they would comply with the WHO's call for action to reduce TFA by 3% by 2021, allowing them 3 years to comply with the latest norm.

 The revised Regulations apply to edible refined oils, vanaspati (partially hydrogenated oils), margarine, bakery shortenings and other mediums of cooking, such as vegetable fat spreads and mixed fat spreads.

Types of Trans Fats:

- Naturally occurring trans fats are produced in the gut of some animals, and the foods made from these animals (e.g., milk and meat products) may contain small quantities of these fats.
- Artificial trans fats are created in an industrial process that adds hydrogen to liquid vegetable oils to make them more solid. Since they are easy to use, inexpensive to produce and last a long time, and give foods a desirable taste and texture, they are still widely used, despite their harmful effects being well-known.

12. Answer: (a) Explanation:

In 2018, the World Health Organization (WHO) launched the REPLACE action package to support the governments to eliminate industrially produced TFA (trans fatty acids) from the global food supply by 2023.

According to the WHO, approximately 5.4 lakh deaths take place each year globally because of the intake of industrially produced trans fatty acids. The WHO has called for the global elimination of trans fats by 2023.

13. Answer: (c)

Explanation:

<u>Applications</u> of the <u>Random</u> Numbers:

- Random numbers have essential roles in many fields, such as Quantum Communication, cryptography (key generation, key wrapping, authentication etc.), scientific simulations, lotteries and fundamental physics experiments.
- The generation of genuine randomness is generally considered impossible with classical means.
- Quantum Mechanics has the inherent potential of providing true random numbers and, thus, has become the preferred option for the scientific applications requiring randomness.
- With this development, India enters the club of generation of random numbers based on the countries who have the technology to achieve the Quantum Phenomenon.

14. Answer: (a)

Explanation:

The government has released the report "Action Agenda for an AtmaNirbhar Bharat (AAAN)". It has been prepared by the Technology Information, Forecasting and Assessment Council (TIFAC).

About TIFAC:

- TIFAC is an autonomous organization, set up in 1988, under the Department of Science and Technology, to look ahead in technology domain, assess the technology trajectories and support innovation by networked actions in select areas of national importance.
- TIFAC continues to strive for technology development in the