

### Answers

### 1) C

According to the 2018 report on "vital statistics of India based on the Civil Registration System (CRS), Arunachal Pradesh recorded the best sex ratio in the country while Manipur recorded the worst sex ratio.

Sex ratio at birth is the number of females born per thousand males. Child Sex ratio is the number of females per thousand males in the age group 0–6 years in a human population.

Arunachal Pradesh recorded 1,084 females born per thousand males, followed by Nagaland (965) Mizoram (964), Kerala (963) and Karnataka (957).

The worst was reported in Manipur (757), Lakshadweep (839) and Daman & Diu (877), Punjab (896) and Gujarat (896).

Delhi recorded a sex ratio of 929, Haryana 914 and Jammu and Kashmir 952.

The prescribed time limit for registration of birth or death is 21 days. Some States however register the births and deaths even after a year.

### 2) D

Union Minister of Education has recently launched the Lilavati Award-2020: AICTE's Innovative education program to empower women virtually. The objective of the award is to create awareness about issues like sanitation, hygiene, health, nutrition, literacy, employment, technology, credit, marketing, innovation, skill development, natural resources and rights among women.

### AICTE Lilavati Award-2020

All India Council for Technical Education (AICTE) has established the Lilavati Award. The award covers multidisciplinary areas such as women's health, self-defence, sanitation, literacy, entrepreneurship and legal awareness.

The program will ensure the participation of women and enable them to hold higher positions in educational institutions.



### 3) A

Recently, the Union Minister for Health and Family Welfare digitally addressed the Ministerial meeting of the Global Prevention Coalition (GPC) for Human immunodeficiency virus (HIV) Prevention. It was hosted by Joint United Nations Program on HIV/AIDS (UNAIDS) and United Nations Population Fund (UNFPA) on behalf of the Global HIV Prevention Coalition (GPC).

The conference this year holds significance in achieving the 2016 UNGA commitment to end AIDS by 2030. Member States of GPC had also agreed to reduce new adult HIV infections by 75% at the end of 2020 from 2010 levels.

### **Global Prevention Coalition**

Global Prevention Coalition (GPC) is a global coalition of United Nations Member States, donors, civil society organizations which was established in the year 2017 to support global efforts to accelerate HIV prevention. It includes the 25 highest HIV burden countries, UNAIDS Cosponsors, donors, civil society and private sector organizations.

It aims to strengthen and sustain political commitment for primary prevention by setting a common agenda among key policy-makers, funders and program implementers. With countries and communities at the centre, it seeks to ensure accountability for delivering prevention services at scale in order to achieve the targets of the 2016 Political Declaration on Ending AIDS, including a 75% reduction in HIV infections towards fewer than 500 000 infections by 2020, and to ending the AIDS epidemic by 2030.

### 4) A

Recently, the United Nations Children's Fund (UNICEF) has released the report "Averting a lost Covid generation". It is the first UNICEF report to comprehensively outline the dire and growing consequences for children as the pandemic goes on.

It shows that while symptoms among infected children remain mild, infections are rising and the longer-term impact on the education, nutrition and well-being of an entire generation of children and young people can be life-altering.

- 5) D
- 6) C

Blood contains red blood cells, for carrying oxygen to tissues and organs, and white or immune cells, for fighting infection. These white cells consist primarily of macrophages, B-lymphocytes



and T-lymphocytes. Macrophages are white blood cells that swallow up and digest germs, plus dead or dying cells. The macrophages leave behind parts of the invading germs called antigens. The body identifies antigens as dangerous and stimulates antibodies to attack them. B-lymphocytes are defensive white blood cells. They produce antibodies that attack the antigens left behind by the macrophages. T-lymphocytes are another type of defensive white blood cell. They attack cells in the body that have already been infected.

- 7) D
- 8) A
- 9) B

Reserve Bank of India in its monthly bulletin stated that India has entered a technical recession in the first half of 2020-21 for the first time in its history with Q2:2020-21 likely to record the second successive quarter of GDP contraction. A technical recession is a term used to describe two consecutive quarters of decline in output. In the case of a nation's economy, the term usually refers to back-to-back contractions in real GDP.

The difference between a 'technical recession' and a 'recession' is that while the former term is mainly used to capture the trend in GDP, the latter expression encompasses an appreciably more broad-based decline in economic activity.

#### 10) C

Sustainable Development Goal 6: Ensure access to water and sanitation for all: While substantial progress has been made in increasing access to clean drinking water and sanitation, billions of people—mostly in rural areas—still lack these basic services. Worldwide, one in three people do not have access to safe drinking water, two out of five people do not have a basic hand-washing facility with soap and water, and more than 673 million people still practice open defecation.

Recognizing the growing challenge of water scarcity, the UN General Assembly launched the Water Action Decade (2018-2028) to mobilize action that will help transform how we manage water.

### 11) C

RNA vaccines work by introducing an mRNA sequence (the molecule which tells cells what to build) which is coded for a disease specific antigen, once produced within the body, the antigen is recognised by the immune system, preparing it to fight the real thing. RNA vaccines are faster



and cheaper to produce than traditional vaccines, and a RNA based vaccine is also safer for the patient, as they are not produced using infectious elements Production of RNA vaccines is laboratory based, and the process could be standardised and scaled, allowing quick responses to large outbreaks and epidemics

- 12) B
- 13) D
- 14) B

The UN has collaborated with The Vaccine Confidence Project at the University of London to undertake Team Halo, an initiative which aims to counter the misinformation around Covid-19 vaccines.

Over 100 scientists have joined the Team Halo to tackle the issue of misinformation around Covid-19 vaccines and build confidence by busting myths and sharing information on the safety and effectiveness of vaccines via the social media. In India, over 22 scientists have joined Team Halo from various renowned institutes.



#### 15) A



### 16) C

IRNSS is an independent regional navigation satellite system being developed by India. It is designed to provide accurate position information service to users in India as well as the region extending up to 1500 km from its boundary, which is its primary service area. An Extended Service Area lies between primary service area and area enclosed by the rectangle from Latitude 30 deg South to 50 deg North, Longitude 30 deg East to 130 deg East. IRNSS will provide two types of services, namely, Standard Positioning Service (SPS) which is provided to all the users and Restricted Service (RS), which is an encrypted service provided only to the authorised users. The IRNSS System is expected to provide a position accuracy of better than 20 m in the primary service area.

It has been accepted as a component of the World Wide Radio Navigation System (WWRNS) for operation in the Indian Ocean Region by the International Maritime Organization (IMO). This will enable merchant vessels to use IRNSS for obtaining position information similar to GPS and GLONASS to assist in the navigation of ships in ocean waters within the area covered by 50°N latitude, 55°E longitude, 5°S latitude and 110°E longitude (approximately up to 1500 km from Indian boundary).

The Maritime Safety Committee (MSC) of IMO during its recent meeting (102nd session) held from 4 to 11 November 2020 has approved the recognition of the IRNSS as a component of the World-Wide Radio Navigation System.

### 17) D

The G-20 operates without a permanent secretariat or staff. The chair rotates annually among the members and is selected from a different regional grouping of countries. The chair is part of a revolving three-member management group of past, present and future chairs referred to as the Troika.

The 15th G20 Summit chaired by the Kingdom of Saudi Arabia, under the theme "Realising the Opportunities of 21st Century for All", is being virtually organised on 21-22 November 2020. India will enter the G20 Troika, along with Saudi Arabia when Italy will take over the Presidency of the G-20 on 1st December, 2020.

### 18) C

The 3rd Global RE-INVEST Renewable Energy Investors Meet & Expo, organised by the Ministry of New and Renewable Energy (MNRE) will be held from 26 – 28 November 2020 on a Virtual Platform.



RE-INVEST 2020, themed 'Innovations for Sustainable Energy Transition' aims to accelerate the worldwide effort to scale up development and deployment of renewable energy and connect the global investment community with Indian energy stakeholders. It will feature a 3-day conference on renewable and future energy choices, and an exhibition of manufacturers, developers, investors and innovators.

#### 19) C

Param Siddhi, the high performance computing-artificial intelligence (HPC-AI) supercomputer established under National Supercomputing Mission (NSM) at C-DAC has achieved global ranking of 63 in TOP 500 most powerful non-distributed computer systems in the world released recently.

The supercomputer was conceived by C-DAC and developed jointly with the support of Department of Science and Technology (DST), Ministry of Electronics and Information Technology (MeitY) under NSM.

Param Siddhi Supercomputer is built on the NVIDIA DGX Super POD reference architecture networking along with C-DAC's indigenously developed HPC-AI engine, software frameworks and cloud platform and will help deep learning, visual computing, virtual reality, accelerated computing, as well as graphics virtualization.

### 20) C

A rare Ebola-like illness that is believed to have first originated in rural Bolivia in 2004 can spread through human-to-human transmission, researchers from the US Centers for Disease Control and Prevention (CDC) have discovered.

### Chapare Virus

The Chapare hemorrhagic fever (CHHF) is caused by the same arenavirus family that is responsible for illnesses such as the Ebola virus disease (EVD).

According to the CDC website, arena viruses like the Chapare virus are generally carried by rats and can be transmitted through direct contact with the infected rodent, its urine and droppings, or through contact with an infected person.

The virus, which is named Chapare after the province in which it was first observed, causes a hemorrhagic fever much like Ebola along with abdominal pain, vomiting, bleeding gums, skin rash and pain behind the eyes