15 D

Ex. On 14 September 2019, Russia's world first floating nuclear power plant has been completed. It is about 5,000 kilometre (3,100 miles) Arctic transfer to the country's far east. The floating nuclear power plant named 'The Akademik Lomonosov'. It will start operating by the end of the year from Pevek, the autonomous district of Chukotka. It will provide energy for around 1, 00,000 people and also power oil platforms.

16 A

Ex. The satellites of NASA had discovered 'First Nearby Super-Earth'. It is a planet that could possibly support life. The team of International Astronomers announced their findings in the publication Astronomy and Astrophysics. The new discovery is known as an exoplanet. It is basically a planet that orbits a star outside of our solar system.

17 D

Ex. The 'Additional Protocol' is not a stand-alone agreement, but rather a protocol to a safeguards agreement that provides additional tools for verification. In particular, it significantly increases the IAEA's abiilty to verify the peaceful use of all nuclear materials in states with comprehensive safeguards agreement. With the signing of additional protocol with IAEA, the civilian nuclear reactor comes under IAEA safeguards.

18 C

Ex. Terminal High Altitude Area Defense (THAAD), formerly Theater High Altitude Area Defense, is an American anti-ballistic missile defense system designed to shoot down short, medium, and intermediate-rangle ballistic missilies in thier terminal phase (descent or re-entry) by intercepting with a hit-to-kill approach.

19 A

Ex.

20 D

Ex. China is world's largest manufacturer of silicon wafers used in photovoltaic units. As entrusted by the Electricity Act, 2003, Central Electricity Regulatory Commission (CERC), is designated as a key regulator of pwoer sector in India which determines the solar power tariffs.

21 D

Ex.

22 D

Ex. In tissue culture, new plants are grown by removing tissue or separating cells from the growing tip of a plant. The cells are then placed in an artificial medium where they divide rapidly to form a small group of cells or callus. The callus is transferred to another medium containing hormones for growth and differentiation. The plantlets are then placed in the soil so that they can grow into mature plants. Using tissue culture, many plants can be grown from one parent in disease-free conditions. This technique is commonly used for ornamental plants.
Hence, all the statements are correct.

23 C

Ex. aluminium. Hence statement 2 is correct.
aluminium is the most abundant. It is the third most abundant element in earth's crust (8.3% approx. by weight). It is a major component of many igneous minerals including mica and clays. Many gemstones are impure forms of Al_2O3 and the impurities range from Cr (in 'ruby') to Co (in 'sapphire'). Hence statement 1 is correct.
For the purpose of extraction, bauxite is chosen for

24 D

Ex.

25 A

Ex. Vitamins fall into two categories:
* Water-solube vitamins - C and the B-complex vitamins (such as vitamins B6, B12, niacin, riboflavin, and folate) - need to dissolve in water before your body can absorb them. Because of this, your body can't store these vitamins. Any vitamin C or B that your body doesn't use as it passes through the human body is lost. So one needs a fresh supply of these vitamins every day.
* Fat-solube vitamins - A, D, E, and K - dissolve in fat and can be stored in your body.

26 C

Ex.

27 D

Ex.

28 D

Ex.

29 C

Ex. Polytetrafluoroethene (Teflon): Teflon is manufactured by heating tetrafluoroethene with a free radical or persulphate catalyst at high pressures. It is chemically inert and resistant to attack by corrosive reagents.
It is used in making oil seals and gaskets and also used for non - stick surface coated utensils.
Other advantage of Teflon is its versatility, and the range of applications over so many products and different industries for this material is staggering. The use of teflon can have massive benefits in manufacturing and engineering, not just in making tubes or liners for handling or storing corrosive chemicals, but by coating parts such as bearings or screws to increase the lifetime of both the parts themselves and the machinery they are part of. Hence statement 1 and 2 are correct.

30 C

Ex.

31 C

Ex.