

Answers

1) C

Climate engineering aka geo engineering is the deliberate and large-scale intervention in the Earth's climate system, usually with the aim of mitigating the adverse effects of global warming.

Following are the few Geo-Engineering techniques

Solar Radiation Management (SRM) - It refers to offsetting the warming effect of greenhouse gases by reflecting more solar radiation (sunlight) back into space.

Carbon Dioxide Removal (CDR) - It refers to removing carbon dioxide gas (CO₂) from the atmosphere and sequestering it for long periods of time.

LOHAFEX - is an ocean iron fertilization experiment to see if iron can cause algal bloom and trap carbon dioxide from the atmosphere.

It is jointly planned by the Council of Scientific and Industrial Research (CSIR) in India and the Helmholtz Foundation in Germany.

2) B

It is released by RBI with March 2018 as the base period. The RBI-DPI comprises five broad parameters that enable the measurement of deepening and expansion of digital payments in the country over different time periods.

The parameters are including

- Payment Enablers (weight 25%),
- Payment Infrastructure -Demand-side factors and (10%),
- Payment Infrastructure – Supply-side factors (15%),
- Payment Performance (45%)
- Consumer Centricity (5%).

The RBI-DPI shall be published on RBI's website on a semi-annual basis from March 2021 onwards with a lag of 4 months.

3) D

COVID Vaccine Intelligence Network (CoWIN) platform has been developed by MoHFW for real time information of vaccine stocks, their storage temperature and individualized tracking of beneficiaries for COVID-19 vaccine. This software will assist the program managers across all levels through automated session allocation for pre-registered beneficiaries, their verification and a digital certificate will be generated upon successful completion of the vaccine schedule.

4) D

Trans fats or trans-fatty acids are a form of unsaturated fats. They come in both natural and artificial forms.

Naturally-occurring Trans fats are produced in the gut of some animals and foods made from these animals (e.g., milk and meat products) may contain small quantities of these fats. Artificial Trans fats (or Trans fatty acids) are created in an industrial process that adds hydrogen to liquid vegetable oils to make them more solid. The primary dietary source for Trans fats in processed food is “partially hydrogenated oils.”

Trans fats raise the low-density lipoproteins (LDL) cholesterol levels and lower the good (HDL) cholesterol levels. Eating Trans fats increases the risk of developing heart disease and stroke. It’s also associated with a higher risk of developing type 2 diabetes.

The Food Safety and Standards Authority of India (FSSAI) has capped the amount of trans fatty acids (TFA) in oils and fats to 3% for 2021 and 2% by 2022 from the current permissible limit of 5% through an amendment to the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations.

5) B

Ministry of Ports, Shipping and Waterways recently initiated the process of commencing operations of the Seaplane services, on the select routes, under a Special Purpose Vehicle (SPV) framework through prospective airline operators.

Sagarmala Seaplane Services (SSPS)

The project execution and implementation would be through Sagarmala Development Company Ltd (SDCL), which is under the administrative control of the Ministry of Ports, Shipping and Waterways.

The proposed Origin-Destination pairs under Hub and Spoke model include various islands of Andaman & Nicobar and Lakshadweep, Guwahati Riverfront & Umranso Reservoir in Assam,

Yamuna Riverfront / Delhi (as Hub) to Ayodhya, Tehri, Srinagar(Uttarakhand), Chandigarh and many other tourist places of Punjab & HP; Mumbai (as Hub) to Shirdi, Lonavala, Ganpatipule; Surat (as Hub) to Dwarka, Mandvi & Kandla; Khindsi Dam, Nagpur & Erai Dam, Chandrapur (in Maharashtra) and/or any other Hub & Spoke suggested by the Operator.

One such Seaplane Service is already in operation between Kevadia and Sabarmati Riverfront in Ahmedabad.

Sea Plane Services

It will utilize the nearby water bodies for take-off and landing and thus connect those places in a much economical way as conventional airport infrastructure like a runway and terminal buildings are not required for seaplane operations.

6) C

The Patent (Amendment) Rules 2020 have come into force on October 20, 2020. It is mandatory under the (Indian) Patents Act, 1970 for every patentee and every licensee to file a statement as to the extent of commercial working of a granted patent in the Indian Territory. The information to be provided in the New Form 27 for the relevant financial year is:

If patent worked in India – Approximate revenue/value accrued in India through manufacturing in India/import into India of the patented invention;

If not worked in India – Reasons for non-working and steps taken for working the invention

7) B

National Metrology Conclave 2021 is being organised by Council of Scientific and Industrial Research-National Physical Laboratory (CSIR-NPL), New Delhi, which is entering into its 75th year of inception. The theme of the conclave is 'Metrology for the Inclusive Growth of the Nation'.

The CSIR—NPL National Atomic Timescale launched recently generates Indian Standard Time with an accuracy of 2.8 nanosecond.

8) A

Samples of dead migratory water birds found at the Pong Dam Lake in Himachal Pradesh have tested positive for avian influenza or bird flu.

It has now become the fifth state to report suspected cases of bird flu after Haryana, Rajasthan, Kerala and Madhya Pradesh.

Avian Influenza

It is a highly infectious and severe respiratory disease in birds caused by the H5N1 influenza virus. It can occasionally infect humans as well, although human-to-human transmission is unusual, according to the World Health Organisation.

9) A

It is found in only one cave in Hanumanahalli village in the Kolar district of Karnataka, and its population is less than 200 individuals.

Its natural habitats are subtropical or tropical dry forests and caves. **It is currently evaluated as critically endangered by the IUCN.** Recently Karnataka Forest Department, along with the Bat Conservation India Trust (BCIT), is on a war footing to save the Kolar Leaf-Nosed Bat from extinction.

10) C

Government has created Indian National Space, Promotion & Authorization Centre (INSPACe), under Department of Space to encourage, promote and hand hold the private sector for their participation in Space Sector. Private players will also be able to use ISRO infrastructure through INSPACe.

It is to be established as a single window nodal agency, with its own cadre, which will permit and oversee the following activities of Non-Government Private Enterprises:

Space activities including building of launch vehicles and satellites and providing space based services as per the definition of space activities.

Sharing of space infrastructure and premises under the control of ISRO with due considerations to on-going activities.

Establishment of new space infrastructure and facilities, by NGPEs, in pursuance of space activities based on safety norms and other statutory guidelines and necessary clearances.

Initiation of launch campaign and launch, based on readiness of launch vehicle and spacecraft systems, ground and user segment.

11) C

India presently has two research stations at Antarctica namely 'Maitri' and 'Bharati' which are being operated under National Centre for Polar and Ocean Research (NCPOR), Ministry of Earth Sciences. At both the stations, research and investigations are undertaken to understand the Polar processes and phenomenon. Observations and studies are carried out in atmospheric, biological, geological, ecological sciences etc. Maitri station has been in operation since 1989 while Bharati has been constructed and established in March, 2013.

12) C

The School Bag Policy 2020 released by the Department of School Education and Literacy, Ministry of Education recommends that the weight of a schoolbag across classes 1 to 12 should be 10% of the body weight of the student carrying it. Weight of school bag needs to be monitored and checked on a regular basis in the school. For this, every school needs to keep a digital weighing machine in the school premises. In line with the National Education Policy (NEP) it also suggested that there should be no homework up to Class 2. Homework requiring a time of maximum of two hours a week is allowed for Classes 3 to 5, five-six hours a week for classes 6 to 8, and 10-12 hours a week for classes 9-12.

13) C

Pangolin is understood to occur in various types of tropical forests as well as open land, grasslands and degraded habitats, including in close proximity to villages. The species can adapt well to modified habitats, provided its ant and termite prey remains abundant. Indian Pangolin is widely distributed in India, except the arid region, high Himalayas and the North-East. It can be found at elevation up to 2500 m. The species also occurs in Bangladesh, Pakistan, Nepal and Sri Lanka.

Indian Pangolin is listed in Schedule I of Wildlife (Protection) Act, 1972 and as Endangered on IUCN Red List.

14) C

Bureau of Indian Standards celebrates the 74th foundation day on 6th January 2021.

BIS is the National Standard Body of India established under the BIS Act 2016. It was established for the harmonious development of the activities of standardization, marking and quality certification of goods and for matters connected therewith.

The Bureau is a Body Corporate consisting of 25 members representing both Central and State governments, Members of Parliament, industry, scientific and research institutions, consumer organizations and professional bodies.

Union Minister of Consumer Affairs, Food and Public Distribution is the President and Minister of State for Consumer Affairs, Food and Public Distribution is the Vice-President of the Governing Council of BIS.

15) C

The Ganges River Dolphin or also called 'Susu,' is the National Aquatic Animal of India. Gangetic Dolphins are found in the river systems of Ganga, Brahmaputra, Meghna, and Karnaphuli-Sangu in Nepal, India, and Bangladesh.

The reason to declare Ganges River Dolphin as the National Aquatic Animal of India was to save it from extinction. Also, the Ganges Dolphin is seen as the reflector of the health of the Ganga River.

Ganges River Dolphin is found only in freshwater and as the name goes, the Ganges Dolphins are endemic to the river Ganga. It cannot breathe in the water, it being a mammal. It surfaces above the water every 30-40 seconds to breathe.

16) A

The Indian Ocean Commission (IOC) is an intergovernmental organisation comprising five member states: The Union of Comoros, Réunion (an overseas region of France), Madagascar, Mauritius and Seychelles. Created by the Port Louis Declaration in 1982, the IOC was institutionalized in Seychelles in 1984 by the General Cooperation Agreement, better known as the "Victoria Agreement". Observer members of the IOC: India, China, Japan, Malta, European Union, United Nations and International Organization of the Francophonie.

17) C

Anemia occurs when there are not enough healthy red blood cells to carry oxygen to body's organs.

A common cause of anemia is low levels of iron in the body. This type of anemia is called iron-deficiency anemia. Human body needs a certain amount of iron to make hemoglobin, the substance that moves oxygen throughout the body.

In October 2016, FSSAI operationalized the Food Safety and Standards (Fortification of Foods) Regulations, 2016 for fortifying staples namely Wheat Flour and Rice (with Iron, Vitamin B12 and Folic Acid), Milk and Edible Oil (with Vitamins A and D) and Double Fortified Salt (with Iodine and Iron) to reduce the high burden of micronutrient malnutrition in India. The '+F' logo has been notified to identify fortified foods.

18) D

The United Nations Statistics Division, the United Nations Environment Programme, the Secretariat of the Convention on Biological Diversity, and the European Union launched the project "Natural Capital Accounting and Valuation of Ecosystem Services" (NCAVES) in 2017. The project funded by the European Union through its Partnership Instrument (PI), aims to assist the five participating partner countries, namely Brazil, China, India, Mexico and South Africa, to advance the knowledge agenda on environmental-economic accounting, in particular ecosystem accounting.

The main objective of the UNSD-led project is to mainstream natural capital accounting and the valuation of ecosystem services in data-driven decision and policy-making at the national, regional and local levels.

NCAVES India Forum 2021 is being organised by the Ministry of Statistics and Program Implementation (MoSPI). In India, the NCAVES project is being implemented by the MoSPI in close collaboration with the Ministry of Environment, Forest and Climate Change (MoEF&CC) and the National Remote Sensing Centre (NRSC).

19) C

It is a levy on the overall revenues earned by the supplier of specific digital services. It is different from Netflix tax, which is essentially a "value-added tax" on digital services where the consumer bears the entire tax burden on the value of the final product.

GAFA tax named after Google, Apple, Facebook, and Amazon is a proposed digital tax that is to be levied on large technology and internet companies.

Recently India has expanded the scope of the Equalization Levy, or digital tax, to the sale of goods and services in the country by overseas e-commerce firms.

The transactions were to be taxed at 2 per cent if businesses earned more than Rs 2 crore.

The Equalization Levy was introduced for the first time in 2016 as 6% tax on revenues earned by non-residents from online advertising and related services.

20) C

The National Internet Exchange of India (NIXI) has recently announced that it will offer a free IDN (Internationalized Domain Name) in any of their preferred 22 official Indian language along with every IN domain booked by the registrant. Applicant will also get a free email in local language.

National Internet Exchange of India (NIXI)

It is a not for profit Organization under section 8 of the Companies Act 2013, and was registered on 19th June, 2003. NIXI was set up for peering of ISPs among themselves for the purpose of routing the domestic traffic within the country, instead of taking it all the way to US/Abroad, thereby resulting in better quality of service (reduced latency) and reduced bandwidth charges for ISPs by saving on International Bandwidth.

NIXI is managed and operated on a Neutral basis, in line with the best practices for such initiatives globally. Any ISP can join NIXI. NIXI is not an ISP and will not provide Internet connections or Transit services.

Functions

It is working since 2003 for spreading the internet technology to the citizens of India through the following activities: -

Internet Exchanges through which the internet data is exchanged amongst ISPs and between ISPs and CDNs. IN Registry, managing and operation of IN country code domain and IDN domain for India. IRINN, managing and operating Internet protocol (IPv4/IPv6).

