Current Affairs - Apr 2020

Month [All ▼]   Type [All ▼]

- ▶ **134** *Current Affairs were found in Period -* **April 21 - 30, 2020** *for Type -* **All**

Appointments

1. ▶ Former Karnataka cricketer J. Arunkumar has been appointed the head coach of USA Cricket team.
2. ▶ Government announced new appointments at Secretary level -
   1. Ministeries -
      1. Sanjeev Ranjan - Ministry of Shipping.
      2. Arvind Kumar Sharma - MSME Ministry.
      3. Aramane Girdhar - Ministry of Road Transport and Highways.
      4. Ajay Tirkey - Ministry of Women & Child Development
      5. Rajesh Verma - Ministry of Corporate Affairs.
      6. Tarun Kapoor - Ministry of Petroleum & Natural Gas.
      7. Indu Shekhar Chaturvedi - Ministry of New and Renewable Energy.
      8. Rameshwar Prasad Gupta - Ministry of Environment, Forest and Climate Change.
      9. Pradip Kumar - Ministry of Steel.
      10. Anand Kumar - Ministry of Culture.
      11. Amit Khare - Ministry of Information and Broadcasting.
   2. Notable Departments under Ministeries -
      1. Ravi Mittal - Department of Sports (Ministry of Youth Affairs and Sports).
      2. Tarun Bajaj - Department of Economic Affairs (Ministry of Finance).
      3. Rajesh Kr. Chaturvedi - Deptt of Chemicals and Petrochemicals (Ministry of Chemicals and Fertilizers).
      4. Leena Nandan - Department of Consumer Affairs (Ministry of Consumer Affairs, Food and Public Distribution).
      5. Sudhanshu Panday -Department of Food and Public Distribution (Ministry of Consumer Affairs, Food and Public Distribution).
      6. Nagendra Nath Sinha - Department of Rural Development (Ministry of Rural Development).
      7. Anita Karwal - Department of Education and Literacy (Ministry of Human Resource Development).
3. ▶ Government reconstituted 16 member National Shipping Board (NSB), which is highest advisory body on matters related to Indian shipping. Its board will now be headed by former Director General of Shipping Malini Shankar.
4. ▶ Misc. Appointments (April 2020) -
   1. Lakshminarayanan Duraiswamy appointed as MD of Sundaram Home Finance.
   2. Government extended term of Madhabi Puri Buch as a Whole Time Member (WTM) at Securities and Exchange Board of India (SEBI) by 6 months. She is the first woman Whole Time Member (WTM) of SEBI.
   3. Parag Raja has been appointed by Bharti AXA Life Insurance as its MD & CEO.
   4. Supreme Court extended tenure of Shiva Kirti Singh as Chairman of Telecom Disputes Settlement and Appellate Tribunal (TDSAT), for 3 months.
   5. Govt.approved extension of tenure of members and current part-time chairman of Bank Board Bureau(BBB) by 2 years.
   6. Karnataka Bank received RBI nod for reappointment of Mahabaleshwara M S as MD and CEO for 3 years.
   7. Birupaksha Mishra became Executive Director of Union Bank of India, after its amalgamation with Corporation Bank and Andhra Bank.

8. Vineet Arora has been appointed MD and CEO of New Paytm Group Entity *Paytm General Insurance Ltd*.
9. Ajay Mahajan appointed as MD & CEO of credit rating agency *CARE Ratings*.
10. Rajnesh Oswal has been appointed as First permanent Judge of common High Court of UTs of Jammu & Kashmir and Ladakh.
11. Anurag Srivastava has been appointment as spokesperson for ministry of external affairs, replacing Raveesh Kumar.
12. V Kanagaraj appointed as new State Election Commissioner of Andhra Pradesh.
13. Tata Capital appointed Sarosh Amaria as Managing Director.
14. US President Donald Trump appointed Indian-American Sudarsanam Babu to US National Science Board.
15. Shiv Das Meena is appointed as CMD of PSU HUDCO.
16. David Li has been appointed as CEO of Chinese Telecommunications Giant Huawei's India Operations.
17. RBI approved re-appointment of N Kamakodi as MD & CEO of City Union Bank.
18. International Motorcycle Manufacturers Association (IMMA) elected Rakesh Sharma (Bajaj Auto Executive Director) as its President for 2 years.
19. London Based Financial Firm HSBC appointed Noel Quinn as Group chief executive officer.
20. Neeraj Vyas has been appointed as interim MD & CEO of PNB Housing Finance for 8 months.
21. RBI extended Madhavan Menon's term as part-time Chairman of CSB Bank (Formerly Catholic Syrian Bank).

5. ▶ Rajiv Kumar (*Former finance secretary*) has been appointed as Chairperson of Public Enterprises Selection Board(PESB).
6. ▶ Sanjay Kothari has been appointed as Central Vigilance Commissioner (CVC). He earlier served as secretary to President of India, replaced by Kapil Dev Tripathi recently.
    1. Also, Suresh N. Patel appointed as Vigilance Commissioner.
    2. Central Vigilance Commission Consists of A Chief Vigilance Commissioner (Sanjay Kothari) and 2 Vigilance Commissioners (Suresh N. Patel AND Sharad Kumar).
7. ▶ T S Tirumurti will be appointed as India"s Permanent Representative to United Nations, replacing Syed Akbaruddin. Several Other Ambassadors Appointed -
    1. Namrata S Kumar - Slovenia
    2. Jaideep Mazumdar - Austria
    3. Deepak Mittal - Qatar
    4. Piyush Srivastava - Bahrain

Awards

1. ▶ Adam Higginbotham's *Midnight in Chernobyl: The Untold Story of the World's Greatest Nuclear Disaster*, won William E. Colby Award. It includes $5,000 monetary prize.
2. ▶ Industrial Awards (April 2020) -
    1. Animal rights body People for Ethical Treatment of Animals (PETA) India has conferred Chief Minister of Odisha, Naveen Patnaik with 'Hero to Animals Award' for allocating funds to feed community animals in Odisha during lockdown.
    2. India-based non-profit organization (NPO) ARMMAN has been awarded Skoll Award for Social Entrepreneurship 2020 in recognition of its exceptional work in the maternal and child health space in India, along with 4 other awardees.
    3. Tata Power company's *Club Enerji #Switchoff2SwitchOn' campaign*, which is India's 1st, energy & resource conservation club has won silver in Edison Award 2020 under Social innovation's subcategory, social energy solution.

Books

1. ▶ Book *How the Onion Got Its Layers* authored by Sudha Murty has been released.
2. ▶ Book *Sayajirao Gaekwad III: The Maharaja of Baroda*, written by Uma Balasubramaniam has been published.

Committees

1. ▶ Committee headed by Ravindra H Dholakia, which was tasked with reviewing methodology of estimation of sub-national accounts and giving recommendations for the same, has suggested a complete revamp of how states collect and compile data for

state-level gross domestic product (GDP) and other estimates.

    1. It suggested that GST must be used for estimating incomes and other statistics at the state level.

    2. It also said that states should compile their own index of industrial production (IIP) instead of relying on all-India IIP data.

2. ▶ University Grants Commission Committee headed by R. C. Kuhad, submitted its report regarding Guidelines on Examinations and Academic Calendar, amid Covid-19 pandemic. Main Recommendations -

    1. Intermediate Semester Students Will be graded based on internal assessment of present and previous semester. In states where COVID-19 situation has normalized, exams will be in July.

    2. For Terminal Semester Students, exams will be held in July.

    3. COVID-19 cell will be constituted in every university, and A COVID-19 cell in UGC to be created for faster decision making.

    4. Universities may Consider -

        1. Reducing exam time from 3 hours to 2 hours.

        2. Conduct examinations in offline / online mode, observing guidelines of "social distancing" and and ensuring fair opportunity to all students.

        3. Conduct practical / Viva Examinations through Skype or other meeting apps.

        4. Extension of six months period to the M.Phil.or Ph.D. students.

Days

1. ▶ Apr 21 is marked as National Civil Services Day.

    1. It was on this day in 1947, That First Home Minister Sardar Shri Vallabhai Patel addressed first batch probationers of Administrative Services.

    2. Apr 21 is also observed as World Creativity and Innovation Day.

2. ▶ Apr 22 is observed as World Earth Day, Being Observed Since 1970. 2020 is 50th anniversary of this Observance.

    1. 2020 Theme is *Climate Action.*

3. ▶ Apr 23 is observed as UNESCO World Book and Copyright Day. It is being observed since 1995. For 2020, Kuala Lampur (Malaysia) is declared as World Book Capital.

    1. Apr 23 is also observed as Global English Language Day and Spanish Language Day.

    2. April 23 also observed as Khongjom Day in Indian state of Manipur, commemorating warriors who fought in 1891 Anglo-Manipur war.

        1. War was fought between 31 March and 27 April of 1891. It resulted in victory of British.

        2. The war has its significance in Indian history for bravery of soldiers that fought against three sides of British attack, that is, from Silchar, Kohima and Myanmar. Battle was fought at the Kheba hills of Khongjom in Manipur, hence named Khongjom Day.

    3. Apr 23, 2020 is also observed as International Girls in ICT (Information and Comunication Technology) Day, celebrated every year on 4th Thursday of April.

4. ▶ Apr 25 is observed as World Malaria Day, established by World Health Organization in 2007. 2020 Theme is *Zero malaria starts with me* (Same as 2019 Theme).

    1. Apr 25, 2020 also marks First Ever *International Delegate's Day*. It marks75th anniversary of San Francisco Conference (1945).

    2. Apr 25, 2020 is also observed as World Veterinary Day. It is observed on Last Saturday of April.

    3. Apr 25 is also observed as World Penguin Day.

5. ▶ Apr 26 is observed as World Intellectual Property Day, established by World Intellectual Property Organization (WIPO) in 2000. 2020 Theme is *Innovate for a Green Future.*

    1. Apr 26 is also observed as UN International Chernobyl Disaster Remembrance Day, Proclaimed in 2016.

6. ▶ Apr 28 - World Day for Safety and Health at Work, observed annually since 2003. 2020 Theme is *Stop The Pandemic.*

7. ▶ Apr 29 - International Dance Day. It marks birth anniversary of Jean-Georges Noverre (born on 29 April 1727), a French dancer, and creator of modern ballet, and great reformer of dance.

8. ▶ Apr 30 is observewd as Ayushman Bharat Diwas, being observed since 2018. Under Ayushman Bharat / Pradhan Mantri Jan Arogya Yojana (PMJAY), Health Insurance of 5 lakh rupees per family is given to a family.

    1. Apr 30 is also Observed as International Jazz Day, declared by UNESCO in 2011.

9. ▶ April 24 is Observed as -

1. International Day of Multilateralism and Diplomacy for Peace. 2019 was First ever observance of this day.
2. World Day for Laboratory Animals.

10. ▶ National Panchayati Raj Day in India. It began in 2010. It marks passing of Constitution (73rd Amendment) Act, 1992 that came into force with effect from 24 April 1993.
    1. On this occasion in 2020, PM Modi launched E-Gram Swaraj application. Also, he launched Swamitva scheme to integrate lands and reduce land disputes, in 6 states.
11. ▶ World Immunization Week is observed annually during last week of April.

Top

Defence

1. ▶ Defence Minister Rajnath Singh unveiled India's First Mobile Virology Research and Diagnostics Laboratory (MVRDL) developed by DRDO's Hyderabad based Research Centre Imarat (RCI). It is capable of processing over 1000 samples in a day for COVID-19 Infection.

Top

Economy

1. ▶ India signed $1.5 billion loan Agreement with Asian Development Bank (ADB), to support government's response to COVID-19 pandemic, focusing on immediate priorities such as disease containment and prevention.
2. ▶ A quarterly business confidence index issued by economic think tank *National Council for Applied Economic Research,* dropped by over 30% in last quarter of previous fiscal year. Its at lowest level since 1998 when business sentiment was low due to Asian financial crisis
3. ▶ As per N K Singh Headed 15th Finance Commission, States can use *escape* clause under their Fiscal Responsibility Act (FRBM) to raise additional resources to fight Covid-19 pandemic.
    1. Centre and States have their own FRBM Acts, respectively. However, there are two similarities. One, the limit for the fiscal deficit is 3 % and, there is an escape clause to raise deficit up to 50 basis points in exceptional situations.
4. ▶ Asian Development Bank (ADB) approved USD 346 million (around Rs 2600 crores) loan to India, for reliable power connection in rural areas of Maharashtra.
5. ▶ Axis Bank acquired additional 29 % stake in Max Life Insurance, for approx 1590 Crores. It Makes Max Life Insurance a 70:30 joint venture between Max Financial Services and Axis Bank.
6. ▶ Competition Commission of India Approvals (April 2020) -
    1. Approved acquisition of 18.95 % stake in Religare Health Insurance Company by Trishikhar Ventures under green channel route.
    2. Approved formation of Joint Venture between Adani Green Energy and Total S.A. in business of power generation through solar energy in India. Total S.A. is parent entity of Total Group.
    3. Approved 100% acquisition by JSW Energy Limited of GMR Kamalanga Energy Limited.
    4. Approved acquisition of 80.1% stake by Hitachi in power grid business of ABB Limited.
    5. Approved acquisition of 9.93% stake by Emerald Sage Investment Limited in Apollo Tyres Limited.
    6. Approved acquisition of majority shareholding in B.M.M Ispat Limited (BMM) by JSW Projects Limited (JPL).
    7. Approved acquisition of under 5% shareholding in Intas Pharmaceuticals Limited by Canary Investments Limited (Mauritius) and Link Investment Trust II.
    8. Approved Combination between BP Global Investments Limited (BP Global) and Reliance BP Mobility Limited (RBPML). It relates to - It involves transfer of Reliance Industries' and its group entities' entire undertaking and related activities in India to RBPML.
        1. Proposed transaction would involve acquisition of an aggregate 49 % of fully diluted paid-up equity share capital and voting rights in and of RBPML by BP Global.
    9. Approved acquisition of 100% shares and control of Tech Data Corporation by Tiger Midco LLC.
7. ▶ Federal Bank acquired additional stake of up to 4% in equity capital of IDBI Federal Life Insurance Co Ltd (IFLIC), from IDBI Bank. Federal Bank currently holds a 26% stake in JV insurance company.
8. ▶ Finance ministry established International Financial Services Centres Authority (IFSCA), to be headquartered in Gandhinagar (Gujarat).

1. It is a unified authority to regulate all financial services in International Financial Services Centres (IFSCs) in country. Currently, IFSC are regulated by multiple regulators such as RBI, SEBI and IRDAI.
2. This brings into effect certain provisions of IFSCA Act 2019. Government has not effected provisions pertaining to -
    1. Regulation of financial products, financial services and financial institutions in IFSCs and its abilities to transact in foreign currencies and make rules.
3. Main function of authority will be to regulate financial products in an IFSC, which were previously regulated by appropriate regulators.
4. Details Pertaining to IFSCA act

9. ▶ Finance ministry increased coverage of a lender's loss in case of loan default under Credit Guarantee Fund for Micro Units (CGFMU) scheme to 75%, from 50% earlier. It incentivizes lending to micro businesses which are bearing brunt of coronavirus outbreak.
    1. CGFMU scheme, announced in April 2016, covers micro loans up to Rs 10 lakh extended under Pradhan Mantri Mudra Yojana.
    2. Lenders can pay a fee for the portfolio of loans they want to be covered by the guarantee.

10. ▶ Government amended IBC (Insolvency and Bankruptcy Code) 2016 by suspending provisions that result in insolvency proceedings against defaulters, for a period upto one year, amid the pandemic.
    1. This will act as a relief measure for corporate borrowers affected by COVID-19 pandemic as well as pave the way for banks to restructure loans.
    2. Sections are -
        1. Section 7 - pertains to initiation of corporate insolvency proceedings by a financial creditor.
        2. Section 9 - pertains to initiation of corporate insolvency proceedings by an operational creditor.
        3. Section 10 - relates to filing an application for insolvency resolution by a corporate.

11. ▶ Government announced that Common Service Centres (CSCs) will take over village level online retail chain, taking over work of E-commerce Giants Flipkart and Amazon in rural regions.
    1. Village-level online retail chains are being created to address the difficulties created by the restrictions imposed on mobility.
    2. Outlets will be privately run, but will be monitored by Ministry of electronics and IT.
    3. Unique Identification Authority of India (UIDAI) also allowed Common Service Centres to start Aadhaar updation facility at 20,000 centres that operate as Banking Correspondents (BCs).

12. ▶ Government declared banking industry as public utility service till October 21, under provisions of Industrial Disputes Act 1947.
    1. It is being done to prevent strikes by employees of banking sector, amid COVID-19 Oubreak.
    2. Aim of Industrial Disputes Act 1947 is to secure harmony and peace in work culture of Indian Industries, applied to organized sector.

13. ▶ HDFC acquired 6.43 % stake in debt-trapped Reliance Capital, by invoking pledged shares, with 25.27 crore shares valuing 252 crores.

14. ▶ IT firm Tech Mahindra collaborated with US Based IBM, to help businesses transform operations and accelerate their hybrid cloud strategies, by establishing innovation centres to address complex business problems.

15. ▶ Indian GDP Growth Forecasts (April 2020) -
    1. Asian Development Bank's Asian Development Outlook 2020 has projected India's growth to slow down to 4% in the current FY 21 (2020-21), and 6.2 % in FY 22 (2021-22). Growth in South Asia will decelerate to 4.1% in FY 2020-21, an dwill recover to 6% in 2021-22.
    2. American and financial firm Goldman Sachs lowered India's growth forecast for FY 2020-21 (FY21) to 1.6%.
    3. World Bank report *South Asia Economic Focus* -
        1. Indian Economy is expected to grow at 1.5% to 2.8% in FY 21 (2020-21), lowest since its balance of payment crisis in 1991.
        2. However, in coming years growth rate is expected to be 4% to 5%.
    4. As per IMF's April update of World Economic Outlook (WEO) -
        1. India's growth to be to 1.9% from 5.8% earlier for FY21 (2020-21). India's growth is seen recovering sharply to 7.4% in next fiscal year (FY 22 (2021-22)).
        2. IMF warns of *worst global recession since Great Depression (1929-1930)*, due to COVID-19 Pandemic. Global economy is expected to shrink by 3%.
        3. China is seen growing 1.2% in 2020 and rebound to 9.2% in 2021.

4. Asia will stall at 0% growth in 2020 for 1st time in 60 years,which includes Global Financial Crisis (4.7%) and Asian Financial Crisis (1.3%).

5. US to shrink by 6 % and Europe by 6.6 %.

5. Ratings agency ICRA revised its forecast for India's growth in FY 21 (2020-21) to 2%.

6. British Financial Firm Barclays has cut India's growth forecast for FY 21 (2020-21) to 0%, stating that economic fallout will be worse than earlier estimation.

7. SBI Ecowrap report estimated India's GDP growth to fall to 1.1% in FY21 (2020-21), due to impact of coronavirus pandemic.

8. Fitch Solutions expected India's fiscal deficit to go up to 6.2 % of gross domestic product (GDP) in fiscal year FY21 (2020-21). due to economic slowdown and enhanced welfare spendings amid COVID-19 Outbreak. Government had set a target of limiting fiscal deficit to 3.5 % of GDP during FY 2020-21.

   1. Earlier, Fitch Ratings had lowered India's GDP growth forecast to 0.8 % for FY2020-21(FY21), due to global recession triggered by COVID-19 Outbreak.

   2. Also, Fitch Ratings lowered Global Growth forecast for 2020-21 (FY21) to 1.3% from 2.5% earlier.

9. S&P (Standard & Poor's) Global Ratings declined India's growth forecast for FY 21 (2020-21) to 1.8% from 3.5% earlier. For FY 22 (2021-22), it is projected to 7.5%.

10. Confederation of Indian Industry (CII) estimated India's Gross Domestic Product (GDP) growth to be 1.5% in FY 21 (2020-21).

11. CARE Ratings projected Indian GDP Growth for FY 21 (2020-21) between 1.1%-1.2%. Agency also revised GDP forecast for FY20 (2019-20) to 4.7% from 5%.

12. Moody's Investors Service slashed India growth forecast for FY 2020-21 (FY 21) to 0.2 %, from 2.5 % earlier. For 2021, the rating agency expects India's growth to rebound to 6.2 per cent.

   1. China is projected to grow 1 % in 2020-21 and 7.1 in 2021-22. Only China, India, and Indonesia are projected to witness economic growth in 2020 by Moody's.

13. Fitch group company India Ratings & Research slashed estimate for India's GDP growth rate to 1.9 % for 2020-21 (FY 21), lowest after India recorded growth rate at 1.1 per cent in 1991-92.

14. As per Japanese Firm Nomura, Indian economy will contract by 6.1 % in April-June quarter, and will expand only in December quarter.

   1. Economy will grow at 3.2 per cent in January-March 2020 Quarter, contract by 6.1 % in June - Aug quarter and 0.5 % in Sep - Dec quarter, before rising by 1.4 % in the last quarter of FY 21 (Jan - Mar 2021).

   2. Nomura Predicted Indian GDP to grow at -.5 % in FY 2020-21 (FY 21).

15. American Investment Bank Goldman Sachs Predicted India's GDP to grow at 1.6 % in FY 2020-21 (FY 21).

16. Domestic rating agency CRISIL has cut projections for India's GDP growth rate in FY 21 (2020-21) at 1.8 %.

16. ▶ L&T Finance Holdings's subsidiary L&T Capital Markets (LTCM) has been acquired by IIFL Wealth Finance, for 230 crores.

17. ▶ Market regulator Securities and Exchange Board of India(Sebi) opened doors for Mauritius based funds to get preferential category I foreign portfolio investor(FPI) license.

   1. Until now, only off-shore funds coming from jurisdictions that Financial Action Task Force(FATF) complaint, were allowed to obtain a category I license.

   2. However, Now SEBI ruled that even funds coming from those countries which are non-FATF complaint may obtain FPI license if central government approves.

   3. It is significannt as several Mauritius based investors have been facing uncertainty ever since India was put on a 'grey list' by FATF.

18. ▶ Ministry of New and Renewable Energy (MNRE) appointed Indian Renewable Energy Development Agency Limited (IREDA) as implementing agency to handle *Central Public Sector Undertaking (CPSU) Scheme Phase-II,* on its behalf.

   1. Earlier, Solar Energy Corporation of India (SECI) handled the scheme on behalf of ministry.

   2. Regarding timelines for commissioning of solar projects, existing clause provides 18 months for the same. In amended clause, projects up to 500 MW are required to be commissioned within 24 months. For projects with higher capacity, commissioning of balance capacity must be in next 6 months.

   3. As another amendment, power produced can be used on payment of usage charges of not more than Rs 2.80 per unit, down from 3.50 in existing clause.

   4. CPSU Scheme Phase-II is aimed at setting up 12,000-MW grid-connected solar PV power projects under government producers with VGF (Viability Gap Funding) support for self-use or by government entities either directly or through disc.

19. ▶ Misc. Corporate Events (April 2020) -
    1. Insurance Australia General (IAG) sold its entire 26% stake in SBI General Insurance for USD 310 million (about Rs 2,325 crore) to Napean Opportunities LLP (an affiliate of Premji invest) and WP Honey Wheat Investment Ltd (Warburg Pincus Group).
    2. HDFC Trustee Company Ltd, acquired 5.45% stake in Indian low-cost airline SpiceJet.
    3. E-Commerce Firm Flipkart partnered with ICICI Lombard General Insurance & Go Digit General Insurance to launched two health insurance policies related to COVID-19.
    4. YES Bank extended its strategic bancassurance relationship with Max Life Insurance, for 5-years.
    5. Bajaj Allianz General Insurance launched a preventive healthcare platform in partnership with GOQii under regulatory sandbox initiative.
    6. India's Ujjivan Small Finance Bank ranked 5th among 'Best Large Workplaces in Asia 2020' by *Great Place To Work Institute*.
    7. Paytm Payments Bank inked partnership with Mastercard to issue virtual and physical debit cards. It earlier partnered with VISA also, for the same.
    8. Indian Overseas Bank (IOB) launched Working Capital demand Loan for agriculture sector (WCDL-Agri), a special credit facility for agriculture sector & allied activities as a relief measure to fight coronavirus (COVID-19) pandemic.
    9. Hinduja Group's Automotive Brand Ashok Leyland acquired 3.36 % equity of its subsidiary Hinduja Leyland Finance Ltd (HLFL), taking its stake to 68.81 %.
    10. ICICI Prudential Mutual Fund Bharat-22 ETF picked up shares worth 59 crores in National Aluminium Company (NALCO).
    11. Flipkart Tied Up With Meru Cabs, to Deliver Daily Essentials, Groceries During Lockdown.
    12. Indian Overseas Bank launched a special borrowing programme for Self Help Groups (SHGs) to help them amid COVID-19 Pandemic. A Member of SHG will be given a maximum loan of Rs 5,000 & the limit for the group has been fixed at 1 lakh, with 9.4 % Interest.
20. ▶ PSU HIL (Hindustan insecticides Limited) sent proposals to Indian Embassies in China, Japan and South Korea for inviting interested agro-chemical manufacturers in respective countries for investment in India.
    1. This has been done after Minister of Chemicals and Fertilizers, DV Sadananda Gowda suggested PSUs to strengthen their performance by exploring Joint Ventures with global enterprises looking for investments, during the times of pandemic.
    2. Mr. Sadananda Gowda also congratulated chemicals and petrochemicals industry on becoming top exporting sector for first time, after export of chemicals grew by 7.43% over previous corresponding period, reaching 2.68 Lakh Crores (in April 2019-January 2020). It constitutes 14.35% of total exports.
21. ▶ RBI Allowed *Transcorp International* for entering into co-branding arrangements for Prepaid Instruments. Transcorp will be launching API based co-branded partnerships for Digital, Physical and Contactless cards with select marquee clients on its own BINs.
22. ▶ RBI cancelled licence of *CKP Co-operative Bank Ltd Mumbai*, due to its financial instability and violations of various RBI norms. On liquidation, every depositor is entitled to repayment of deposits up to 5 Five lakh, from Deposit Insurance and Credit Guarantee Corporation (DICGC).
23. ▶ RBI extended its truncated timings of 10 am-2 pm for money market instruments, until further notice, in light of a likelihood of an extension of COVID-19 lockdown.
24. ▶ RBI instructed its regulated entities to carry out money laundering and terrorist financing risk assessment exercise periodically. For this, RBI added a new section in Master Directions on KYC.
25. ▶ RBI opened a special liquidity facility for mutual funds of INR 50000 crores, Amid liquidity strains on mutual funds (MFs) due to COVID-19 Pandemic.
    1. Under This, RBI shall conduct repo operations of 90 days tenor at the fixed repo rate. Scheme is available for bidding by banks, till May 11, 2020 or up to utilization of allocated amount, whichever is earlier.
    2. Funds availed under SLF-MF shall be used by banks exclusively for meeting requirements of Mutual Funds.
    3. Exposures under this facility will not be reckoned under the Large Exposure Framework (LEF), and shall be exempted from banks' capital market exposure limits.
    4. Under this, liquidity support even when exceeds 25% of total investment is to be permitted to be included as Held to Maturity.
26. ▶ RBI reduced general category foreign portfolio investors' (FPI) investment limit in government securities to 2.34 lakh crores for entire fiscal, from earlier 2.46 lakh crores.

1. At the same time, long term FPI investment limits in G-secs have been brought down to Rs 1.03 lakh crore from prevailing limit of 1.15 lakh crores.

2. RBI increased general category FPI investment limits in state development loans (SDL) by 3215 crores to 64415 crores for first half of FY21 and to 67630 crores for second half of FY21.

27. ▶ Reliance Industries ventured into retail market with launch of online store JioMart on WhatsApp platform.

1. Recently, WhatsApp Owner Facebook had acquired 9.9 % stake in Jio, for USD 5.7 billion.

2. JioMart WhatsApp Number is 8850008000 and is currently available in Navi Mumbai, Thane and Kalyan areas of Mumbai. It will soon be launched across country.

28. ▶ SBI holds 48.21 % stake in revived Yes Bank, bringing it out of trouble. Other Stakeholders in Yes Bank -

1. HDFC and ICICI Bank - 7.97 % each

2. Axis Bank - 4.78 %

3. Kotak Mahindra Bank - 3.61 %

4. Bandhan Bank - 2.39 %.

5. Federal Bank - 1.92 %

6. IDFC - 1.67 %

7. LIC - 1.64 %

29. ▶ Singapore's Caladium Investment raised its stake in India's Bandhan Bank by 1.1% to 4.49%.

30. ▶ Small Industries Development Bank of India (SIDBI) launched Liquidity support scheme for micro, small and medium enterprises (MSMEs) that have been hugely impacted by COVID-19 pandemic.

1. SIDBI received 15000 crores from RBI, through a Special Liquidity Facility (SLF), to help MSMEs.

2. SIDBI will provide liquidity lines to non-banking finance companies (NBFC's), microfinance institutions (MFI's), and banks who will refinance MSMEs.

3. RBI announced 50000 Crores for All India Financial Institutions (AIFIs) such as NABARD and SIDBI. 25000 crores are provisioned for NABARD.

31. ▶ Task Force on **National Infrastructure Pipeline** (NIP) submitted its Final Report on NIP for FY 2019-25, Finance Ministry.

1. Summary Report of the same was released on December 31st, 2019. The summary Report stated that between 2020 and 2025, Govt has plans to invest 102 lakh crores rupees,to help make India a 5 trillion-dollar economy.

2. Earlier, Finance Minister Nirmala Sitharaman in her Budget speech 2019-20 announced that 100 lakh crore would be invested on infrastructure over next five years.

3. Final Report of NIP Task Force is projecting infrastructure investment of 111 lakh crores during FY 2020-25. Out of it -

1. Projects worth Rs 44 lakh crores are under implementation

2. Projects worth Rs 33 lakh crore are at conceptual stage

3. Projects worth Rs 22 lakh crore are under development.

4. Information regarding project stage are unavailable for projects worth Rs 11 lakh crores.

4. Sector Wise -

1. Sectors such as energy (24%), roads (18%), urban (17%) and railways (12%) amount to around 71% of the projected investments.

2. Centre (39%) and States (40%) are expected to have almost equal share in implementing NIP, followed by private sector (21%).

5. Task Force has recommended 3 Committees to be setup -

1. A Committee to monitor NIP progress and eliminate delays

2. A Steering Committee in each Infrastructure ministry level for following up implementation

3. A Steering Committee in DEA for raising financial resources for NIP.

32. ▶ Vodafone Idea tied up with Paytm to launch *Recharge Saathi* programme, to help individuals / small businesses to earn an additional income. It will enable Paytm customers to start selling Vodafone-Idea recharges on Paytm app.

33. ▶ World Bank approved USD 82 Million (INR 585 crores) for Himachal Pradesh State Roads Transformation Project (HPSRTP).

International

1. ▶ A recently issued World Health Organization map showed parts of Ladakh as Chinese territory, shown as dotted line and colour code.

1. Also, regions of Jammu and Kashmir and Pakistan occupied Kashmir has been shown as dotted line. Dotted line suggest that the region is a disputed territory.
   2. Also, WHO has been criticized in its handling of COVID-19 Pandemic. It has been favoring and safeguarding China by hiding facts behind Coronavirus.
2. ▶ According to Open Budget Survey conducted by *International Budget Partnership* -
   1. India ranks 53rd among 117 countries in budget transparency and accountability.
   2. Top 3 - New Zealand and South Africa (Joint 1st), Sweden (2), Mexico (3).
3. ▶ As 1st such deal, Indian movie producer and distributor Eros International announced all-share merger with Hollywood's STX Entertainment to create an equally-held global entertainment company with a value of USD 1 billion.
4. ▶ As per Asia Pacific Economic Cooperation, APEC region will face economic decline of 2.7% in 2020 due to impact of COVID-19.
   1. Unemployment rate in region will increase to 5.4% in 2020, up from 3.8% in 2019.
   2. Anticipated growth of region in the 2021 is 6.3%.
   3. About APEC -
      1. Asia-Pacific Economic Cooperation is inter-governmental forum for 21 member economies in Pacific Rim that promotes free trade throughout Asia-Pacific region. It began in 1989.
      2. The region has now been renamed as Indo-Pacific.
      3. India is not a member of APEC, constrained by the fact that India does not border Pacific Ocean.
5. ▶ As per Sweden Based *Stockholm International Peace Research Institute (SIPRI)* -
   1. Global military expenditure rose to $1917 billion in 2019 (3.6 % Hike).
   2. Top 5 Military spenders — U.S. ($732 bn), China ($261 Billion), **India ($71 Billion)**, Russia ($65.1 bn) and Saudi Arabia ($61.9 bn).
6. ▶ As per US Data, India's holding of US securities has gone up to record high of USD 177.5 bn at end of February 2020.
7. ▶ As per World Bank report *COVID-19 Crisis: Through a Migration Lens* -
   1. remittances to India are likely to drop by 23% to USD 64 billion in 2020 from USD 83 billion in 2019 due to COVID-19 impact. India is the world's biggest recipient of remittances.
   2. Globally, remittances by migrant workers are projected to decline by 20% due to economic crisis induced by COVID-19 pandemic.
8. ▶ Chinese National Space Administration (CNSA) named its first Mars Exploration mission as *Tianwen 1*.
   1. It was announced on Apr 24, Observed as National Space Day in China. It marks launch of first Chinese satellite Dongfanghong-1 (1970).
   2. Tianwen means *Heavenly Questions*.
9. ▶ IIT Kharagpur ranked 57th among global universities for its impact research in areas that help achieve sustainable development goals (SDGs) as mandated by United Nations.
   1. IIT Kharagpur ranked 4th in SDG6 (Clean Water and Sanitation), 13th for SDG13 (Climate Action), joint 21st for SDG1 (No Poverty) and 24th for SDG7 (Affordable and Clean Energy).
   2. Global Top 3 -
      1. University of Auckland (New Zealand)
      2. University of Sydney (Australia)
      3. Western Sydney University (Australia)
      4. La Trobe University (Australia)
      5. Arizona State University (US).
10. ▶ India extended USD 150 million foreign currency swap support to Maldives, under USD 400 mn. bilateral agreement signed in July 2019.
11. ▶ Indian IT Firm Tata Consultancy Services (TCS) will launch Israel's first fully digital bank, powered by TCS BaNCS Global Banking Platform.
    1. The yet to be named digital bank is the first to receive a banking license in Israel in over 40 years and is to be launched in 2021.
12. ▶ Indian Meteorological Department (IMD) released 169 new names for tropical cyclones in Indian Ocean Region, contributed by 13 countries namely India, Sri Lanka, Maldives, Myanmar, Oman, Thailand, Qatar, UAE, Saudi Arabia, Yemen, Pakistan, Bangladesh and Iran. Notable Naming norms -
    1. Names should be neutral to cultures, politics, gender and religious beliefs.

2. Name should be less than 8 characters and easy to pronounce.

3. Regional Specialize Meteorological Centre (RSMC New Delhi) is responsible to name cyclones in region of Bay of Bengal and Arabian Sea.

13. ▶ Iran reportdly launched its first military satellite *Noor*, to orbit at 425 km. This has increased tensions between US and Iran.

14. ▶ Lebanon became first Arab country to legalize marijuana cultivation, to boost export of marijuana.

15. ▶ Saudi Arabia ended death penalty for crimes committed by minors, soon after Saudi Arabia ban flogging as Punishment (In which victim is hit repeatedly with stick).

16. ▶ Swedish luxury vehicles brand Volvo Group acquired Daimler's fuel cell technology for heavy trucks, for approx $650 million.

1. Daimler is parent company of Mercedes-Benz, Freightliner, Mitsubishi Fuso, and Torc robotics (among others).

17. ▶ UN Agency United Nations Conference on Trade and Development (UNCTAD) called for writing-0ff Around $1 trillion of debt owed by developing countries, to help them overcome fallout of coronavirus pandemic.

18. ▶ World Bank partnered with Indian Business School AIMA (All India Management Association), to organize a virtual workshop called *The Contract Management during Emergency situations*, to create awareness about likely impact of the coronavirus (COVID -19) pandemic on implementation of bank-funded projects.

19. ▶ World Food Programme of United Nations released 4th annual report on Food Crisis -

1. Food crisis has grown by 10%, with 26.5 crore people facing food insecurity in 2020. This has almost doubled as compared to 2019, mainly due to COVID-19 Outbreak.

20. ▶ World Health Organization (WHO) launched its Access to COVID-19 Tools Accelerator, a collaboration to progress development of coronavirus vaccines and therapeutics. It Aims to make COVID-19 treatment available to all in equitable manner.

21. ▶ World Health Organization warned against issuance of *immunity passports* or *Risk free Certificates*.

1. Immunity passports are to be provided to persons that have been recovered from COVId-19 and has tested positive to hold antibodies against the disease.

2. WHO is against this concept as there is no evidence till that people who have recovered from COVID-19 will not get infected again.

3. Despite WHO Warning, Chile stated to issue risk free certificates to people who have recovered from Covid-19, to allow them to return to work.

22. ▶ World Press Freedom Index 2020 report by Reporters Without Borders (180 countries) -

1. Norway topped the index for 4th consecutive year.

2. Top 5 - Norway (1), Finland (2), Denmark (3), Sweden (4), The Netherlands (5)

3. Bottom 5 - Dijibouti (176th), China (177th), Eritrea (178th), Turkmenistan (179th), North Korea (180th)

4. India drops by two positions (140th rank in 2019) to **142nd** in 2020.

5. Neighbours - China (177th), Bangladesh (151), Pakistan (145), Sri Lanka (127th).

Top

Meetings

1. ▶ BRICS Ministers of Foreign Affairs /International Relations Held Through video conference, led by Russia. External Affairs Minister S. Jaishankar represented India.

1. BRICS nations agreed to allocate $ 15 billion to New Development Bank (NDB), so that it could set up a special loan instrument to support revival of economies amid coronavirus pandemic.

2. ▶ Minister of Environment, Forest and Climate change Prakash Javadekar attended 11th session (and 1st virtual session) of *Petersberg Climate Dialogue*. It was hosted by Germany, co-chaired by UK.

1. India suggested to create 1 trillion USD grant to developing world immediately.

2. This Dialogue is being organized by Germany since failure of 2009 United Nations Climate Change Conference in Copenhegen.

Top

National

1. ▶ Indian Airline *IndiGo* ranked 43rd among most valuable and strongest airlines as per Brand Finance Airlines 50 report for 2020. It entered this list for the first time.

2. ▶ **Coronavirus (Covid-19)** Updates -

1. **India** -
    1. **April 2020** -
        1. Andhra Pradesh Govt launched *Covid Pharma* app to keep track of people buying medicines for cough, cold and fever.
        2. Odisha Govt announced compassionate of 15 lakh to working journalists who die due to coronavirus infection.
        3. Short video app VMate partneted with Government's citizen engagement platform MyGov, to support Government efforts against COVID-19 pandemic.
        4. Researchers at Centre for Nano and Soft Matter Sciences Bangalore(CeNS) created face masks termed *TriboE,* that can hold electric charges to restrict entry of infections, without any external power.
        5. Nagaland government imposed a COVID-19 cess on diesel and petrol, becoming the first state to introduce such a tax in India. Nagaland imposed a Rs 5 per litre COVID-19 cess on diesel and Rs 6 per litre cess on petrol and other such liquid fuel.
        6. DRDO Supported Defence Institute of Advanced Technology Pune developed a microwave steriliser named as 'ATULYA' to disintegrate COVID-19, which gets disintegrated by differential heating in range of 560 - 600 Celsius temperatures.
        7. Researchers from IIT Bombay, Islamic University of Science and Technology, NIT Srinagar Jointly invented a low-cost ventilator called "Ruhdaar".
        8. Durgapur-based CSIR - Central Mechanical Engineering Research Institute developed Hospital Care Assistive Robotic Device (HCARD), that can help frontline healthcare workers in maintaining physical distance from infected patient.
        9. A government hospital in Ernakulam (Kerala) deployed a robot to serve food and medicines to coronavirus patients with an aim to reduce risk of infections for doctors and health workers, named *KARMI-Bot*.
        10. National Agricultural Cooperative Marketing Federation of India (NAFED) is distributing 6 lakh metric tonnes of pulses to around 20 crore households under Pradhan Mantri Garib Kalyan Ann Yojana.
            1. Earlier, it was announced that 80 crore poor people will to get 5 kg wheat or rice and 1 kg of preferred pulses for free every month for the next three months.
        11. Researchers from IIT Delhi developed web-based dashboard to predict the spread of COVID-19, named PRACRITI (Prediction and Assessment of Corona Infections and Transmissions in India).
        12. India approved USD 1 million to Antigua as project outlay, with immediate assistance of USD 1,50,000 for medical equipment to combat coronavirus crisis.
        13. Ahmedabad based Sardar Vallabhbhai Patel Institute of Medical Science and Research became first authorized study centre in country to carry out plasma research under trial in view of Covid 19. It signed MoU with ICMR.
            1. Also, Luckow based King George Medical University became first government hospital to launch plasma therapy to treat COVID-19.
        14. Rajasthan government partnered with healthcare startup MedCords, to launch online consultation and medicine delivery app named *Aayu & Sehat Sathi*.
        15. Pathanamthitta district in Kerala launched a vehicle called 'Tiranga' (Total India Remote Analysis Nirogya Abhiyaan) for rapid screening of COVID-19.
        16. Indraprastha Institute of Information Technology (IIIT Delhi) developed a mobile app named 'WashKaro', which help warn people about a coronavirus containment zone nearby.
        17. CSIR IGIB (Institute of Genomics and Integrative Biology) have come up with a COVID-19 test called *Feluda*, named after a detective character in stories of film maker Satyajit Ray. It produces results in 1 hour.
        18. IIT Delhi Kusuma School of Biological Sciences (KSBS) Researchers developed a COVID 19 probe - free Real-time PCR Diagnostic Kit.
            1. Kit has been validated at ICMR with a sensitivity and specificity of 100%. This makes IIT Delhi first institute to have obtained ICMR approval for a real-time PCR-based diagnostic assay.
        19. *Chitra Magna* innovative RNA extraction kit has been developed by Sree Chitra Tirunal Institute for Medical Sciences and Technology Kerala (SCTIMST), as an innovative technology for isolating RNA from swabs for COVID 19 tests.
            1. SARS-COV-2, the causative virus of COVID-19 pandemic, is an RNA virus, a long single-stranded polymeric substance present in all living cells that carries genetic information of organism necessary for life.

2. One of the critical steps in detecting this virus is by confirming the presence of the RNA of virus in samples.
3. Chitra Magna can be used to extract high purity RNA from patient samples not only for LAMP testing but also for the RT-PCR test.
20. Karnataka Government launched *Apthamitra* mobile application and helpline,to fight COVID-19. It aims at providing medical guidance and advice on COVID-19.
21. As per NASA, Air Pollution in India has reached 20 year low, amid lockdown due to COVID-19 Pandemic.
22. Amid the pandemic, Government has put on hold the hike in dearness allowance for central government employees / pensioners for 2020-21. Currently, These employees are receiving Dearness Allowance at 17% of their salary.
23. Researchers from Pune-based Centre for Materials for Electronics Technology (C-MET) developed a low-cost indigenous prototype of polymer swab which can be used for collection of samples for coronavirus testing.
24. Himachal Pradesh government rolled out "e-sanjeevani-opd" for free online medical consultation to sick people.
25. HDFC Bank started *Safety Grid campaign,* to encourage social distancing in Public places.
26. IIT Ropar developed a 'WardBot',to deliver medicines and food to COVID-19 patients in isolation wards without human intervention.
27. Digital directory named *Covid FYI,* containing information of all COVID-19 related services and helplines, has been released.
28. Uttar Pradesh became first state to geotag community kitchens, with over 7500 community kitchens geo-tagged, in association with Google. The kitchens produce 12 lakh food packets per day.
29. Goa, Manipur and Tripura declared themselves free of Covid-19.
30. Madhya Pradesh Government launched COVID-19 Yoddha Kalyan Yojana. Under it, around 1 lakh Anganwadi workers are to be benefitted. Anganwadi workers will get special health insurance of Rs 50 lakhs.
31. Government created online data pool on URL *https://covidwarriors.gov.in,* of doctors, nurses and other health care professionals, volunteers for use by ground level administration at state / district / municipal levels.
32. Minister of Health & Family Welfare, Harsh Vardhan launched *COVID India Seva*, an interactive platform to establish a direct channel of communication with people amid the pandemic. People can pose queries @CovidIndiaSeva and get them responded to in almost real time.
33. Mobile application *Saiyam* has been developed by Pune Municipal Corporation under Smart Cities Mission, to effectively track home-quarantines citizens.
34. Tata AIA Life Insurance became first Life Insurance Firm to announce additional COVID-19 Related benefits up to 5 lakh at no additional cost, for its Policyholders / Agents.
35. Chhattisgarh CM Bhupesh Baghel launched website 'CG Haat', to provide home delivery of fruits and vegetables during COVID-19 lockdown.
36. CSIR's National Aerospace Laboratory developed Personal Protective Cover all suit, with polypropylene spun multilayered non-woven fabric. It can be used to ensure safety of doctors, paramedical staff, health care workers and nurses.
37. Delhi Government launched *Assess Koro Na* application, to conduct door to door survey in COVID-19 containment zones.
38. Central Drug Research Institute signed MoU with King George Medical University to sequence strains of COVID-19 virus.
    1. Gujarat Biotechnology Research Centre (GBRC) recently found 3 new mutations of COVID-19 virus. GBRC became first government laboratory in country to sequence whole genome of COVID-19.
    2. Including these, 9 mutations of virus are found so far.
39. Ministry of Commerce launched an online platform to issue Certificate of Origin to the exporters and other guidelines, to facilitate shipments during COVID-19 lockdown.
    1. Currently, online platform is used to obtain certificate of exports under PTA signed with Chile, SAFTA signed with Nepal and SAPTA signed with SAARC countries and also India-Korea Comprehensive Economic Partnership Agreement.
    2. Certificate of Origin document is used worldwide, which attests that product originated in a particular country. Guidelines for issuance of certificate of origin are issued by International Chamber of Commerce. Certificate is important to determine tariffs.

3. SAFTA is South Asian Free Trade Area (signed in 2004) and SAPTA is SAARC Preferential Trading Agreement that envisages creating an area of preferential trading.

40. Chitra GeneLAMP-N, developed by Sree Chitra Tirunal Institute for Medical Sciences and Technology, has made confirmatory tests results of COVID 19 possible in 2 hours, with 100% accuracy.

41. Researchers at NIT-Karnataka developed cost-effective disinfectant chamber called 'ZERO-COV', that could disinfect personal protective equipment (PPE) kits and other related materials without causing them damage.

42. Kailash Choudhary (Minister of State for Agriculture and Framers' Welfare) Inaugurated Pusa Decontamination and Sanitizing Tunnel, developed by ICAR- Indian Agricultural Research Institute.

43. Survey of India launched a mobile application called "Sahyog" to collect information about COVID-19.

44. ICMR and and National Institute of Virology Pune Study stated that pathogenic coronaviruses have been found in two species of Indian bats - Indian Flying Fox and Rousettes. It is yet to be found out if these viruses will affect humans.

    1. Also, Six new coronaviruses in bats were recently discovered by scientists in Myanmar.

45. Uttar Pradesh govt launched Annapurna, Supply Mitra portals for citizens' food needs amid COVID-19 Outbreak.

46. An Integrated Geospatial Platform "SAHYOG" has been rolled out by Department of Science and Technology (DST), to help in decision making during COVID-19 outbreak.

47. YSR Nirman and COVID-19 portals have been launched by Andhra Pradesh Govt, to fight against Coronavirus pandemic.

48. Jim Corbett National Park, India's oldest forested wildlife sanctuary located in Nainital district of Uttarakhand, has become the India's 1st quarantine centre for animals with symptoms of coronavirus (COVID-19).

49. Department of Telecommunication and C-DOT in coordination with Telecom Service Providers have developed an Covid *Quarantine Alert system*, which alerts authorities when an identified corona positive person moves away from quarantine.

50. Goa became first state to integrate allopathy and Ayurveda to boost immunity of COVID-19 patients and quarantined persons.

51. COVID Sample Collection Kiosk (COVSACK) has been developed by DRDO's DRDL Hyderabad Unit. The kiosk will be useful for healthcare workers while taking COVID-19 samples of infected patients.

52. ICMR permitted Uttar Pradesh to start pool testing of COVID-19, making UP first to start pool testing. Pool testing can highly increase scale of testing. Under Pool Testing, if 10 samples of COVID-19 test negative, then it is an indicator that all the samples test negative. On the other hand, if the samples tested are not negative, individual testing will be done.

53. Khadi and Village Industries Commission (KVIC) developed double-layered khadi masks, made with fabric which is washable, easy to reuse, biodegradable and breathable.

54. *CovidGyan* initiative has been launched by Tata Institute of Fundamental Research (TIFR), Indian Institute of Science (IISc) and Tata Memorial Centre (TMC). It aims to bring scientific / factual aspects of COVID-19 pandemic outbreak in public domain.

55. PM Narendra Modi announced Extension of Nationwide lockdown till May 3, 2020. He also mentioned *Saptapdi,* to fight against COVID-19. It has 7 mantras -

    1. Senior citizens and elderly have to be looked after with special care
    2. Social distancing and lock down rules have to be followed strictly
    3. Citizens should boost immunity based on guidelines issued by Ministry of AYUSH
    4. Download "Arogya Sethu" mobile application.
    5. Provide shelter and food to the needy and poor
    6. Compassion towards colleagues
    7. Also -
        1. Govt made spitting in public places as an offense, under Section 51 of National Disaster Management Act.

56. Indian Council of Medical Research announced that antiviral drug Remdesvir is highly effective in stopping replication of COVID-19. Remdesvir is a part of WHO's "Solidarity Trial".

57. AIIMS Rishikesh and BHEL (Bharat Heavy Electronics Limited) has set up India's first remote health monitoring system, to be widely used in state of Uttarakhand to monitor COVID-19 patients.

58. West Central Railway's Coach Rehabilitation Workshop Bhopal designed a "mobile doctor booth" named "CHARAK", providing doctors a much needed *zero contact check-up facility*.
59. Researchers at Biomedical Engineering & Technology incubation Centre (BETiC) at IIT Bombay has developed a *digital stethoscope* (Named *AyuSynk*) that can listen to hear beats from a distance and record them, minimizing risk to doctors and health care professionals who are handling COVID- 19 patients.
60. Governemnt will set up 20 lakh retail shops called 'Suraksha Stores' across India which will provide daily essentials to citizens amid lockdown. Neighbourhood kirana stores will get sanitised and *Suraksha stores*.
61. Indian Council of Medical Research (ICMR) validated usage of TrueNat, a diagnostic machine for Tuberculosis , for COVID-19 tests.
62. Hindustan Unilever partnered with the United Nations Children's Fund (UNICEF) to support India to combat COVID-19, launching 'BreakTheChain' campaign.
63. Hyderabad based Indian Immunologicals Limited and Australia's Griffith University will joint work to develop a 'Live Attenuated SARS – CoV-2 vaccine'.
    1. Bharat Biotech also tied-up with US-based FluGen and University of Wisconsin Madison to develop a vaccine named "Coro-Flu" to fight COVID-19.
64. Researchers at National Institute of Pharmaceutical Education and Research Guwahati developed 2 products that can be great help in the fight against current COVID-19. Products are -
    1. A 3D-printed hands-free object that could be used to help operate doors or related tasks that require hand touch.
    2. A 3D-printed antimicrobial face-shield to control spread of novel coronavirus.
65. Sree Chitra Tirunal Institute for Medical Sciences and Technology (Kerala) obtained approval for providing innovative *convalescent-plasma therapy* treatment to patients suffering from COVID-19.
66. Ministry of Home Affairs, exempted fishing and aquaculture industries from Lock Down. Earlier, only agricultural activities were exempted.
67. Government approved grant of life insurance cover to over 1 lakh workers and officers of Food Corporation of India, who are working to supply food grains across country amidst outbreak of Coronavirus pandemic. Cover will vary between 10 lakh to 35 lakh, depending on designation.
68. Along with SBI, Bank of Maharashtra and HDFC Bank also received mandate for collecting Money on behalf of PM Cares Fund.
69. Data collection period for 7th economic census extended by 6 months, till 30th September 2020, in wake of COVID-19. Economic census is only source of information on country's large unorganized sector.
70. Researchers from Institute of Genomics and Integrative Biology Delhi and Centre for Cellular and Molecular Biology Hyderabad began working on novel coronavirus genome sequencing, to figure out evolution of virus and its aspects.
71. Chhattisgarh police has developed the app 'Rakhsa Sarv', to track quarantined people through Google Maps. Similar app has been developed by Mohali Police in Punjab, named 'COVID Control'.
72. Telangana Government deployed India's first automated "Covid–19 Monitoring System App", developed by Hyderabad-based Vera Smart Healthcare, to identify, undertake live surveillance, track, monitor, and provide real-time analytics to Health Department.
73. Arunachal Pradesh government launched COVIDCARE app, to combat COVID-19.
74. Department of Science and Technology funded a health care start up called *Module Innovations*, to develop COVID-19 testing kit that can make testing quicker (10 to 15 minutes), called *nCoVSENSE*. DST also funded *Genrich Membranes*, for scaling up membrane oxygenator equipment (MOE).
    1. DST also funded a IIT Bombay Project to develop a Nasal passage gel to limit transmission of Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus, causative agent of COVID-19.
75. India announced restrictions on export of Hydroxychloroquine (HCQ) drug -
    1. India had recently imposed ban on export of HCQ drug to prevent shortage of this drug in country, which is proving useful in COVID-19 Treatment. India eased the bans after high demand from Many Nations.
    2. India allowed export of 12 Active Pharmaceutical Ingredients (APIs), which were earlier banned for export.
76. Govenremnt launched *Containment Plan for Large Outbreaks*, similar to "Bhilwara Model" of Rajasthan. It has 6 steps -

1. Isolation of a region by imposing Section 144.
2. Door to Door screening of people.
3. Adopt contact tracing and spot source of the new infection.
4. Increase quarantine facilities.
5. Build confidence of the people in the rural region, increase their awareness and monitor them continuously.

77. Delhi Govt announced Operation Shield, in 21 containment zones of National Capital Region. SHIELD stands for Sealing, Home quarantine, isolation and tracing, essential supply, local sanitation and door-to-door checks.
    1. Delhi Government also announced 5T plan to tackle spread of Corona Virus - *Testing, Tracing, Teamwork, Treatment and Tracking.*

78. Govt mandated to issue all pending income-tax refunds up to Rs. 5 lakh immediately, to benefit around 14 lakh taxpayers amid COVID-19 pandemic. It is also decided to issue all pending GST and Custom refunds which would provide benefit to around 1 lakh business entities.

79. Government launched a training module for management of COVID-19 named 'Integrated Government Online training' (iGOT) portal (https://igot.gov.in) on DIKSHA platform of MHRD. It aims to enhance capacity building of front line workers to handle pandemic efficiently.

80. Govt approved package named *Covid-19 Emergency Response and Health System Preparedness Package,* worth 15000 crores to build on health infrastructure. 7774 crores will be utilised for immediate response to pandemic, while rest will be spent in medium-term (1-4 years).

81. *V Safe Tunnel* installed in Telangana, that can sanitize people from any possible bacteria and other microbes within 20 seconds to minimise local transmission of Coronavirus.

82. Life Insurance Council announced that all life insurance companies, both public and private, will process all coronavirus-related death claims. Council confirmed that clause of 'Force Majeure' will not apply in case of COVID-19 death claims.
    1. Force majeure events include an Act of God or natural disasters, war or war-like situations, labour unrest or strikes, epidemics, pandemics, etc.

83. Department of Science & Technology approved setting up of a Centre for Augmenting WAR with COVID-19 Health Crisis (CAWACH) at cost of 56 Crores, to support start-ups that address COVID-19 challenges.
    1. DST-supported Society for Innovation and Entrepreneurship (SINE) at IIT Bombay has been identified as Implementing Agency of CAWACH.

84. Ministry of Human Resource and Development launched *MHRD AICTE COVID-19 Student Helpline Portal*, to support students facing difficulties due to closure of hostel and colleges. URL is*https://helpline.aicte-india.org*.

85. Odisha Government launched "Mo Prativa" programme in collaboration with UNICEF (United Nations Children's Funds), to engage children in various activities during lockdown.

86. Ministry of Civil Aviation launched Lifeline UDAN, to help India fight against COVID-19. Under this, flights are operated for transporting essential equipment and medicines all over country.

87. Associations of civil servants formed an initiative called CARUNA (Civil Services Associations Reach to Support Natural Disasters), as a collaborative platform.

88. National Health Authority has partnered with Uber India to provide dedicated transport services to the health care workers that are involved in treating COVID-19 patients.

89. Government notified empowered group set up for coordination with private sector, NGOs and international organisations for COVID-19 related response activities. It is led by Amitabh Kant, CEO of Niti Aayog.
    1. Government also constituted a Science and Technology Empowered Committee to make speedy decisions on research and development of COVID-19, chaired by Niti Aayog member Vinod Paul and K Vijay Raghavan.

90. Indian Air Force (IAF) C-130J transport aircraft delivered 6.2 tonne of essential medicines and hospital consumables to Maldives under Operation Sanjeevani.

91. Government extended benefit of 2 % Interest Subvention (IS) to banks and 3 % Prompt Repayment Incentive(PRI) to all farmers up to May 31, 2020 for all crop loans up to Rs 3 lakh. It will allow farmers to repay such loans up to extended period at 4 % annual interest without any penalty.

92. As per Indian Council of Medical Research (ICMR), mixture of three quasi-subspecies of SARS-CoV-2(COVID-19) is in circulation in India.

93. Andhra Pradesh government purchased portable Multi-feed Oxygen Manifold (MOM), a novel contraption developed by Navy, to help meet any emergency requirement of oxygen supply to coronavirus patients.
    1. Also, Naval Dockyard Mumbai has developed a handheld IR-based temperature sensor that can be manufactured under 1000, to undertake screening of large number of people for COVID-19 infection.
94. Andhra Pradesh government began distributing pensions to beneficiaries at their doorstep, with help of around 2.5 lakh volunteers. Aim is to encourage beneficiaries to stay at home during COVID-19 pandemic.
95. RBI announced further 3 measures to contain economic impact of COVID-19 pandemic -
    1. *Extension of realisation period of export proceeds* - The Value of goods and software exports made by exporters currently is required to be realised fully and repatriated to the country within 9 months from date of exports. RBI extended it to 15 Months, by end of July 2020.
    2. *Review of Way and Means Limits of States/UTs* - Based on the suggestions of Sudhir Shrivastava committee, RBI decided to increase the ways and means limit by 30 percent for all states and UTs.
    3. *Implementation of countercyclical capital buffer framework* - RBI had put forward a framework on the countercyclical capital buffer (CCyB) in its guidelines issued in February 2015. Under it, countercyclical capital buffer will be activated when required. CCyB framework envisages the credit-to- GDP gap as main indicator that is used along with other supplementary indicators.
96. Govt launched *Hack the Crisis – India* Online Hackathon to find working solutions for overcoming COVID 19 pandemic.
97. Govt Launched National Monitoring Dashboard on COVID-19, developed by DARPG (Department of Administrative Reforms and Public Grievances), aiming at timely implementations of COVID-19 response and containment activities.
98. National Informatics Center developed an application "Arogya Sethu", which can alerts a person whenever it comes within 6 feet range of a COVID-19 infected person.
    1. Aarogya Setu App has became world's fastest app to reach 5 crore users.
    2. Department of Telecommunication(DoT) in partnership with Tamil Nadu (TN) government and IIT Madras launched its complementary initiative named "Aarogya Setu Interactive Voice Response System (IVRS)". Aarogya Setu is for smartphones while IVRS is its helpline version for non-smart phones.
    3. Karnataka government also launched 'Corona Watch' mobile application, to track movement history of persons tested positive.
    4. Ministry of Housing and Urban Affairs also launched a revised version of Swachhata application.
99. National Cadet Corps (NCC) launched "Exercise NCC Yogdan" to help authorities fighting against COVID-19.
100. Indian Council for Cultural Relations (ICCR) launched global painting competition on Title *United against CORONA-Express through Art*.
101. World Bank has offered $1 billion help to India for a proposed India Covid-19 emergency response and health systems preparedness project. The 4 year project aims to develop preparedness of India's health care systems in time of pandemic.
    1. India seeks further help of 6 Billion USD from ADB and AIIB to tackle the pandemic.
102. Sree Chitra Tirunal Institute for Medical Sciences and Technology signed an agreement with Wipro 3D, Bangalore to jointly manufacture automated ventilators. IIT Kanpur and IISC Bengaluru are working to build portable and low cost ventilators.
    1. Rail Coach Factory Kapurthala also developed a low cost ventiltor called JEEVAN.
    2. IIT Roorkee developed a low cost portable ventilator called "Prana Vayu".
    3. IIT Hyderabad Incubator *Aerobiosys Innovations* designed a low cost portable emergency ventilator called 'Jeevan Lite'.
103. IT Firm IBM introduced 'Watson Assistant for Citizens' in India, free of cost to address COVID-19 queries.
104. Himachal Pradesh government started "Active Case Finding Campaign", to provide information about COVID-19 to people at their doorsteps.
105. Amid COVID-19 Outbreak, Ministry of Road Transport and Highways has extended validity of documents that expired since 1st February 2020, to 30th June 2020.
106. Ministry of Agriculture launched new features of National Agriculture Market, to reduce congestion at mandis and help fight COVID-19. Modules are -

1. Warehouse based trading module in e-NAM software to facilitate trade from warehouses based on e-NWR (Negotiable Warehouse Receipt).
2. FPO trading module in e-NAM whereby FPOs can trade their produce from their collection center without bringing produce to APMC (Agricultural produce market committee).

2. **March 2020** -
   1. SBI launched an additional liquidity facility "Covid-19 Emergency Credit Line (CECL)" to meet any liquidity mismatch for its borrowers in order to tide over current crisis situation. SBI will facilitate funds up to 200 crores under this.
      1. SBI also committed 0.25% of annual profit for FY 2019-20, to fight COVID-19 Crisis.
      2. Indian Bank also launched five special emergency loans targeted at specific corporates.
   2. Government constituted a high level technical committee of Public Health Experts for COVID-19 to guide the prevention and control activities in country, headed by NITI Aayog member V K Paul.
   3. India shared two SARS-CoV-2 with the Global Initiative on Sharing All Influenza Data (GISAID). Pune based National Institute of Virology has shared two sequences of novel corona virus with Global Initiative on Sharing All Influenza Data.
   4. Government Invoked *Disaster Management Act 2005* and *Epidemic Diseases Act 1897*, to control and mitigate coronavirus outbreak.
      1. Epidemic Diseases Act 1897 was first enacted to tackle bubonic plague in Mumbai (formerly Bombay) in former British-occupied India. The law is meant for containment of epidemics by providing special powers that are required for the implementation of containment measures to control the spread of the disease.
   5. Scientists at CSIR-IHBT (Institute of Himalayan Bioresource Technology) developed a new sanitizer without using chemicals, amid hike in demand for the same due to COVID-19 Outbreak.
   6. Invest India (Ministry of Commerce and Industry) launched *Invest India Business Immunity Platform*, to help businesses and investors get real-time updates on India's response to COVID-19, in partnership with SIDBI (Small Industries Development Bank of India).
   7. PM Narendra Modi called for a complete lockdown of entire nation for 21 days (Mar 25 - Apr 14, 2020), to contain the COVID-19 Pandemic. Govt also allocated 15000 Crores to fight the pandemic.
   8. Reliance has set up India's first hospital to operate exclusively to treat Corona Virus patients, in Mumbai, with Negative Pressure Rooms.
      1. Negative Room Pressure technology is a technique in medical centres that prevent cross-contamination. This allows air to flow into the room and prevents air from escaping out of the room.
   9. PM Narendra Modi also launched *Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund)*, to enable voluntary contributions by Citizens, to help Govt in eradicating CODIV-19. People can use UPI handle *pmcares@sbi,* to contribute.
   10. Government announced 1.70 Lakh Crore relief package under Pradhan Mantri Garib Kalyan Yojana for poor, to help them fight against Corona Virus -
       1. Insurance cover of 50 Lakh per health worker fighting COVID-19 to be provided under Insurance Scheme.
       2. 80 crore people will to get 5 kg wheat or rice and 1 kg of preferred pulses for free every month for the next three months.
       3. Gas cylinders would be provided to 8 crore poor families for the next three months.
       4. 20 crore women Jan Dhan account holders to get Rs 500 per month for next three months.
       5. Increase in MNREGA wage to Rs 202 a day from Rs 182 to benefit 13.62 crore families.
       6. Ex-gratia of Rs 1,000 to 3 crore poor senior citizen, poor widows and poor disabled.
       7. Government to pay 2000 to farmers in first week of April under existing PM Kisan Yojana to benefit 8.7 crore farmers.
       8. Government asked State Governments to use Building and Construction Workers Welfare Fund to provide relief to Construction Workers.
       9. For Wage-earners below 15000 per month in businesses having less than 100 workers, government will pay 24 % of their monthly wages into their PF accounts for 3 months.
       10. For 63 lakhs women Self Help Groups (SHGs) that support 6.85 crore households, Limit of collateral free lending would be increased from 10 to 20 lakhs.

11. Employees' Provident Fund Regulations will be amended to include Pandemic as reason to allow non-refundable advance of 75 % of amount or three months of wages, whichever is lower, from their accounts.
12. Govt also created a seperate fund of 15000 crores to fight COVID-19.

11. Government announced several easing measures, aimed at helping citizens / companies during Lockdown imposed to contain COVID-19 Outbreak.
    1. Financial Services -
        1. No charges on withdrawal of cash in bank ATMs.
        2. There will be no charges on not keeping minimum balance requirement, for 3 months.
        3. Reduced digital charges for trade transactions.
    2. Tax measures -
        1. For FY 2018-19, last date for returns extended to June 30, 2020. For delayed payments made till June 30, interest rate reduced to 9% from 12%.
        2. For delayed deposit of TDS, interest has been reduced to 9 % from 18%
        3. Aadhaar-pan linking extended to June 30 from March 31
        4. Vivaad se Vishwaas scheme extended to June 30. No additional 10% amount, if payment made by June 30, 2020.
        5. Compliances under Income Tax Act, Wealth Tax Act, Benami Transaction Act, Black Money Act, Vivaad se Vishwaas, have been extended to June 30, 2020
    3. GST
        1. All GST returns for March, April, May and composition returns extended to June 30, 2020
        2. For companies less than 5 cr no late fee and penalty to be charged. For above Rs 5 cr, only int at the rate of 9% For Customs
        3. Sabka Vishwaas scheme for indirect taxes having last date till March 31 has been extended to June 30,2020. No interest to be levied.
        4. Customs clearance till June 30 to work 24x7.
    4. Companies -
        1. In respect of MCA21 registry, there is a moratorium being issued from April 1 till Sep 30 no additional fees for late filing.
        2. For newly incorporated companies, additional 6 months for filing declaration of commencement of business.
        3. Mandatory requirement of holding meetings of Board of companies within prescribed interval provided in Companies Act (120 days), shall be extended by 60 days (till 30th September).
        4. Requirement to create a Deposit reserve of 20% of deposits maturing during 2020-21 before 30th April 2020 shall be allowed to be complied with till 30th June 2020.
        5. Requirement to invest 15% of debentures maturing during a particular year in specified instruments before 30th April 2020, may be done by 30th June 2020.
    5. Insolvency and Bankruptcy Code -
        1. Threshold of default raised from 1 lakh to 1 crore, to prevent triggering of insolvency proceedings for SMEs.
        2. If it continues like this beyond April, then sec 7, 9, 10 of the IBC will be suspended for a period of six months.

12. RBI Announced several measures to prevent economic fallout due to COVID-19 Outbreak -
    1. RBI Allowed Banks to Declare 3 Months Moratorium on Term Loans, to enable borrowers to avail 3 months deferment on payment of Loan EMIs. It is applicable between repayments due between Mar 1 - May 31, 2020.
        1. Amid COVID-19 Outbreak, there may be temporary disruption in cash flows / loss of income, for businesses/ individuals. This measure is a great help to borrowers. More Details and FAQs
    2. RBI has announced several Monetary Policy Rates Changes, by preponing 7th Bi-monthly Monetary Policy Statement 2019-20 due to COVID-19 Outbreak -
        1. Repo Rate by 75 basis points, to 4.4 %.

1. Repo rate is now lowest ever. Before this, it had hit lowest point of 4.74% in April 2009 amid Global Financial Crisis.
2. Reverse Repo Rate cut by 90 basis points, to 4 %.
3. CRR (Cash Reserve Ratio) of all banks reduced by 100 basis points to 3%, for one year.
4. These measures will inject liquidity of Rs 3.74 lakh crore to the system.
5. Current MPC Rates -
   1. Repo Rate - 4.40 %
   2. Reverse Repo - 4.00 %
   3. Bank Rate - 4.65 %
   4. CRR (Cash Reserve Ratio) - 3 %
   5. SLR(Statutory Liquidity ratio) - 18.25 %
   6. Marginal Standing Facility (MSF) Rate - 4.65 %

13. Pune based testing services MyLab became first Indian company to get approval from CDSCO for sales of COVID-19 testing kits.
14. Ministry of Health and Family Welfare declared Hydroxycholoroquine as a Schedule H1 drug, putting restrictions on its sales and distribution. Out of 4 treatments suggested by the World Health Organization to contain the virus, India adopted the use of Hydroxychloroquine.
15. *Mo Jeeban* Programme launched by Odisha Government to contain the spread of COVID-19, appealing people to stay indoors.
16. Indian Army launched *Operation Namaste* to contain spread of Corona Virus in country.
17. RBI for the first time, shared its Business Continuity Plan (BCP) to ensure zero disruptions in the national payments systems (NPS) due to the coronavirus outbreak. BCP is a recovery plan to prepare for anticipated disruptions, ensure smooth flow of operations and staffing, and form crisis management groups.
18. Government fixed price of a three-ply face mask made of melton-non-woven fibre till June 30 at a maximum of Rs 16 per mask.
19. Government created a 'MyGov Corona Helpdesk' in collaboration with WhatsApp to provide factually correct information about coronavirus. People can clarify their queries by sending *Namaste* to WhatsApp number *9013151515*.
20. Election Commission of India permited use of indelible ink on persons for stamping for home quarantine by health authorities insight of COVID-19.
21. Indore became 1st Indian city to use drones to sanitize city against COVID-19 Virus.
22. Labour and Employment Ministry issued advisory under Building and Other Construction Workers (BOCW) Act 1996, to all state and UT (Union Territory) governments to provide financial aid to nearly 3.5 crore construction workers from Rs 52,000-crore construction cess collected by Labour Welfare Boards.
23. Government announced that Testing and Treatment of Corona virus (COVID-19) will be covered under Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) Yojana, which covers expenses up to 5 Lakh.
24. Tourism Ministry launched *Stranded in India* portal, to support foreign tourists stuck in India amid COVID-19 Outbreak.
25. Technology developed by an incubatee company of Scitech Park, Pune has emerged as an effective solution for India's fight against Covid-19 by reducing viral load of infected areas within a room significantly within an hour.
    1. DST has released Rs 1 crore to manufacture and scale up the product, under NIDHI PRAYAS program of Govt.
26. Minister of Health and Family Welfare launched CoNTec, a Telecommunication Centre that aims to connect doctors in the country with AIIMS (All India Institute of Medical Sciences).
27. Ministry of Power approved relief measures to provide power supply 24/7 to consumers. Govt will provide moratorium of 3 months to Discoms in order to make payments to generating companies, as non payment of dues by consumers due to lockdown has dteeroited finanes of Discoms.
28. Govt. exempted agriculture and farming related activities from Lock Down, to protect crops and livelihood of farmers.
29. Jharkhand government launched PRAGYAAM Mobile application, to issue e-passes to everyone associated with delivery of essential services during lockdown to curb spread of COVID-19.

30. ICICI Lombard And BharatPe Partner To Launch *COVID-19 Protection Insurance Cover* for shopkeepers.
31. Nagaland Govt launched *Self Declaration COVID-19 App,* which will be mandatory for any person who entered Nagaland after March 6. It is useful for tracking and surveillance of high-risk cases.
32. Himachal Pradesh Government created a 'HP COVID-19 Solidarity Response Fund' to provide personal protection equipment to health workers and other related officials. Rajasthan police also launched a mobile app called "RajCop citizens app"
33. Govt. allowed using 30 % District Mineral Foundation (DMF) funds for healthcare, screening and food distribution, to combat Covid-19 pandemic.
34. IIT Bombay developed mobile app named 'CORONTINE', aiming to help tracking asymptomatic carriers and prevent spread of COVID-19.
35. Govt has set up 11 empowered groups for ensuring a comprehensive and integrated response to Covid-19 pandemic, under Disaster Management Act 2005.
36. Coronavirus risk-tracking app called 'Corona Kavach' has been launched by Government. It uses a person's location to assess whether they are in the high-risk geographical zone or not.
37. IIT Gandhinagar launched 'Project Isaac' to engage students in creative projects during COVID-19 lockdown.
38. Saudi Arabia assured uninterrupted Liquefied petroleum gas(LPG) supply to India, during COVID-19 outbreak.

2. **Global** -

   1. **April 2020** -

      1. Biennial Warfare Exercise Pitch Black hosted by Royal Australian Air Force (RAAF), has been cancelled due to COVID-19 Threat.
      2. NASA Developed a new high-pressure ventilator named called VITAL (Ventilator Intervention Technology Accessible Locally), developed at NASA's Jet Propulsion Laboratory in Southern California.
      3. US President Donald Trump signed executive order to temporarily suspend immigration into United States, amid COVID-19 Outbreak.
      4. International Monetary Fund (IMF) proposed to deploy its full USD 1 trillion lending capacity to support countries battling COVID-19.
      5. As per International Labour Organization report *COVID-19 and world of work* -
         1. 40 crore people are to enter poverty in India, wiping out 20 crore Jobs. Reductions of jobs are to be more in Arab countries and in Asia and Pacific.
         2. Also, as per Centre for Monitoring Indian Economy (CMIE),unemployment in India has risen over 23%, due to COVID-19 lockdown.
         3. In Americas and Africa, risk percentage of unemployment is 43% and 26% respectively.
      6. As per WTO, Global trade may fall by 13-32 % in 2020 amid Covid-19. Report states that in 2019, 1.7 % of world exports originated from India, while 2.5 % of imports reached India.
      7. Asian Development Bank (ADB) has tripled its COVID-19 Response Package to $20 Billion, up from $6.5 Billion USD Earlier.
      8. South Asian Association for Regional Cooperation (SAARC) Development Fund (SDF) allocated $5 million for Covid-19 related projects in member Nations.
      9. Twitter CEO Jack Dorsey pledged $1 billion as his contribution for relief fund against Coronavirus pandemic. It represents 28 percent of his wealth, and will go to his charity fund, Start Small LLC.
      10. United Nations suspended its peace keeping forces till June 30, to mitigate risk of transmission of COVID-19 virus.
      11. World Bank April 2020 Economic Update for East Asia and Pacific (EAP) titled "East Asia and Pacific in the Time of COVID-19 stated that poverty is estimated to increase by about 11 million people in EAP region. Growth in developing EAP region will be 2.1%, from 5.8% in 2019. Growth in China will decline to 2.3% from 6.1% in 2019.
         1. World Bank Group is rolling out a $14 billion fast-track package to strengthen COVID-19 response in developing countries.
      12. UN postponed Conference of Parties (COP 26) that was to be held in Glasgow in November 2020, amid threat of COVID-19.
      13. 2021 World Games that were to be held in Birmingham in Alabama (US), are postponed to 2022. This is being done to avoid clash with Tokyo Olympics that have been postponed to 2021 amid COVID-19 Outbreak. 2021

World Athletics Championships are also pushed to 2022 for the same reason.

14. UN approved resolution that called upon international cooperation to fight against COVID-19, calling for intensified international cooperation and exchange of information.

15. Apple and Google teamed up to allow contact tracing on most of world's smartphones. The partnership will allow approx 3 billion people to opt in to location tracking through Bluetooth on their smartphones for purposes of combating Covid-19.

2. **March 2020** -

1. Asian Development Bank (ADB) will provide USD 4 million to help developing countries in Asia and Pacific to fight the outbreak of novel coronavirus (COVID-19).

2. World Bank announced 12 billion USD to assist countries that are grappling with economic impacts of corona virus.

3. OPEC (Organization of Petroleum Exporting Countries) Member Russia refused to make deal for cutting production, as deepest oil production cuts since 2008 financial crisis. Saudi Arabia proposed cutting production by 1.5 million barrel a day from April 2020.

4. Indian-American Seema Verma is appointed a key member of White House Coronavirus Task Force constituted by US President Donald Trump. President Trump also signed a 8.3 Billion bill to combat spread of the Covid-19.

5. As per UNCTAD report *Global trade impact of the Coronavirus (COVID-19) Epidemic* -

    1. India has faced a trade impact of 348 million dollars due to slow down in China's production.
    2. Most affected economies - EU (15.6 billion), US (5.8 billion), Japan (USD 5.2 billion), South Korea (USD 3.8 billion).
    3. Dveloping countries' debt will increase between $2.6 trillion and $3.4 trillion amid COVID-19 pandemic.

6. Bill & Melinda Gates Foundation, Wellcome, and Mastercard committed up to $125 million in seed funding to speed-up response to COVID-19 pandemic by identifying, assessing, developing, and scaling-up treatments.

7. US Reserve Bank (Federal Reserve) reduced key interest rates to 0% - 0.25%, amid slwing down economy due to COVID-19 Impact.

8. For the first time since 1962, Iran seeked help of International Monetary Fund, to fight Corona Virus Outbreak.

9. Asian Development Bank (ADB) will provide $200 million to companies manufacturing and distributing medicines, and other items needed to combat novel coronavirus (COVID-19).

10. SAARC (South Asian Association for Regional Cooperation) Nations held a Video Conference, to formulate Strataegy for tackling novel coronavirus (COVID-19) Outbreak. India proposed an emergency SAARC Fund in this regard and contributed 10 Million USD for same.

11. World Economic Forum created *COVID Action Platform*, as first of its kind, aiming to convene business community for collective action, protect people's livelihoods and facilitate business continuity, and mobilize support for COVID-19 response.

12. Philippines became first country to suspend all financial markets, amid COVID-19 Outbreak.

13. *African Lion Military Exercise,* the joint US-Africa Military Exercise has been cancelled, amid COVID-19 Outbreak.

14. WhatsApp launched *Coronavirus Information Hub* globally, and donated $1 million donation to Poynter Institute's International Fact-Checking Network (IFCN).

15. A New Virus called *Hantavirus* appeared in China, which is also deadly like Covid-19 but far less contagious.

16. International Olympics Committee announced postponement of 2020 Tokyo Olympics, due to COVID-19 Outbreak. This is first such postponment in 124-year history of Olympics. Tokyo Olympics are tentatively rescheduled for July 23-Aug 8, 2021.

17. Noted Tennis Grand Slam Wimbeldon which was to be held in England in June 2020, has been cancelled due to ongoing coronavirus pandemic. It is cancelled for the first time since Second World War.

18. World's largest streaming media service *Netflix* formaed $100 million fund, to help workers on film and television productions that have been impacted due to global coronavirus outbreak. The fund will help cast and crew members such as electricians, carpenters, drivers and other hourly workers.

19. Football Governing Body FIFA started a campaign to raise awareness about COVID-19 and importance of lockdowns. It has 28 acclaimed international players, Including India's Sunil Chhetri.

20. International Monetary Fund launched *IMF Policy Tracker*, as a platform to provide all key economic responses launched by Governments all over the world to fight against Corona Virus.

21. UN launched Global Humanitarian Response Plan to fight against COVID-19, allocating 2 billion USD to implement the plan.

22. U.S. Centers for Disease Control and Prevention introduced an AI bot called 'Clara' to help people assess potential symptoms of COVID-19, in partnership with Microsoft Azure's Healthcare Bot service.

23. Proposed / Considered Treatment Methods -

    1. US Food and Drug Administration approved use of Convalescent plasma collected from patients recovered from COVID-19 to treat seriously ill COVID-19 patients. Idea is to inject plasma with antibodies into critically ill patients for them to gain immunity against the virus.

    2. World Health Organization (WHO) started a mega trial namely "Solidarity" of 4 most promising drugs that may cure COVID-19 -

        1. Remdesivir - experimental antiviral compound widely used to combat Ebola and other dangerous viruses.

        2. Chloroquine and hydroxychloroquine - Treats malaria. Indian Council for Medical Research (ICMR) also recommended this.

        3. Combination of lopinavir and ritonavir - Treats human immunodeficiency virus (HIV).

        4. Ritonavir/lopinavir plus interferon-beta - Treats Middle-East respiratory syndrome coronavirus (MERS) patients.

24. International Telecommunications Union (ITU) launched a "Global Network Resiliency Platform" to help global networks remain "safer, stronger and more connected" during COVID-19 crisis.

25. US invoked Defence Production Act 1950, to direct *General Motors* to manufacture ventilators needed to fight COVID-19.

    1. The act was enacted in 1950 in response to Korean War. earlier In 2011, President Obama invoked it to force telecommunications industries to provide information related to use of foreign-manufactured hardware and software in networks of companies.

26. US also approved largest stimulus package in US history, a $2 trillion bill intended to rescue the coronavirus-battered economy.

27. US announced USD 174 million financial assistance to 64 most at-risk countries which include USD 2.9 million to India as support for combating coronavirus pandemic. In February 2020, USA provided 100 million aid for the same purpose.

28. US halted funding of World Health Organisation, accusing it of Shielding China and covering up Info about COVID-19 Outbreak. US provide between USD 400-500 million per year to WHO, over 10 times more China.

3. ▶ Amid COVID-19 Pandemic, Gujarat Government launched a unique initiative called *Umbare Aanganwadi (doorstep Aanganwadi)* under ICDS (Integrated Child Development Services) programme, to reach out to children during lockdown.

4. ▶ Andhra Pradesh CM Y. S. Jaganmohan Reddy started *Jagananna Vidya Deevena* Scheme.

    1. Under this, fee reimbursement (15000-20000) will be credited to mothers' accounts instead of college accounts in coming academic year 2020-21.

5. ▶ Andhra Pradesh CM Y.S. Jagan Mohan Reddy re-launched zero interest loan scheme for Women Self-Help Groups(SHGs),by releasing 1400 crores to 8.78 lakh SHGs.

    1. Each SHG will receive 20000 - 40000 towards interest component on their loans. Currently, SHG are securing loans from banks at an interest rate of 7 to 13%.

    2. The scheme was first launched by Former CM N Kiran Kumar Reddy in united Andhra Pradesh in 2011. But, after state bifurcation, it was stalled.

6. ▶ As per *Global Report on Internal Displacement* by Internal Displacement Monitoring Centre -

    1. Over 5 million people displaced in India in 2019, highest in world.

    2. Around 33.4 million people faced displacements in the world due to conflicts and disasters, in 2019.

7. ▶ As per a CRISIL report -

    1. Karnataka retained its 1st position in terms of total installed renewable capacity in FY20 (2019-20), with 15232 MW Capacity.

    2. Karnataka is followed by Tamil Nadu (14347 MW) & Gujarat (10586 MW).

8. ▶ Assam government launched a new scheme *Dhanwantari,* under which locally unavailable medicines are provided to patients at home. Medicines below 200 rupees will be provided free of cost to patients.

9. ▶ Bharti Airtel and Nokia signed agreement (*approx 1 Billion USD*) to deploy Nokia's SRAN solution across nine circles in India, helping Airtel to enhance network capacity of its networks. The rollout will see around 3 lakh radio units deployed across several spectrum bands, by 2022.
   1. Nokia's SRAN solution helps operators to manage their networks from one platform, reducing network complexity and increasing cost efficiencies.

10. ▶ Border Roads Organisation (BRO) constructed a new permanent bridge on river Ravi, measuring 484 meters, connecting Kasowal enclave in Punjab to rest of country.
    1. Earlier, The pontoon bridge used to be dismantled every year prior to Monsoon, or else it would have got washed away.

11. ▶ Cabinet Approvals (Apr 22, 2020) -
    1. General -
       1. Approved to relax requirement of Aadhaar seeding of data beneficiaries of the States of Assam and Meghalaya and UTs of Jammu & Kashmir and Ladakh for release of benefits to them under PM-Kisan Scheme upto 31st March, 2021.
          1. PM-KISAN Scheme was launched in February 2019, to provide income support of 6000 per year to all landholder farmer families across country with cultivable land.
       2. Approved investments to the tune of 15000 crores for 'India COVID-19 Emergency Response and Health System Preparedness Package', to be utilized in 3 Phases. For an immediate response, 7774 crores are sanctioned. Rest are to be utilised as medium-term support in 1 to 4 years.
    2. CCEA -
       1. Approved fixation of Nutrient Based Subsidy (NBS) rates for Phosphaticand Potassic (P&K) Fertilizers for 2020-21 -

Per Kg Subsidy rates (in Rs.)			
N	P	K	S
18.789	14.888	10.116	2.374

          1. CCEA also approved inclusion of a complex fertilizer namely Ammonium Phosphate (NP 14:28:0:0) under NBS Scheme.
          2. Expected expenditure for release of subsidy on P&K Fertilizers during 2020-21 will be 22186 crores.

12. ▶ Central Public Works Department issued guidelines to use air conditioners during ongoing summers, to help minimize spread of COVID-19 -
    1. Temperature to be maintained between 24 - 30 Degree Celsius.
    2. Relative humidity should be maintained between 40% and 70%. T
    3. Mechanical exhaust air shall be 70% to 80% of fresh air quantity.

13. ▶ Coal and Mines Minister Pralhad Joshi stated that Coal India Limited will produce 710 million tonnes of coal in FY 21 (2020-21). It aims to achieve 1 billion tonne coal production by 2023-24.

14. ▶ General News / Events / Conferences (Apr 21 - 30, 2020)-
    1. All India Institute of Ayurveda and Delhi Police organised AYURAKSHA programme for Delhi Police personal, to fight against coronavirus.
    2. Central Industrial Security Force (CISF) launched an e-office application named 'e-karyalay', to enable movement of files without physical touch.
    3. Paistan Hosted video conference of SAARC Health Ministers, on COVID-19.
    4. Health and Family welfare Minister Harsh Vardhan participated in Virtual interactive session with Health Ministers of member countries of World Health Organization (WHO), on measures being taken against COVID-19.
    5. Uttar Pradesh became 1st state with a software-based in-house facility of virtual courts, for hearing cases through video conferencing.
    6. Madhya Pradesh government launched *Jivan Shakti Yojana* for women. Under this, women in urban areas can earn by making masks at home. The government will pay them Rs 11 per mask.

1. Madhya Pradesh government als launched 'Jeevan Amrit Yojana', to boost immune system of people to fight (COVID-19) disease. Under this, state government will freely distribute an ayurvedic product called 'Trikut Churna', prepared by AYUSH Department of state.

7. Jammu and Kashmir State Legal Services Authority (JKSLSA) launched helpline under *Serve-the-Seniors Initiative*, to help senior citizens who live alone.

8. Supreme Court held that it is quantity of the entire banned drug mixture and not its purity which will determine the punishment for an offender under Narcotic Drugs and Psychotropic Substances (NDPS) Act, Making the law more stringent.

9. Indian IT Company NIIT (National Institute of Information Technology)'s US subsidiary signed a managed service agreement with a US-based education technology (EdTech) company.

10. Rajasthan Govt launched a project 'SMILE' in order to ensure that continuity of learning amid Covid-9 lockdown.

11. Indonesia's Anak Krakatau volcano had longest eruption, since its explosive collapse in 2018.

12. Haryana Govt launched 'Sampark Baithak' app for primary students.

15. ▸ Government brought in ordinance to end violence against doctors and health care workers, provisioning jail for 6 months to 7 years for the same and fine up to 5 lakhs.

1. Ordinance will make amendment to Epidemic Disease Act 1897, for this to take effect.

2. Also, Govt made Epidemic Act a concurrent act, allowing state governments to take actions as well.

16. ▸ Gujarat government launched 3rd edition of the Sujalam Sufalam Jal Sanchay Abhiyan to prepare water bodies before monsoon.

1. Since Its launch in 2018, Water storage capacity has increased by 2.3 billion cubic feet .

2. It works on a PPP model,with government contributing 60% and remaining by people.

17. ▸ HRD Minister Ramesh Pokhriyal'Nishank' e-launched VidyaDaan 2.0 program, for inviting e-learning content contributions, due to increasing requirement for e-learning content for students. It is specially significant amid Covid- 19 outbreak.

18. ▸ Institute of Information Technology and Management Kerala developed an AI Semantic search engine to enable researchers to get deeper insights into scientific studies, especially when they need to find an early solution to COVID-19 crisis. URL is *vilokana.in,* which in Sanskrit means 'finding out'.

19. ▸ Minister of Road transport & Highways Nitin Gadkari launched Bank of Schemes, Ideas, Innovation and Research portal (http://ideas.msme.gov.in/).

1. It gives access to all Schemes of Union, State and UT Governments, with provision for uploading Ideas, Innovations & Researches.

2. Apart from crowd sourcing of Ideas, it also enables evaluation and rating of crowd sourced ideas. It can also facilitate inflow of venture capital, foreign collaboration etc.

20. ▸ Ministry of Coal (MoC) launched a Project Monitoring Unit (PMU) for facilitation of early operationalisation of coal mines allocated by Government. It will support Coal mines allocatees in obtaining timely approval to operationalise mines, with KPMG as Consultant.

21. ▸ Ministry of Rural Development & Panchayati Raj issued guidelines regarding recently launched SVAMITVA scheme, aiming to provide rural people with the right to document their residential properties so that they can use their property for economic purposes.

1. It will help in streamlining planning and revenue collection in rural areas and ensuring clarity on property rights.

2. This will also help in resolving property related disputes and will enable creation of better-quality Gram Panchayat Development Plans (GPDPs), leveraging maps created under this programme.

3. It is currently being implemented in six states - Haryana, Karnataka, Madhya Pradesh, Maharashtra, Uttar Pradesh and Uttarakhand.

22. ▸ NTPC invited Global Expression of Interest (EoI) to provide 10 Hydrogen Fuel Cell (FC) based electric buses and an equal number of Hydrogen Fuel Cell based electric cars in Leh and Delhi.

1. This is first such procurement of Hydrogen Fuel Cell based vehicles in India, wherein a complete solution from green energy to the fuel cell vehicle would be developed.

23. ▸ National Council for Science & Technology Communication (NCSTC) and Department of Science & Technology (DST) launched a programme on health and risk communication 'Year of Awareness on Science & Health (YASH)' with focus on COVID-19. Aim is to encourage public engagement and enable communities to increase their sense of awareness against COVID-19.

24. ▸ Navratna PSU NLC India commenced production of Coal for the First Time. Coal was produced from Talabira II and III Mines in Odisha, allotted to NLCIL in 2016 with a capacity of 20 Million Tonne per annum.

25. ▶ Supreme Court asked Govt to consider adoption of *one nation, one ration card* scheme, during ongoing COVID-19 lockdown. It will be beneficial for migrant workers and economically weaker sections to get benefit of subsidized food.

26. ▶ United Nations Office on Drugs and Crimes (UNODC) rolled out a 'Lockdown Learners' series in India under its flagship "Education for Justice" initiative. It emphasizes on COVID-19 and its impact on Sustainable Development Goals, peace and rule of law.

27. ▶ United States Agency for International Development (USAID) will provide 3 million USD for India's PAHAL project (Partnerships for Affordable Healthcare Access and Longevity).

    1. USAID will also help National Health Authority to establish financial facility to mobilize resources from private sector.

    2. USAID provides funds for poverty relief, disaster relief, technical cooperation and socioeconomic development.

    3. PAHAL is a joint initiative of USAID and IPE, aiming to provide quality and affordable health care solutions to urban poor.

Top

Persons

1. ▶ As per Medicine Maker Power List 2020, Biocon Chief Kiran Mazumdar-Shaw is named among world's top 20 inspirational leaders in field of biopharmaceuticals.

2. ▶ Obituaries (April 2020) -

    1. Notable deaths due to complications arising due to COVID-19 infection -

        1. Gita Ramjee - Noted Indian-origin virologist from South Africa.

        2. Spain Princess Maria Teresa became 1st royal to die from complications arised due to COVID-19 infection.

        3. Adam Lyons Schlesinger - Noted Emmy and and Grammy Award American singer-songwriter and instrumentalist.

        4. Brahm Kanchibotla - Noted Indian-American journalist.

        5. Mahmoud Jibril - Former Prime Minister of Libya.

        6. Rifat Chadirji - Father of modern Iraqi architecture.

        7. Roger Chappot -Noted Swiss ice hockey player.

        8. Zafar Sarfraz - Former Pakistani first-class Cricketer.

        9. Eddie Large - Noted British comedian.

        10. Luis Sepúlveda Calfucura - Noted Chilean writer and journalist.

        11. Ajay Kumar Tripathi - Former Judicial Member of Lokpal.

        12. Troy Sneed -Grammy Nominated American Singer and Musician.

    2. Tony Lewis - Former British Cricketer and co-inventor of Duckworth- Lewis Method.

    3. Philip W. Anderson - Noted American physicist and Nobel laureate. He won Nobel Prize in Physics in 1977.

    4. Arjun Dev - Noted historian.

    5. Bhai Nirmal Singh Khalsa - Padma Shri Awardee Sikh Hazoori Ragi of Darbar Sahib in Amritsar.

    6. Bill Withers - American songwriter & 3 time Grammy award winner.

    7. MK Arjunan - Noted Malayalam music composer.

    8. Honor Blackman - Noted British Actress.

    9. Bullet Prakash - Noted Kannada Actor.

    10. Kalinga Sasi - Noted Malayalam actor.

    11. Jock Edwards - New Zealand Cricketer.

    12. Jackie du Preez - Zimbabwe Cricketer.

    13. John Prine - Noted American folk singer-songwriter.

    14. Shanti Hiranand Chawla - Padma Shri Awardee classical singer.

    15. Peter Bonetti - England Footballer (goalkeeper).

    16. Stirling Moss - Noted British Formula One racing driver.

    17. Tim Brooke Taylor - Noted British Comedian-actor.

    18. Donato Sabia - Noted Italian distance runner who specialized in 800 metres.

    19. M.V. Rajasekharan - Noted Congree politician, also served as Union Minister of State for Planning.

    20. Ashok Desai - Former Attorney General of India.

    21. George Douglas Sanders - Noted American golfer.

    22. Walter D'Souza - Former Noted Gujarati first-class cricketer.

    23. Nobuhiko Obayashi -Noted Japanese filmmaker, who devoted his works to depicting war's horrors.

24. Ranjit Chowdhry - Noted Hindi Actor.

25. Saharai Oram - Noted tribal leader and Odisha Minister.

26. R V Bhuskute - Freedom fighter, who participated in Quit India movement.

27. Willie Davis - Noted Former American football player.

28. Rudratej Singh - BMW India Serving CEO.

29. Gene Deitch - *Tom and Jerry* and *Popeye* Director and Oscar-winning illustrator and animator.

30. Ratnakar Chaini - Noted Odia litterateur.

31. Basanta Das - Former Member of Parliament from Odisha.

32. Usha Ganguly - Noted theatre director-actor and activist, most known for her work in Hindi theatre in Kolkata.

33. Devanand Konwar - Former governor of Bihar, Tripura and West Bengal.

34. Ronny Roy - Noted Photojournalist.

35. Graeme Watson - Former Australian Cricketer.

36. Ravi Vallathol - Noted Malayalam mjkactor.

37. Irrfan Khan - Noted Bollywood Actor. He was honored with Padma Shri Honour in 2011.

38. Rishi Kapoor - Noted Bollywood Actor.

39. Michael Robinson - Foemer British footballer. He had settled in spain, post retirement.

40. Bijay Mishra - Noted Odia dramatist and lyricist.

41. James M. Beggs - Former (6th) NASA administrator, who led the NASA during early years of space shuttle program and resigned after Challenger disaster killed seven astronauts in 1986.

3. ▶ Persons Resigned / Retired (April 2020) -

   1. Noted Chinese world silver- medallist high jumper Zhang Guowei announced his retirement.

   2. Australian Cricketer Stephen O'Keefe retired from 1st class cricket.

   3. Tamas Ajan - International Weightlifting Federation President. He resigned amid allegations of corruption and doping violations.

   4. Sana Mir - Pakistani Female Cricketer.

   5. Denmark's Olympic silver Medalist Badminton Player Mathias Boe announced retirement.

Science

1. ▶ Scientists at Institute of Nano Science and Technology Mohali (*INST*) found a low-cost metal-free nanomaterial for visible light microbial disinfection which can be an alternative to silver and other metal-based materials -

   1. Researchers tested carbon nitride quantum dots (g-CNQDs) for visible-light-driven antibacterial activity and found it to be efficient, apart from being biocompatible with mammalian cells.

   2. It is a suggested anti bacterial alternative to metal/non-metal semiconductors and expensive silver, thus making it cost-effective

2. ▶ As per C3S (Copernicus Climate Change Service) and CAMS (Copernicus Atmosphere Monitoring Service) -

   1. The 1 Million Square Kilometer Hole in Ozone layer Over North Pole, has healed itself. It was formed due to unusual climatic conditions and was discovered recently.

   2. It has reportedly healed due to Polar Vortex, a winter phenomenon.

      1. Polar Vortex is cyclonic circular winds that blow in stratosphere from west to east. Polar Vortex extends from tropopause through stratosphere and into mesosphere.

      2. When vorticity is high, values of ozone is minimum and temperature is at its highest cold. Thus, the hole has closed as the vorticity has decreased.

3. ▶ Asteroid 1998 OR2 (Asteroid 52768) safely passed by Earth, at distance of 62 Lakh kilometres.

   1. It had diameter of approx 1.2 Miles (2 KM) and travelled at approx 20000 miles per hour.

   2. NASA's Center for Near-Earth Object Studies, had categorized asteroid 1998 OR2 as 'a potentially hazardous object', because it flies past Earth's earth at regular intervals.

4. ▶ Brazilian Astronomers discovered 19 new asteroids between Jupiter and the Neptune, believed to hae joined solar system 4.5 billion years ago.

   1. These asteroids once belonged to another star and are now orbiting between Jupiter and Neptune. They are now a part of "Centaurs" orbiting the sun.

5. ▶ CSIR - Central Scientific Instruments Organisation Chandigarh (CSIO) developed an innovative technology for effective disinfection and sanitization to fight with corona pandemic, transferring this technology to Nagpur-based Rite Water Solutions.
    1. Electrostatic Disinfection Machine is developed based on electrostatic principle. It produces uniform and fine spray droplets of disinfectants in size range of 10-20 micrometre to kill microorganisms and viruses.
6. ▶ For the first time, gravitational wave observatories at LIGO (Laser Interferometer Gravitational-Wave Observatory) scientific collaboration detected a merger of two unequal-mass black holes.
    1. The event, dubbed GW190412, was detected nearly a year ago.
    2. One of black holes was 30 times mass of Sun and other which had 8 times mass of sun. Merger took place approx 2.5 billion light years away.
7. ▶ Indian Institute of Chemical Technology (IICT) Hyderabad collaborated with Hyderabad-based integrated pharmaceutical company LAXAI Life Sciences, to develop and manufacture APIs and drug intermediates.
    1. APIs and intermediates are key components of any drug that produces intended effects.
    2. Current initiative is aimed at reducing India's dependance on China for supply of APIs and drug intermediates.
    3. The collaboration will primarily focus on Umifenovir, Remdesivir and a key intermediate of Hydroxy Chloroquine (HCQ).
8. ▶ Kerala Innovator *D Vasini Bai* developed ten varieties of Anthurium, a flower with high market value, by cross-pollination.
    1. Anthurium is a vast group of beautiful blooming plants available in a wide range of colors, having high demands due to its use as indoor decorative plants and natural air purifiers.
    2. National Innovation Foundation facilitated mass multiplication and large scale production of four highly demanded varieties through tissue culture technique at Indian Institute of Horticultural Research (IIHR) Bangalore.
9. ▶ National Institute of Biomedical Genomics Kalyani (West Bengal) released a study stating that novel coronavirus has mutated into 10 different types.
    1. *A2a* mutation has been highly efficient in entering human lungs in large numbers because of which COVID-19 became prevalent globally. At present, 11 types have been identified.
    2. Type *O* was the ancestral type that originated in Wuhan.
10. ▶ On Apr 24, 2020, NASA's Hubble Space Telescope completed 30 Years.
    1. Named After Noted astronomer Edwin Hubble, Hubble Space Observatory is run in partnership with European Space Agency. It has played crucial role in several discoveries, including evidence of existence of black holes in centre of galaxy.
    2. On its 30th anniversary, Hubble captured a Cosmic Reef, a group of stars that has an appearance of a coral reef undersea.
    3. Some Notable Observations by Hubble Space Telescope -
        1. Age and Expansion of Universe -
            1. It has measured distances to Cepheid variable stars more accurately than ever before, constraining value of *Hubble constant*, the measure of the rate at which the universe is expanding, which is also related to its age.
            2. Universe estimated age is now about 13.7 billion years. Before Hubble Telescope, it was predicted between 10-20billion years.
            3. Hubble data helped discover farthest known galaxy so far - GN-z11, 32 Billion Light Years Away.
        2. Images provided by HST have been especially well-suited to establishing prevalence of black holes in center of galaxies.
        3. In March 2019, observations from Hubble were used to determine that Milky Way Galaxy weighs approximately 1.5 trillion solar units and has a radius of 129,000 light years. It is more than double of earlier estimated Radius of Milky way.
11. ▶ Researchers at International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) in collaboration with Nanomechanics Inc (USA) have jointly developed an advanced tool for mapping nano-mechanical properties of materials like multi-phase alloys, composites, and multi-layered coatings, called *NanoBlitz 3D*.
    1. It has high-throughput and enables performance of a large array, typically consisting of 1000s high-speed nano-indentation tests, wherein each indentation tests takes less than one second to measure hardness and elastic modulus of a given material.
12. ▶ Researchers at Nainital-based Arayabhatta Research Institute of Observational Sciences (ARIES) found that *SN 2010kd*, a super-luminous supernova (*Stars Collision*) stands out with amount of mass as well as Nickel ejected during explosion, which is much more than normal core-collapse supernova.
    1. Scientists said that larger ejected mass of Super-luminous supernovae SN 2010kd, located 1.5 Giga light-years away, indicates that related star evolution might be different from other possible progenitors of normal core-collapse supernovae. Also, It exploded with a larger velocity but decayed slower than other similar supernovae.

2. It was discovered by Robotic Optical Transient Search Experiment (ROTSE-IIIb) telescope as a part of ROTSE supernova verification project in USA. in November 2010.

13. ▸ Researchers from Wadia Institute of Himalayan Geology (WIHG) brought out 35000 year history of river erosion and identified hotspots of erosion and wide valleys that act a buffer zones, after studying rivers in Ladakh Himalaya.
    1. Study showed how rivers in drier Ladakh Himalaya operated in longer time scales and how they responded to varying climate.
    2. Ladakh Himalaya forms a high altitude desert between Greater Himalayan ranges and Karakoram Ranges. Indus and its tributaries are major rivers flowing through the terrain.
    3. Research suggested that wide valley of Padam, with an area of 48 square km, in upper Zanskar, has stored a vast amount of sediments in these landforms, making Padam valley a hotspot of sediment buffering in Zanskar.
    4. This Study will help understand river-borne erosion and sedimentation, which are main drivers that make large riverine plains, terraces, and deltas that eventually become cradle to evolving civilizations.

14. ▸ Scientists at Indian Institute of Geomagnetism (IIG) developed generalized one dimensional fluid simulation code capable of studying a wide spectrum of coherent electric field structures in near-earth plasma environment / magnetosphere, which can help in planning future space missions.
    1. Team developed a generalized 1D fluid code which modelled coherent electric field structures in space plasmas. Results obtained were found well in agreement with spacecraft observations of coherent electric field structures.
    2. Almost 99% of matter in universe is in form of plasma. Earth's magnetosphere, too, contains this plasma processes that can hamper working of satellites.
    3. Apart from well being of these expensive satellites, academic understanding of this region is quite essential to comprehend cosmos.
    4. Sun is major source of plasma deposition in space around Earth.

15. ▸ Scientists at S. N. Bose National Centre for Basic Sciences Kolkata (SNBNCBS) developed a safe nanomedicine that can treat several diseases by altering oxidative stress in body, as a hope in India's fight against COVID-19.
    1. Animal trial for Reduction & Oxidation processes (Redox) healing of several diseases is completed, and now institute is looking human Trials.
    2. Medicine combines nanoparticles extracted from manganese salt with citrus extract, like from lemon. A crucial combination of manganese and citrate employing tricks of nanotechnology produces the nanomedicine.

16. ▸ Scientists from Jawaharlal Nehru Centre For Advanced Scientific Research (JNCASR) modified structure of Berberine, a natural and cheap product similar to curcumin, available commercially, into Ber-D to use as a Alzheimer's inhibitor.
    1. Researchers selected isoquinoline natural product berberine found in India and China and used in traditional medicine and other applications.
    2. As berberine is poorly soluble and toxic to cells. So, Researchers modified berberine to Ber-D, which is a soluble (aqueous), antioxidant. They found it to be a multifunctional inhibitor of multifaceted amyloid toxicity of Alzheimer's disease.

17. ▸ Scientists from Pune based Agharkar Research Institute (ARI) developed a microreactor that can produce large quantities of uniform size of nanoparticles, serving a major requirement in biomedical technology.
    1. Device could synthesize metal, semiconductor, and polymer nanoparticles by continuous flow active microreactor.
    2. Nanoparticles possess unique size-dependent properties, which make them useful in biomedical technology but difference in their sizes reduces their efficiency.
    3. Maintaining a uniform size of the nanoparticles is a challenge faced by biomedical industry. New approach in resolving monodispersity paradox could be of immense value to researchers working in nanotechnology.

18. ▸ Swiss Scientists discovered a six-planet system, orbiting the star HD 158259 in Draco constellation.
    1. It has a *super-Earth* & 5 *mini-Neptunes*. Discovery was done by SOPHIE spectrograph at Haute-Provence Observatory in South of France and TESS (Transiting Exoplanet Survey Satellite) exoplanet-hunting space telescope.
    2. The solar system is 88 light-years away from Earth.
    3. Every planet in HD 158259 star has same *orbital resonance* from its later planet, which is 3:2.
        1. Orbital Resonance is a term used to understand how orbits of the two planets are connected.
        2. Best example of this is Pluto and Neptune in our solar system. These two bodies have 2:3 orbital resonance, that means for every 2 laps of Pluto around the Sun, Neptune makes three.

19. ▸ US Space Firm SpaceX successfully launched a new batch of 60 Starlink satellites into orbit, as 84th Falcon 9 flight.
    1. Starlink is a satellite constellation being constructed by SpaceX, to provide satellite Internet access.

2. Constellation will consist of thousands of mass-produced small satellites in low Earth orbit (LEO), working in combination with ground transceivers.
20. ▸ USGS (United States Geological Survey) Astrogeology Science Center, NASA and Lunar Planetary Institute released first ever digital, unified, global, geological map of moon named *Unified Geologic Map of the Moon*, with shaded topography from NASA's LOLA mission (Lunar Orbiter Laser Altimeter).
    1. It will serve as a blueprint for future human missions and a source of research and analysis for the educators and the general public interested in lunar geology.

Top

Sports

1. ▸ Indian Badminton Player P V Sindhu has been named ambassador of campaign "I am Badminton", launched by Badminton World Federation (BWF).
2. ▸ Misc. Sports Events (April 2020) -
    1. China will host third edition of Asian Youth Games in November 2021, as announced by Olympic Council of Asia (OCA).
    2. 2021 World Games that were to be held in Birmingham in Alabama (US), are postponed to 2022. This is being done to avoid clash with Tokyo Olympics that have been postponed to 2021 amid COVID-19 Outbreak. 2021 World Athletics Championships are also pushed to 2022 for the same reason.
    3. Noted American Basketballer Kobe Bryant, who passed away recently, has been named into this year's list of inductees into Naismith Memorial Basketball Hall of Fame.
    4. International Weightlifting Federation suspended Malaysia & Thailand weightlifters from competing in Tokyo Olympics (Shifted to 2021).
    5. India will host Asian Boxing Championships for men and women in November-December 2020, assuming coronavirus pandemic to ve wiped out by then.
    6. BCCI suspended Indian Premier League 2020 indefinitely, amid COVID-19 Outbreak.
        1. BCCI also created a campaign named *Team Mask Force*, to spread awareness about wearing masks amid Pandemic.
    7. Ferrari's Charles Leclerc won Formula One Esports Chinese Virtual Grand Prix championship. Due to Coronavirus pandemic, actual F1 races are not being held. The virtual races will run instead of each delayed Grand Prix, using official F1 2019 PC video game.
    8. Iran's Alireza Firouzja beaten World Chess Champion Magnus Carlsen in Banter Blitz Cup 2020, to claim $14,000 prize.
    9. T10 League Sindhi Franchise Owner Deepak Agarwal has been banned for 2 years for breaching ICC Anti-Corruption Code.
    10. Pakistani cricketer Umar Akmal has been banned from all forms of cricket for a 3 years, on corruption charges.
    11. Indian Middle-distance runner Jhuma Khatun has been banned for 4 years by World Athletics, for doping Violation.
    12. India lost hosting rights of 2021 Men's World Boxing Championship, after Boxing Federation of India (BFI) failed to pay host fee to International Boxing Association (AIBA), amounting approx 30 Crores INR. Now hosting rights of the same are given to Serbia.

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