

## Answers

**1) C**

Arunachal is first in the country to obtain Organic Certification for its wild Kiwi under Mission Organic Value Chain Development for North East Region (MOVCD-NER). Kiwis of Ziro Valley located in Lower Subansiri district were certified as organic following a standard three-year-process.

The kiwis of the region are the only certified organic fruit of their kind in the country. Certification helps producers and handlers; they receive premium prices for the products, and have access to fast-growing, local, regional and international markets.

**2) D**

India International Science Festival (IISF) launched in 2015 is a celebration to promote Science and Technology and demonstrate how science could lead India towards a developed nation within a short span of time.

Several curtain raiser events are being organized by government departments for generating awareness about the 6th India International Science Festival (IISF-2020) to be held virtually this year. IISF is an annual event organised jointly by science & technology-related Ministries and Departments of the Government of India

**3) C**

The RT-LAMP test is Reverse Transcriptase loop-mediated isothermal amplification technology. It is a one-step nucleic acid amplification method to multiply specific sequences of RNA of the corona virus.

Under this technology, the RNA is first made into cDNA (copy DNA) by the usual reverse transcription and then, the DNA is amplified by the LAMP technique. The important advantage of the LAMP technology is that the assay is so fast that results can be obtained within 30 minutes and positive samples are amplified as early as 10 minutes.

The LAMP technology does not need laborious preparation as in the case of RT-PCR. The LAMP technology has been recently validated by the Indian Council of Medical Research with sensitivity 98.7% and specificity 100%.

4) A

5) C

World Health Organisation has recently released the World Malaria Report 2020. According to the report, India made impressive gains in the global fight against malaria, recording the largest reduction in cases in South-East Asia from 20 million in 2000 to about 5.6 million last year.

India also recorded a decrease in the number of deaths from malaria between 2000 and 2019. Malaria deaths in India declined from about 29,500 in 2000 to about 7,700 last year, the report said. In the WHO South-East Asia Region, malaria deaths reduced by 74 per cent, from about 35,000 in 2000 to 9,000 in 2019. India, however, still accounted for 88 per cent of malaria cases and 86 per cent of malaria deaths in the WHO South-East Asia Region in 2019.

6) A

The Minister of Science and Technology and Vice President of Council for Scientific and Industrial Research (CSIR), Dr Harsh Vardhan virtually inaugurated the 2nd TCGA 2020 conference in New Delhi recently.

The Cancer Genome Atlas (TCGA)

It is a landmark cancer genomics program that molecularly characterized over 20,000 primary cancers and matched normal samples spanning 33 cancer types. This joint effort between the US- National Cancer Institute and the National Human Genome Research Institute began in 2006, bringing together researchers from diverse disciplines and multiple institutions.

The data, which has already led to improvements in the ability to diagnose, treat, and prevent cancer, will remain publicly available for anyone in the research community to use.

Indian Cancer Genomics Atlas (ICGA)

On similar lines, the establishment of an 'Indian Cancer Genomics Atlas (ICGA)' has been initiated by a consortium of key stakeholders in India led by CSIR, Government of India in which several government agencies, cancer hospitals, academic institutions and private sector partners.

7) A

8) B

It is a subsurface mixed flow constructed wetland system developed and internationally patented by CSIR-NEERI, Nagpur with successful demonstration in the field for more than 10 years of continuous operation as a stand-alone sewage treatment system. Phytorid is a self-sustainable technology for wastewater treatment that works on the principle of natural wetland.

It uses certain specific plants which can absorb nutrients directly from wastewater but do not require soil. These plants act as nutrient sinker and remover. Using Phytorid Technology for the treatment of sewage, it is possible to recover and reuse the treated water for gardening purposes.

CSIR-NCL is the first CSIR laboratory to use NEERI Phytorid water treatment technology. Compared to the conventional processes, this natural system based Phytorid Technology for sewage treatment is zero energy and zero operation & maintenance (O&M).

**9) B**

To fast-track the carbon footprint reduction technology development, NTPC Vidyut Vyapar Nigam (NVVN) in partnership with EESL organises technology challenge named as Green Charcoal Hackathon.

The purpose of the event is to leverage the innovative Indian mind to bridge the technology gap, with the prime objective to clean the air by eliminating farm fire, producing renewable energy out of the agro residue, to promote local entrepreneurship, and to increase the income of the farmers.

**10) C**

The UN Convention on the Rights of Persons with Disabilities (CRPD) is a legally binding international instrument now exists to guarantee that States that have ratified the treaty will promote and protect the rights of people with disability. These States will next work on passing their own national civil rights legislation to improve the lives of people with disability.

India is a signatory of the United Nations Convention on Rights of Persons with Disabilities (UNCRPD). It ratified this Convention on 01-10-2007 in pursuance of Article 35 of the Convention. India submitted its First Country Report on Status of Disability in India in November 2015.

**11) A**

They are measures of fuel stability. It is a measure of a fuel's ability to avoid knock. Knock occurs when fuel is prematurely ignited in the engine's cylinder, which degrades efficiency and can be damaging to the engine. The higher the octane number, the more resistant the petrol mixture is to knock.

Worldwide, 100 Octane petrol has a niche market for luxury vehicles that demand high performance and is available only in six countries of USA, Germany, Greece, Indonesia, Malaysia and Israel. At most retail stations, three octane grade are offered, 87 (regular), 89 (mid-grade) and 91-94 (premium).

Hindustan Petroleum Corporation Ltd (HPCL) had recently launched Octane 99 and now IOC has come to the market with XP100.

**12) C**

**13) B**

Global Innovation & Technology Alliance (GITA) is a “not-for-profit” Section-8 Public Private Partnership (PPP) company promoted jointly by the Technology Development Board (TDB), Department of Science & Technology (DST), Government of India and the Confederation of Indian Industry (CII).

**14) A**

**15) D**

**16) B**

Established in 1994, the IAIS headquartered in Switzerland is a voluntary membership organization of insurance supervisors and regulators from more than 200 jurisdictions, constituting 97% of the world's insurance premiums. It is the international standard-setting body responsible for developing and assisting in the implementation of principles, standards and other supporting material for the supervision of the insurance sector.

The International Financial Services Centre Authority (IFSCA) obtained membership of International Association of Insurance Supervisors (IAIS).

**17) C**

Section 16 of the National Food Security Act, 2013 (NFSA) provides that every State Government shall, by notification, constitute a State Food Commission for the purpose of monitoring and review of implementation of the Act.

Section 18 of the Act provides that the State Government, if considers it necessary, by notification, designate any statutory commission or a body to exercise the powers and perform the functions of the State Commission. Section 19 provides that two or more States may have a joint State Food Commission with the approval of the Central Government.

**18) B**

The Aadi Mahotsav is a unique celebration of the spirit of tribal culture, crafts, cuisine and commerce. It is a 10 day long festival, celebrated annually commenced in 2017.

It is organized by TRIFED under Union Tribal Affairs Ministry. The festival is an attempt to familiarize the people with the rich and diverse craft and culture of the tribal communities across the country, in one place. Recently TRIFED has decided to continue with this tradition by organising it on an online platform.

**19) B**

Peacock soft-shelled turtle is a turtle of a vulnerable species under IUCN. They have a large head which is olive green in colour. This species is confined to India, Bangladesh and Pakistan.

It is widespread in North eastern and central parts of the Indian subcontinent. These are found in rivers, streams, lakes and ponds with mud or sand bottoms.

It is placed under Wildlife Protection Act, 1972: Schedule I, CITES: Appendix I. The species is heavily exploited for its meat and calipee (the outer cartilaginous rim of the shell).

**20) A**

