

Weekly MCQs Answers (11th-18th Oct 2020)

1) C

Statement 1 is correct. CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) technology is a tool for editing genomes. It allows researchers to easily alter DNA sequences and modify gene function. CRISPRs are specialized stretches of DNA. The protein Cas9 (CRISPR-associated-9) is an enzyme that acts like a pair of molecular scissors, capable of cutting strands of DNA. Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops.

Statement 2 is correct. CRISPR technology was adapted from the natural defense mechanisms of bacteria and archaea (the domain of single-celled microorganisms). These organisms use CRISPR-derived RNA and various Cas proteins, including Cas9, to foil attacks by viruses and other foreign bodies. They do so primarily by chopping up and destroying the DNA of a foreign invader. When these components are transferred into other, more complex, organisms, it allows for the manipulation of genes, or “editing.”

2) A

The Advanced Manufacturing HUB or AMHUB is one of the 19 platforms designed by the World Economic Forum (WEF). This platform focuses on engaging entire regional production ecosystems to identify and address regional opportunities and challenges brought by the Fourth Industrial Revolution (4IR) by amplifying regional success stories, sharing best practices & incubating new partnerships

3) A

Statement 1 is correct. Television Rating Points (TRPs) represent how many people, from diverse socio-economic categories, watched which channels for how much time during a particular period of hours/days/week/months.

Television ratings in turn influence program produced for the viewers. Better ratings would promote a program while poor ratings will discourage a program. It also has commercial impact as program/channel with higher ratings is able to attract more and profitable advertisements. Statement 2 is incorrect. Broadcast Audience Research Council (BARC) India is a Joint Industry Company founded by stakeholder bodies that represent Broadcasters, Advertisers, and Advertising and Media Agencies. The I&B Ministry notified the Policy Guidelines for Television Rating Agencies in India in January 2014 and registered BARC in July 2015 under these guidelines, to carry out television ratings in India.

4) A

Article 19(1)(b) provides for fundamental right to assemble peacefully and without arms. Further, Article 19(3) of the Constitution provides for power of the State to provide for any law imposing reasonable restrictions on the exercise of the right to assemble peaceably and without arms in the interests of the sovereignty and integrity of India or public order.

5) C

Statement 1 is correct. The Minister of Education recently inaugurated the Gyan Circle Ventures, a Ministry of Electronics and Information Technology funded Technology Business Incubator (TBI) of Indian Institute of Information Technology, Sri City (Chittoor), Andhra Pradesh. Gyan Circle Ventures would function as a Technology Incubation and Development of Entrepreneurs (TIDE 2.0) incubation center as approved by the Ministry of Electronics and Information Technology (MeitY). # TIDE 2.0 scheme promotes tech entrepreneurship through financial and technical support to incubators engaged in supporting ICT startups primarily engaged in using emerging technologies such as IoT, AI, Block-chain, Robotics etc. in pre-identified areas of societal relevance. Statement 2 is correct. The Gyan Circle Ventures will serve as a hub for innovation and startups by providing support, in various phases, via investments, infrastructure and mentoring. The TBI would have an Advisory Committee comprising leading Industrialists, entrepreneurs and technical experts. It would enable incubatees to leverage these expert mentors and networks from both academia and the industry.

6) C

Statement 1 is correct. DNA barcoding is a methodology for rapidly and accurately identifying species by sequencing a short segment of standardized gene regions and comparing individual sequences to a reference database.

Statement 2 is correct. International Barcode of Life (iBOL), a Canadian not-for-profit corporation, after successful completion of BARCODE 500K in 2015, has launched project BIOSCAN in 2019 to generate barcode coverage for two million species.

7) A

Calcium nitrate also known as Norwegian saltpeter is mainly produced as a fertilizer, used for plant nutrition purposes, and for wastewater treatment. It is a source of both calcium and nitrogen, for plants. 'Calcium Nitrate' & 'Boronated Calcium Nitrate' is now being manufactured for the first time in India by Gujrat State Fertilizers and Chemicals -GSFC India Ltd. GSFC launched these two products in the retail market for the first time from Solan in Himachal Pradesh and Bhavnagar in Gujarat. Sodium bicarbonate is commonly known as baking soda.

8) A

Statement 1 is correct. The Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing proposes a financial incentive to boost domestic manufacturing and attract large investments in the electronics value chain including electronic components and semiconductor packaging. Incentive: The Scheme extends an incentive of 4% to 6% on incremental sales (over base year) of goods manufactured in India and covered under target segments, to eligible companies, for a period of five years subsequent to the base year 2019-20. Statement 2 is incorrect. The Scheme is only applicable for target segments namely mobile phones and

specified electronic components.
Specified Electronic Components: SMT components, Discrete semiconductor devices including transistors, diodes, thyristors, etc., Passive components including resistors, capacitors, etc. for electronic applications, Printed Circuit Boards (PCB), PCB laminates, prepregs, photopolymer films, PCB printing inks, Sensors, transducers, actuators, crystals for electronic applications, System in Package (SIP), Micro or Nano-electronic components such as Micro Electromechanical Systems (MEMS) and Nano Electromechanical Systems (NEMS), and Assembly, Testing, Marking and Packaging (ATMP) units.

9) A

10) C

11) A

Statement 1 is correct. The region is internationally recognised as part of Azerbaijan but controlled by ethnic Armenians.

After the end of World War I and the Bolshevik revolution in Russia, the new Soviet rulers established the Nagorno-Karabakh Autonomous Region, with an ethnic Armenian majority, within the Soviet Socialist Republic of Azerbaijan in the early 1920s.

In 1988, towards the end of Soviet rule, Azerbaijani troops and Armenian secessionists began a violent war which left the de facto independent state in the hands of ethnic Armenians when a truce was signed in 1994.

Negotiations have so far failed to produce a permanent peace agreement
Statement 2 is incorrect. It is a landlocked mountainous region.

12) D

13) A

Sustainable Development Goal 12: Ensure sustainable consumption and production patterns. SDG Target 12.3 seeks to halve global food waste at retail and consumer levels, as well as to reduce food loss during production and supply. In order to measure food waste and losses, two indices have been proposed: Food Waste Index (FWI) and Food Loss Index (FLI).

Statement 1 is correct. The Food Loss Index examines the food loss along supply activities such as production, handling & storage, and processing. It focuses on food losses that occur from production up to (and not including) the retail level. It measures the changes in percentage losses for a basket of 10 main commodities by country in comparison with a base period.

Statement 2 is incorrect. To monitor SDG Target 12.3, Food and Agriculture Organization has created the Food Loss Index (FLI). The focus of the indicator is on percentages of food removed from the supply chain. Further, the Food Waste Index is currently in development at UN Environment. The FWI will measure tons of wasted food per capita, considering a mixed stream of products from processing through to consumption.

14) B

Statement 1 is incorrect. The Information Technology Act 2000 regulates cyber activities in India and provides for offences in cyber domain does not provide for explicit prohibition on Gambling or Betting.

Statement 2 is correct. The Public Gambling Act 1867, as it stands makes a distinction between games of chance and games of skill. The act does not apply to any game of mere skill wherever played.

15) B

Statement 1 is incorrect. The Quadrilateral Security Dialogue or Quad is an informal strategic forum between the United States, Japan, Australia and India that is maintained by semi-regular summits and information exchanges among the member countries. Quad, being an informal forum, has no formal mutual-assistance treaty, secretariat, or even a website. Statement 2 is correct. BRICS members are Brazil, Russia, India, China, and South Africa; India is the only country in Quad that is a member of BRICS.

16) D

17) B

18) B

19) B

20) A

21) C

Statement 1 is correct. Cabinet has recently approved the implementation of the Strengthening Teaching-Learning and Results for States (STARS) project with a total project cost of Rs 5718 crore with the financial support of World Bank amounting to US \$ 500 million. STARS project would be implemented as a new Centrally Sponsored Scheme under Department of School Education and Literacy, Ministry of Education (MOE). Statement 2 is correct. STARS project has separate National and State level implementation components. It further includes a Contingency Emergency Response Component (CERC) under the National Component which would enable it to be more responsive to any natural, man-made and health disasters. It will help the government respond to situations leading to loss of learning such as school closures/infrastructure damage, inadequate facilities and use technology for facilitating remote learning etc.

22) C

Statement 1 is correct. A Government Security (G-Sec) is a tradeable instrument issued by the Central Government or the State Governments. It acknowledges the Government's debt obligation. Such securities are short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more). In India, the Central Government issues both, treasury bills and bonds or dated securities while the State Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs). Statement 2 is correct. SDLs are eligible securities for Statutory Liquidity Ratio (SLR) and Liquidity adjustment

facility (LAF) purposes, and are bought by banks, insurance companies, mutual funds, provident funds and other institutional investors.

23) C

From an employer standpoint, the The Leather Sector Skill Council (LSSC) recently announced the launch of Skill Certification Assessment for Leather Employees (SCALE) India web platform and android app. SCALE will help candidates in the skilling ecosystem to get assessed and certified on their platform will serve as a job portal with access to a certified talent pool of candidates to hire from, leading to increase in productivity and profitability. Employers can share their skill gap requirements and check for suitable training modules available to bridge the skill gap of their workforce and raise training requests for short term/customised training that would be serviced by the LSSC.

LSSC was set up as a non-profit organisation in 2012 as one of the key sector skill councils approved by National Skill Development Corporation (NSDC).

24) C

Statement 1 is correct. The RUDRAM is first indigenous anti-radiation missile of the country being developed by Defence Research and Development Organisation (DRDO). It is a new generation Anti-Radiation Missile and was successfully Flight tested recently onto a radiation target located on Wheeler Island off the coast of Odisha.

Statement 2 is correct. It has INS-GPS navigation with Passive Homing Head for the final attack. The RUDRAM hit the radiation target with pin-point accuracy.

The Passive Homing Head can detect, classify and engage targets over a wide band of frequencies as programmed.

25) A