

OFFICERS' Pulse

ISSUE NO. 41 | 15TH MARCH TO 21ST MARCH, 2020

Coverage.

The Hindu
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At a Glance & In Depth.

Polity and Social Issues
Economy
International Relations
Environment
Science and Tech
Culture..

CURRENT AFFAIRS
WEEKLY

THE **PULSE** OF UPSC AT
YOUR FINGER TIPS.



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News @ a glance

POLITY

1) Bill on Central status to 3 Sanskrit deemed universities passed

Why in News?

- A Bill to grant the status of Central universities to three deemed Sanskrit universities have been passed by the Rajya Sabha.

News in Detail:

- The Central Sanskrit Universities Bill, 2020, was passed by the Lok Sabha in December 2019.
- It gives Central status to the Rashtriya Sanskrit Sansthan, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth in Delhi and the Rashtriya Sanskrit Vidyapeeth in Tirupati.
- Several Opposition MPs raised concern that the other five classical Indian languages are being neglected.

Importance of Sanskrit

- Sanskrit is a language having special characteristics and is unique in so many areas like grammar, meaning, pronunciation, accuracy etc.
- The Devanagari script is otherwise of Sanskrit only and a lot of words in many Indian languages are derived from Sanskrit.
- Sanskrit language is not only a language but an identity of the great cultural diversity of this country and hence it is known as an unique language. Due to these factors, it is imperative to promote the study and research in Sanskrit language.

About the 'Classical' languages in India:

- Currently, six languages enjoy the 'Classical' status
 1. Tamil (declared in 2004),
 2. Sanskrit (2005),
 3. Kannada (2008),
 4. Telugu (2008),
 5. Malayalam (2013), and
 6. Odia (2014).

- The guidelines for declaring a language as 'Classical' are:
- High antiquity of its early texts/recorded history over a period of 1500-2000 years.
- A body of ancient literature/texts, which is considered a valuable heritage by generations of speakers.
- The literary tradition be original and not borrowed from another speech community;
- The classical language and literature being distinct from modern, there may also be a discontinuity between the classical language and its later forms or its offshoots.

2) Nominated members in Rajya Sabha

About Members elected in Rajya Sabha:

- The maximum strength of the Rajya Sabha is 250 out of which **12 members are nominated by the President** and 238 are representatives of the States and of the Union territories.
- The members nominated by the President are persons having **special knowledge or practical experience in respect of such matters as literature, science, art and social service.**
- The allocation of seats to be filled by representatives of States and the Union territories is laid down in the **Fourth Schedule** to the Constitution.
- The representatives of States are elected by the elected members of the Legislative Assemblies of the respective States in accordance with the system of proportional representation by means of the single transferable vote. The representatives of the Union territories are chosen in such a manner as Parliament may, by law, prescribe.
- The Rajya Sabha is **not subject to dissolution; one-third of its members retire every second year.**

Constitutional provisions for the nominated members:

- 80(1)(a) of the Constitution of India makes provision for the nomination of 12 members to the Rajya Sabha by the President of India in accordance with provisions of Arts.80(3).
- 80(3) says that the persons to be nominated as members must be possessing special knowledge or practical experience in respect of such matters as the following namely : Literature, science, art and social service.

Why in News?

- Former Chief Justice of India (CJI) Ranjan Gogoi has been nominated to Rajya Sabha.

News in Detail:

- The President of India has nominated the former Chief Justice to the Rajya Sabha, as a member of eminence.
- Justice Gogoi will not be the first CJI to sit in the Rajya Sabha. The 21st CJI, Rangnath Mishra, served as an MP in the Upper House from 1998 to 2004. However, Justice Mishra was a Congress MP, not a member of eminence appointed by the President.
- Justice Gogoi retired in November 2019, after being part of important verdicts like the Ayodhya land dispute, the Sabarimala review and also supervised the exercise to update the National Register of Citizens in Assam.
- Former Supreme Court Judge Mr. Joseph Kurian said, "The acceptance of nomination as member of the Rajya Sabha by a former Chief Justice of India has certainly shaken the confidence of the common man in the independence of the judiciary, which is part of the Basic Structure of the Constitution".

Law Commission recommendations

- In its 14th report in 1958, the Law Commission noted that retired Supreme Court judges used to engage in two kinds of work after retirement
- Firstly, "chamber practice" (a term which would, today, mean giving opinions to clients and serving as arbitrators in private disputes).
- Secondly, "employment in important positions under the government".
- Ban on post-retirement government employment: It strongly recommended banning post-retirement government employment for Supreme Court judges

because the government was a large litigant in the courts.

- The Commission's recommendations were never implemented.

3) Breach of Privacy

Why in News?

- The Cellular Operators Association of India has reported mass requests from the government for mobile call detail records (CDRs).

Background:

- As a serious departure from the stringent protocol established by the UPA government following an uproar in 2013 after prominent politicians were found to be under unauthorised surveillance.
- Records have been sought for all consumers .In the case of Delhi; records were sought for the last three days of campaigning before assembly elections, while the anti-CAA protests were at their peak.
- Requests were delivered by local offices of the Department of Telecommunications, taking advantage of a condition in licences granted to operators, which permits the DoT to inspect their CDRs, which go back one year.

What is the protocol for requesting CDR information?

- A CDR request is supposed to be sanctioned by the home secretary and handled by a police officer of the rank of SP or above, but in this case DoT offices were used.
- The requirement of informing the magistrate was not fulfilled: The requirement to report CDR requests on a monthly basis to the district magistrate was not complied with.
- No reason was offered: Most importantly, no reason was offered for snooping on the traffic of citizens.
- Surveillance must be specific and purposive: It is generally understood that communications surveillance must be specific and purposive, and must not trespass on the privacy of the innocent.
- Invasion of privacy of all citizens: Indiscriminate mass surveillance of communications invades the privacy of all citizens to the detriment of public trust. In this case, it was for purposes which are not

verifiably honourable, since the government has chosen not to reveal them.

Concern:

- CDRs are all metadata and have no content. They do not reveal any words uttered or messaged.
- But combining the metadata with phone location data reveals a lot about connections between specific people and the actions that they take.

- If data is available at scale, as was the case here, it is possible to build a multi-dimensional map of human activity, and correlate it with real events.
- This would disturb the balance of information power between the citizen and the state, and amount to a breach of privacy.

ENVIRONMENT

1) World Sparrow Day



Key Facts

A	<i>Common Name</i> House sparrow
Aa	<i>Scientific Name</i> <i>Passer domesticus</i>
	<i>Population</i> Unknown
	<i>Height</i> 16 cm
	<i>Length</i> Wingspan of 21 cm
	<i>Weight</i> 25-40 gm
	<i>Status</i> Listed as Least Concern on the IUCN Red List

Why in the news?

- Recently World Sparrow day was celebrated on 20th March



About House Sparrows

- The house sparrow is not only among the most commonly found bird species in urban cities, but also the most loved. They occur naturally in most of Europe, the Mediterranean region, and much of Asia.
- Fossil evidence from a cave in Bethlehem dating back 4,00,000 years suggests that the house sparrow shared its space with early humans.
- Around the start of agriculture, the urban house sparrow split from the wild birds; it

has a pair of genes, AMY2A, that helps it digest complex carbohydrates, the reason that it shares our love of starchy wheat and rice.

- They feed mostly on seeds, but in the breeding season, adults feed their young with insects.

Causes for Decline

- The house sparrow has evolved with humans, known only to live in close contact with us, instead of forests.
- For years, it has peacefully coexisted with us in our buildings and gardens, but in the last two decades, their population is on the decline in almost every city. Some of the causes are:
 - Unfriendly architecture of our homes
 - Chemical fertilisers in our crops
 - Noise pollution that disturbs acoustic ecology and
 - Noxious exhaust fumes from vehicles

Conservation Efforts taken:

- House sparrow being declared the state bird of Delhi in 2012.
- World Sparrow Day, an initiative of Nature Forever Society (a non-governmental, non-profit organization), has been celebrated since 2010 on MARCH 20th to spread awareness.

2) International Day of Forests

About:

- The United Nations General Assembly proclaimed **21 March** the International Day of Forests in 2012.
- The Day celebrates and raises awareness of the importance of all types of forests. On each International Day of Forests, countries are encouraged to undertake local, national and international efforts to organize activities involving forests and trees, such as tree planting campaigns.
- The theme for each International Day of Forests is chosen by the **Collaborative Partnership on Forests** (informal, voluntary arrangement among 15 international organizations and secretariats with substantial programmes on forests.).
- The theme for 2020 is **Forests and Biodiversity**.

ECONOMY

1) MSME definition

What is the definition of MSME?

- The Government enacted the **Micro, Small and Medium Enterprises Development (MSMED) Act, 2006** in terms of which the definition of micro, small and medium enterprises is as under:
- Enterprises engaged in the **manufacture or production, processing or preservation of goods** as specified below:
 1. A **micro enterprise** is an enterprise where investment in plant and machinery does not exceed Rs. 25 lakh;
 2. A **small enterprise** is an enterprise where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed Rs. 5 crore;
 3. A **medium enterprise** is an enterprise where the investment in plant and machinery is more than Rs.5 crore but does not exceed Rs.10 crore.
- 4. Enterprises engaged in providing or rendering of **services** are specified below.
- 5. A **micro enterprise** is an enterprise where the investment in equipment does not exceed Rs. 10 lakh;
- 6. A **small enterprise** is an enterprise where the investment in equipment is more than Rs.10 lakh but does not exceed Rs. 2 crore;
- 7. A **medium enterprise** is an enterprise where the investment in equipment is more than Rs. 2 crore but does not exceed Rs. 5 crore.

MSME's contribution to economy

- In India, the MSME sector currently contributes **24% of the GDP growth** and **48% of exports**, with an annual turnover of Rs. 1 lakh crore this year.
- A target of Rs.5 lakh crore in five years had been set by the government.

Why in News?

- The government announced that it would soon come out with a new definition of MSMEs, which are currently defined on the **basis of investment** in plant and machinery.
- Member of Parliament Jairam Ramesh suggested that MSME units should be defined on the **basis of turnover** as it

would increase compatibility with the Goods and Services Tax (GST) system.

2) Open Market Operations

What are Open Market Operations (OMOs)?

- Open Market Operations are conducted by the RBI which involves sale or purchase of **G-Secs** to or from the market. The objective is to control the **money supply conditions**.
- If there is excess money supply (i.e. excess liquidity) in the market, the RBI resorts to sale of securities which reduces the volume of money. Similarly, when the liquidity conditions are tight, it buys securities from the market, thereby releasing money into the market.

What are Government Securities (G-Secs)?

- G-Secs are tradable instruments like bonds issued by the Central Government or the State Governments with a promise of repayment upon maturity.
- The Central Government can issue both treasury bills and bonds while the State Governments can issue **only bonds**, which are called the State Development Loans (SDLs).
- These securities are considered low-risk, since they involve the government and hence, are called **risk-free gilt-edged instruments**.

Why in News?

- The RBI has decided to infuse Rs 10,000 crore liquidity in the banking system by buying government securities through open market operations.

3) COVID-19 will impact GDP growth by 90 bps

About SBI

- Founded in 1806, Bank of Calcutta was the first Bank established in India and over a period of time evolved into State Bank of India (SBI).
- The Government of India nationalized SBI in **1955**.
- SBI is the **largest state-owned banking and financial services company** in India.

Why in News?

- SBI has released a report analysing the impact of COVID-19 on Indian economy.

Highlights of the report

- The spread of COVID-19 could impact the economic growth of the country by 90 basis points (100 basis points is equivalent to 1%).
- Since China is an important source of critical inputs for many sectors, the supply shock due to COVID-19 can lead to a higher price of inputs, which, in turn, could affect the price of all the commodities up the supply chain.
- A simultaneous demand and supply shock to the economy will also have implications for the banking sector. The demand side shock is expected to lead to an output loss of 1.2% in banking and insurance combined.
- The report recommends a combination of monetary and fiscal policy to tackle the current COVID-19 outbreak.

4) Adjusted Gross Revenue (AGR)

What is AGR?

- Telecom operators are required to **pay licence fee and spectrum charges** in the form of 'revenue share' to the Centre. The revenue amount used to calculate this revenue share is termed as the AGR.

Issues related to calculation of AGR

- According to the Department of Telecommunications' (DoT), the calculations should incorporate all revenues earned by a telecom company – including from **non-telecom sources** such as deposit interests and sale of assets.
- The companies, however, have been of the view that AGR should comprise the revenues generated from telecom services only and non-telecom revenues should be kept out of it.
- The tussle between DoT and the telecom companies has been on since 2005.

SC Judgement

- In 2019, the Supreme Court upheld the DoT's definition of AGR.

Why in News?

- Vodafone Idea paid Rs 3354 crore to the DoT as a part of its AGR liability.

5) Fuel Prices

How fuel prices are fixed in India?

- From June 2017, retail prices of petrol and diesel in India are revised by oil companies on a **daily basis**, according to changes in the price of global crude oil. This is called the **dynamic fuel price method**.
- This makes sure that even a minute's variation in global oil prices can be transmitted to fuel users and dealers. Before this fuel prices were revised every fortnight.

Taxes on fuel

- Taxes on fuel include **central excise duty** levied by the central government, and **Value Added Tax (VAT)** charged by the states (which varies from state to state).
- **Double taxation**
- The taxation structure with respect to fuels such as petrol and diesel are criticised by some economists as it involves double taxation.
- For eg: When an oil marketing company sells a litre of petrol to dealers, the dealer applies his commission, while the Centre applies its excise duty, at a fixed rate.
- On this landed price, the state applies its VAT, which gets applied on the excise duty, resulting in double taxation (i.e. tax on already taxed product).
- **Why in News?**
- The central government has hiked excise duty on petrol and diesel by Rs 3 per litre.
- Retail prices of petrol and diesel will not be impacted by the tax changes as state-owned oil firms adjusted them against the recent fall in oil prices.
- With this, the total incidence of excise duty on petrol has risen to Rs 22.98 per litre and that on diesel to Rs 18.83.

INTERNATIONAL RELATIONS

1) IMF rejects Venezuela's \$5 bn virus aid request

About International Monetary Fund (IMF)

- The IMF was conceived in 1944 at the **United Nations Bretton Woods Conference** in New Hampshire, United States.
- The IMF and the World Bank are called **Bretton Woods twins**.
- The IMF is a permanent observer at the UN.
- It is an organization of 189 countries (including **India**).
- The mandate of the IMF as follows:
 1. To promote international monetary cooperation;
 2. To facilitate the expansion and balanced growth of international trade;
 3. To promote exchange stability;
 4. To assist member countries in correcting maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity;
 5. To assist in the elimination of foreign exchange restrictions which hamper the growth of world trade;

Why in News?

- The IMF rejected Venezuela's request for a \$5 billion loan to help it cope with the onslaught of COVID-19 on the country.

2) SAARC Coronavirus Emergency Fund

About SAARC

- The South Asian Association for Regional Cooperation (SAARC) was established in 1985 with 7 founding members.
- SAARC now comprises **eight Member States**: Afghanistan (joined in 2007), Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.
- There are nine observer countries namely Australia, China, European Union, Iran, Japan, Mauritius, Myanmar, South Korea, and the United States.
- The Secretariat of the Association is located in **Kathmandu, Nepal**.

Coronavirus Emergency Fund

- Recently, Prime Minister Narendra Modi invited members of the SAARC to create a fund to fight the threat of COVID-19.
- Mr. Modi extended \$10 million as India's contribution to the fund.

Why in News?

- Maldives pledged \$200,000 contribution to the SAARC Corona Emergency Fund.
- Nepal and Bhutan also pledged nearly \$1 million and \$100,000 respectively to the Emergency Fund.

3) G7 Summit

About G7

- The Group of Seven (G7) is a collective of seven of the world's most industrialized and developed economies. Their political leaders come together annually to discuss important global economic, political, social and security issues.
- The G7 member countries are the **United States, Britain, France, Japan, Germany, Italy, and Canada**.
- Russia belonged to the forum from 1998 through 2014, when the bloc was known as the G8, but was suspended following its annexation of Crimea.
- **India is not a member** of the G-7 grouping.



Why in News?

- US President Donald Trump has decided to hold this year's G7 summit through video-conference due to the coronavirus crisis.

SCIENCE AND TECHNOLOGY

1) How does soap use help in tackling COVID-19?

Why in News?

- Guidelines by the **World Health Organization** specify that one of the ways to reduce the risk of COVID-19 infection is by regularly and thoroughly cleaning one's hands with an **alcohol-based hand rub** or washing them with **soap and water**.
- Regular washing becomes important as the **virus tends to be viable from hours to more than a day** on different surfaces that are regularly touched with hands.

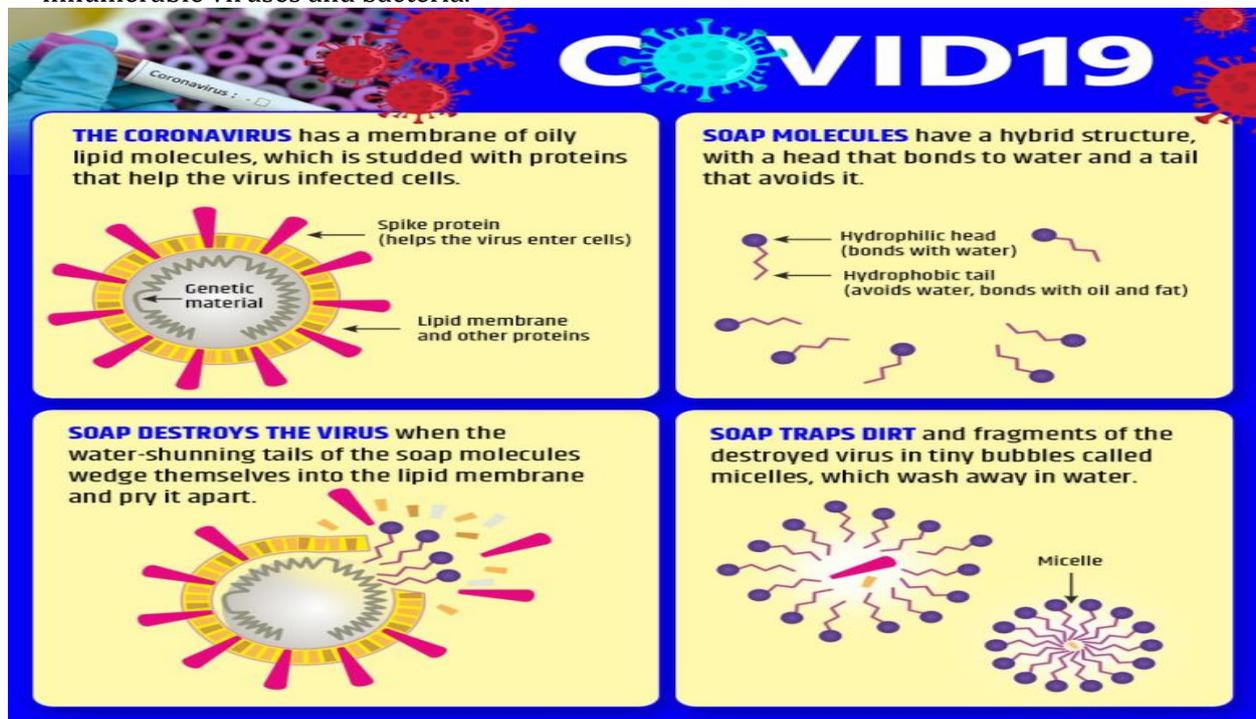
Water alone is insufficient

- The grime on our hands contains innumerable viruses and bacteria.

- Washing with water without using soap **helps reduce the amount of microbes** but **does not remove completely** the virus and bacteria.
- Using soap, therefore, becomes far more effective in removing microbes.

How does washing with soap help get rid of the coronavirus?

- Viruses such as coronavirus, influenza-causing viruses, Ebola, Zika have their genetic material **encased in a layer of fat** called the **lipid envelop**.
- Soap molecules are pin-shaped with a head that is water-loving (hydrophilic) and a tail that is oil-loving (oleophilic).



- Being oleophilic, the tail portion of the molecule tends to have an affinity for and 'competes' with the lipids in the virus envelope.
- Since the chemical bonds holding the virus together are not very strong, the long oleophilic tail gets inserted into the envelope and tends to have a 'crowbar' effect that breaks the lipid envelope of the virus.
- The tail also competes with the bond that binds the RNA and the lipid envelop thus

dissolving the virus into its components which are then removed by water.

Do all viruses have the lipid layer?

- No, certain viruses do not have the lipid envelop and are called the non-enveloped viruses.
- Examples: Rotavirus which causes severe diarrhoea, poliovirus, adenovirus that cause pneumonia and human papillomavirus (HPV)
- The oil-loving tail of the soap molecule also disrupts the bond that binds dirt and non-enveloped viruses to the hand.

- The dirt and viruses are surrounded by several tails making them remain as suspended particles.
- Rinsing with water washes away the suspended particles leading to clean hands.

How do alcohol-based hand sanitizer help get rid of coronavirus?

- Like soap, the alcohol present in hand sanitisers dissolve the lipid envelop, thus inactivating the virus.



- To be effective, the sanitizers should contain **at least 60% alcohol**.
- Unlike water, alcohol run does not remove the dead viruses from the hand.
- While a sanitizer can quickly reduce the number of microbes, it does not get rid of all types of germs, and is “not as effective when hands are visibly dirty or greasy”.

2) TIFR study reveals role of glucose in regulating liver functions, ageing

Why in News?

- A study by researchers from Tata Institute of Fundamental Research, Mumbai (TIFR) shows that **glucose controls the function of SIRT1 directly**.
- SIRT1 is an enzyme known to be associated with regulation of metabolic activities and also ageing and hence has become a target of therapeutics.
- A shortage or absence of this control can lead to a diabetic-like state, while excess feeding and sustained low levels of SIRT1 can lead to obesity and enhanced ageing.

Role of glucose

- SIRT1 maintains everyday **feed-fast cycles** and is also associated with longevity.
- In normal healthy individuals, SIRT1 protein levels are known to increase during fasting and decrease during feed, which is essential to maintain a balance between glucose and fat metabolism.
- Glucose puts a check on the activity of SIRT1 in the fed state.
- In the absence of this check, SIRT1 activity increases and results in hyperglycemia in a fasted state, mimicking diabetic state.
- Constant feeding or high calorie intake that leads to sustained reduction in the levels of SIRT1 (by glucose) is associated with ageing and obesity.
- The study shows that both over-activation and under-activation of this longevity factor could lead to diseases.

Future steps

- This study paves the way to regulating this modification, which might be beneficial in tackling lifestyle disorders and ageing related diseases.

3) WASP-76b - Exoplanet where it rains iron

Why in News?

- Researchers using **European Southern Observatory (ESO)'s Very Large Telescope (VLT)** have observed an extreme planet- **WASP-76b** -where they suspect it rains iron.

News in Detail

- WASP-76b is located some **640 light-years** away in the **constellation of Pisces**.
- The ultra-hot giant exoplanet has a day side where temperatures climb above 2400 degrees Celsius, high enough to vaporise metals.
- Strong winds carry iron vapour to the cooler night side where it condenses into iron droplets.

Why does it rain iron?

- This strange phenomenon happens because the 'iron rain' planet only ever shows one face, its day side, to its parent star, its cooler night side remaining in perpetual darkness.
- Like the Moon on its orbit around the Earth, WASP-76b is '**tidally locked**': it takes as long to rotate around its axis as it does to go around the star.

- On its day side, it receives thousands of times more radiation from its parent star than the Earth does from the Sun.
- It's so hot that molecules separate into atoms, and metals like iron evaporate into the atmosphere.
- The extreme temperature difference between the day and night sides results in vigorous winds that bring the iron vapour from the ultra-hot day side to the cooler night side, where temperatures decrease.
- It is raining iron on the night side of this extreme exoplanet.

4) Real-time polymerase chain reaction (real-time PCR)

About real-time PCR

- A real-time polymerase chain reaction (real-time PCR), also known as **quantitative polymerase chain reaction (qPCR)**, is a laboratory technique of molecular biology based on the polymerase chain reaction (PCR).
- It monitors the **amplification of a targeted DNA molecule** during the PCR (i.e., in real time), not at its end, as in conventional PCR.

Applications

- There are numerous applications for quantitative polymerase chain reaction in the laboratory.
- It is commonly used for both **diagnostic and basic research**.
- Uses of the technique in industry include the quantification of **microbial load in foods** or on vegetable matter, the **detection of GMOs** (Genetically modified organisms) and the quantification and **genotyping of human viral pathogens**.

Diagnostic uses

- Diagnostic qualitative PCR is applied to rapidly detect nucleic acids that are diagnostic of, for example, **infectious diseases, cancer and genetic abnormalities**.
- The introduction of qualitative PCR assays to the clinical microbiology laboratory has significantly **improved the diagnosis** of infectious diseases.
- It is deployed as a tool to detect newly emerging diseases, such as **new strains of flu and coronavirus**, in diagnostic tests.

Why in News?

- The Union Government has allowed “high quality” accredited private labs to conduct the tests of coronavirus samples to ramp up its COVID-19 testing capabilities.
- The tests are real time polymerase chain reaction tests (RT-PCR) that can, within a day — sometimes in hours — confirm the presence of SARS-COV2.

5) The time is right for OneHealth science

What is 'One Health'?

- 'One Health' is an approach of designing and implementing programmes, policies, legislation and research in which **multiple sectors communicate and work together** to achieve better public health outcomes.
- The areas of work in which a One Health approach is particularly relevant include **food safety, the control of zoonoses** (diseases that can spread between animals and humans, such as flu, rabies), and **combating antibiotic resistance**.

Why do we need a One Health approach?

- Many of the same microbes infect animals and humans, as they share the ecosystems they live in.
- Efforts by just one sector cannot prevent or eliminate the problem.
- For instance, rabies in humans is effectively prevented only by targeting the animal source of the virus (for example, by vaccinating dogs).
- Information on influenza viruses circulating in animals is crucial to the selection of viruses for human vaccines for potential influenza pandemics.
- Drug-resistant microbes can be transmitted between animals and humans through direct contact between animals and humans or through contaminated food.
- So to effectively contain it, a well-coordinated approach in humans and in animals is required.

Who makes the One Health approach work?

- Many professionals with a range of expertise who are active in different sectors, such as public health, animal health, plant health and the environment, should join forces to support One Health approaches.
- To effectively detect, respond to, and prevent outbreaks of zoonoses and food

safety problems, epidemiological data and laboratory information should be shared across sectors.

- Government officials, researchers and workers across sectors at the local, national, regional and global levels should implement joint responses to health threats.
- WHO, works closely with the **Food and Agriculture Organization of the United Nations (FAO)** and the **World Organisation for Animal Health (OIE)** to promote multi-sectoral responses to food safety hazards, risks from zoonoses, and other public health threats at the human-animal-ecosystem interface and provide guidance on how to reduce these risks.

Why in News?

- The frequency with which new pathogens are emerging or old ones are re-emerging across the world are alarm calls for greater transparency, cross-country collaborations, and enhanced national infrastructure and capacity for integrated OneHealth science.

6) Defence Ministry places order for 16,479 Negev LMG

Why in News?

- The Ministry of Defence (MoD) on Thursday signed a ₹880-crore contract with the **Israeli Weapon Industries (IWI)** for 16,479 Light Machine Guns (LMG).

News in Detail



- The contracted **Negev 7.62X51 mm LMG** is a combat-proven weapon and currently used by several countries and would greatly enhance the lethality and range of a soldier compared to the presently used weapon.

SIG-716

- The Army has recently begun inducting the first batch of 10,000 **SIG-716 assault rifles** with troops engaged in counter-insurgency operations in the Northern Command.



- The rifles are being procured under a contract signed in February 2019 with **Sig Sauer** of the **U.S.** for **72,400 SIG-716** assault rifles worth over ₹700 crore.

AK-203



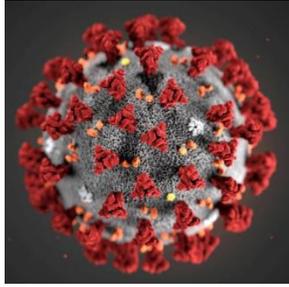
- The Army is also close to signing the final deal for the procurement of over 7.5 lakh AK-203 assault rifles most of which **would be manufactured locally by an India-Russia Joint Venture (JV)** under technology transfer.

7) SARS-CoV-2 virus

What are coronaviruses?

- Coronaviruses are a large family of viruses with some causing less severe common cold to more severe diseases such as **severe acute respiratory syndrome (SARS)** and **Middle East respiratory syndrome (MERS)**.
- The **SARS-CoV-2** is a coronavirus very similar to the one that caused SARS.
- Many coronaviruses are **zoonotic**, meaning they are transmitted from animals to humans.
- SARS coronavirus is thought to be an animal virus from an **as-yet-uncertain animal reservoir**, perhaps bats, that spread to other animals (civet cats) and first infected humans in the **Guangdong** province of southern China in 2002.
- The MERS coronavirus was passed on from **dromedary camels** to humans in **Saudi Arabia in 2012**.
- There is evidence that the SARS-CoV-2 has also been transmitted from **bats**.

A closer look at SARS-CoV-2



- Like other coronaviruses, SARS-CoV-2 virus particles are **spherical** and have mushroom-shaped proteins called **spikes** protruding from their surface, giving the particles a crown-like appearance.
- The **spike binds and fuses to human cells**, allowing the virus to gain entry.
- Like SARS coronavirus, the spike protein of the SARS-CoV-2 that causes Coronavirus Disease 19 (COVID-19) binds to the **cellular receptor** called **angiotensin-converting enzyme 2 (ACE2)**, which serves as the **entry point into human cells**.
- But unlike in the case of SARS, the spike protein of the novel coronavirus binds to the cell receptor with much higher affinity — 10- to 20-fold higher.

High transmissibility

- The much greater binding affinity to the cell receptor explains the apparent **high human-to-human transmissibility** of the virus compared with the SARS coronavirus.
- Since both the SARS coronavirus and the 2019 novel coronavirus share structural similarity and bind to the same receptor, the researchers tested three monoclonal antibodies specific to SARS virus for their ability to bind to the novel coronavirus.
- But none of the three antibodies tested were found to be effective in inhibiting the novel coronavirus from binding to the human receptor ACE2 and prevent or treat the disease.

Spike structure

- Mapping the **3D structure** of the protein — **spike (S) glycoprotein** — will allow better understanding of how the virus binds to the human cells.
- Knowing the structure of the spike protein will, in turn, allow scientists **to develop vaccines and antivirals** against the virus and even better diagnostics.

Genome sequencing

- When the entire genome is sequenced, it helps researchers understand the arrangement of the four chemical entities or bases that make up the DNA or RNA.
- The differences in the arrangement of the bases make organisms different from one another.
- **Sequencing** the genome of SARS-CoV-2 will **help us understand where the virus came from and how it spread**.
- For instance, by sequencing the genome of the virus isolated from an Indian patient, it will become possible to know if the virus had come from China or any other country
- In India, the Pune-based National Institute of Virology (NIV) has sequenced the SARS-CoV-2 genome collected from two patients in Kerala.

8) COVID-19

Understanding the disease

- The **World Health Organisation** has declared COVID-19 to be a **pandemic**.
- The **symptoms** of COVID-19 appear within **two to 14 days** after exposure and include **fever, cough, a runny nose and difficulty in breathing**.

How does the disease spread?

- It primarily spreads through the respiratory droplets of infected people.
- If a person touches a surface or object that has been infected by the virus and then touches his own mouth, nose, or eyes, he may get infected.

Who is affected?

- While people of all ages can be affected by the disease, people aged 80 and above are at the highest risk of dying due to COVID-19.
- Victims of the virus with pre-existing medical conditions such as cardiovascular disease and diabetes have a higher fatality rate than others.

Severity

- As per the guidelines from the Union Health Ministry, “COVID-19 may present with mild, moderate, or severe illness; the latter includes severe **pneumonia, ARDS [Acute Respiratory Distress Syndrome], sepsis and septic shock.**”

What is the treatment?

- There is no current evidence from randomised controlled trials to recommend

any specific treatment for suspected or confirmed COVID19 patients.

- **No specific antivirals** are recommended for treatment of those suffering from respiratory ailment due to lack of adequate evidence from medical literature.
- In India, the Union Health Ministry guidelines have recommended use of **anti-HIV drug combinations Lopinavir and Ritonavir** on a case-to-case basis depending upon the severity of the condition.
- The Ministry recommended Lopinavir-Ritonavir for high-risk groups: patients aged above 60, suffering from diabetes mellitus, renal failure, and chronic lung disease and are immuno-compromised.
- Application of timely, effective, and safe **supportive therapies** is the cornerstone of

therapy for patients that develop severe manifestations of COVID-19.

Can a vaccine be developed for COVID-19?

- There are two ways of going for vaccine preparation — either the **sequences of the gene** may lead to development of antibodies, or actually having the **strain** and then try to develop a vaccine which is always an easier option.
- Indian scientists have managed to successfully isolate the COVID-19 virus and about 11 isolates are available which is a prime requisite for doing any kind of research related to viruses and developing the vaccine.
- Internationally, several institutes and pharmaceutical companies are in various stages of developing the vaccine with some set to go on clinical trials soon.

ART & CULTURE

1) India has 38 World Heritage Sites at present

Why in News?

- At present, India has 38 World Heritage Sites. The world heritage sites are well conserved and in good shape.

Cultural Sites (30)

- Agra Fort (1983)
- Ajanta Caves (1983)
- Archaeological Site of Nalanda Mahavihara at Nalanda, Bihar (2016)
- Buddhist Monuments at Sanchi (1989)
- Champaner-Pavagadh Archaeological Park (2004)
- Chhatrapati Shivaji Terminus (formerly Victoria Terminus) (2004)
- Churches and Convents of Goa (1986)
- Elephanta Caves (1987)
- Ellora Caves (1983)
- Fatehpur Sikri (1986)
- Great Living Chola Temples (1987,2004)
- Group of Monuments at Hampi (1986)
- Group of Monuments at Mahabalipuram (1984)
- Group of Monuments at Pattadakal (1987)
- Hill Forts of Rajasthan (2013)
- Historic City of Ahmedabad (2017)
- Humayun's Tomb, Delhi (1993)
- Jaipur City, Rajasthan (2019)
- Khajuraho Group of Monuments (1986)
- Mahabodhi Temple Complex at Bodh Gaya (2002)
- Mountain Railways of India (1999,2005,2008)
- Qutb Minar and its Monuments, Delhi (1993)
- Rani-ki-Vav (the Queen's Stepwell) at Patan, Gujarat (2014)
- Red Fort Complex (2007)
- Rock Shelters of Bhimbetka (2003)
- Sun Temple, Konârak (1984)

- Taj Mahal (1983)
- The Architectural Work of Le Corbusier, an Outstanding Contribution to the Modern Movement (2016)
- The Jantar Mantar, Jaipur (2010)
- Victorian Gothic and Art Deco Ensembles of Mumbai (2018)

Natural Sites (7)

- Great Himalayan National Park Conservation Area (2014)
- Kaziranga National Park (1985)
- Keoladeo National Park (1985)
- Manas Wildlife Sanctuary (1985)
- Nanda Devi and Valley of Flowers National Parks (1988,2005)
- Sundarbans National Park (1987)
- Western Ghats (2012)

Mixed Sites (1)

- Khangchendzonga National Park (2016)

About the World Heritage Convention:

- The most significant feature of the 1972 World Heritage Convention is that it links together in a single document the concepts of nature conservation and the preservation of cultural properties.
- The Convention sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them.
- By signing the Convention, each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage.
- It explains how the World Heritage Fund is to be used and managed and under what conditions international financial assistance may be provided.
- The Convention stipulates the obligation of States Parties to report regularly to the World Heritage Committee on the state of conservation of their World Heritage properties.

PIB ANALYSIS

1) Mission Solar Charkha

About:

- Ministry of Micro, Small and Medium Enterprises (MSME) has launched the Mission Solar Charkha in 2018-19 for implementation of 50 Solar Charkha Clusters across the country.
- The aims and objectives of Mission Solar Charkha are:-
- To ensure inclusive growth by generation of employment, especially for women and youth and sustainable development through solar charkha clusters in rural areas.
- To boost the rural economy and help in arresting migration from rural to urban areas.
- To leverage low-cost, innovative technologies and processes for substance.
- The **Khadi and Village Industries Commission (KVIC)** would implement the programme.

Why in News?

- This information was given by the Union Minister for Micro, Small and Medium Enterprises in a written reply to a question in Rajya Sabha. Till date, 10 projects have been approved under Mission Solar Charkha. One Solar Charkha cluster has been identified in Andhra Pradesh. The scheme envisages generating direct employment to nearly one lakh persons.

2) Efforts to Boost Defence Sector

News in Detail:

- The efforts made by Government to boost country's defence sector during the last two years are as follows:
- **Industrial licensing:** The Industrial licensing regime for Indian manufacturers in the Defence sector has been liberalized.
- **FDI:** FDI Policy has been revised and under the revised policy. Foreign Investment is allowed under **automatic route upto 49% and above 49% through government route**, wherever it is likely to result in access to modern technology or for other reasons to be recorded.
- **Defence Procurement Procedure (DPP):** A new category of procurement 'Buy {Indian-IDD (Indigenously Designed,

Developed and Manufactured}}' has been introduced in DPP-2016 to promote indigenous design and development of defence equipments. Besides this, preference is being given to 'Buy (Indian)' and 'Buy & Make (Indian)' categories of capital acquisition over 'Buy (Global)' & 'Buy & Make (Global)' categories.

- **"Make" Procedure:** A separate procedure for 'Make-II' sub-category has been notified wherein a number of industry friendly provisions have been introduced.
- Government has notified the **'Strategic Partnership (SP)' Model** which envisages establishment of long-term strategic partnerships with Indian entities through a transparent and competitive process, wherein they would tie up with global Original Equipment Manufacturers (OEMs) to seek technology transfers to set up domestic manufacturing infrastructure and supply chains.
- **iDEX:** Innovations for Defence Excellence (iDEX) framework, was launched with the aim to achieve self-reliance and to foster innovation and technology development in Defence and Aerospace Sector by engaging Industries including MSMEs, startups, individual innovators, R&D institutes and academia.
- **Indigenisation policy:** Government has notified a Policy for indigenisation of components and spares used in Defence Platforms.
- **Defence Corridors:** Government has decided to establish two defence industrial corridors to serve as engines of economic development and growth of defence industrial base in the country. They span across Chennai, Hosur, Coimbatore, Salem and Tiruchirappalli in Tamil Nadu and Aligarh, Agra, Jhansi, Kanpur, Chitrakoot and Lucknow in Uttar Pradesh.
- The Ministry has instituted a new framework titled **'Mission Raksha Gyan Shakti'** which aims to provide a boost to the IPR culture in indigenous defence industry.

3) Gross Enrolment Ratio (GER) for females

Why in News?

- Union Minister for Human Resource Development informed Lok Sabha about Gross Enrolment Ratio (GER) for females.

What is the Gross Enrolment Ratio?

- GER is a statistical measure for determining the number of students enrolled in undergraduate, postgraduate and research-level studies within a country and expressed as a percentage of population.

News in Detail:

- As per All India Survey on Higher Education (AISHE) 2018-19, there are 39931 colleges in India, out of which 60.53% are located in rural areas. Further, majority of the colleges provide higher education to both males and females and 11.04% colleges are exclusively for females.
- Additionally, as per AISHE 2018-19, females constitute 48.6% of the total enrolment in higher education and the Gross Enrolment Ratio (GER) for females in higher education at 26.4% is higher than the national GER of boys at 26.3%.
- Also, the Gender Parity Index (GPI) has increased during the last 5 years, from 0.92 in 2014-15 to 1 in 2018-19.

4) National Action Plan for Drug Demand Reduction (NAPDDR).

Why in News?

- The Minister for Social Justice and Empowerment informed the Lok Sabha about the National Action Plan for Drug Demand Reduction (NAPDDR).

News in Detail:

- The Ministry of Social Justice and Empowerment has formulated a National Action Plan for Drug Demand Reduction (NAPDDR) for 2018-2025.
- The Plan aims at reduction of adverse consequences of substance (drug) abuse through a multi-pronged strategy.
- The activities under the NAPDDR, inter-alia, include awareness generation programmes in schools/colleges/Universities, community based peer led intervention programmes for vulnerable adolescents and youth in the community, provisioning of treatment facilities and capacity building of service providers.

- The Ministry is also providing central assistance for running and maintenance for Integrated Rehabilitation Centres for Addicts (IRCA).

About NAPDDR

- Drug and substance abuse is a serious problem adversely affecting the social fabric of the country.
- The Ministry of Social Justice and Empowerment has prepared a National Action Plan for Drug Demand Reduction (NAPDDR) for 2018-2023 so as to focus on preventive education, awareness generation, identification, counselling, treatment and rehabilitation of drug dependent persons and training and capacity building of the service providers through collaborative efforts of the Central and State Governments and Non-Governmental Organizations.
- **Implementation agency**
- The National Institute of Social Defence (NISD), New Delhi, an autonomous body under the administrative control of the Ministry of Social Justice and Empowerment, is the nodal training and research Institute for interventions in the area of Social Defence.

5) Usage of Modern Contraceptives

Why in News?

- The details of measures taken by the Government to increase the availability, awareness and usage of modern contraceptives are given below:

News in Detail:

- **Mission Parivar Vikas:** The Government has launched Mission Parivar Vikas on 10th November 2016 for substantially increasing access to contraceptives and family planning services in 146 high fertility districts with Total Fertility Rate (TFR) of 3 and above in seven high focus states.
- **New contraceptives** viz. Injectable contraceptive (Antara program) and Centchroman (Chhaya) have been added to the existing basket of choices in 2015-16.
- **Family Planning Logistic Management and Information System (FP-LMIS):** A dedicated software launched in 2017, to ensure smooth forecasting, procurement and distribution of family planning

commodities across all the levels of health facilities.

- Scheme for **Home delivery of contraceptives by ASHAs** at doorstep of beneficiaries.
- **Clinical Outreach Teams (COT) Scheme** has been launched in 146 Mission ParivarVikas districts wef December 2017 for providing family planning services through mobile teams from accredited organizations in far-flung, underserved and geographically difficult areas.

6) Tech For Tribals

Why in News?

- TRIFED launched a transformational “**Tech For Tribals**” program in partnership with Institutes of National Importance (INIs) to develop Tribal entrepreneurship.

News in Detail:

- A project aimed to transform 5 crore Tribal Entrepreneurs under the name “Tech for Tribal” has been launched by TRIFED with support from the Ministry of MSME.
- It was launched on 19th March 2020 by TRIFED and IIT-Kanpur along with IIT-Roorkee, IIM Indore, Kalinga Institute of Social Science, Bhubaneswar and SRIJAN, Jaipur in the first phase of organising tribal entrepreneurship and skill development program.
- Tech for Tribals aims at capacity building and imparting entrepreneurship skills to tribal forest produce gatherers enrolled under the **Pradhan Mantri Van Dhan Yojana (PMVDY)**.
- The trainees will undergo a 30 days program over six weeks comprising 120 sessions. The Partners will develop course contents relevant to Entrepreneurship in Value Addition and Processing of Forest Produces.

- The Van Dhan Scheme is an initiative of the **Ministry of Tribal Affairs and TRIFED**. It seeks to improve tribal incomes through value addition of tribal products. The scheme will be implemented through the Ministry of Tribal Affairs as Nodal Department at the Central Level and TRIFED as Nodal Agency at the National Level.

7) Mahatma Gandhi Bunkar Bima Yojana (MGBBY)

About:

- The Ministry of Textiles is implementing converged Mahatma Gandhi Bunkar Bima Yojana (MGBBY) for providing social security benefits like life, accidental & disability insurance coverage to handloom weavers/workers in the age group of 51-59 years across the country, who have already enrolled under the scheme on 31.5.2017.
- To provide the benefits to all handloom weavers/workers in an effective manner, the Government of India has organized Hasthkala Sahyog Shivirs in handloom clusters across the country in association with State Governments and LIC for creating awareness among the weavers for enrollment under the Scheme.
- The claim benefits are provided by LIC directly into the bank account of beneficiaries through Direct Benefit Transfer (DBT).
- The Ministry of Textiles also regularly organizes awareness programmes and camps through its Weavers’ Service Centres to facilitate enrolment of handloom weavers/workers under Government Flagship Insurance Schemes.

8) e-Learning Platforms

Why in News?

- Union HRD Minister asked students to continue their learning by making full use of the available digital e-Learning platforms during the period the educational institutions are closed as a precautionary measure against COVID-19.
- **Few digital initiatives/platforms of Ministry of HRD are as follows:**
- **DIKSHA:** Diksha has more than 80000 e-Books for class 12th created by CBSE, NCERT and States/UTs which are available in multiple languages.
- **e-PATHSHALA:** In this web portal NCERT has deployed 1886 audios, 2000 videos, 696 e-books (e-Pubs) and 504 Flip Books for classes 1st to 12th in different languages.
- **National Repository of Open Educational Resources (NROER):** NROER portal has a total of 14527 files including 401 collections, 2779 documents, 1345

interactive, 1664 audios, 2586 images and 6153 videos on different languages.

- **SWAYAM:** SWAYAM is the national online education platform hosting 1900 courses covering both school (class IX to XII) And Higher Education (undergraduate, post graduate programs) in all subjects including engineering, humanities and

social sciences, law and management courses.

- **SWAYAM PRABHA:** It has 32 D2H TV channels transmitting educational contents on 24/7 basis. These channels are available for viewing all across the country using DD free Dish set top box and antenna. The channels cover both school education and Higher Education.

News in Depth

AIR NEWS

1) World Consumer Rights Day

Why in News?

- World Consumer Rights Day 2020 was celebrated on March 15 with the theme "The Sustainable Consumer" to spread awareness about environmental breakdown and global climate changes.

News in Detail:

- This day is celebrated on the 15th of March every year to raise global awareness about consumer rights and needs.
- World Consumer Rights Day was inspired by President John F Kennedy, who sent a special message to the US Congress on 15th March 1962, in which he formally addressed the issue of consumer rights. He was the first world leader to do so.
- It is led by Consumers International, a not-for-profit membership organisation for consumer groups around the world. Its head office is based in London, England.

2) Aircraft (Amendment) Bill, 2020

Why in News?

- Lok Sabha today passed the Aircraft (Amendment) Bill, 2020 to amend the Aircraft Act, 1934.

About:

- The amendments would fulfill the requirements of the International Civil Aviation Organization (ICAO).

- The International Civil Aviation Organization is a specialized agency of the United Nations. It changes the principles and techniques of international air navigation and fosters the planning and development of international air transport to ensure safe and orderly growth.

- This will enable the three regulatory bodies in the Civil Aviation sector in India, namely Directorate General of Civil Aviation,

Bureau of Civil Aviation Security and Aircraft Accident Investigation Bureau to become more effective.

- This will lead to enhancement in the level of safety and security of aircraft operations in the country.

3) Subsidy Sharing Pattern

Why in News?

- Premium subsidy sharing pattern between Centre & North Eastern states changed from 50:50 to 90:10.

News in Detail:

- Agriculture minister informed the Lok Sabha that the premium subsidy sharing pattern between Centre and North Eastern States has been changed from 50 : 50 to **90:10**.
- It will allow more States to notify the scheme and existing States to notify more crops and areas to facilitate greater coverage of farmers under the scheme.
- For remaining States, the subsidy sharing pattern will continue as 50 : 50.
- The Minister also said, Insurance companies will now be selected by the States for 3 years in a go instead of one year thereby increasing their commitment and accountability to the farmers.

4) National Commission for Indian System of Medicine Bill 2019

Why in News?

- Rajya Sabha passed the National Commission for Indian System of Medicine Bill 2019.

Key features of the bill:

- The Bill seeks to repeal the Indian Medicine Central Council Act, 1970.
- The Bill provides for the establishment of the National Commission for Indian System of Medicine (NCISM). The NCISM will

consist of 29 members, appointed by the central government.

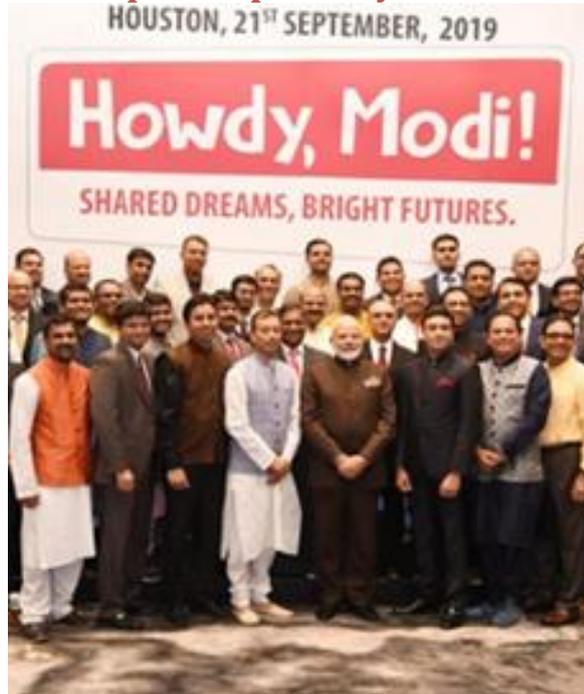
- Functions of the NCISM include: (i) framing policies for regulating medical institutions and medical professionals of Indian System of Medicine and (ii) ensuring coordination among the autonomous boards set up under the Bill.
- The Bill sets up following autonomous boards under the supervision of the NCISM:
 - a. the Board of Ayurveda and the Board of Unani, Siddha, and Sowa-Rigpa,
 - b. the Medical Assessment and Rating Board for Indian System of Medicine and

c. the Ethics and Medical Registration Board:

- The central government will constitute an Advisory Council for Indian System of Medicine, which will be the primary platform through which the states/union territories can put forth their views and concerns before the NCISM.
- There will be a uniform National Eligibility-cum-Entrance Test for admission to undergraduate education in each of the disciplines of the Indian System of Medicine in all medical institutions regulated by the Bill.

THE HINDU EDITORIALS

1) The ambit and the limits of 'Diaspora diplomacy'



Why in the news?

- India continues to be the largest country of origin of international migrants with a 17.5 million-strong Diaspora across the world.
- It received the highest remittance of \$78.6 billion from Indians living abroad.
- This was reported in the **Global Migration Report 2020**.

What is the Background?

- The term "Diaspora" is derived from the Greek word "**diaspeirein**" which means "dispersion".
- In India, Diaspora is commonly understood to include :
 1. Non-Resident Indians (NRIs),
 2. Persons of Indian Origin (PIOs) and
 3. Overseas Citizens of India (OCI)
- During the British rule, the Indian migration began in large numbers as indentured labourers to former colonies like Fiji, Kenya and Malaysia.

How has Diaspora policy worked for India?

- India's foreign policy in the 1950s was structured according to J L Nehru's views which said that the Diaspora could not expect India to fight for their rights.

- It followed a model of non-interference whenever the emigrant Indians got into trouble in Sri Lanka, Myanmar, etc.
- This policy was changed by Rajiv Gandhi in the 1980s by inviting Indians abroad to participate in nation-building.
- With Atal Bihari Vajapayee as Prime Minister there were many positive measures introduced like a separate Ministry of Overseas Indian Affairs, the Person of Indian Origin (PIO) Card, Pravasi Bharatiya Divas, Pravasi Bharatiya Samman Award, Overseas Citizen of India Card, NRI funds and voting rights for Indian citizens abroad after 2000.
- 'Know India Program' was launched in 2016 for Diaspora engagement which familiarizes Indian-origin youth (18-30 years) with their Indian roots and contemporary India.

What are the contributions by Indian Diaspora?

- Indian Diaspora can help lobby for favourable terms regarding India's interests like in the U.S and U.K.
- This has helped in reducing disguised unemployment in India through the migration of less and semi skilled labourers.
- Balance of Payments has led to positive systemic effects due to migrants remittances.
- These migrant workers facilitated the flow of tacit information, commercial and business ideas, and technologies into India.
- Indian Diaspora acts as a soft power and impacts bilateral relations.

What are the challenges ahead?

- With the Diaspora spread all across the world their aspirations and demands are heterogenous which needs demand specific policies rather than in general.
- There have been hate crimes reported in different countries against Indian community which poses a challenge to the government to secure them.
- With economic slowdown and political turmoil across the world, the country faces problems of these Diaspora returning back

to India posing threat to limited resources and opportunities in India.

- India has had problems with negative campaigning and foreign funding, coming from abroad, for separatist movements like the Khalistan movement.

What are the steps to be taken?

- Bilateral policies can help in developing good relations with Indian Diaspora and help them retain their careers abroad helping Indian economy through their remittances.
- India needs to plan strategically the Diaspora evacuation policy from conflict zones in a world where crises materialise

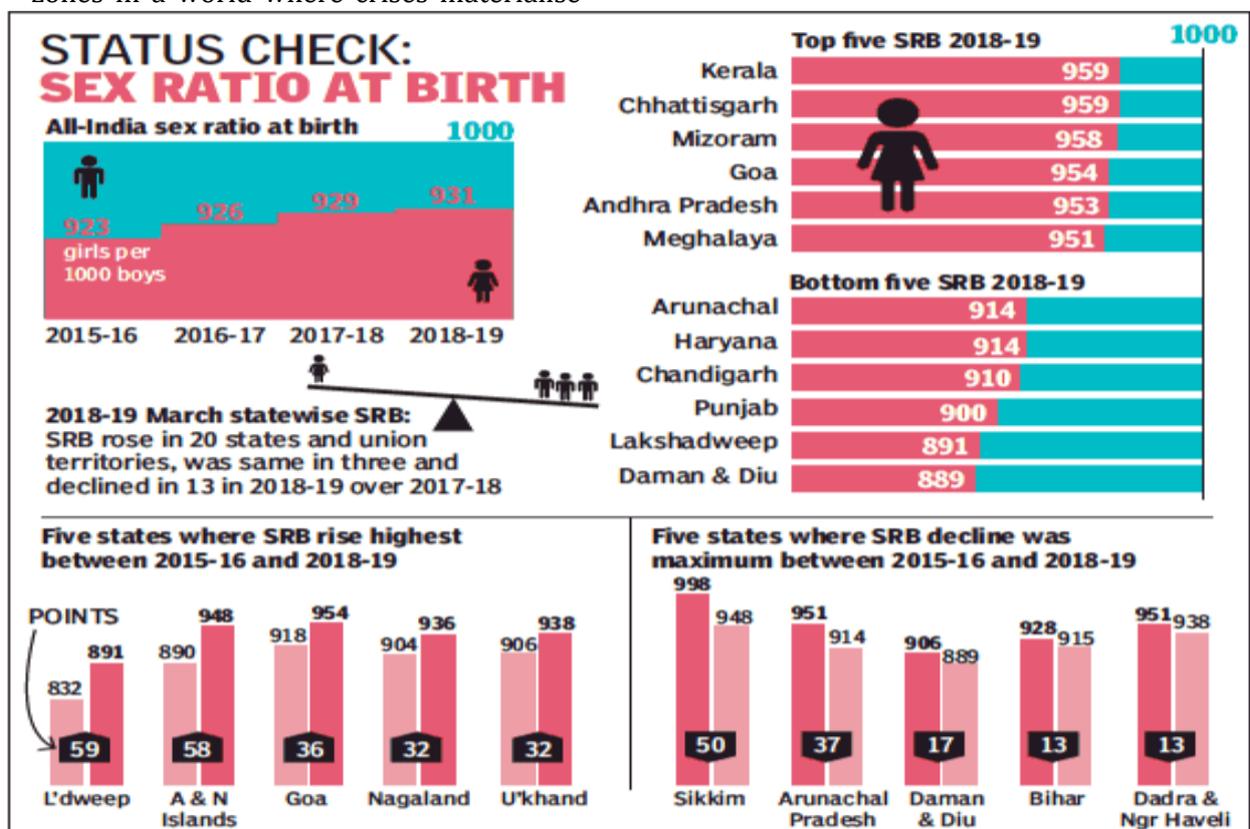
without warnings and give very little reaction time for governments.

- Attracting the young population towards Indian culture and inspiring them to contribute for its development should be considered in future schemes.

Conclusion

- The government must immediately work with developed countries to ask that they kick back a portion of the income tax revenues they collect from the Indian Diaspora by formulating a new NRI policy.

2) Missing at birth: Sex selective abortion and infanticide



Why in the news?

- Amartya Sen's statement, "While at birth boys outnumber girls, 'after conception, biology seems on the whole to favour women' is enough to understand the plight of Sex selective abortion and infanticide cases in India.

What is the Background?

- Tamil Nadu has been historically notorious for its crude methods of killing female babies and last week case of infanticide there v sent a chill down the spine of the country.

- The news is that a couple had reportedly used inhuman practice of feeding female infants with the toxic milk of a local herb to kill their second girl child, just a month old.

What is sex selective abortion?

- It is the practise of terminating a pregnancy based upon the predicted sex of the infant.
- This is most common in India where male children are valued over female children leading to selective abortion of female foetuses.
- This affects human sex ratio having unbalanced gender ratios.

What is sex ratio at birth?

- It is defined as the number of girls born for every 1,000 boys born, is a refined indicator of the extent of prenatal sex selection.
- The Central government shows that SRB in rural India was 898 in 2015-17 while the figure for urban India was 890 in Sample Registration Survey-2017.

What are the reasons for this falling trend?

- Sex selective abortion at scan centres continues as the preferred vehicle for parents obsessed with son preference.
- misuse of prenatal diagnostic technique for sex selective abortion.
- Treating girl children as a burden due to societal norms like dowry and male preferences.
- Lack of ethics with doctors and health technicians in implementing Pre-

Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994.

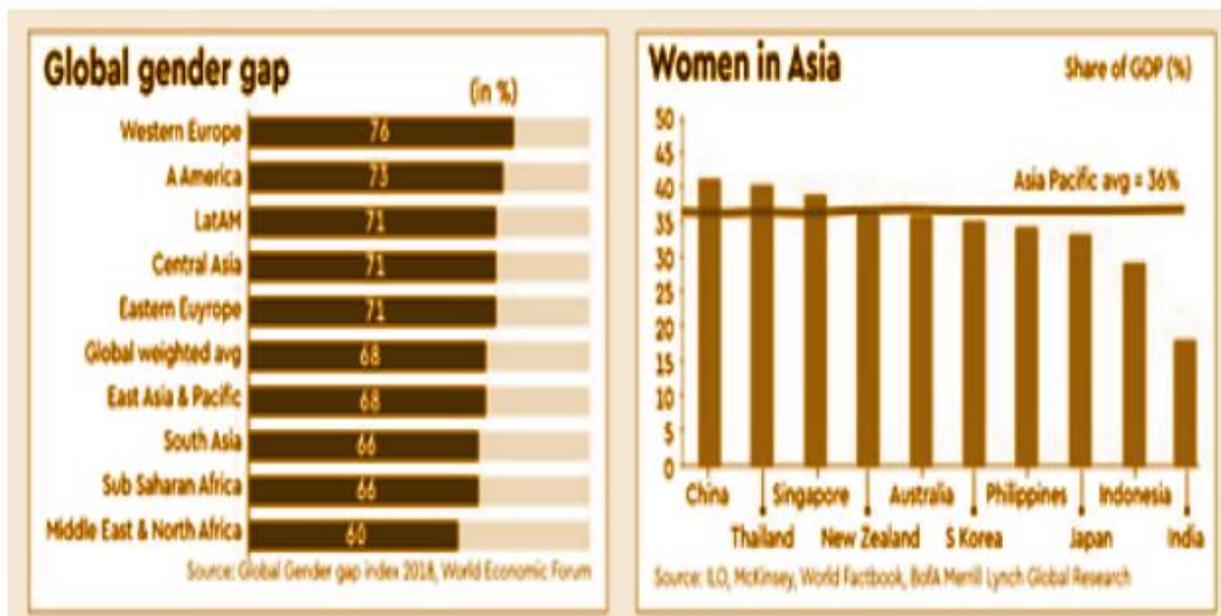
What are the steps to be taken?

- The government should ramp up awareness building exercises by using technology to monitor every single pregnant woman.
- To eliminate the perversion of son preference from people's minds there is a need for counselling and attitude change.
- There needs to be stringent punishment for offenders violating the act.

Conclusion

- The Centre's 'Beti Bachao, Beti Padhao' campaign aimed at saving girl children has a huge unfinished task in front of it and should be streamlined with other existing policies to achieve gender equality.

3) Closing the gender gap in Science



Why in the news?

- India along with other countries have agreed to fulfil the Sustainable Development Goals (SDGs) which is a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity.
- Increasing gender participation in STEM (Science, Technology, Engineering, Mathematics) fields has remained the Achilles heel for India.

What are the facts?

- India has slipped to the 112th spot from its 108th position in 2018 in the Global Gender Gap Index 2020.
- India ranks 147th out of 149 countries on the health and survival of women and 142nd out of 149 in terms of economic participation of women as per the WEF's Gender Gap Index.
- India ranks 163rd out of 181 countries in female labour force participation as per the World Bank.
- A large percentage of all the jobs lost last year were held by women as per the Centre for Monitoring Indian Economy (CMIE).

- Indian women receive 34% fewer wages than men for equivalent work.

What are the reasons behind?

- The cultural and gender norms that engendered discrimination is a major reason why India lost out on an important opportunity to build a culture of including women in STEM fields.
- Organisational factors have also played a big role in preventing gender parity.
- Societal norms about women doing household chores have also restricted their entry to STEM fields.

What is the 'Leaky Pipeline' problem?

- It is a metaphor for the way that women disappear from some careers especially pertaining to STEM fields.
- Due to the absence of supportive institutional structures during pregnancy, safety issues in fieldwork and workplace has made women leave the workforce.
- Issues related to poor education and healthcare access are responsible for a lesser number of women in these fields.

- Nearly 23 million girls drop out of school each year because of the economic stress faced by their families or because of inadequate sanitation or improper menstrual hygiene capabilities in schools.

What are the steps to be taken?

- Bringing behavioural change is the main step to be taken.
- The Indian scientific community should act as a pressure group to build greater focus on the issue and push for concrete measures to address the problem.
- Textbooks like NCERT should highlight the role of women in STEM fields.

Conclusion

- Though STEM was once seen as a 'men only' domain, recent instances show that social shackles pertaining to women are loosening and women participation is on the rise. Though STEM was once seen as a 'men only' domain, recent instances show that social shackles pertaining to women are loosening and women participation is on the rise.

RSTV BIG PICTURE

1) Volatile Sensex and Impact on Economy



Why in the news?

- In a highly volatile session, equity indices erased most of their losses in afternoon trade as markets rebounded from record lows.
- The benchmark BSE Sensex and the broader NSE Nifty plunged over 10 per cent, hitting their lower circuit limits, within the first 15 minutes of opening of the session.

What is the background?

- The steep dive in the markets in the opening session eroded more than Rs 12 lakh crore of investors' wealth.
- Mild recovery was seen in other Asian bourses too.
- From Wall Street to Asia, the recent sell-off in global stock markets has triggered trading halts in multiple stock exchanges — an occurrence that could become increasingly common as investors fear the impact of the coronavirus outbreak.

How has it been a circuit breaker?

- In the U.S., trading was temporarily stopped twice this week after the S&P 500 Index fell 7% — triggering the first threshold for a “circuit breaker,” aimed at preventing markets from wild swings.
- In Asia, circuit breakers were also triggered in many exchanges including India, Japan, South Korea, Indonesia, Thailand and the Philippines this week.
- Circuit breakers are measures implemented by exchanges when they consider price movements to be overly volatile.

What is Stock?

- Stocks are a type of security that represent ownership interest in a company.
- It allows businesses to raise capital to pay off debt, launch new products and expand operations.
- The stocks offer the chance profit from gains in stock value as well as company dividend payments for investors.

What are the impacts of stock markets?

- It influences consumer and business confidence.
- The prices of individual stocks are dynamic, giving the entire stock market a dynamic and even volatile character.
- The trends have a psychological impact on individuals and businesses.
- Rising stock markets, or bull markets, can create a sense of confidence about the direction of the economy.
- Falling stock markets, or bear markets, usually have the opposite effect. People feel pessimistic about the economy.

What are the impacts on business investments?

- When they feel that business investments will lead to rising market values such as during rising or bull markets.
- If sustained stock price increases lead to increased consumer spending and Management has more operational flexibility.
- During bull markets, merger and acquisition activity tends to increase because companies can use stock as currency.
- Initial public offerings increase as new companies take advantage of market optimism to raise capital.
- Merger activity slows down, as does the number of new company listings.

Conclusion

- Consumer spending and business investment slows down, which reduces economic growth. Falling interest rates can stimulate economic growth. Fiscal policy decisions also can affect the economy. For example, large budget deficits can reduce government investments and purchases, which can slow down the economy.

2) SAARC : Fighting Corona Together



Why in the news?

- Pakistan has said it will participate in a video conference of SAARC member countries proposed by Prime Minister Narendra Modi to combat the fast-spreading coronavirus pandemic that has killed over 5,000 people globally.
- Prime Minister Modi reached out to the eight-member regional grouping and pitched for a video conference among the leaders of the South Asian Association for Regional Cooperation to chalk out a strong strategy to combat the coronavirus outbreak.

What is the background?

- Pakistan responded positively to PM Modi's proposal, saying it was ready to participate in the conference, acknowledging that coordinated efforts were needed to minimise the threat posed by the deadly coronavirus.
- In a series of tweets, the PM said, "I would like to propose that the leadership of SAARC nations chalk out a strong strategy to fight Coronavirus. We could discuss, via video conferencing, ways to keep our citizens healthy. Together, we can set an example to the world, and contribute to a healthier planet."
- PM Modi's suggestion was backed by all member states of SAARC.

What is the outcome of the video conference?

- The PM of India called for a COVID-19 emergency fund at South Asian Association for Regional Cooperation (SAARC) video conference to fight the threat of COVID19, with a contribution of \$10 million towards the fund.
- The videoconference was addressed by Bangladesh Prime Minister Sheikh Hasina, Bhutan Prime Minister Lotay Tshering, Nepal Prime Minister K.P. Sharma Oli, Maldives President Ibrahim Mohamed Solih, Sri Lankan President Gotabaya Rajapaksa and Afghan President Ashraf Ghani.
- The PM of Bangladesh called for creation of an Institution to fight contagious diseases that pose a threat to public health in the region.
- The president of Maldives expressed concern over drying up of tourists, leading to squeezing up of its economy.
- Mr. Ghani highlighted the vulnerability of Afghanistan as it shares a long border with Iran that is one of the worst affected countries.
- He pitched for creation of a task force and a framework of telemedicine to deal with the threat.

What is PM strategy?

- The call comes amid detection of coronavirus cases among the population of the SAARC member-states.

- India has been coordinating bilaterally with countries like Italy and Iran for evacuation but this is the first time that the Indian leadership has called for a joint action by SAARC, which has been stuck because of India-Pakistan hostilities.
- The leadership of SAARC nations needs to chalk out a strong strategy to fight coronavirus.
- To discuss, via video conferencing, ways to keep our citizens healthy.
- Together, the SAARC nations can set an example to the world and contribute to a healthier planet.

What is SAARC and its objectives?

- The South Asian Association for Regional Cooperation (SAARC) is a regional intergovernmental organization and geopolitical union of nations in South Asia, whose foundation was laid in 1985 in Dhaka.
- It consists of 8 member states - Afghanistan, Bangladesh, Bhutan, Nepal, India, Pakistan, Sri Lanka and Maldives.
- SAARC is headquartered at Kathmandu, Nepal.
- SAARC intends to promote regional and economic integration, social progress and cultural development which will help in accelerating economic growth in the region.
- To improve the quality of life and promote the welfare of the people of South Asia by providing all individuals the opportunity to live in dignity and to realize their full potential.
- To strengthen collective self-reliance among the countries of South Asia.
- To promote active collaboration and mutual assistance in different fields.

Conclusion

- As SAARC countries have common tradition, dress, food and culture and political aspects thereby synergizing their actions. This is the reason why the Prime Minister of India made a call to SAARC nations at a time when the world is fighting the outbreak of CORONAVIRUS. This will help in chalking out a strong strategy to protect the citizens of the region and the world from the negative impacts of the virus.

3) COVID-19 and Social Distancing

Why in the news?

- With cases of the novel coronavirus in India increasing by the day, the Centre and state governments are doubling down on measures to curb the spread of the flu-like disease.
- Worldwide, the disease has claimed over 6500 lives and has infected at least one lakh people.

What is the background?

- With the World Health Organisation characterising the spread of the COVID-19 as a pandemic', one of the measures being recommended by health and governance authorities across the world is 'social distancing', which is to "reduce the frequency of large gatherings" and limiting the scope of in-person interactions.

What is 'Social Distancing'?

- Social distancing is a method prescribed to check the spread of the COVID-19 so that the healthcare system is equipped to treat existing patients.
- Around the world, including in several Indian cities, governments have recommended that companies should allow employees to work from home, and schools and universities have been shut for a period of a few weeks.

What are the interventions proposed?

- Closure of all educational establishments (schools, universities etc), gyms, museums, cultural and social centres, swimming pools and theatres. Students should be advised to stay at home. Online education to be promoted.
- Possibility of postponing exams may be explored. Ongoing exams to be conducted only after ensuring physical distance of one meter amongst students.
- Encourage private sector organizations/employers to allow employees to work from home wherever feasible.
- Meetings, as far as feasible, shall be done through video conferences. Minimize or reschedule meetings involving a large number of people unless necessary.
- Restaurants to ensure hand washing protocol and proper cleanliness of frequently touched surfaces. Ensure

physical distancing (minimum 1metre) between tables; encourage open air seating where practical with adequate distancing.

- Keep already planned weddings to a limited gathering; postpone all non-essential social and cultural gatherings.
- Local authorities have a dialogue with organizers of sporting events and competitions involving large gatherings and they may be advised to postpone such events.
- Local authorities have a dialogue with opinion leaders and religious leaders to regulate mass gatherings and should ensure no overcrowding/at least one metre distance between people.
- Local authorities have meetings with traders associations and other stakeholders to regulate hours, exhibit Do's and Don'ts and take up a communication drive in market places like sabzi mandi, anaj mandi, bus depots, railway stations, post-offices etc., where essential services are provided.
- All commercial activities must keep a distance of one meter between customers. Measures to reduce peak hour crowding in markets.
- Hospitals to follow necessary protocol related with COVID-19 management as prescribed and restrict family/friends/children visiting patients in hospitals
- Special protective measures for delivery men/ women working in online ordering services.

What is the impact?

- The social distancing measures are effective in flattening the epidemic curve.
- The epidemic curve is a statistical chart that gives the number of cases of the disease over a time period.
- It can help in understanding various aspects like source, trend over time, incubation period, etc.
- The curve is much steeper without proper control measures than with it.
- Super spreader is a contagious patient, who causes the spreading of the disease to an unusually large number of people.
- He/ she is more likely to infect other people than a typically infected person.

Conclusion

- The government has spared shopping malls, restaurants and places of worship but asked local authorities to reach out to traders and religious leaders to make sure that people in and around their premises keep a distance of one metre to prevent spread of the infection.

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