

# VAJIRAO & REDDY INSTITUTE

India's Top Potential Training Institute for IAS

C

Test Booklet Code: 190

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Total Ques: 100

- 1 B  
Ex.
- 2 B  
Ex.
- 3 C  
Ex.
- 4 B  
Ex.
- 5 A  
Ex.
- 6 C  
Ex.
- 7 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 power sector in India which determines the solar power tariffs.
- 8 A  
Ex.
- 9 D  
Ex.
- 10 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.
- 11 C  
Ex.
- 12 C  
Ex.
- 13 C  
Ex.
- 14 A  
Ex. Vitamins fall into two categories:  
\* Water-soluble 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-soluble vitamins - A, D, E, and K - dissolve in fat and can be stored in your body.
- 15 B  
Ex.

- 16 B  
Ex.
- 17 D  
Ex. Bipolar Disorder is a mental health condition in which patients undergo intense mood shifts that oscillate between depression and elevated moods. After researching, scientists found that such patients carry some residual impairment in terms of processing of information even in their 'normal' phases. The study has been done by jointly researchers from the National Institute of Mental Health and Neuroscience (Nimhans), Bengaluru and All India Institute of Medical Sciences, New Delhi.
- 18 A  
Ex. satellite was launched by Nepal successfully from Virginia in the United States on 18 April, 2019. Its aim is to gather detailed geographical information of the Himalayan nation.
- 19 D  
Ex.
- 20 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.
- 21 A  
Ex.
- 22 C  
Ex. A plane mirror is a mirror with a flat and smooth reflecting surface. Reflection from a smooth surface like that of a mirror is called regular reflection. Images are formed by regular reflection.  
\* The image formed by a plane mirror is erect.  
\* It is virtual (cannot be obtained on a screen) and is of the same size as the object. This is because the light rays do not actually pass through the image. So, it cannot be focused on a screen placed at the location where the image is.  
\* The image is at the same distance behind the mirror as the object is in front of it.  
\* The left side of the object is seen on the right side in the image, and right side of the object appears to be on the left side in the image. This is known as lateral inversion.
- 23 B  
Ex.