

**Q: Consider the following statement regarding Shelf Cloud:**

1. It generally forms along the leading edge of thunderstorms.
2. It is produced by thunderstorms are always preceded by a rush of dry and cold air ahead of the cloud.
3. It forms when hot and dense air is forced into a colder air mass by wind.

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 “shelf cloud” or “Arcus cloud” generally forms along the leading edge of thunderstorms.
- It is a type of low-lying, horizontal cloud formation characterized by a clearly defined line of solid clouds.
- It is known for its distinctive wedge-shaped formation. They usually appear as a broad arc across the sky that can sometimes appear to be rotating horizontally.
- Shelf clouds form when cold and dense air is forced into a warmer air mass by wind.
- This rush of cold air often occurs in a thunderstorm’s downdraught, where cold air rushes towards the ground before spreading out to create a gust front.
- Shelf clouds produced by thunderstorms are always preceded by a rush of dry and cold air ahead of the cloud, with rain arriving after the shelf cloud has passed overhead.

**Q: Consider the following statement regarding Mukurthi National Park:**

1. It lies north of Annamalai hills.
2. It is sandwiched between the Mudumalai National Park and the Silent Valley National Park.
3. Pykara and Kundah rivers flow through the park along with several perennial streams.

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:

- Mukurthi National Park lies in the western corner of Nilgiris Plateau in the state of Tamil Nadu.
- The park is a part of the Nilgiri Biosphere Reserve. It is sandwiched between the Mudumalai National Park and the Silent Valley National Park.
- It was established with the prime motive of conserving its keystone species – the Nilgiri Tahr.
- It is a UNESCO World Heritage Site and was formerly known as Nilgiri Tahr National Park.
- It is also home to Mukurthi Peak (2,554m), the fourth highest peak in the Nilgiri Hills.
- Pykara and Kundah rivers flow through the park along with several perennial streams that originate in the park and drain into the Bhavani Puzha.

**Q: Consider the following statement regarding Urban 20 (U20) Summit:**

1. It is a city diplomacy initiative launched at One Planet Summit in Paris.
2. It provides a platform for cities from G20 countries to facilitate discussions on various important issues of urban development.

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:

- Urban 20 (U20) Summit is a city diplomacy initiative launched on December 12, 2017, at the One Planet Summit in Paris.
- including climate change, social inclusion, sustainable mobility, and affordable housing, and propose collective solutions.

- C40 Cities (C40) and United Cities and Local Governments (UCLG) convene the U20 under the leadership of a Chair city that rotates annually, based in the G20 host country.
- This year it was chaired by the City of Ahmedabad.

**Q: Consider the following statement regarding Lambani embroidery patches:**

1. It is an intricate form of textile embellishment characterised by colourful threads, mirror-work and stitch patterns.
2. It is practised in several villages of Karnataka.
3. This embroidery had also found a place in the list of products with Geographic Indication (GI) tag in the country.

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 Lambani embroidery is an intricate form of textile embellishment characterised by colourful threads, mirror-work and stitch patterns.
- It is practised in several villages of Karnataka such as Sandur, Keri Tanda, Mariyammanahalli, Kadirampur etc.
- The Lambani craft tradition involves stitching together small pieces of discarded fabric to create a beautiful fabric.
- This embroidery had also found a place in the list of products with Geographic Indication (GI) tag in the country.

**Q: Consider the following statement regarding Guillain-Barre syndrome:**

1. It is a rare autoimmune disorder where the body's immune system mistakenly attacks the peripheral nerves.
2. This could be a bacterial or viral infection.
3. It is more common in young female.

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:

- Guillain-Barre syndrome is a rare autoimmune disorder where the body's immune system mistakenly attacks the peripheral nerves.
- It is more common in adults and males, but it can affect people of all ages.
- It is often preceded by an infection.
- This could be a bacterial or viral infection.
- There is no known cure for this syndrome.