

**Q: Consider the following statement:**

1. A 3D-printed cornea is developed from the human donor corneal tissue.
2. Corneal damage is the leading cause of blindness.
3. Clinicians from Shankar Netralaya develop 3D-printed cornea.

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:

- A team of clinicians and scientists from the LV Prasad Eye Institute (LVPEI), Hyderabad, Indian Institute of Technology (IIT) Hyderabad, and Centre for Cellular and Molecular Biology (CCMB), have collaborated to develop the 3D-printed cornea from the human donor corneal tissue, which would have otherwise been discarded for not meeting optical standards for clinical transportation.
- Corneal damage is the leading cause of blindness worldwide with more than 1.5 million new cases of corneal blindness reported every year.

**Q: Consider the following:**

1. More plantation of Eucalyptus tree.
2. Warm and wet climate.
3. Carbon pollution

The Tibetan Plateau will experience significant water loss due to

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

Ans: b

Explanation:

- The Tibetan Plateau will experience significant water loss this century due to global warming, according to recent research that warns of severe supply stress in a climate change ‘hotspot’.
- They found that due to an increasingly warm and wet climate, the Tibetan Plateau has lost just over 10 billion tonnes of water a year since 2002.
- They projected changes in water storage across the plateau under a middle-of-the-road emissions scenario, where levels of carbon pollution stay roughly at current levels before falling gradually after 2050.
- They found two river basins were particularly vulnerable to water loss.
- For the Amu Darya, central Asia's largest river, water loss could be equivalent to 119 per cent of the current demand.
- Communities reliant on the Indus basement for water supply could see a loss equivalent to 79 per cent of current demand.

**Q: Consider the following statement regarding Postal Identification Number (PIN) and choose the incorrect option:**

- a) PIN codes are made up of six-digit numbers.
- b) The first number of the PIN code indicates the postal zone.
- c) The second number of the PIN Code denotes States.
- d) The final three digits of the PIN code are handed over to individual post offices.

Ans: c

Explanation:

- PIN codes are made up of six-digit numbers, which makes it easier for the postman to trace and deliver a letter to the recipient.
- The first number of the PIN code indicates the postal zone — Eastern, Western, Northern and Southern. Number 9 indicates the Army Postal Service.
- The second number of the PIN Code denotes a sub-region, and the third number represents the sorting district.
- The final three digits of the PIN code are handed over to individual post offices within the sorting district of the zone.

**Q: In India, artillery gun salutes are fired on**

- Republic Day
- Independence Day
- Oath taking ceremony of the President
- All the above

Ans: d

Explanation:

- India inherited the tradition from the British rulers who had gun salutes comprising 101 volleys, 31 volleys and 21 volleys, and so on depending on the hierarchy.
- In India, artillery gun salutes are fired on the Republic Day, the Independence Day and also at the time of oath taking ceremony of the President, among other occasions.
- Over the years, this 21-gun salute was fired by the World War era howitzers of British make known as 'Ordnance Quick Fire 25 Pounder' or just '25 Pounder'.

**Q: Consider the following statement:**

- Police is a State subject.
- Model Police Act drafted by Jagdish Singh Khehar.

Choose the correct option from the codes given below:

- 1 Only
- 2 Only
- 1 and 2
- None of the above.

Ans: a

Explanation:

- Despite 'Police' being a State subject, no State government has given due attention to police reforms so far.
- Though the Police Act of 1861 was made applicable to all provinces after the 1902-03 Commission's recommendations, no State or UT has adopted the Model Police Act drafted by Soli J. Sorabjee.