

**Q: Consider the following statement regarding Trisonic Wind Tunnel system:**

1. It is a system to aid aerodynamic design of rockets and re-entry spacecrafts.
2. The tunnel can be used only for testing various space vehicles below the speed of sound.

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: a

Explanation:

- The Trisonic Wind Tunnel is a system to aid aerodynamic design of rockets and re-entry spacecrafts by characterizing a scaled model by evaluating forces, moments, load distribution, unsteady pressures, acoustic levels etc.
- The tunnel has an overall length of about 160m and has a maximum cross section of 5.4m.
- The tunnel can be used for testing various space vehicles in three flight regimes - below the speed of sound, at the speed of sound and above the speed of sound: hence the name trisonic wind tunnel.
- The tunnel can simulate flight conditions from 0.2 times the speed of sound (68 m/s) to 4 times the speed of sound (1360 m/s).

**Q: Recently, the government introduced four Bills that seek to modify the Scheduled Tribes (ST) list in the four States. Consider the following statement:**

1. The states in which the ST list is modified is Chhattisgarh, Madhya Pradesh and Kerala.
2. The Bill seeks to add the Narikoravan and Kuruvikkaran hill tribes to the ST list.
3. The Hattee community of Trans-Giri region in Sirmaur district was added to the ST list.

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:

- Recently, the government introduced four Bills that seek to modify the Scheduled Tribes (ST) list in the four States of Tamil Nadu, Karnataka, Himachal Pradesh and Chhattisgarh in Lok Sabha, via amendments proposed in the Constitution (Scheduled Tribes) Order, 1950.
- The Bill seeks to add the Narikoravan and Kuruvikkaran hill tribes to the ST list of Tamil Nadu.
- The demand for their inclusion dates to before 1965 and even the Lokur Committee had in its report of that year recommended its inclusion.
- The government also moved a bill to introduce Betta-Kuruba as a synonym for the already categorised Kadu kuruba in the ST list of Karnataka.
- It also moved a bill to add a number of synonyms in Devanagri script for the already categorised Bhariya Bhumia tribe in the ST list of Chhattisgarh.
- They are all part of the same tribe but had been kept out of the list just because they pronounced and spelt their names differently.
- The Hattee community of Trans-Giri region in Sirmaur district was added to the ST list of Himachal Pradesh—a demand pending for almost five decades.

**Q: Consider the following statement regarding ILO:**

1. It is the only tripartite U.N. agency.
2. It got the Nobel Peace Prize in 1969.

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:

- It is the only tripartite U.N. agency, since 1919. It brings together governments, employers and workers of 187 member States.

- Established as an agency for the League of Nations following World War I by the Treaty of Versailles in 1919.
- It became the first specialised agency of the United Nations (UN) in the year 1946.
- It got the Nobel Peace Prize in 1969.
- Headquarters: Geneva, Switzerland.

**Q: Consider the following statement regarding the portal name GHAR:**

1. It is developed by National Commission for Protection of Child Rights (NCPCR).
2. Digital tracking and monitoring of children who are in the Juvenile Justice system
3. Digital transfer of cases of children to the concerned Juvenile Justice Board.

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 National Commission for Protection of Child Rights (NCPCR), has developed and launched a portal namely GHAR - GO Home and Re-Unite (Portal for Restoration and Repatriation of Child).
- The GHAR portal has been developed to digitally monitor and track the restoration and repatriation of children according to the protocol.
- Digital tracking and monitoring of children who are in the Juvenile Justice system and have to be repatriated to another Country/State/District.
- Digital transfer of cases of children to the concerned Juvenile Justice Board/Child Welfare Committee of the State. It will help in speedy repatriation of children.

**Q: Recently, three medicinal plant species found in the Himalayas have made it to IUCN Red List of Threatened Species following a recent assessment. Consider the following statement:**

1. The three plants are Meizotropis pellita, Fritillaria cirrhosa and Dactylorhiza hatagirea.
2. Meizotropis pellita, commonly known as Patwa.
3. Dactylorhiza hatagirea is a vulnerable species.

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:

- Meizotropis pellita, commonly known as Patwa, is a perennial shrub with restricted distribution that is endemic to Uttarakhand.
- The species is listed as 'critically endangered' based on its limited area of occupancy (less than 10 sq. km).
- The species is threatened by deforestation, habitat fragmentation and forest fires.
- The essential oil extracted from the leaves of the species possesses strong antioxidants and can be a promising natural substitute for synthetic antioxidants in pharmaceutical industries.