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EXCELLENCE

**MARCH
2020**




APPOLO STUDY CENTRE

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IMPORTANT DAYS

Date	Day	Theme
March 1 st	Zero Discrimination Day (SDG5: Gender Equality)	Theme: Zero Discrimination Against Women and Girls
March 1 st	World Civil Defence Day	Theme: Civil Defence and a first aider in every home
March 3 rd	World Wildlife Day	Theme: "Sustaining all life on earth"
March 3 rd	World Hearing Day	Theme: "Hearing for life. Don't let hearing loss limit you".
March 4 th	National Safety Day	To raise awareness about the safety measures to prevent mishaps and accidents due to lack of awareness.
March 7 th	Jan Aushadhi Diwas	To create awareness and providing a thrust to the use of generic medicines.
March 8 th	International Women's Day	Theme: 'An equal world is an enabled world'.
March 12 th	World Kidney Day	Theme: "Kidney Health for Everyone Everywhere—from Prevention to Detection and Equitable Access to Care."
March 13 th	World Sleep Day	Theme: Better Sleep, Better Life, Better Planet.
March 14 th	World Pi day	Pi is a symbol used in mathematics to represent a constant. It is the ratio of the circumference of a circle to its diameter which is approx. 3.14.
March 15 th	World Consumer Day	To raise global awareness about consumer rights and needs.
March 16 th	National Vaccination Day	Theme: VaccinesWork for All
March 18 th	Ordnance Factories Day	The day is celebrated by displaying the rifles, guns, artillery, ammunition, etc in exhibitions all over India.
March 18 th	Global Recycling Day	Theme: "Recycling Heroes"
March 20 th	World Sparrow Day	Theme: "I Love Sparrow"
March 20 th	International Day of Happiness	Theme: 'Happiness For All, Together'
March 20 th	French Language Day	To promote equal use of all six official working languages throughout the organization.

March 21 st	International Day of Forests	Theme: Forests and Biodiversity
March 21 st	International Day for the Elimination of Racial Discrimination	For the Elimination of Racial Discrimination 2020 is focused on the midterm review of the International Decade for People of African Descent.
March 21 st	World Down Syndrome Day	Theme: “We Decide”
March 21 st	World Poetry Day	To encourage a return to the oral tradition of poetry recitals, to encourage the teaching of poetry as well as to restore a dialogue between poetry and the other arts such as theatre, dance, music, and painting.
March 22 nd	World Water Day	Theme: “Water and Climate Change”
March 23 rd	World Meteorological Day	Theme: “Water and Climate Change”
March 23 rd	Martyrs Day	March 23 is observed as Martyrs Day, also known as Shaheed Diwas as a tribute to martyrs Bhagat Singh, Sukhdev Thapar, and Shivaram Rajguru.
March 24 th	World Tuberculosis Day	Theme: ‘It’s Time’
March 24 th	International Day for the Right to the Truth Concerning Gross Human Rights Violations and for the Dignity of Victims	Theme: “Monsignor Óscar Arnulfo Romero”
March 25 th	International Day of Remembrance of the Victims of Slavery and the Transatlantic Slave Trade	Theme: “Confronting Slavery’s Legacy of Racism Together”
March 25 th	International Day of Solidarity with Detained and Missing Staff Members	To mobilize action, demand justice and strengthen our resolve to protect UN staff and peacekeepers, as well as our colleagues in the non-governmental community and the press.
March 27 th	World Theatre Day	It is celebrated annually on the 27th March by ITI Centres and the international theatre community.
Last Saturday of March (March 28)	Earth Hour	The Earth hour 2020 took place on 28 March at 8:30pm in India.

TAMIL NADU

- 1. The 500mcft (million cubic feet) capacity reservoir being built in the lakes of Thervoykandigai and Kannankottai Rajaneri near Uthukottai in Tiruvallur district - is expected to be ready by April.**
 - This will be the fifth reservoir that will be supplying water to Chennai.
- 2. Chief Minister Edappadi K. Palaniswami - launched the Tamil Nadu Health System Reform Programme in Chennai on March 4, 2020.**
 - It will be implemented with the financial support from the World Bank.
 - This was the World Bank's first Program-for-Results project in India and the first for the State.
- 3. The Chief Justice of Madras High Court Amreshwar Pratap Sahi - constituted the first-ever all-women Full Bench (comprising three judges) to decide on a reference made to the High Court by a Division bench (comprising two judges).**
 - The Full Bench consisting of Justices Pushpa Sathyanarayana, Anita Sumanth and P.T. Asha shall hold their first hearing together on March 4, 2020
- 4. Chief minister Edappadi K Palaniswami - laid foundation stone on March 4 for a new project to deliver the surplus water from the Mettur dam to fill 100 lakes in the Sarabanga river basin in the Salem district.**
- 5. Anna University - was ranked at 373rd, up by 24 places, in Engineering and technology category in the QS World University Rankings.**
 - IIT Madras moved seven places to 88th rank in the same category
 - It is the fourth best institute in engineering and technology category, followed by IIT-Bombay, IIT-Delhi and IIT-Kharagpur, which have bagged the top three ranks at country level.

- 6. The Union environment ministry - has notified a buffer zone of 9.068sqkm around the boundary of Ousteri lake bird sanctuary in Villupuram district in Tamil Nadu as an 'ecosensitive' zone**
- 7. Former AIADMK minister C Ponnaiyan - was appointed vice-chairman of the State Planning Commission (SPC) on March 9**
- 8. Chennai - becomes the first city in Tamil Nadu to get an Art District.**
 - The Chennai Corporation inaugurated the Kannagi Nagar Art District, showcasing work of renowned artists from various countries.
 - The Kannagi Nagar Art District is the fifth project in the country.
 - The project is intended to promote art and culture for social transformation and civic improvement.
- 9. The Tamil Nadu government - is planning to set up a new solar park project in Kamuthi, 30km from Kadaladi, in Ramanathapuram district**
 - This was announced by the power minister P Thangamani on March 11
 - It has to be recalled that the Centre had recently cancelled the 500MW Kadaladi solar park project in Ramanathapuram district following the state's failure to acquire land for the project
- 10. Chief Minister Edappadi K. Palaniswami - announced in the State Assembly on March 13 that ₹210 crore would be allocated to 6 State-run universities to boost research in different disciplines**
- 11. The State government - has declared COVID-19 a notified disease under the Tamil Nadu Public Health Act, 1939.**
- 12. The Centre - has notified constitution of a regional bench of the National Company Law Appellate Tribunal (NCLAT) in Chennai**

13. The excavation works at archaeological sites at Adichannallur and Sivakalai in Tuticorin district and Kodumanal in Erode district - will commence in the next week

- This was announced by minister for Tamil culture and archeology, Ma Foi K Pandiarajan on March 15.

14. The concluding function of the birth centenary of E.V.R. Maniammai - would be celebrated at Periyar Thidal on March 16, 2020

15. The State government - has proposed to bring more schemes under the social audit during 2020-21

- The new schemes to be included are the National Social Assistance Programme (NSAP), the Pradhan Mantri Awaas Yojana - Gramin (PMAY-G) and the Dr. Puratchi Thalaivar M.G.R. Nutritious Noon Meal Programme,.
- At present, the social audit is being undertaken for the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).
- The Social Audit Society of Tamil Nadu facilitates the exercise, which is executed by village panchayats to ensure proper implementation of MGNREGS.
- The Social Audit Society of Tamil Nadu is a body registered in 2013 under the Tamil Nadu Societies Registration Act

16. Chennai Metrowater - to have its first solar energy plant by mid-May 2020.

- It will be constructed on the premises of Chembarambakkam water treatment plant

17. The Tamil Nadu government - has proposed to pass a new law to create special reservation for students of government schools in medical college admission

- This was announced by the chief minister Edappadi K Palaniswami, while making a suo motu statement in the assembly on March 21.

- The reservation will be provided to the students who study from Class I to XII in government, corporation, municipal or adi-dravida schools as well as those run by the forest department
- In this regard, a committee under the chairmanship of a retired high court judge will study the issue and make recommendations to the government.
- The commission will have secretaries of the health and law departments as members.
- Apart from them, two educationists named by the school education department will be included in the commission.
- The Director of medical education will be the member-secretary of the commission
- The commission will analyse the reason for the poor entry of government school students into medical colleges and assess their social conditions before making recommendations to rectify the trend
- The commission will submit its recommendations in a month.

18. The Tamil Nadu Chief Minister - announced the creation of a new district of Mayiladuthurai on March 24

- Nagapattinam will be divided into two and Mayiladuthurai will be created as the 38th district of TN

19. Chief Minister Edappadi K. Palaniswami - announced the creation of an Information Centre Park on March 24

- The park will be spread over 150 acres across Nemili and Mannur villages in Sriperumbudur taluk and will be developed at a cost of ₹500 crore

20. The Tiruvallur Police - have launched an app called 'CoBuddy' to provide a platform between people on home quarantine for Covid-19 and the state government.

STATES

1. The new Union Territory of Jammu and Kashmir (J&K) - will be the only place in the country to undergo a 'delimitation exercise' based on the population figures recorded in the 2011 census.

- ✓ The latest readjustment of boundaries of constituencies (delimitation) in the States and other Union Territories has been done on the basis of the 2001 census
- ✓ In future, it will be carried out based on the 2031 census.
- ✓ This unique provision for J&K UT was enabled through an amendment introduced in the J&K Reorganisation Act, 2019
- ✓ The Act passed by Parliament on August 6 bifurcated the State of J&K into the Union Territories of J&K (with a legislature) and Ladakh (without legislature).
- ✓ The J&K state assembly was dissolved in November 2018 and the region has been under Central rule since June 2018.
- ✓ The delimitation was last done in the former state of J&K in 1995.
- ✓ Earlier, on February 17, Chief Election Commissioner Sunil Arora nominated Election Commissioner Sushil Chandra as his nominee to the proposed Delimitation Commission for J&K.
- ✓ As per the J&K Reorganisation Act, the number of seats in the Assembly would be increased from 107 to 114.
- ✓ The delimitation will be done for 90 seats as 24 seats fall in Pakistan-occupied Kashmir (PoK).
- ✓ The exercise will take at least a year to complete, which means, till then, no elections can be held
- ✓ The full Delimitation Commission is yet to be appointed.

- 2. In a 'historic and landmark' decision, Chief minister Trivendra Singh Rawat - announced in the state assembly that his government will make 'Gairsain' the summer capital of Uttarakhand**
- 3. The state of Andhra Pradesh - has been ranked first for the overall implementation of Poshan Abhiyan, as per a recent report by NITI Aayog**
 - ✓ The Union Government has launched Poshan Abhiyan, which was earlier known as National Nutrition Mission, across the nation on December 18, 2017 to address the problem of malnutrition.
- 4. Beary - is set to be introduced as an optional third language across state schools from the 2020-21 academic year in the state of Karnataka.**
 - ✓ Beary, which traces its origins by around 1,200 years ago to Muslim traders, combines Malayalam and Tulu with a strong Arabic influence.
- 5. The Maharashtra government - has approved the implementation of the "happy hour" concept for the autorickshaws in the state.**
- 6. The Maharashtra Cabinet - approved the proposal to rename Mumbai Central Station to Nana Shankarsheth recently**

NATIONAL

- 1. The Union Government - has approved 32 projects across 17 states in the food processing sector under Pradhan Mantri Kisan Sampada Yojana (PMKSY).**
 - ✓ The PMKSY scheme aims to create processing and preservation capacities and modernise existing food processing units to increase the quality of processing and the shelf-life of the agricultural produce/processed food and reduce wastage.
 - ✓ The implementation period of the PMKSY scheme is 2016-20 and it has a total outlay of Rs 6,000 crore
- 2. Indian Railways - started its first railway restaurant "Restaurant on Wheels" at Asansol railway station for the usage of its passengers and common people.**
- 3. The Lok Sabha - passed the bill to implement the 'Direct Tax Vivaad se Vishwas' scheme on March 4**
 - ✓ As per the estimates, with the new scheme, the government is planning to collect ₹1.5 lakh crore to settle pending direct tax disputes.

Why The Scheme?	Who Can Avail Scheme?	The Dates
483,000 Cases Pending at various fora	All taxpayers with cases at various legal fora	LAST DATE: MAR 31
₹9.32 Lakh Crore Stuck in these cases	Those with prosecution cases under PMLA, benami law not eligible	WITH 10% ADDITIONAL PAYMENT: JUN 30
PAST EFFORTS such as raising appeals threshold not effective	Individuals with cases of undisclosed foreign assets not eligible	

- 4. A parliamentary panel - suggested the Centre allocate ₹200 crore more to the National Clean Air Programme (NCAP) on March 6**
 - ✓ The additional funds are intended to support additional 20 non-attainment cities under the 'Control of Pollution' scheme of NCAP.
- 5. The Law Ministry - issued an order to set up a Delimitation Commission for the Union Territory (UT) of Jammu and Kashmir and the northeastern States of Assam, Arunachal Pradesh, Manipur and Nagaland on March 6.**

- ✓ The Commission will be headed by former Supreme Court judge Ranjana Prakash Desai
- ✓ It will have Election Commissioner Sushil Chandra as the ex-officio member of the Commission.
- ✓ The Election Commissioners of the concerned States and UTs will also act as the members of the Commission.

6. The Union Jal Shakti Minister, Gajendra Singh Shekhawat - launched the second phase of Swachh Bharat Mission (Grameen) at the National Dissemination and Consultation workshop in New Delhi on March 4, 2020

- ✓ The Phase II of the mission will focus on sustaining the achievements made under the Phase I in the last five years
- ✓ The Phase II of the mission aims to ensure that effective solid and liquid waste management (SLWM) is undertaken in every gram panchayat of the nation.
- ✓ It will be implemented for a period of five years from 2020-21 to 2024-25.
- ✓ The mission's second phase will be monitored on the basis of the outcome in four key areas -
 - ✓ bio-degradable solid waste management (including animal waste management),
 - ✓ plastic waste management,
 - ✓ fecal sludge management and
 - ✓ grey water management.
- ✓ Earlier, the Union Cabinet had approved the second phase of Swachh Bharat Mission (Grameen) on February 19, 2020
- ✓ The Swachh Bharat Mission (Grameen) aims to provide universal coverage and safe access to sanitation in rural areas.
- ✓ It was launched on October 2, 2014.
- ✓ Following the launch of the mission, over 10 crore toilets have been built in the rural areas across the country.
- ✓ Also, around 5.9 lakh villages, 699 districts and 35 states and UTs declared themselves Open Defecation Free (ODF) as on October 2, 2019.
- ✓ The Union Government has also released a study done by the UNICEF and Melinda Gates Foundation (BMGF) on the impact of Swachh Bharat Mission (Grameen) on the women in the rural areas

7. The Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) - has signed MoU with Amazon, as a part of Women's Day celebrations.

- ✓ The main aim of the MoU is to e-market products made by self help groups in India.
- ✓ It seeks to empower the women entrepreneurs and promote their products in the online marketplace.

8. The Indian Government - has targeted to replace all level crossings on National Highways with road over bridges or under bridges under the 'Setu Bharatam' scheme before the end of the year 2020

9. The Indian Railways - has announced the upgradation of the iconic 'Deccan Queen Express'

- ✓ The Deccan Queen Express runs between Mumbai and Pune in Maharashtra

10. The Department of Biotechnology, operating under Ministry of Science and Technology - has cleared 'Genome India' Project.

- ✓ The project will witness the participation of more than 20 leading institutions including IISc Bengaluru.
- ✓ The Project was inspired by the international 'Human Genome' Project, funded by the US Government.
- ✓ The Human Genome Project was launched in 1990 and ended in 2003
- ✓ The Genome India project aims to map human genome and assemble them together to obtain a complete sequence of chromosomes
- ✓ Genome is the sequence of DNA or simply sum of all DNAs of an individual.

11. The Union Cabinet - recently approved the proposal to set up major port at Vadhvan in Maharashtra.

12. The Ministry of AYUSH - released digital platform called AYUSH GRID

- ✓ The grid contains details of facilities associated with AYUSH hospitals and laboratories and promotes traditional health care.
- ✓ The "AYUSH GRID" platform aims to digitize entire AYUSH sector.

13. The main national event on the eve of 6th International Day of Yoga (IDY) - will be held in Leh, capital of Ladakh on June 21, 2020.

- ✓ This would be the first instance that such a large number of people will be doing yoga in a high altitude location like Leh
- ✓ Last year, the main national event for the International Yoga Day 2019 was held in Ranchi with the participation of Prime Minister.
- ✓ The first International Day of Yoga was celebrated across the world on June 21, 2015.
- ✓ The proposal to establish the day was proposed by PM Modi during his speech at the United Nations General Assembly (UNGA) on September 27, 2014.
- ✓ The date, June 21, was chosen, as it is the longest day of the year in the Northern Hemisphere.
- ✓ This is also when the earth shifts towards Summer Solstice.

14. The Government - has notified the Protection of Children from Sexual Offences (Pocso) Rules, 2020

- ✓ The new rules are meant to enable implementation of recent amendments to the Act
- ✓ The Act has made punishment provisions more stringent
- ✓ It has defined the term 'child pornography' for the first time and provides guidelines for crackdown on possession of pornographic material involving children.
- ✓ The Pocso rules became effective from March 9

15. The 39th GST Council meeting, chaired by the Finance minister Nirmala Sitharaman - was held in New Delhi on March 14

- ✓ The Council had announced an increase in the levy on mobile phones to 18% from 12%
- ✓ The increase was aimed at correcting a situation where inputs face higher taxes than the final product, resulting in problems such as delays in refunds.

16. Four of the culprits in the Nirbhaya case - were hanged by the neck to death at 5.30am on March 20.

- ✓ Pawan Jallad is the executioner who has performed the hanging
- ✓ The execution of the these four convicts got delayed three times previously, as they were using all the legal remedies available to be freed from the sentence.
- ✓ A Nirbhaya fund was set up by the Centre in 2013 to fund women's safety initiatives, following the recommendations of J S Verma committee

17. The Small Industries Development Bank of India (SIDBI) - has announced the launch of 'Swavalamban Express' on June 05, 2020, to promote aspiring and budding business entrepreneurs.

- ✓ The Swavalamban Express will depart from Lucknow on June 5, 2020, and travel to the 11 entrepreneurial cities.
- ✓ These include Jammu, Delhi, Jaipur, Ahmedabad, Mumbai, Bengaluru, Hyderabad, Bhubaneswar, Kolkata and Varanasi as the final destination.
- ✓ The entrepreneurs will travel through a pre-planned route of building business throughout the journey.
- ✓ The journey would focus on the Prime Minister's vision of developing the country into a five trillion-dollar economy by 2024-25.
- ✓ The train will undertake 15 days of a journey that will cover about 7000 km of track

18. The Ministry of Railways - presented the details of Greenco System in the country in Lok Sabha recently

- ✓ As on 2018, 42 Railway Production units have implemented Greenco Rating.
- ✓ The Greenco Certification or rating is provided by the Confederation of Indian Industry (CII).
- ✓ Earlier, the Greenco rating was acknowledged in the INDC (Intended Nationally Determined Contributions) submitted by India to United Nations Framework Convention on Climate Change (UNFCCC) in 2015.

INTERNATIONAL

1. China - has assumed the Presidency of the United Nations Security Council for March 2020

- ✓ The presidency of the UN Security Council is rotated among its members every month according to the English alphabetical order.
- ✓ The UN Security Council is one of the United Nations' six main organs.
- ✓ It was formed in 1945 and held its first session on January 17, 1946
- ✓ The Security Council comprises 15 members- 5 permanent and 10 non-permanent members elected for a period of 2 years.
- ✓ The five permanent members of the UNSC include the winning side of World War II- the United States, the United Kingdom, Russia (formerly a part of Soviet Union), France and China
- ✓ These permanent members of the council have the veto power
- ✓ India has previously served as a non-permanent member of the UNSC for seven terms, overall 14 years, with the most recent term during 2011-2012
- ✓ India's bid for the permanent membership has the backing of four of the five permanent members- the US, UK, Russia and France, except China

2. Luxembourg in Europe - has become the first country to make all forms of public transport 'free'

- ✓ Luxembourg has declared its public transport free for all to remove the severe traffic problems the country faces due to too many cars on the roads.
- ✓ It will cost the government 500 million euros to run the service.
- ✓ Estonia's capital, Tallinn and the French city of Dunkirk are the only two cities that have made buses free and accessible to all passengers. However, this scheme was not implemented across the entire country.
- ✓ It is the second smallest country in the European Union.
- ✓ In October 2019, the State Government of Delhi announced similar scheme, making the public transport free for women.
- ✓ Delhi being the 8th most congested city in the world, the scheme has boosted women population

3. Bangladesh - celebrated 100th birth anniversary of Bangabandhu Sheikh Mujibur Rahman on March 17, 2020

- ✓ Indian Prime Minister, Narendra Modi participated in the celebrations through video conferencing.



- ✓ Sheikh Mujibur Rahman is called the father of Bangladesh.
- ✓ He was the first president of Bangladesh and later he served as the Prime Minister of Bangladesh between 1971 and 1975.
- ✓ He was assassinated in 1975.

APPOLLO
STUDY CENTRE

APPOINTMENTS

- 1. Revenue secretary, Ajay Bhushan P Pandey- was appointed as the new finance secretary for nearly an year term on March 3**



- ✓ With the appointment, he will remain the in-charge of all budget-related work.

- 2. Information commissioner Bimal Julka - was appointed as the chief information commissioner (CIC).**



- ✓ The commission was functioning without a chief after Sudhir Bhargava retired on January 11.
- ✓ The Central Information Commission was established by the Central Government in the year 2005 under the Right to Information Act (RTI), 2005

- 3. Justice Ranjan Gogoi - was nominated as a member of Rajya Sabha by the President for his outstanding contribution in the field of law.**

- 4. Thus, Justice Gogoi becomes the first Supreme Court justice and ex-CJI to receive a nomination to the upper house**

5. He will be the third SC Justice to enter Rajya Sabha, after ex-CJI Ranganath Mishra and Baharul Islam, who were elected members from the Congress party.



- ✓ During his tenure, he headed a five-judge constitution bench that delivered the landmark judgment deciding the 70-year-old litigation on ownership of the disputed Ram Janmabhoomi-Babri Masjid land in Ayodhya in favour of Hindus.
- ✓ Under Clause (3) of article 80, the President has powers to nominate persons with special knowledge to the council of states
- ✓ In total, the President can appoint 12 members to the upper house of the Parliament.

6. BJP national vice-president Shivraj Singh Chouhan - was sworn in for a fourth term as chief minister of Madhya Pradesh on March 23



- ✓ Governor Lalji Tandon administered the oath in the presence of select BJP leaders, MLAs and top bureaucrats.

7. B.P. Kanungo, Deputy Governor of the Reserve Bank of India (RBI) - was given a one-year extension of service by the Centre on March 27.



- ✓ His extension will be effective from April 2, 2020, when his three year tenure comes to an end.
- ✓ Besides Kanungo, the other three Deputy Governors of the RBI include NS Vishwanathan, M.K. Jain and Michael Patra.

SCHEMES

1. **Lok Sabha Speaker Om Birla - recently launched a national campaign named "Suposhit Maa Abhiyan" from his constituency, Kota in Rajasthan on March 1, 2020, with an intention to create malnutrition-free India.**



- ✓ The main objective of this campaign is to keep adolescent girls, pregnant women and newborn 'healthy'.
- ✓ About 1000 kits of 17 kg balanced diet were provided to 1,000 pregnant women in the first phase of the campaign.

COMMITTEES

1. **The Union Government - has formed a committee for the implementation of Kisan Rail.**
 - ✓ The committee will have representatives from the Railway and Agriculture Ministries to work out the modalities of the scheme.
 - ✓ It will look into the creation of a cold supply chain for the perishable goods, including milk, fish and meat, by initiating express and freight trains with refrigerated coaches
 - ✓ The scheme will be set up through a public-private-partnership (PPP) arrangement.
 - ✓ The Kisan Rail will include refrigerated coaches in Express and Freight trains.
2. **The Finance Commission - has constituted a committee under the chairmanship of NK Singh in order to create a road map for fiscal consolidation for the Center and the States**

PERSONALITIES

1. Britain's 111-year-old Bob Weighton - has now become the oldest living man in the world.



- ✓ He got this position after the death of the world's oldest Chitetsu Watanabe (112) in Japan.

2. Britain's World War II spy, Noor Inayat Khan - to be honoured with a memorial blue plaque at her former London home this year.



3. 'TIME Magazine' - has named India's former Prime Minister Indira Gandhi and freedom fighter Amrit Kaur among 100 greatest women of the year.



- ✓ TIME has created 100 special covers for 100 women from 1920 to 2020, who made an impression in that particular year.

- ✓ The magazine has named Amrit Kaur as the women of the year for 1947 and Indira Gandhi for 1976
- ✓ In 1930, Amrit Kaur became Mahatma Gandhi's secretary while tackling social issues and raising voice for women's education.
- ✓ She was the first woman health minister of India after Independence, serving the country in the position for the next 10 years.
- ✓ Amrit Kaur founded the 'Indian Council for Child Welfare' and helped the government to establish several hospitals and medical colleges.
- ✓ In 1999, TIME Magazine's customary 'Man of the Year' was converted into the 'Person of the Year' for making it equal for men and women.

4. Former State Bank of India (SBI) chairperson, Arundhati Bhattacharya - is announced to head the Indian operations of Salesforce, one of the world's leaders in customer relationship management (CRM) software



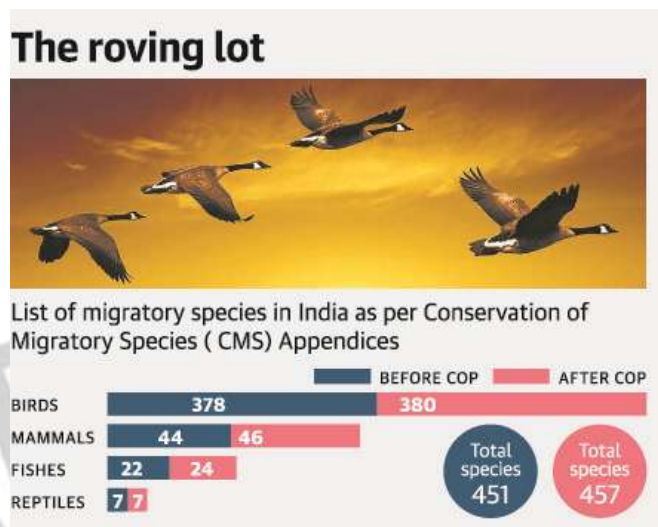
5. The Indian Mountaineer Satyarup Siddhanta - has entered 'Limca Book of Records'.



- ✓ He has set the record of becoming the first Indian to climb the highest volcanoes in all the 7 continents during January 2019

SCIENCE, TECHNOLOGY & ENVIRONMENT

1. Realme and Xiaomi - have announced that they are going to launch a new range of smartphones with ISRO's NavIC, which is known as India's navigational system.
2. The total number of migratory fauna from India - is estimated at 457 species, as per the new wildlife list put out by the Convention on the Conservation of Migratory Species (CMS)
 - ✓ Of the 457 species, birds comprise 83% (380 species)



- ✓ Before COP 13, the number of migratory bird species stood at 378.
 - ✓ Of these, the bird family Muscicapidae has the highest number of migratory species.
3. The Government of India - declared the National Chambal Sanctuary in Madhya Pradesh an eco-sensitive zone on March 2, 2020.



- ✓ This sanctuary is famous for freshwater Ganga dolphins and critically endangered crocodiles.

- ✓ This place is the home of Gharial (75% of critically endangered crocodile species)
- ✓ An eco-sensitive zone is a protected area that acts as a "shock absorber" against the environment degradation

4. Indian Space Research Organisation (Isro) - is planning the launch of Chandrayaan-3 mission in the first half of next year, 2021.

- ✓ The Chandrayaan-3 mission is said to be comparatively economical as it would carry only a lander mission without an orbiter.
- ✓ Chandrayaan-3 project director is Veerumuthuvel

5. National Aeronautics and Space Administration (NASA) - has named its Mars rover 'Perseverance' after a nationwide competition.



- ✓ NASA has scheduled its Mars mission in July 2020.
- ✓ Alexander Mather, a seventh grade student, recommended that Rover should be named 'Perseverance', which got more votes than any other entry.
- ✓ The Perseverance will collect samples of Martian Rocks from Mars.
- ✓ NASA's Mars Rover 'Perseverance' would work as a robotic scientist.
- ✓ Weighing about 2300 pounds (approx 1043 kg), it will research for signs of past microbial life on Mars
- ✓ It will become the fifth American rover to land on Mars.

6. The Gene Editing Tool called CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) - has been used for the first time to treat blindness.

7. Microsoft India and NASSCOM Foundation - launched the 'Innovate for Accessible India' campaign on March 17, 2020.

8. Elon Musk's SpaceX - will send astronauts to the International Space Station for the first time in May

- ✓ This was announced by Nasa after the confirmation of the first crewed launch from the United States to the platform since 2011.
- ✓ SpaceX will launch a Falcon 9 rocket to transport Nasa astronauts Bob Behnken and Doug Hurley in a first for the space agency as a measure of 'cost cutting'

9. The first fatal case of Hantavirus - was reported in China's Yunnan Province on March 23, 2020

- ✓ The symptoms of Hantavirus are similar to Covid-19 infection symptoms.
- ✓ However, Hantavirus is rarely known to have spread from person to person and is not airborne

10. The United States Space Force - began its first national security mission on March 26, 2020 by launching a hyper-secure Military communications satellite into orbit.

11. The world's fastest supercomputer and IBM's massive machine, called 'Summit' - identified 77 unique chemicals that can keep the coronavirus from infecting a host.



- ✓ It can compute over 200 quadrillion calculations per second with the power of 200 petafolds to back it up.
- ✓ In comparison to the world's fastest laptop – the Summit is a million times more powerful with processors stacked up to six feet high

12. Wasp - 76 b - Iron Raining

- ✓ Astronomers from University of Geneva found that the newly discovered bizarre exoplanet gets rainy in the evening, but instead of water, it rains iron.
- ✓ They call this exoplanet the Wasp-76 b.
- ✓ The exoplanet's weather conditions include a steady showering of molten iron rain, 2,400 degrees Celsius temperature, and winds above 10,000mph.
- ✓ It is slightly smaller than Jupiter and is somewhere in the constellation Pisces that is about 640 light-years away from our planet.

COURT VERDICT

1. **The Supreme Court - lifted the RBI ban on trading in virtual currencies such as Bitcoin on March 4, 2020.**



- ✓ Cryptocurrencies are virtual or digital currencies that have encryption techniques
- ✓ They operate independently of a central bank.
- ✓ Bitcoin is the most popularly accepted cryptocurrency.
- ✓ Japan had accepted Bitcoin as legal currency in 2017.

ART & CULTURE

1. **GOI nominates two places for inclusion in the World Heritage List**

- ✓ The government of India has nominated two places to include them in the World Heritage List 2020. These two places are - Dholavira and Forts and Monuments of Deccan Sultanate.



CONFERENCES & SUMMITS

1. The Department of Science of Technology, operating under Ministry of Science and Technology - organized a two-day 'International Conference on Nano-Science and Nano Technology' (ICONSAT) at Kolkata.



- The first G-20 virtual summit - will be held on March 26, 2020 under the chairmanship of Saudi Arabian King Salman bin Abdulaziz al Saud through a video conference.
2. India - has been approved as an observer state for Indian Ocean Commission (IOC), a five-nation grouping in the Western Indian Ocean
 - ✓ The IOC consists of Madagascar, Comoros, Seychelles, Mauritius and French Reunion.
 - ✓ The Indian Ocean Commission was created in 1982 at Port Louis, Mauritius.
 - ✓ The decision was taken at the meeting of the IOC Conference of ministers in Seychelles making India the fifth observer.
3. **ICONSAT**
 - ✓ The International Conference on NanoScience and NanoTechnology (ICONSAT) - Kolkata.

DEFENCE

- **Defence Minister of India Rajnath Singh - inaugurated the production facility of Light Combat Helicopter at the HAL campus in Bengaluru.**



- ✓ The project is a part of the "Make in India" initiative.
- ✓ These helicopters will be deployed at the Siachen base, which is 4,700 meters above sea level.
- ✓ This light combat helicopter is able to carry 500 km of weight.
- ✓ The government of India targeted to reach defence exports to Rs 35,000 crore by 2024.

- 2. In a major success, India - has bagged a deal worth \$40 million to supply four indigenously-built 'Swathi' weapon locating radars to Armenia by outscoring Russian and Polish firms.**



- ✓ The 'Swathi' weapon locating radars were developed by the Defence Research and Development Organisation (DRDO) and manufactured by the Bharat Electronics Limited (BEL)
- ✓ The supply of the equipment to Armenia has started to provide a big 'push' for 'Make in India' programme in the defence sector


- **India - has now signed the around \$190 million (₹1,300 crore) deal with the US for the development of two self-protection suites (SPS)**
- ✓ The Indian “Air Force One” suites will be retrofitted on the two custom-built Boeing-777 aircraft earlier acquired for long-haul VVIP travel.

3. **India - is ranked as the world’s second-largest arms importer, just behind Saudi Arabia**

- ✓ The country is ranked at the 23rd position among the top 25 weapon exporters, with Myanmar, Sri Lanka and Mauritius being its biggest clients

NOT ENOUGH BANG FOR BUCK

Military Expenditure			
➤ India is world's 5th largest military spender after US, China, Russia & Saudi Arabia	➤ Spent over \$80bn in arms deals over last 15-16	➤ Defence Budget (2020-21) is ₹3.37 lakh crore. Another ₹1.33 lakh crore for defence pensions	➤ Revenue outlay (65%) dwarfs Capital outlay (35%) for modernization in defence budget
Arms Deals		Operational Hollowness	
<ul style="list-style-type: none"> ➤ World's second largest arms importer, gets over 60% of requirements from abroad due to poor domestic defence-industrial base ➤ Biggest suppliers Russia, Israel, France & US ➤ Around 65 capital acquisition contracts worth over ₹1.5 lakh crore inked with foreign vendors since 2016-17 ➤ Over 80% of domestic acquisitions from five defence PSUs, four shipyards and 41 ordnance 		<ul style="list-style-type: none"> ➤ Poor long-term planning; haphazard procurements; little tech transfer despite mega deals ➤ Army has critical gaps in artillery, infantry weapons, light helicopters, night-fighting etc ➤ IAF does not have enough fighter jets, mid-air refuellers, AWACS, drones etc ➤ Navy short of submarines, multi-role helicopters, minesweepers etc ➤ Maintenance of 15-lakh armed forces, pay & pensions consume bulk of the expenditure 	



4. **Tejas, the made in India Light Combat Aircraft (LCA) - completed its maiden test on March 17, 2020 after Final Operational Clearance (FOC)**

- ✓ This first flight of LCA Tejas was held in Bangalore

5. **Operation Namaste:**

The Indian Army has launched its anti-COVID-19 campaign code-named as “Operation Namaste” in order to help the government in its fight against the pandemic.

ECONOMY

1. India - has overtaken France and the UK to become the world's fifth-largest economy, as per IMF's October World Economic Outlook, which ranked the countries based on nominal GDP.

- ✓ On the other hand, India's real GDP is predicted to witness slow growth in the year ahead due to credit weakness.

Rank	2010	2019
1	United States	United States
2	China	China
3	Japan	Japan
4	Germany	Germany
5	France	India
6	United Kingdom	United Kingdom
7	Brazil	France
8	Italy	Italy
9	India	Brazil
10	Russian Federation	Canada

2. The government - announced the collection of ₹1.05 lakh crore as Goods and Services Tax (GST) revenue in February 2020, an increase of 8% over the same month last year.

3. According to the Bloomberg Billionaires Index, Chinese billionaire Jack Ma, founder of e-commerce major Alibaba Group - has replaced Mukesh Ambani, Chairman of Reliance Industries Limited (RIL) as the richest man in Asia.

- ✓ Ambani's current net worth stands at \$41.8 billion, while that of Jack Ma is \$44.5 billion
- ✓ Globally, Ambani is the 19th richest man just behind Jack Ma

4. Iran Seeks IMF Loan

- ✓ Iran has sought financial assistance from the International Monetary Fund (IMF) to help it combat the novel coronavirus. This is the first time the nation has sought money from the IMF since 1962.

5. World Bank's \$1 Billion Emergency Fund for India

- ✓ WB has sanctioned \$1 billion to roll out a COVID-19 Emergency Response and Health Systems.
- ✓ Preparedness Project in India.

6. Pradhan Mantri Garib Kalyan Yojana

- ✓ In light of the COVID-19 pandemic, the Finance Minister announced a relief package under the Pradhan Mantri Garib Kalyan Yojana for the poor. An amount of Rs 1.7 lakh crore has been allocated for the same.



SPORTS

1. Saurashtra - claimed their maiden Ranji trophy title, on first-innings lead against Bengal after the final at SCA Stadium ended in a draw at Rajkot on March 13.



2. Teenage Indian batting sensation, Shafali Verma - becomes the World No. 1 female player in the ICC women's T20 rankings, following her brilliant knocks at the Women's World Cup in Sydney, Australia.



3. The BCCI's Cricket Advisory Committee (CAC) - named former India left-arm spinner Sunil Joshi as the new chairman of the senior national selection committee

✓ It had also picked ex-pacer Harvinder Singh for the five-member selection panel.



4. Australia - defeated India to win an unprecedented fifth T20 World Cup on March 8 at Melbourne, Australia

- ✓ India lost the game to the brutal Australian side, which defeated them by 85 runs in the final



LEADING SCORERS	
BETH MOONEY	259
ALYSSA HEALY	236
NATALAIE SCIVER	202
HEATHER KNIGHT	193
SHAFALI VERMA	163

LEADING BOWLERS	
MEGAN SCHUTT	13
JESS JONASSEN	10
POONAM YADAV	10
SOPHIE ECCLESTONE	6
ANYA SHRUBSOLE	6

Stats: Rajesh Kumar

- ✓ Batting first, Australia set a formidable total of 184 for four in the stipulated 20 overs
- ✓ Overwhelmed by the occasion, India crumbled to 99 all out in front of a turnout of 86,174 at the iconic Melbourne Cricket Ground, a record in women's cricket history.
- ✓ Australia have already won the T20 World cup in 2010, 2012, 2014 and 2018
- ✓ The inaugural event was bagged by England while West Indies emerged winner in 2016
- ✓ For India, the game is their maiden entry into the summit clash

5. Legendary M C Mary Kom (51kg) and World No.1 Amit Panghal (52kg) -bagged bronze medals at the Asian Olympic Qualifiers at Amman, Jordan on March 10.

AWARDS

1. President Ram Nath Kovind - presented Nari Shakti Puraskar for 2019 to 15 women at Rashtrapati Bhavan on March 8

- ✓ The awards are conferred to illustrious women in recognition of their efforts in rendering distinguished service towards emancipation of women, especially vulnerable and marginalised women

Nari Shakti Puraskar 2019: Winners List

S. No	Name	Category	State
1	Padala Bhudevi	Individual	Srikakulam, Andhra Pradesh
2	Bina Devi	Individual	Munger , Bihar
3	Arifa Jan	Individual	Srinagar, Jammu and Kashmir
4	Chami Murmu	Individual	Rajnagar, Saraikela Kharsawan, Jharkhand
5	Nilza Wangmo	Individual	Leh , Ladakh
6	Rashmi Urdhwaresha	Individual	Pune, Maharashtra
7	Sardarni Mann Kaur	Individual	Patiala, Punjab
8	Kalavati Devi	Individual	Kanpur, Uttar Pradesh
9	Tashi and Nungshi Malik	Individual	Dehradun, Uttarakhand
10	Kaushiki Chakroborty	Individual	Kolkata, West Bengal
11	Bhageerathi Amma Karthyayini Amma	Individual	Kollam, Alappuzha, Kerala
12	Avani Chaturvedi Bhawna Kanth Mohana Singh	Individual	Rewa, Madhya Pradesh Darbhanga, Bihar Agra, Uttar Pradesh Indian Air Force

2. The Abel Prize 2020

- ✓ Hillel Furstenberg, 84, of the Hebrew University of Jerusalem, and Gregory Margulis, 74, of Yale University. Both are retired professors, shared this year's Abel Prize, the mathematics equivalent of a Nobel.
- ✓ The citation for the prize, awarded by the Norwegian Academy of Science and Letters, lauds the two mathematicians "for pioneering the use of methods from probability and dynamics in group theory, number theory and combinatorics."

OBITUARY

'Perasiriyar' K Anbazhagan, veteran politician (97 years)



A LIFE OF PRINCIPLES

DEC 19, 1922

Born Ramaiah to M Kalyanasundaram and Swamambal at Kattur near Tiruvarur. His father was a Congressman and follower of Periyar

1942 Introduced to values of Periyar at home, begins following Maraimalai Adigal's Thani Tamil Iyakkam and changes his name to Anbazhagan

1942 While pursuing his post-graduation at Annamalai University, invites C N Annadurai to address students. Connects with M Karunanidhi

1944 Joins Pachaiyappa's College as Tamil lecturer

1948 Becomes editor of Puthuvazhvu magazine

1949 Comes out of Dravidar Kazhagam and becomes part of the launch of the DMK

1957 Gives up his job at the college to turn full-time politician; his academic background earns him the sobriquet Perasiriyar

➤ Elected for the first time to assembly from Egmore constituency

1962 Loses assembly polls, but is elected to legislative council

1964 Participates in anti-Hindi agitation and is imprisoned for six months



FROM THE ALBUM: Seen with E V R Periyar, C N Annadurai and M G Ramachandran

1967 Elected to Lok Sabha from Tiruchengode

1971 Elected MLA from Purasaiwalkam, joins Karunanidhi's cabinet as health minister

1977 Becomes DMK general secretary, holds post till death

1983 Resigns as MLA along with Karunanidhi protesting against the Sri Lanka war

1986 Disqualified from assembly for burning a copy of the 17th Schedule of the Constitution as part of anti-Hindi agitation

1989 Wins from Anna Nagar constituency and becomes education minister in the DMK government; retains portfolio after winning 1996 election

2006 Gets elected from Harbour and goes to the assembly for the ninth time. Becomes finance minister

2017 Pushes M K Stalin to be DMK working president

2018 Proposes Stalin as DMK president after the demise of M Karunanidhi

MAR 7, 2020

Passes away at the age of 97 after being ill for a few months

RANKING & REPORT

1. For the first time, Indian technical institutions - have found place among the Top 50 in QS World University Ranking by subject

- ✓ IIT-Bombay and IIT-Delhi were occupying the 44th and 47th rank, respectively, this year in engineering & technology.

2. Uttar Pradesh - topped the list with 22,655 fatalities (15% of all road deaths) in road accidents last year

- ✓ Tamil Nadu had reported 17,218 fatalities in 2015, which came down to 10,525 last year.
- ✓ The total number of accidents in Tamil Nadu in 2019 is 57,228

3. On March 20, 2020, United Nations - released the 8th edition of World Happiness Report on the International Day of Happiness, 2020



- ✓ Finland was ranked first in the report and India was ranked 144 among 156 ranked countries
- ✓ This year the report has given a special role for environments and has linked people's happiness to their environment
- ✓ Finland ranked topmost for the third consecutive time.
- ✓ Afghanistan ranked the least.

4. Freedom in the World 2020 Report

- ✓ The Freedom in the World 2020 report has ranked India at the 83rd position along with Timor-Leste and Senegal.
- ✓ While, Finland topped the list as the free democratic country.

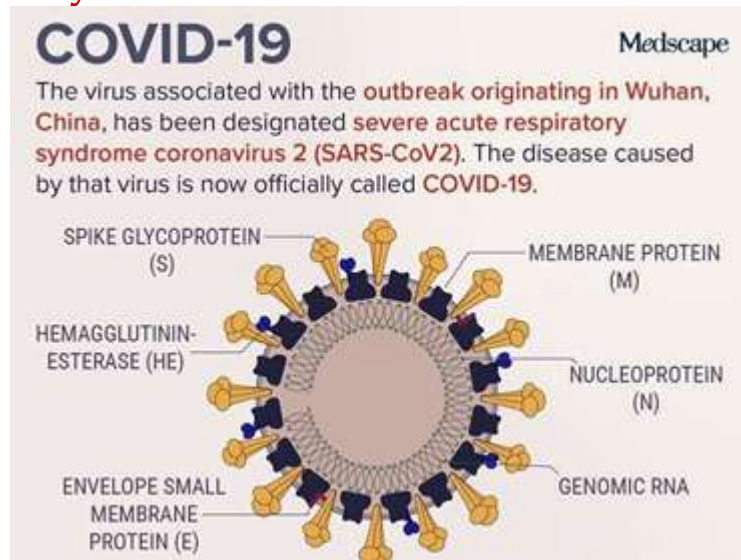
5. India - has scored 'C' ranking in the Animal Protection Index 2020, released by World Animal Protection, an international animal welfare charity.



- ✓ The index ranks countries from A (being the highest score) to G (being the weakest score) according to their policy and legislation.
- ✓ India has attained a C ranking in the index.
- ✓ India was ranked along with Spain, Mexico, France and New Zealand.
- ✓ Sweden, the United Kingdom, and Austria are rated with the highest scores.
- ✓ The countries that performed weakly included Iran, Morocco, Algeria and Belarus.

FACTS ON COVID-19

- ❖ On February 26, for the first time since the COVID-19 outbreak began in China on December 8, the number of novel coronavirus (SARS-CoV-2) cases reported in a single day was more outside mainland China than within the country.



- ❖ Coronaviruses are a large family of viruses, including some that cause the common cold to some that cause major diseases such as the Severe Acute Respiratory Syndrome (SARS) and the Middle East Respiratory Syndrome (MERS).
- ❖ The coronavirus outbreak came to light when on December 31, 2019, China informed the World Health Organisation of a cluster of cases of pneumonia of an unknown cause in Wuhan City in Hubei province.
- ❖ The novel coronavirus has acquired the ability to spread among humans, with cases of human-to-human transmissions being reported first in Vietnam and Germany.
- ❖ Coronavirus symptoms can include fever, cough and shortness of breath.
- ❖ The illness also causes lung lesions and pneumonia.
- ❖ Milder cases may resemble the flu or a bad cold, making detection difficult.

Declaration of pandemic: WHO

- ❖ A pandemic is defined as the worldwide spread of a new disease.
- ❖ The last pandemic reported was the 2009 H1N1 flu pandemic, which killed hundreds of thousands globally.
- ❖ Unless it is influenza, WHO generally avoids declaring diseases as pandemics.

- ❖ This change came about after the lessons learned from the 2009 H1N1 experience.
- ❖ According to 2017 pandemic influenza risk management guidelines, the WHO uses pandemic influenza phases – interpandemic, alert, pandemic and transition – to “reflect its risk assessment of the global situation regarding each influenza virus with pandemic potential infecting humans”.

WHO declared the COVID-19 as Pandemic on March 11, 2020.

Way Forward: What steps should countries take to stop the virus from spreading?

- ❖ The priority should be to detect cases early and isolate people who test positive for the virus.
- ❖ Once a case is detected, the focus should be to trace the contacts and treat them if already infected.
- ❖ Since the molecular test is not highly sensitive and can return false negatives, people who have returned to India or have come in contact with people who have tested positive should be made aware to seek immediate medical care once symptoms show up.
- ❖ Though the average incubation period is five-seven days, a few have shown up symptoms at the end of 24 days.
- ❖ Efforts should also be focussed on preventing outbreaks in hospitals and spread in the community.
- ❖ One way to stop the spread in the community is to avoid mass gathering in enclosed spaces.

ARS-CoV-2? Covid-19?

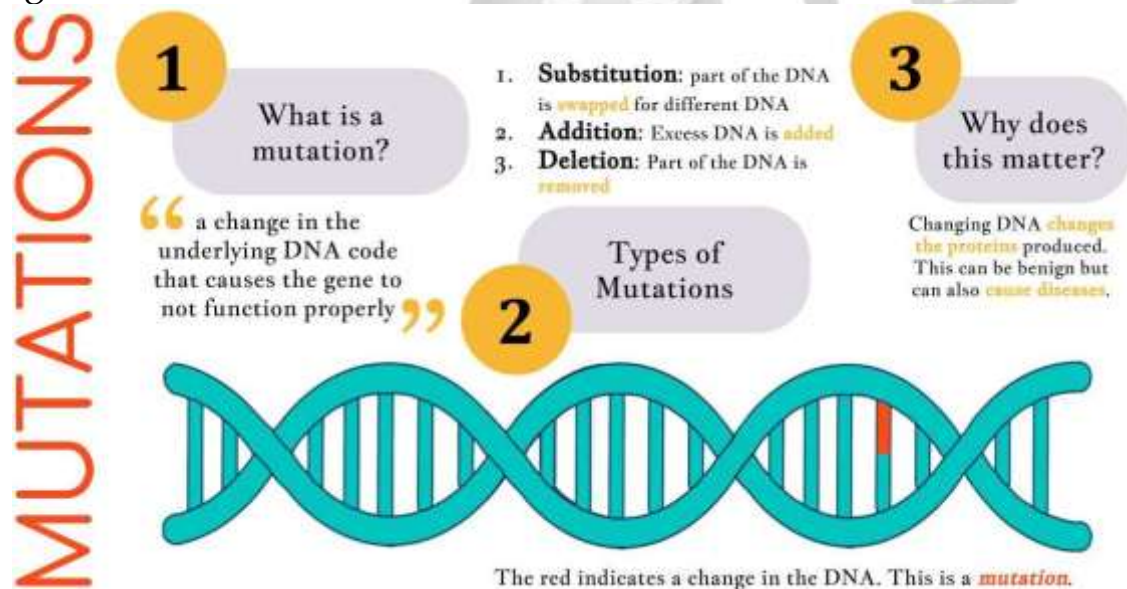
- ❖ The World Health Organisation (WHO) has named the new coronavirus disease as ‘Covid-19’.
- ❖ The new name is taken from the words "corona", "virus" and "disease", with 2019 representing the year when it emerged (the outbreak was reported to the WHO on 31st December, 2019).
- ❖ The WHO wanted to avoid stigmatizing a country or particular group, so it chose a name that did not refer to a geographical location, an animal, an individual or a group of people.
- ❖ Moreover, the word coronavirus refers to the group of viruses it belongs to, rather than the latest strain. The latest strain has been designated ‘Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)’ by the International Committee on Taxonomy of Viruses.

THE SARS-COV-2 IS MUTATING

- ❖ Senior scientists at Australia's national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), have said the virus dubbed SARS-CoV-2 is mutating, after analysing the 115 published genome sequences from the current COVID-19 outbreak.
- ❖ Some of these 'errors' in the virus known as 'mutations' may be significant for the development and evaluation of new diagnostics, drugs and vaccines

Mutation

- ❖ A Mutation occurs when a DNA gene is damaged or changed in such a way as to alter the genetic message carried by that gene.
- ❖ A Mutagen is an agent of substance that can bring about a permanent alteration to the physical composition of a DNA gene such that the genetic message is changed.



What test is done for coronavirus?

- ❖ The first test that samples of all suspected patients are sent for is the polymerase chain reaction (PCR) test. If that is positive, the sample is sent to the National Institute of Virology in Pune, which is the only government laboratory currently doing genome sequencing, for final confirmation. This final confirmatory test specific for the novel coronavirus was developed virtually overnight after the emergence of the disease.

Can masks contain the coronavirus infection?

- ❖ Masks are effective in containing the spread of infection. Any person with a history of travel to affected areas or of contact with infected persons, and showing symptoms of the disease, should use a mask. It is also important for medical staff to use masks.
- ❖ For the general population, it is not essential to use masks at the current moment. In fact, masks come with their own hazards. For a person with an existing medical condition, wearing a mask may inadvertently complicate the situation. Many experts have noted that people may wear a mask incorrectly, and they can increase the risk of infection by touching their face more often.

Coronavirus in India: Are hand sanitisers effective?

- ❖ They are, provided they are alcohol-based and the alcohol content is more than 60%. The US Centres for Disease Control “recommends washing hands with soap and water whenever possible because handwashing reduces the amounts of all types of germs and chemicals on hands. But if soap and water are not available, using a hand sanitizer with at least 60% alcohol can help you avoid getting sick and spreading germs to others.” Hand-washing, though, remains the first and best step, preferably with warm water.

Coronavirus outbreak: Is it safe to shake hands?

- ❖ The virus can transmit itself via hand contact, especially if the infected person has coughed or sneezed into his own hands. As the number of people exposed to the virus goes up, and given the 14-day incubation period during which a person can stay asymptomatic but spread the disease, it may be better to use a hands-off greeting, such as a namaskar.

How does the novel coronavirus spread?

The virus is transmitted through

1. Direct contact with respiratory droplets of an infected person (generated through coughing and sneezing)
2. Touching surfaces contaminated with the virus.

The virus may survive on surfaces for several hours, but simple disinfectants can kill it

What are the Symptoms of Coronavirus?

❖ Signs and symptoms of COVID-19 may appear two to 14 days after exposure and can include:

1. Fever
 2. Cough
 3. Shortness of breath or difficulty breathing
- ❖ The severity of COVID-19 symptoms can range from very mild to severe.
 - ❖ People who are older or have existing medical conditions, such as heart disease, may be at higher risk of serious illness.
 - ❖ This is similar to what is seen with other respiratory illnesses, such as influenza.

What is Endemic, Epidemic and Pandemic?

1. **Endemic:** a disease that exists permanently in a particular region or population. Malaria is a constant worry in parts of Africa.
2. **Epidemic:** An outbreak of disease that attacks many peoples at about the same time and may spread through one or several communities.
3. **Pandemic:** When an epidemic spreads throughout the world.
4. **Sporadic:** Refers to a disease that occurs infrequently and irregularly.

CORONAVIRUS STRAIN ISOLATED

❖ India is only the fifth country in the world besides – Japan, Thailand, U.S. and China – to have successfully isolated the COVID-19 virus strain, helping it take the first step towards expediting the development of drugs, vaccines and rapid diagnostic kits in the country.

About India Isolating the Coronavirus Strain

- ❖ Director General of the Indian Council of Medical Research (ICMR) has said that India has managed to isolate the strain from a very small batch of positive cases which is a remarkable achievement.
- ❖ The strain that we have is 99.99% similar to the Wuhan strain.
- ❖ These steps will enable India to expedite detection of the virus and will help in effective management.

About ICMR

❖ The Indian Council of Medical Research (ICMR), the apex body in India for the formulation, coordination and promotion of biomedical research, is one of the oldest and largest medical research bodies in the world.

How does it work?

- ❖ To infect a lung cell, the coronavirus must insert its genes, co-opting the cell's own genetic machinery.
- ❖ The cell begins to produce viral proteins, which are used to produce millions of new viruses.
- ❖ Each of those viral proteins must be able to latch onto the necessary human proteins for the process to work.
- ❖ In the new study, the scientists investigated 26 of the coronavirus's 29 genes, which direct production of the viral proteins. The researchers found 332 human proteins targeted by the coronavirus.
- ❖ Some viral proteins seemed to target just one human protein; other viral proteins are capable of targeting a dozen human cellular proteins.

Hydroxy Chloroquine:

- ❖ Chloroquine has been much in the news this past week, thanks to speculation about its use against the coronavirus.
- ❖ Chloroquine kills the single-celled parasite that causes malaria.
- ❖ Scientists have long known that it can also attach to a human cellular protein called the sigma-1 receptor. And that receptor is also the target of the virus.

What are antibodies?

- ❖ Antibodies, also known as immunoglobulins, are Y-shaped proteins that are produced by the immune system to help stop intruders from harming the body.
- ❖ When an intruder enters the body, the immune system springs into action.
- ❖ These invaders, which are called antigens, can be viruses, bacteria, or other chemicals.
- ❖ When an antigen is found in the body, the immune system will create antibodies to mark the antigen for the body to destroy.

Function of Antibodies

- ❖ The antibodies act sort of like the immune system's scouts.
- ❖ They find antigens, stick to them, and identify for the immune system the exact type of antigen so that it can be destroyed.
- ❖ Each antibody is made for one and only one antigen, and it's fitted with special receptors that will only bind to that antigen.
- ❖ For instance, a specific antibody is created to help destroy the chickenpox virus. Only that particular antibody will attack a chickenpox virus.

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