2 and 3

Answer : c

Dengue

- Dengue is transmitted to humans by the Aedes mosquito species, Ae. Aegypti or Ae. Albopictus, which also spreads Chikungunya and Zika virus.
- India does not have an indigenous vaccine for dengue.
- There are four serotypes (or types) of the dengue virus, DEN-1, DEN-2, DEN-3 and DEN-4, each virus interacting differently with antibodies in the human body.
- Each serotype is capable of manifesting into dengue fever, dengue haemorrhagic fever and dengue shock syndrome.
- Five types of dengue vaccines are currently being investigated:

1. Live attenuated vaccine (which uses the weakened or attenuated form of the virus, such as the measles or chickenpox vaccine);
2. Inactivated vaccine (using the dead virus, used for Hepatitis A and rabies),
3. Recombinant subunit vaccine (as in COVISHIELD, where non-structural proteins of the dengue virus are used, aiding a balanced immune response),
4. Viral vectored vaccine (such as the vaccine against Ebola)
5. DNA vaccine (for HIV, malaria, TB)