

Answers

1) C

Shigella is a Gram-negative, non-motile bacillus belonging to the Enterobacteriaceae family, it causes an infection called shigellosis. The infected will have diarrhoea, stomach cramps and fever.

Diarrhoea, often containing blood or mucus in stool, stomach pain, cramps, fever and vomiting are the main symptoms of the infection. Infants, non-breast fed children, children recovering from measles, malnourished children, and adults older than 50 years have a more severe illness and a greater risk of death.

It is highly contagious and can be transmitted after using a common toilet also. The transmission occurs via the faecal-oral route, person-to-person contact, household flies, infected water, and inanimate objects. Pivmecillinam and Ceftriaxone were the only antimicrobials that are usually effective for treatment of multi-resistant strains of Shigella in all age groups.

2) B

Recently, the Reserve Bank of India (RBI) has announced that it will introduce the 'Positive Pay System' for cheques transactions above Rs 50,000 in a bid to enhance safety and eliminate frauds.

Under this process, the issuer of the cheque submits electronically (through channels like SMS, mobile app, Internet banking and ATM) certain minimum details of that cheque to the drawee bank, details of which are cross-checked with the presented cheque by Cheque Truncation System (CTS). The National Payments Corporation of India (NPCI) will develop the facility of Positive Pay in CTS, and make it available to participant banks.

The Positive Pay System will be implemented from January 1, 2021. While availing of this facility is at the discretion of the account holder, banks may consider making it mandatory in case of cheques for amounts of Rs 5, 00,000 and above.

3) C

An aquifer is a body of saturated rock through which water can easily move. Groundwater enters an aquifer as precipitation seeps through the soil. It can move through the aquifer and resurface through springs and wells.

Aquifers must be both permeable and porous and include such rock types as sandstone, conglomerate, fractured limestone and unconsolidated sand and gravel. Fractured volcanic rocks such as columnar basalts also make good aquifers.

An artesian well is simply a well that doesn't require a pump to bring water to the surface. This occurs when there is enough positive pressure in the aquifer to bring the water to the surface.

Groundwater in aquifers between layers of poorly permeable rock, such as clay or shale, may be confined under pressure. If such a confined aquifer is tapped by a well, water will rise above the top of the aquifer and may even flow from the well onto the land surface. Water confined in this way is said to be under artesian pressure, and the aquifer is called an artesian aquifer.

4) B

Tribes India is an outlet focuses on sourcing new, natural, attractive as well as immunity-boosting tribal products and bringing them to the customer. Exquisite Dhokra products from different tribes of India were among the main items added in its 7th edition of "From Our Home to your Home" campaign on Tribes India.

35 new products were included in the Tribes India catalogue over the past week. Key among them are the dhokra style metal work.

5) C

Status of Leopards report was released recently in New Delhi.

Highlights of the report

India now has 12,852 leopards as compared to the previous estimate of 7910 conducted 2014. More than 60% increase in population has been recorded.

The States of Madhya Pradesh, Karnataka and Maharashtra recorded the highest leopard estimates at 3,421, 1,783 and 1,690 respectively. The leopard was estimated across forested habitats in tiger range areas of the country but other leopard occupied areas such as non-forested habitats (coffee and tea plantations and other land uses from where leopards are known to occur), higher elevations in the Himalayas, arid landscapes and majority of North East landscape were not sampled and, therefore, the population estimation should be considered as minimum number of leopards in each of the landscapes.

6) C

To reduce vehicular traffic at the toll plazas, the Government of India (GOI) has mandated all toll plazas; pan India, to make toll payments electronic.

FASTag is a simple to use, reloadable tag which enables automatic deduction of toll charges and lets you pass through the toll plaza without stopping for the cash transaction. FASTag is linked to a prepaid account from which the applicable toll amount is deducted. The tag employs Radio-frequency Identification (RFID) technology and is affixed on the vehicle's windscreen after the tag account is active.

7) C

A tri-hydride of nitrogen (NH_3), ammonia is a building block for ammonium nitrate (NH_4NO_3) that is used in agriculture as a high-nitrogen fertiliser. Ammonia is also used as a refrigerant gas, for purification of water supplies, and in the manufacture of plastics, explosives, textiles, pesticides, dyes and other chemicals.

Ammonia is irritating and corrosive. Exposure to high concentrations of ammonia in air causes immediate burning of the nose, throat and respiratory tract. This can cause bronchiolar and alveolar edema, and airway destruction resulting in respiratory distress or failure.

Inhalation of lower concentrations can cause coughing, and nose and throat irritation. Ammonia's odor provides adequate early warning of its presence, but ammonia also causes olfactory fatigue or adaptation, reducing awareness of one's prolonged exposure at low concentrations.

8) B

National Water Mission (NWM), Ministry of Jal Shakti in collaboration with Nehru Yuva Kendra Sangathan (NYKS), Ministry of Youth Affairs & Sports launched the "JSA II: Catch the Rain" Awareness Generation Campaign recently.

NWM has launched a campaign "Catch the rain" with tag line "catch the rain, where it falls, when it falls" in order to nudge all stake-holders to create Rain Water Harvesting Structures (RWHS) suitable to the climatic conditions and sub-soil strata to store rain water as rains falling in the four/five months of monsoon are the only source of water for most parts of the country.

Some of the activities suggested to be taken up with peoples' active participation under this campaign are:

- To make water harvesting pits
- Rooftop RWHS and check dams
- Removal of encroachments and de-silting of tanks to increase their storage capacity
- Removal of obstructions in the channels which bring water to them from the catchment areas
- Repairs to traditional water harvesting structures like step-wells and using defunct borewells and old wells to put the water back to aquifers

The collaboration with NYKS is a step to engage people at the grassroots through effective campaigning & IEC activities for implementation of the campaign.

9) A

The Registers entail a complete documentation of biodiversity in the area plants, food sources, wildlife, medicinal sources, etc. It will aid in tracing how habitats are changing, and to understand and estimate parts of our forests.

It envisages a decentralised way through an inclusive approach. PBR is prepared in consultation with the local people by Biodiversity Management Committees (BMC), which is established by Biological Diversity Act 2002.

10) D

Fisheries and aquaculture continue to be an important source of food, nutrition, income and livelihood to millions of people. Export earnings from the Fisheries sector has been Rs.46,662.85 crores during 2019-20.

The sector provides livelihood support to about 280 lakh people at the primary level and almost twice the number along the value chain and the annual average growth rate in the Fisheries sector has been 7% over the last few years. Fish being an affordable and rich source of animal protein, is one of the healthiest options to mitigate hunger and nutrient deficiency. India is the second largest fish producing country in the world accounting for 7.56% of global production after China. Fisheries sector is contributing about 1.24% to the country's Gross Value Added (GVA) and over 7.28% to the agricultural GVA.

11) A

12) B

The Barak-8 Surface-to-Air Missile Defence system or LRSAM provides a 360-degree defence against various airborne threats. Complemented by a state-of-the-art multi-mission radar,

flexible control and command system, and two-way data link, Barak-8 can engage multiple targets at the same time during day and night in all weather conditions. Barak-8, jointly developed by the Israel Ministry of Defense (IMOD) and the DRDO (Defence Research and Development Organization) in India, is an advanced groundbreaking air and missile defense system which provides ultimate protection against a variety of aerial platforms, in both land and naval scenarios.

13) A

COVID Vaccine Intelligence Network (CoWIN) system is a digitalised platform to be used to effectively roll out and scale up the mechanism for COVID Vaccine Distribution System, nationally in India.

It has been launched by the Ministry of Health & Family Welfare. Ministry of Health and Family Welfare (MoHFW) along with Ministry of Electronics and Information Technology (MeitY) has announced the launching of “CoWIN”, a Grand Challenge for strengthening the COVID Vaccine Intelligence Network (CoWIN) system.

14) C**15) C**

Prime Minister Narendra Modi will launch Ayushman Bharat PM-JAY SEHAT.

Ayushman Bharat PM-JAY SEHAT

The scheme will ensure Universal Health Coverage and focus on providing financial risk protection and ensuring quality and affordable essential health services to all individuals and communities.

The Scheme provides free of cost insurance cover to all the residents of Jammu and Kashmir. It provides financial cover up to five lakh rupees per family on a floater basis to all residents. It provides for the operational extension of PM-JAY to 15 lakh additional families. The scheme will operate on insurance mode in convergence with PM-JAY. The benefits of the scheme will be portable across the country. The hospitals empanelled under PM-JAY scheme shall provide services under this scheme as well.

Ayushman Bharat

Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (PM-JAY) was launched by Prime Minister in 2018.

The program with its two pillars – Health and Wellness Centres and Pradhan Mantri Jan Arogya Yojna (PM JAY) – is envisaged to achieve UHC. It provides a cover of up to Rs 5 lakh per family per year, for secondary and tertiary care hospitalization for over 10.74 crore vulnerable families (approximately 50 crore beneficiaries), in a cashless and paperless manner, at public and empanelled private hospitals.

16) B

The Government of India will launch STIP 2020, a holistic and pragmatic policy dedicated to Science, technology and most importantly innovation. The policy aims to reorient Science Technology & Innovation (STI) in terms of priorities, sectoral focus and strategies.

A preparatory framework has been developed for the formulation of STIP 2020. This is only the fifth national science, technology, and innovation policy of/for India that follows Science Policy Resolution 1958 (SPR 1958), Technology Policy Statement 1983 (TPS 1983), Science and Technology Policy 2003 (STP 2003) and Science, Technology, and Innovation Policy 2013 (STIP 2013). STIP2020 formulation process is being facilitated jointly by the Office of the Principal Scientific Adviser to the Government of India (Office of PSA) and the Department of Science and Technology (DST).

17) B

Bharat Skills is a e-learning portal of the Directorate General of Training (DGT), Ministry of Skill Development and Entrepreneurship.

Bharatskills is a Central Repository for skills providing easy access for the trainees and trainers of the ITI ecosystem, to access updated curriculums and course content of all courses under the Craftsmen Training Scheme (CTS), Question Banks, mock/practice papers, learning videos, etc., hence enabling anytime, anywhere learning outside the classrooms. This platform also presents a unique access to a centralized, scalable and a thriving support ecosystem through its industrial partners for the students and teachers who can now learn the newer IR 4.0 skills to meet the demands of the industry.

The Directorate General of Training (DGT) joined hands with Microsoft and NASSCOM Foundation to provide a digital content for ITI students and also future-ready employability skilling program for upskilling and reskilling. Nearly 1,20,000 students in around 3000 ITIs across India can be benefited by this digitized e-learning module via the Bharatskills portal.

18) B

19) C

Leprosy mainly affects the skin, the peripheral nerves, mucosal surfaces of the upper respiratory tract and the eyes. Symptoms may occur within a year but can also take as long as 20 years or more to occur.

Based on the number of skin lesions and other symptoms, leprosy is classified as paucibacillary and multibacillary, the latter being more severe. Leprosy is known to occur at all ages and is curable, treatment in the early stages can prevent disability.

Its mode of transmission has never been fully understood, and its likely transmitted via droplets, from the nose and mouth, during close and frequent contact.

20) C

The Sagarmala program is the flagship program of the Ministry of Shipping to promote port-led development in the country through harnessing India's 7,500 km long coastline, 14500 km of potentially navigable waterways and strategic location on key international maritime trade routes.

