

The Saras Collection

Union Minister for Rural Development and Panchayati Raj has launched 'The Saras Collection' on the Government e-Marketplace (GeM) portal.

Details -

- A unique initiative of GeM and the Deen Dayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM), Ministry of Rural Development, the Saras Collection showcases daily utility products made by rural self-help groups (SHGs) and aims to provide SHGs in rural areas with market access to Central and State Government buyers.
- Under this initiative, the SHG sellers will be able to list their products in 5 product categories, namely (i) handicrafts, (ii) handloom and textiles, (iii) office accessories, (iv) grocery and pantry, and (v) personal care and hygiene.
- In the first phase, 913 SHGs from 11 States have already registered as sellers and 442 products have been on-boarded. In order to develop a scalable model capable of onboarding a large number of SHGs across the country in a short time frame, GeM has developed an API based integration mechanism with the NRLM database.

Role of GeM -

- GeM will provide dashboards for functionaries at the national, state, district and block level to provide them real time information about the number of products uploaded by SHGs, and value and volume of orders received and fulfilled.
- In addition, Government buyers shall be sensitised through system generated messages/ alerts in the Marketplace about availability of SHG products on the portal. Potential buyers shall be able to search, view, cart and procure such products through the stipulated modes of procurement.

About DAY-NRLM -

- DAY-NLRM aims to reduce poverty through promotion of diversified and gainful self-employment while creating skilled wage employment opportunities.
- The scheme supports building social capital and ensuring financial linkages to alleviate poverty and enhance the quality of the life of rural poor women.
- It has ambitious plans on innovations for alternate channels of financial inclusion like digital finance, creating value chains around rural products and improving market access, rural enterprise and strengthening community institutions.

About GeM -

- Government e Marketplace (GeM) is a 100 percent Government owned Section 8 Company set up as the National Public Procurement Portal for procurement of goods and services required by Central and State Government organisations.
- GeM provides an online, end to end solution for procurement of goods and services for all Central Government and State Government Ministries, Departments, Public Sector Enterprises (PSEs), local bodies and autonomous organisations.
- The platform reduces human interventions in procurement and enables transparency, cost savings, inclusiveness and efficiency of faceless standardised public procurement.

Samudra Setu

Indian Navy has launched Operation 'Samudra Setu' meaning "Sea Bridge", as a part of national effort to repatriate Indian citizens from overseas.

Details -

- The Government has been closely monitoring the situation with respect to effect of COVID-19 pandemic on our citizens abroad. The Indian Navy has been directed to make suitable preparations for their evacuation by sea.
- The Indian Mission in Republic of Maldives is preparing a list of Indian nationals to be evacuated by Naval ships and will facilitate their embarkation after requisite medical screening.

- In view of the unique challenges associated with COVID-19 stringent protocols have also been stipulated. The evacuated personnel will be disembarked at Kochi, Kerala and entrusted to the care of State authorities. This operation is being progressed in close coordination with Ministries of Defence, External Affairs, Home Affairs, Health and various other agencies of the Government of India and State governments.

Permanent Mission to the UN

India has appointed diplomat TS Tirumurti, currently serving as Secretary in the Ministry of External Affairs, as its Permanent Representative to the United Nations.

Permanent Mission to the United Nations -

- The Permanent Mission is the diplomatic mission that every member state deputed to the United Nations, and is headed by a Permanent Representative, who is also referred to as the "UN ambassador".
- According to Article 1 (7) of the Vienna Convention on the Representation of States in their Relations with International Organisations of a Universal Character, a "Permanent Mission" is a: "... mission of permanent character, representing the State, sent by a State member of an international organisation to the Organization".

Non-Aligned Movement

Prime Minister Narendra Modi recently participated in the online Summit of Non-Aligned Movement (NAM) Contact Group to discuss response to the ongoing COVID-19 pandemic crisis.

About Non-Aligned Movement (NAM) -

- The Non Aligned Movement came into being 55 years ago when leaders of 25 developing countries met at the **1961 Belgrade Conference**.
- 18th NAM Summit was held at Baku in Azerbaijan in October 2019. India hosted the 7th NAM Summit in the year 1983.
- NAM was born as a movement of developing countries that shunned military alliances and wished to jointly play a role in promoting peace, disarmament and development.
- Presently 120 developing countries are members of this Movement. The NAM Summits are among the largest gathering of countries, after the UN.
- 53 countries from Africa, 39 from Asia, 26 from Latin America and the Caribbean and 2 from Europe (Belarus, Azerbaijan).
- There are 17 countries and 10 international organisations that are Observers at NAM.

Vesak Global Celebrations

Prime Minister Shri Narendra Modi participated in the Buddha Purnima celebrations on 7th May 2020.

About Vesak - Buddha Poornima -

- "**Vesak**", the Day of the Full Moon in the month of May, is the most sacred day to millions of Buddhists around the world.
- It was on the Day of Vesak two and a half millennia ago, in the year 623 B.C., that the Gautam Buddha was **born**. It was also on the Day of Vesak that the Buddha attained **enlightenment**, and it was on the Day of Vesak that the Buddha in his eightieth year **passed away**.
- Hence, it is considered the **Triple Blessed Day** as Tathagata Gautam Buddha's Birth, Enlightenment and Maha Parnirvana.
- **The UN General Assembly**, by its resolution adopted in **1999**, recognised internationally the Day of Vesak to acknowledge the contribution that Buddhism, one of the oldest religions in the world, has made for over two and a half millennia and continues to make to the spirituality of humanity.

- This day is commemorated annually at the UN Headquarters and other UN offices, in consultation with the relevant UN offices and with permanent missions, which also wish to be consulted.

National Gallery of Modern Art

National Gallery of Modern Art has been temporarily closed due to COVID 19 but a virtual National Gallery of Modern Art, New Delhi has started the virtual program "NGMA KE SANGRAH SE".

Details -

This virtual program will showcase the rarely seen or maybe unseen jewels from its repository. This program is based on various weekly/ daily themes from NGMA's prestigious collections.

About National Gallery of Modern Art -

- The idea of a national art gallery to germinate and bear fruit was first mooted in 1949. It was nurtured carefully by Prime Minister Jawahar Lal Nehru and Maulana Abul Kalam Azad.
- Vice-president **Dr S Radhakrishnan** formally inaugurated the NGMA in the presence of Prime Minister Jawaharlal Nehru and artists and art lovers of the city on March 29, 1954. The choice of **Jaipur House**, one of the premier edifices of Lutyens' Delhi, signified the envisaged high profile of the institution.
- Designed by architect **Charles G Blomfield and his brother Francis B Blomfield**, as a residence for the Maharaja of Jaipur, the butterfly-shaped building with a central dome was built in 1936. It was styled after a concept of the Central Hexagon visualised by Sir Edwin Lutyens.
- NGMA is run and administered as a subordinate office to the Department of Culture, Government of India.
- The NGMA has two branches one at **Mumbai** and the other at **Bengaluru**.

Satyajit Ray

Ministry of Culture's Development of Museums and Cultural Spaces (DMCS) digitally launched the short film "A Ray of Genius" to mark the beginning of the centenary celebrations of Satyajit Ray.

About Satyajit Ray -

- Satyajit Ray was an Indian filmmaker, screenwriter, music composer, graphic artist, lyricist and author, widely regarded as one of the greatest filmmakers of all time.
- The Government of India honoured him with the Bharat Ratna, its highest civilian award, in 1992.
- He was awarded an honorary degree by Oxford University.
- Ray's first film, **Pather Panchali** (1955), won eleven international prizes, including the inaugural Best Human Document award at the 1956 Cannes Film Festival. Other work includes Charulata, Teen Kanya, Sonar Kella and the 'Apu Trilogy'. With Pather Panchali (Song of the Road), Indian cinema was launched on the world stage.

Professor B Lal

On the occasion of centenary year of great archaeologist Professor B. B. Lal, Union Culture Minister has released an e-book "Prof. B. B. Lal -India Rediscovered" recently.

About Professor B Lal -

- Prof Lal was born on 2nd may 1921 in village Baidora, District Jhansi, Uttar Pradesh.
- Prof. B. B. Lal is a precious gem of Indian archaeology who rediscovered the civilisational India buried under the colonial past.
- Prof. B. B. Lal was conferred upon Padma Bhushan in the year of 2000.
- He was the Director General of the Archaeological Survey of India (ASI) from 1968 to 1972 and has served as Director of the Indian Institute of Advanced Studies, Shimla

- Prof. Lal excavated several important landmark sites including Hastinapura (U.P.), Sisupalgarh (Orissa), Purana Qila (Delhi), Kalibangan (Rajasthan).
- From 1975-76 onwards, Prof. Lal investigated sites like Ayodhya, Bharadvaja Ashrama, Sringerapur, Nandigram and Chitrakoota under the Archaeology of Ramayana Sites.

Rabindranath Tagore

National Gallery of Modern Art has organised the Virtual Tour titled “Gurudev – Journey of the Maestro through his visual vocabulary” from 7th May 2020 to commemorate the 159th birth anniversary of Gurudev Rabindranath Tagore.

About Rabindranath Tagore -

- Rabindranath Tagore (1861-1941), popularly known as ‘Gurudev’, was born in an affluent Family.
- The maestro was fascinated by the worlds of literature, art, music and dance at an early age.
- In 1913, he became the first Indian to receive a Nobel Prize in Literature for his novel ‘Geetanjali’.
- He also wrote the National Anthems of India and Bangladesh.
- He left his imprint on art and played a role in transforming its practices and ushering into modernism.
- Rabindranath Tagore was primarily known as a writer, poet, playwright, philosopher and aesthetician, music composer and choreographer, founder of a unique educational institution - Visva- Bharati and a painter. Tagore's emergence as a painter began in 1928 when he was 67 years old.
- Between 1928 and 1940, Rabindranath painted more than 2000 images. He never gave any title to his paintings. Fed by memories and the subconscious, Rabindranath's art was spontaneous and dramatic. His images did not represent the phenomenal world but an interior reality.
- His drawings and ink paintings are freely executed with brushes, rags, cotton-wool and even his fingers. For Tagore, art was the bridge that connected the individual with the world.
- Tagore had composed Amar Shonar Bangla in 1905 in the wake of the Bengal partition to foster a spirit of unity and patriotism among Bengalis. He also used the Raksha Bandhan festival to bring about a feeling of brotherhood among Bengal's Hindus and Muslims during the partition of 1905. He was fiercely opposed to the partition.
- He was knighted by the British government in 1915. But he later renounced it protesting against the Jallianwala Bagh Massacre.
- Tagore is responsible for modernising Bengali prose and poetry. His notable works include *Gitanjali*, *Ghare-Baire*, *Gora*, *Manasi*, *Balaka*, *Sonar Tori*, He is also remembered for his song ‘*Ekla Chalo Re*’.
- He was also called the ‘Bard of Bengal’.
- In 1918, he founded the Vishwabharati University at Santiniketan. He was staunchly against the classroom kind of education. He believed it stifled creativity. He conceived of an educational system where the students’ curiosity was kindled and learning became more natural.

KNOWHOW

CSIR's constituent lab, Institute of Genomics and Integrative Biology (CSIR-IGIB) has Tata Sons signed a MoU for licensing of KNOWHOW for FNCAS9 EDITOR LINKED UNIFORM DETECTION ASSAY (FELUDA) for rapid diagnosis of COVID-19.

Details -

- The license shall include transfer of the knowledge for scaling up the KNOWHOW in the form of a kit that can be deployed for COVID-19 testing on ground as early as end of May.
- A completely indigenous scientific invention, FELUDA for COVID-19 has been designed for mitigating the ongoing COVID-19 situation and cater to mass testing.
- Its main advantages are its affordability, relative ease of use and non-dependency on expensive Q-PCR machines.
- CSIR IGIB and TATA Sons will now work together to bring it for widespread use at the earliest.

How does it work?

- The technology was conceived and developed at CSIR IGIB under sickle cell mission and utilises an indigenously developed cutting edge CRISPR Cas9 technology to specifically recognise COVID-19 sequence in a sample.
- A combination of CRISPR biology and paper-strip chemistry leads to a visible signal readout on a paper strip that can be rapidly assessed for establishing the presence of viral infection in a sample.

PM-CARES

PM CARES (Prime Minister's Citizen Assistance and Relief in Emergency Situations) Fund Trust today decided to allocate Rs. 3100 Crore for fight against COVID-19.

Details -

Out of Rs 3100 crore, a sum of approximately Rs.2000 crore will be earmarked for the purchase of ventilators, Rs. 1000 crores will be used for care of migrant labourers and Rs.100 crores will be given to support vaccine development.

What is PM-CARES fund?

Amidst the COVID-19 pandemic, to provide relief to the affected, a public charitable trust under the name of 'Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund' (PM CARES Fund)' has been set up.

How is it different from Prime Minister's National Relief Fund?

- Since 1985 when Rajiv Gandhi was the PM, the management of the PMNRF fund was entrusted entirely with the Prime Minister. Since then, the PM has had the sole discretion of appointing a secretary to manage the fund. No separate office or staff is allocated for managing PMNRF. Under this fund, the criterion for disbursement of money and selection of beneficiaries is purely at the 'discretion of the PM and in accordance with the PM's directions.'
- PM CARES, however, now delegates that power of deliberation and decision making to three other ministers of the government. As chairman of the PM CARES trust, the Prime Minister still has the responsibility of sanctioning and approving his ministers' recommendations; but unlike PMNRF, he is not the proverbial 'judge, jury and executioner.'

Management of PM-CARES -

- The Prime Minister is the ex-officio chairman of the PM CARES fund and Minister of Defence, Minister of Home Affairs and Minister of Finance, Government of India are ex-officio Trustees of the Fund.
- The chairperson of the board of trustees shall have the power to nominate three trustees to the board who shall be eminent persons in the field of research, health, science, social work, law, public administration and philanthropy. Any person appointed a trustee shall act in a pro-bono capacity.

Mission -

The fund aims to undertake and support relief or assistance of any kind relating to a public health emergency or any other kind of emergency, calamity or distress, either man-made or natural. It also aims to render financial assistance, provide grants of payments of money or take such other steps as may be deemed necessary by the Board of Trustees to the affected population.

Donations -

- Donations to PM CARES fund would qualify for 80G benefits for 100 per cent exemption under the Income Tax Act, 1961. Donations to PM CARES fund will also qualify to be counted as corporate social responsibility expenditure under the Companies Act, 2013.
- PM CARES fund has also got exemption under the FCRA and a separate account for receiving foreign donations has been opened and it will be made operational soon. This will enable PM CARES Fund to accept donations and contributions from individuals and organisations based in

foreign countries. This is consistent with respect to Prime Minister's National Relief Fund (PMNRF). PMNRF has also received foreign contributions as a public trust since 2011.

The flagship social security scheme of Government of India 'Atal Pension Yojana' has completed five years of successful implementation.

Details -

- The journey of APY over these five years has been phenomenal and as on 9th May 2020, the total enrolment under the scheme stood at 2,23,54,028.
- During the first two years of its launch, almost 50 lacs subscribers were enrolled which doubled to 100 lacs in the third year and the milestone of 1.50 crore was achieved in the 4th year.
- In the last financial year, almost 70 lacs subscribers were enrolled under the scheme.

About Atal Pension Yojana -

- A new version of Swavlamban Scheme, Atal Pension Yojana (APY) was announced in the Budget for 2015-16.
- With this introduction, the enrolment under Swavalamban has been closed and the eligible subscribers were automatically migrated to the APY unless they opt out.
- Under the APY, the subscribers would receive the fixed pension ranging from Rs. 1000 - Rs. 5000 per month, at the age of 60 years, depending on their contributions.
- It focuses on all citizens in the unorganised sector, who join the National Pension System (NPS) administered by the Pension Fund Regulatory and Development Authority (PFRDA).
- It is open to all bank account holders who are not members of any statutory social security scheme.
- It mainly targets on unorganised sector workers.
- The age of joining APY is 18 years to 40 years. Therefore, minimum period of contribution by the subscriber under APY would be 20 years or more.
- The Central Government would also co-contribute 50% of the subscriber's contribution or Rs. 1000 per annum, whichever is lower for a period of 5 years upto 2020.
- The same pension would be paid to the spouse of the subscriber and on the demise of both the subscriber and spouse, the accumulated pension wealth is returned to the nominee.

About PFRDA -

- Pension Fund Regulatory and Development Authority (PFRDA) is the statutory Authority established by an enactment of the Parliament, to regulate, promote and ensure orderly growth of the National Pension System (NPS) and pension schemes to which this Act applies.
- NPS was initially notified for central government employees recruits w.e.f 1st January 2004 and subsequently adopted by almost all State Governments for its employees.
- NPS was extended to all Indian citizens (resident/non-resident/overseas) on a voluntary basis and to corporates for its employees.

Gandhi Peace Prize

The Ministry of Culture invites nominations for awarding Gandhi Peace Prize every year. For the year 2020, the last date for submission of nominations was extended due to COVID19 lockdown.

About Gandhi Peace Prize -

- The International Gandhi Peace Prize (named after Mahatma Gandhi) is awarded annually by the Government of India.
- It was launched in the year 1995 on the occasion of 125th birth anniversary of Mahatma Gandhi.
- It is an annual award given to individuals and institutions for their contributions towards social, economic and political transformation through non-violence and other Gandhian methods.
- The award carries ₹ 1 Crore (10 million) in cash, convertible in any currency in the world, a plaque and a citation.
- It is open to all persons regardless of nationality, race, creed or gender.
- A jury consisting of the **Prime Minister of India, the Leader of Opposition in the Lok Sabha, the Chief Justice of India, Speaker of the Lok Sabha** and one other eminent person decides the awardee each year.

- If the jury considers that none of the proposed nominations merit recognition, the jury is free to withhold the award for that year; the award was withheld in the years from 2006 to 2012.
- Some of the prominent awardees include - Nelson Mandela, Akshaya Patra Foundation, ISRO, Grameen Bank of Bangladesh, Ramakrishna Mission, Vivekananda Kendra, Yohei Sasakawa etc.

Sanjivani App

Union Health and Family Welfare Minister has launched the 'AYUSH Sanjivani App' to harness the technology for COVID-19 response.

About AYUSH Sanjivani App -

- It has been developed by Ministry of AYUSH and Ministry of Electronics and Information Technology to reach out to a target of 50 lakh people.
- It has been launched to help generate data on acceptance and usage of AYUSH advocacies and measures among the population and its impact on prevention of COVID19.
- It will help in promoting AYUSH knowledge for the larger good of the global community.

Prime Minister's Research Fellows Scheme

Union HRD Minister has announced that, to boost research in the country various amendments have been carried out in Prime Minister's Research Fellowship Scheme.

Details -

- After the amendments, now for the students from any recognised institute/ university (other than IISc/ IITs/NITs/IISERs/IIEST/CF IITs), the requirement of GATE Score is reduced to 650 from 750 apart from minimum CGPA of 8 or equivalent.
- There will be two channels of entries, one direct entry and lateral entry. In lateral entry, the students, who are pursuing PhD in PMRF granting institutions can also apply to become fellow under the scheme as per new guidelines.
- To boost research a dedicated Division is being created in the ministry with the name of "Research and Innovation Division". This division will be headed by a director who will be coordinating research work of various institutions coming under MHRD.

About Prime Minister Research Fellows Scheme -

- The scheme was announced in the Budget 2018-19.
- The institutes which can offer PMRF include all the IITs, all the IISERs, Indian Institute of Science, Bengaluru and some of the top Central Universities/NITs that offer science and/or technology degrees.
- It aims to attract the talent pool of the country to doctoral (Ph.D.) programs of Indian Institutes of Technology (IITs) and Indian Institute of Science (IISc) for carrying out research in cutting edge science and technology domains, with focus on national priorities.
- The candidates are selected for the fellowship through a rigorous selection process. **For direct entry**, applicants are judged on metrics including research exposure, publications, performance in international academic competitions, grades and recommendation letters. **For lateral entry**, the metrics are a strong research proposal, publications record and grades. Due weightage will also be given to publication in reputed journals/conferences.

SwasthVayu

CSIR - National Aerospace Laboratories (NAL) Bangalore, a constituent of lab of CSIR has developed a Non Invasive BiPAP Ventilator in a record time of 36 days to treat COVID-19 patients.

Details -

- BiPAP Non-Invasive ventilator is a microcontroller-based precise closed-loop adaptive control system with a built-in biocompatible "3D printed manifold & coupler" with HEPA filter (Highly Efficient Particulate Air Filter).

- These unique features help to alleviate the fear of the virus spread. It has features like Spontaneous, CPAP, Timed, AUTO BIPAP modes with provision to connect Oxygen concentrator or Enrichment unit externally.
- The system has been certified for safety and performance by NABL accredited agencies. The system has undergone stringent biomedical tests and beta clinical trials at NAL Health Centre.

Significance -

- The major advantage of this machine is that it is simple to use without any specialised nursing, cost effective, compact and configured with majority of indigenous components.
- This is ideal for treating COVID -19 patients in Wards, Make shift Hospitals, dispensaries and home in current Indian COVID 19 scenario.

National Technology Day

India recently observed the 29th National Technology Day on 11th March, 2020.

What is 'National Technology Day'?

- It was **first observed on 11 May, 1999**.
- It aims to commemorate the scientific and technological achievements of Indian scientists and engineers.
- The day was **named by the former Prime Minister Atal Bihari Vajpayee**.
- Every year, the **Technology Development Board of India** (a statutory body of the Department of Science and Technology) celebrates the day by awarding individuals with National Award for their contribution to science and technology in India.
- The focus this year is '**Rebooting the economy through Science and Technology**.'

Background -

- It is the day India successfully tested **nuclear bombs in Pokhran on May 11, 1998**.
- India successfully test-fired its Shakti-1 nuclear missile in operation called Pokhran-II, also codenamed as **Operation Shakti**.
- The nuclear missile was tested at the Indian Army's Pokhran Test Range in Rajasthan. This was the second test which was **conducted after Pokhran-I** codenamed **Operation Smiling Buddha**, in May 1974.
- On the same day, India performed a successful test firing of the **Trishul Missile** (surface to air short range missile) and had test flown the first indigenous aircraft – '**Hansa – 3**'.

ELISA

The National Institute of Virology (NIV), Pune, has developed an immunological assay - enzyme-linked immunosorbent assay (ELISA) - to detect antibodies that the body develops in response to infection by the SARS-CoV-2 novel coronavirus.

What is ELISA?

- The test will detect antibodies in blood samples. ELISA is routinely used for detecting HIV infection.
- While ELISA tests for coronavirus are already available in other countries, procuring them in large numbers may be a challenge, particularly during a pandemic. In contrast, availability will be a non-issue when a locally developed test is manufactured in India.
- The ELISA test will be used to screen 30,000 samples from 75 hotspot districts to understand the extent of spread of the virus in the community.
- Since the ELISA test is based on detection of antibodies, it can only help in knowing if the person has been previously infected by coronavirus.

Significance -

- Since it detects antibodies, even people who have remained symptom free (asymptomatic) during the entire course of the infection will test positive.

- While the RT-PCR (reverse transcription polymerase chain reaction) test, which detects the RNA of the coronavirus, enables detection of current infection, it will not be useful if the testing is carried out days after the infection clears as the virus will no longer be present.
- However, antibodies developed in response to the coronavirus infection will be present in the blood for a longer duration and hence the ELISA test can help detect past infection.

About National Institute of Virology -

- The National Institute of Virology is one of the major Institutes of the Indian Council of Medical Research (ICMR). It was established at Pune (Maharashtra) in 1952 as Virus Research Centre (VRC) under the auspices of the ICMR and the Rockefeller Foundation (RF), USA.
- It was an outcome of the global programme of the RF for investigating the Arthropod Borne viruses.
- The RF withdrew its support in 1967 and since then the Institute is entirely funded by the ICMR.
- The Institute was designated as one of the collaborating laboratories of the World Health Organization (WHO) in 1967 and it started functioning as the regional centre of the WHO for South-East Asia for arbovirus studies from 1969.
- In view of its expanded scope and activities, the VRC was re-designated as the National Institute of Virology (NIV) in 1978.

CHAMPIONS Portal

In a major initiative Union Ministry of MSME has launched CHAMPIONS portal, a Technology driven Control Room-Cum-Management Information System.

Details -

- The system utilising modern ICT tools is aimed at assisting Indian MSMEs march into big league as National and Global CHAMPIONS.
- The CHAMPIONS stands here for Creation and Harmonious Application of Modern Processes for Increasing the Output and National Strength. Accordingly, the name of the system is CHAMPIONS.
- As the name suggests, the portal is basically for making the smaller units big by **solving their grievances, encouraging, supporting, helping and handholding**. It is a real one-stop-shop solution of MSME Ministry.

How does it work?

- It is a technology packed control room-cum-management information system. In addition to ICT tools including telephone, internet and video conference, the system is enabled by Artificial Intelligence, Data Analytics and Machine Learning.
- It is also fully integrated on real time basis with GOI's main grievances portal CPGRAMS and MSME Ministry's own other web based mechanisms.
- The entire ICT architecture is created in house with the help of NIC in no cost. Similarly, the physical infrastructure is created in one of ministry's dumping rooms in a record time.

Vande Bharat Mission

The 'Vande Bharat Mission' to bring stranded Indians has been started by the Government of India.

What is 'Vande Bharat Mission'?

- 'Vande Bharat Mission' is about launching 64 flights being operating between May 7 to May 13 to bring back around 15,000 Indian nationals stranded abroad. Approximately, 2,000 people from abroad will fly back to India daily.
- India will operate 10 flights to the UAE, seven flights each to the US and the UK, five flights to Saudi Arabia, five flights to Singapore and two flights to Qatar to repatriate Indian nationals between May 7 and May 13.
- During this period, India also operated seven flights each to Malaysia and Bangladesh, five flights each to Kuwait and Philippines, two flights each to Oman and Bahrain.

- The maximum number of flights will be sent from Kerala which is 15, 11 flights each will be sent from Delhi-NCR and Tamil Nadu, seven from Maharashtra and Telangana, five from Gujarat, three each from Jammu and Kashmir and Karnataka and one each from Punjab and Uttar Pradesh.

MISSION SAGAR

It is a part of the Government of India outreach to the Indian Ocean countries amidst the ongoing COVID-19 pandemic.

Details -

- Indian Naval Ship Kesari departed for **Maldives, Mauritius, Seychelles, Madagascar and Comoros**, to provide Food Items, COVID related Medicines including HCQ Tablets and Special Ayurvedic Medicines with Medical Assistance Teams.
- This deployment as 'Mission Sagar', is in line with India's role as the first responder in the region and builds on the excellent relations existing between these countries to battle the COVID-19 pandemic and its resultant difficulties.
- The deployment is in consonance with the **Prime Ministers vision of Security and Growth for All in the Region 'SAGAR'** and highlights the importance accorded by India to relations with her neighbouring countries and further strengthens the existing bond.
- The operation is being progressed in close coordination with the **Ministries of Defence and External Affairs**, and other agencies of the Government of India.

Fakhruddin Ali Ahmed

President of India has paid homage to Shri Fakhruddin Ali Ahmed, former President of India on his birth anniversary at Rashtrapati Bhavan.

About Fakhruddin Ali Ahmed -

- Fakhruddin Ali Ahmed (13 May 1905 – 11 February 1977) was an **Indian lawyer and politician** who served as the fifth President of India from 1974 to 1977.
- He was the **2nd President of India to die in office**. [First being Dr. Zakir Husain who died on 3 May 1969, the first Indian President to die in office.]
- In 1925, he met **Jawaharlal Nehru** in **England**.
- He joined the **Indian National Congress** and actively participated in the **Indian Freedom Movement**.
- In **1942** he was arrested during the **Quit India Movement** and sentenced to **3.5 years' imprisonment**.
- He was a member of the **Assam Pradesh Congress Committee** from 1936-74
- He was also a member of All India Congress Committee (AICC) from **1947 to 1974**.
- He remained the **Minister of Finance, Revenue and labour in 1948 Gopinath Bordoloi Ministry**.
- He was chosen for the presidency by **Prime Minister Indira Gandhi** in **1974**, and on **20 August 1974**, he became the **second Muslim** to be elected President of India.
- He is known to have issued the **proclamation of emergency**. He used his **constitutional authority** as head of state to allow him to **rule by decree** once the Emergency in India was proclaimed in 1975.

Archaeological Survey of India

The Archaeological Survey of India got a new Director General with the appointment of IAS officer V Vidyavathi recently.

About Archaeological Survey of India -

- The Archaeological Survey of India, established in 1861 is an attached office under the Ministry of Culture dedicated to the protection, preservation and conservation of the national monuments.
- It is a multidisciplinary organisation including exploration and excavation, chemical conservation, Horticultural operation, Museum, underwater archaeology, Pre-History Branch, Epigraphy, Publication etc.
- With the expansion of the Survey, the scope and sphere of the activities of all the branches increased rapidly. As on today, there are 3667 centrally protected monuments including 22 World Heritage Monuments/Sites.
- The present organisation is the successor of 'The Asiatic Society of India', which was founded in its current form in 1861 by Sir Alexander Cunningham with the help of the then Viceroy Canning.

Maharana Pratap

Prime Minister Narendra Modi paid tributes to Maharana Partap on his birth anniversary.

About Maharana Pratap -

- Maharana Pratap was a king of **Mewar**, a region in the present day state of Rajasthan. He was the eldest son of Udai Singh II (founder of city of Udaipur).
- **Battle of Haldighati** - It was fought on 18 June 1576 between the forces Maharana Pratap; and the Mughal emperor Akbar's forces, led by Man Singh I of Amber. The Mughals were the victors but failed to capture Pratap, who escaped.
- **Resurgence** - Mughal pressure on Mewar relaxed after 1579 following rebellions in Bengal and Bihar. Taking advantage of the situation, Pratap recovered Western Mewar including Kumbhalgarh, Udaipur and Gogunda. During this period, he also built a new capital, Chavand, near modern Dungarpur.
- **Chetak** - Chetak is the name given in traditional literature to the horse ridden by Maharana Pratap at the Battle of Haldighati. However, some Historians debate it. According to tradition, Chetak, although wounded, carried Pratap safely away from the battle, but then died of his wounds.

Gopal Krishna Gokhale

Prime Minister Narendra Modi paid tributes to Freedom Fighter and social reformer Gopal Krishna Gokhale on his birth anniversary.

About Gopal Krishna Gokhale -

- Gokhale became a member of the Indian National Congress in 1889. He was the leader of the moderate faction of the Congress party. In 1905, he was elected president of the Indian National Congress (Benaras Session).
- In 1899, Gokhale was elected to the Bombay Legislative Council and in 1901 he was elected to the Imperial Council of the Governor-General of India.
- It was formed by him in Pune (Maharashtra) in 1905 to further the expansion of education in India. The Society organised mobile libraries, founded schools, and provided night classes for factory workers.
- In 1908, he founded the '*Ranade Institute of Economics*'.
- He launched the English weekly newspaper named **The Hitavad** (The people's paper) in 1911.
- Gokhale visited South Africa at Gandhi's invitation. He received personal guidance from Gokhale, including a knowledge and understanding of India and the issues confronting common Indians.

SAMARTH

Department of Higher Education has developed an e-Governance platform, SAMARTH (Enterprises Resource Planning) ERP, under the National Mission of Education in Information and Communication Technology Scheme (NMEICT).

What is SAMARTH?

- ERP, SAMARTH, is an Open Standard Open Source Architecture, Secure, Scalable and Evolutionary Process Automation Engine for Universities and Higher Educational Institutions.
- It caters to faculty, students and staff at a University/Higher Educational Institutions.
- Now, the ERP, SAMARTH, has been implemented at **National Institute of Technology, Kurukshetra**, a participating unit under the World Bank supported Technical Education Quality Improvement Program (TEQIP).
- The objective of this initiative is to automate the processes of the Institute.

What is NMEICT?

- The National Mission on Education through Information and Communication Technology (NMEICT) has been envisaged as a Centrally Sponsored Scheme to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions in any time any where mode.
- This was expected to be a major intervention in enhancing the Gross Enrolment Ratio (GER) in Higher Education by 5 percentage points during the XI Five Year Plan period.
- The three cardinal principles of Education Policy viz., access, equity and quality could be served well by providing connectivity to all colleges and universities, providing low cost and affordable access-cum-computing devices to students and teachers and providing high quality e-content free of cost to all learners in the country.
- NMEICT encompasses all the three elements. The Mission has two major components - providing connectivity, along with provision for access devices, to institutions and learners, and Content generation.
- It seeks to bridge the digital divide, i.e. the gap in the skills to use computing devices for the purpose of teaching and learning among urban and rural teachers/learners in Higher Education domain.

National Migrant Information System

Government of India has allowed the movement of migrant workers by buses and 'Shramik' special trains to enable them to travel to their native places.

About National Migrant Information System -

- In order to capture the information regarding movement of migrants and facilitate the smooth movement of stranded persons across States, National Disaster Management Authority (NDMA) has developed an online Dashboard - National Migrant Information System (NMIS).
- The online portal would maintain a central repository on migrant workers and help in speedy inter-State communication/co-ordination to facilitate their smooth movement to native places. It has additional advantages like contact tracing, which may be useful in overall COVID-19 response work.
- The key data pertaining to the persons migrating has been standardised for uploading such as name, age, mobile no., originating and destination district, date of travel etc., which States are already collecting.
- States will be able to visualise how many people are going out from where and how many are reaching destination States. The mobile numbers of people can be used for contact tracing and movement monitoring during COVID-19.

National Crisis Management Committee

A meeting of the National Crisis Management Committee (NCMC), chaired by the Cabinet Secretary was held recently to review the preparations for the impending cyclone over the Bay of Bengal.

About National Crisis Management Committee -

- At the national level, Cabinet Committee on Security (CCS) and National Crisis Management Committee (NCMC) are the key committees involved in the top-level decision-making with respect to Disaster Management (DM).
- It deals with major crisis which have serious or national ramifications.
- Oversee the Command, Control and Coordination of the disaster response.

- Give direction to the Crisis Management Group (CMG) as deemed necessary.
- **Composition** - Cabinet Secretary (Chairperson); Secretaries of Ministries / Departments and agencies with specific Disaster management responsibilities.

Technology Development Board

Technology Development Board is proactively supporting the efforts of the scientists, technologists, entrepreneurs, and industrialists towards preventing and containing the spread of the COVID19 pandemic by providing financial support for commercialisation of these technologies.

About Technology Development Board -

- The Government of India constituted the Technology Development Board (TDB) in September 1996, under the Technology Development Board Act, 1995, as a statutory body, to promote development and commercialisation of indigenous technology and adaptation of imported technology for wider application. The board consists of 11 Board members.
- The TDB is the first organisation of its kind within the government framework with the sole objective of commercialising the fruit of indigenous research. The Board plays a pro-active role by encouraging enterprises to take up technology oriented products
- Functions - It facilitates interaction between industry, scientists, technocrats and specialists; fosters and innovation culture through contract and cooperative research between industry and institutions, and ; provides an interface with financial institutions and commercial banks for leveraging funds.
- The Fund has been receiving grants from the Government of India out of the cess collections from the industrial concerns under the provisions of the Research and Development Cess Act, 1986, as amended in 1995.

Young Entrepreneur Award 2020

Indian National Academy of Engineering (INAE), Gurgaon has invited nominations for INAE Young Entrepreneur Award 2020.

Details -

- The award would carry a citation and a cash prize of Rs 2 lakhs to the selected individual candidate or to be shared by the group of individuals not exceeding three persons.
- The award presented to upto two candidates in a year has been instituted to encourage and recognise innovation and entrepreneurship among young engineers. Engineering innovations and concepts that have been actually realised and implemented in the industry either in new processes or products are preferred, and Indian citizens not older than 45 years as on 1st of January 2020 are eligible for consideration.

About Indian National Academy of Engineering -

- Indian National Academy of Engineering, Gurgaon is an autonomous institution under the Department of Science and Technology.
- The Indian National Academy of Engineering (INAE), founded in 1987 comprises India's most distinguished engineers, engineer-scientists and technologists covering the entire spectrum of engineering disciplines.
- INAE functions as an apex body and promotes the practice of engineering & technology and the related sciences for their application to solving problems of national importance.
- The Academy also provides a forum for futuristic planning for country's development requiring engineering and technological inputs and brings together specialists from such fields as may be necessary for comprehensive solutions to the needs of the country.
- INAE's activities include programmes on issues of technology policy and overall development for the benefit of society, and the Academy promotes research projects, pilot studies, engineering education, fellowships, scholarships, awards and other benefactions.

Agappe Chitra Magna

The planned commercial launch of Agappe Chitra Magna, a magnetic nanoparticle-based RNA extraction kit for use during testing for detection of COVID19 developed by Sree Chitra Tirunal Institute for Medical Sciences and Technology - Trivandrum, an Institute of National Importance of the Department of Science and Technology (DST) along with Agappe Diagnostics Ltd will be held soon.

About ChitraGene Lamp (Agappe Chitra Magna)-

- The confirmatory diagnostic test detects the N Gene of SARS- COV2 using reverse transcriptase loop-mediated amplification of viral nucleic acid (RT-LAMP).
- The test kit is highly specific for SARS-CoV-2 N-gene and can detect two regions of the gene, which will ensure that the test does not fail even if one region of the viral gene undergoes mutation during its current spread.
- The detection time is 10 minutes, and the sample to result time (from RNA extraction in swab to RT-LAMP detection time) will be less than 2 hours.

How does it work?

- It uses an innovative technology for isolating RNA using magnetic nanoparticles to capture the RNA from the patient sample.
- The magnetic nanoparticle beads bind to the viral RNA and, when exposed to a magnetic field, give a highly purified and concentrated RNA.
- As the sensitivity of the detection method is dependent on getting an adequate quantity of viral RNA, this innovation enhances the chances of identifying positive cases.

What is Reverse transcription loop-mediated isothermal amplification (RT-LAMP)?

- It is a technique for the amplification of RNA.
- It is used in the detection of viruses.
- In this method, **a DNA copy of the viral RNA is generated by reverse transcriptase**, and then isothermal amplification is carried out to increase the amount of total DNA.

Lightweight Carbon Foam

Dr Rajeev Kumar from CSIR-Advanced Materials and Processes Research Institute, Bhopal, a recipient of the INSPIRE Faculty Award instituted by the Department of Science and Technology is developing porous carbon materials which have the potential to replace lead grid in lead-acid batteries.

Details -

- The present grid-scale energy-storage sector is dominated by lithium-ion batteries, because of their higher energy density & specific power and long cycle life. However, there are some serious concerns regarding Li-ion batteries, such as safety risk, limited resource supply, high cost, and lack of recycling infrastructure.
- This necessitates the development of an alternative battery system with lower environmental concerns, economic and higher energy density.
- As a result, lead-acid batteries are still one of the most reliable, economical, and environmentally friendly options. However, electrodes in the lead-acid batteries suffer from the problem of heavyweight, corrosion, poor thermal stability, and diffusion of electrolytes in one dimension, which ultimately affects the output power.

How carbon foam is a better alternative?

- The lightweight carbon foam is highly resistive to corrosion, has good electrical and thermal conductivity with high surface area, and have recently attracted a lot of attention owing to their potential applications in various field.
- The raw material for the fabrication of carbon foam is easily available everywhere, and there is no requirement of any costly equipment for the fabrication of carbon foam and filtration. Such materials can be safely used in remote areas where power supply is scarce.

Significance -

- It can also be useful for heat sinks in power electronics, electromagnetic interference shielding in aerospace, hydrogen storage and electrode for lead-acid batteries and water purification systems.

- The carbon foam developed under the INSPIRE fellowship will also be cost-effective for the removal of arsenic, oil, and other metals from contaminated water. These carbon foams are non-toxic, easy to fabricate, affordable, and insoluble in water. The raw material for the fabrication of carbon foam is easily available everywhere, and there is no requirement of any costly equipment for the fabrication of carbon foam and filtration. Such materials can be safely used in remote areas where power supply is scarce.

About INSPIRE Faculty Scheme -

- INSPIRE Faculty Scheme opens up an 'Assured Opportunity for Research Career (AORC)' for young researchers in the age group of 27-32 years.
- It is expected to augment high quality scientific manpower in scientific and educational institutions.
- It provides attractive opportunities to young achievers for developing independent scientific profiles and intends helping them emerge as S&T leaders in the long term.
- The Scheme offers contractual research positions.
- It provides career opportunities, but it is not a guarantee for tenure positions after 5 years.

COBAS 6800

Union Minister of Health and Family Welfare has visited the National Centre for Disease Control (NCDC) to dedicate the COBAS 6800 testing machine to the nation.

Details -

- This is the first such testing machine that has been procured by the Government for testing of COVID-19 cases and is installed at the National Centre for Disease Control.
- NCDC has been now equipped with the COBAS 6800, a fully automated, high end machine for performing real time PCR testing COVID-19 in the service of nation.

About COBAS 6800 -

- COBAS 6800 will provide quality, high-volume testing with a high throughput of test around 1200 samples in 24 hours. It will largely increase the testing capacity with reduction in pendency.
- COBAS 6800 is a sophisticated machine enabled with robotics that minimises the chance of contamination as well as the risk of infection to the health care workers since it can be operated remotely with limited human intervention.
- As the machine requires a minimum BSL2+ containment level for testing, it cannot be placed at just any facility.
- COBAS 6800 can also detect other pathogens like Viral Hepatitis B & C, HIV, MTb (both rifampicin and isoniazide resistance), Papilloma, CMV, Chlamydia, Neisseria etc.

Emergency Credit Line Guarantee Scheme (ECLGS)

The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, has given the following approvals -

- To enable additional funding of up to Rs. 3 lakh crore to eligible MSMEs and interested MUDRA borrowers by way of "Emergency Credit Line Guarantee Scheme."
- Under the Scheme, 100% guarantee coverage to be provided by National Credit Guarantee Trustee Company Limited (NCGTC) for additional funding of up to Rs. three lakh crore to eligible MSMEs and interested MUDRA. borrowers, in the form of a Guaranteed Emergency Credit Line (GECL) facility.

For this purpose, corpus of Rs. 41,600 crore shall be provided by Government of India spread over the current and the next three financial years.

The Cabinet also approved that the Scheme would be applicable to all loans sanctioned under GECL Facility during the period from the date of announcement of the Scheme to 31.10.2020, or till an amount of Rs 3,00,000 crore is sanctioned under the GECL, whichever is earlier.

Salient features of the scheme -

The salient features of the Scheme include -

- All MSME borrower accounts with outstanding credit of up to Rs. 25 crore as on 29.2.2020 which were less than or equal to 60 days past due as on that date and with an annual turnover of up to Rs. 100 crore would be eligible for GECL funding under the Scheme.
- The amount of GECL funding to eligible MSME borrowers either in the form of additional working capital term loans (in case of banks and FIs), or additional term loans (in case of NBFCs) would be up to 20% of their entire outstanding credit up to Rs. 25 crore as on 29th February, 2020.
- The entire funding provided under GECL shall be provided with a 100% credit guarantee by NCGTC to MLIs under ECLGS.
- Tenor of loan under Scheme shall be four years with moratorium period of one year on the principal amount.
- No Guarantee Fee shall be charged by NCGTC from the Member Lending Institutions (MLIs) under the Scheme.
- Interest rates under the Scheme shall be capped at 9.25% for banks and FIs, and at 14% for NBFCs.

Pradhan Mantri Matsya Sampada Yojana

The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi has given its approval for implementation of the Pradhan Mantri Matsya Sampada Yojana (PMMSY).

Details -

- A scheme to bring about **Blue Revolution** through sustainable and responsible development of fisheries sector in India under two components namely, **Central Sector Scheme (CS)** and **Centrally Sponsored Scheme (CSS)** at a total estimated investment of Rs. 20,050 crore.
- The Scheme will be implemented during a period of 5 years from FY 2020-21 to FY 2024-25.
- The PMMSY will be implemented as an umbrella scheme with two separate Components namely (a) Central Sector Scheme (CS) and (b) Centrally Sponsored Scheme (CSS).

The Centrally Sponsored Scheme (CSS) Component is further segregated into Non-beneficiary oriented and Beneficiary orientated subcomponents/activities under the following three broad heads -

- Enhancement of Production and Productivity
- Infrastructure and Post-Harvest Management
- Fisheries Management and Regulatory Framework

Funding pattern -

Central Sector Scheme (CS) -

- The entire project/unit cost will be borne by the Central government (i.e. 100% central funding).
- Wherever direct beneficiary oriented i.e. individual/group activities are undertaken by the entities of central government including National Fisheries Development Board (NFDB), the central assistance will be up to 40% of the unit/project cost for General category and 60% for SC/ST/Women category.

Centrally Sponsored Scheme (CSS) -

For the Non-beneficiary orientated sub-components/activities under CSS component to be implemented by the States/UTs, the entire project/unit cost will be shared between Centre and State as detailed below -

- North Eastern & Himalayan States - 90% Central share and 10% State share.
- Other States - 60% Central share and 40% State share.
- Union Territories (with legislature and without legislature) - 100% Central share.

Benefits -

- Address the critical gaps in the fisheries sector and realise its potential.
- Augmenting fish production and productivity at a sustained average annual growth rate of about 9% to achieve a target of 22 million metric tons by 2024-25 through sustainable and responsible fishing practices.
- Improving availability of certified quality fish seed and feed, traceability in fish and including effective aquatic health management.

- Creation of critical infrastructure including modernisation and strengthening of value chain.
- Creation of direct gainful employment opportunities to about 15 lakh fishers, fish farmers, fish workers, fish vendors and other rural/urban populations in fishing and allied activities and about thrice this number as indirect employment opportunities including enhancement of their incomes.
- Boost to investments in fisheries sector and increase of competitiveness of fish and fisheries products.
- Doubling of fishers, fish farmers and fish workers incomes by 2024.
- Social, physical and economic security for fishers and fish workers.

Scheme for formalisation of Micro Food Processing Enterprises

The Union Cabinet chaired by the Prime Minister has given its approval to a **new Centrally Sponsored Scheme** - "Scheme for Formalisation of Micro food processing Enterprises (FME)" for the Unorganised Sector on All India basis with an outlay of Rs 10,000 crore. The expenditure will be shared by GOI and the States in ratio 60:40.

Objectives -

- Increase in access to finance by micro food processing units.
- Increase in revenues of target enterprises.
- Enhanced compliance with food quality and safety standards.
- Strengthening capacities of support systems.
- Transition from the unorganised sector to the formal sector.
- Special focus on women entrepreneurs and Aspirational districts.
- Encourage Waste to Wealth activities.
- Focus on minor forest produce in Tribal Districts.

Salient Features -

- Centrally Sponsored Scheme.
- Expenditure to be shared by Government of India and States at 60:40.
- 2,00,000 micro-enterprises are to be assisted with credit linked subsidy.
- Scheme will be implemented over a 5 year period from 2020-21 to 2024-25.
- Cluster approach.
- Focus on perishables.

Impact and employment generation -

- Nearly eight lakh micro- enterprises will benefit through access to information, better exposure and formalisation.
- Credit linked subsidy support and hand-holding will be extended to 2,00,000 micro enterprises for expansion and upgradation.
- It will enable them to formalise, grow and become competitive.
- The project is likely to generate nine lakh skilled and semi-skilled jobs.
- Scheme envisages increased access to credit by existing micro food processing entrepreneurs, women entrepreneurs and entrepreneurs in the Aspirational Districts.
- Better integration with organised markets.
- Increased access to common services like sorting, grading, processing, packaging, storage etc.

Background -

- There are about 25 lakh unregistered food processing enterprises which constitute 98% of the sector and are unorganised and informal. Nearly 66 % of these units are located in rural areas and about 80% of them are family-based enterprises.
- This sector faces a number of challenges including the inability to access credit, high cost of institutional credit, lack of access to modern technology, inability to integrate with the food supply chain and compliance with the health & safety standards.
- Strengthening this segment will lead to reduction in wastage, creation of off-farm job opportunities and aid in achieving the overarching Government objective of doubling farmers' income.

Partial Credit Guarantee Scheme

The Union Cabinet chaired by the Prime Minister Shri Narendra Modi has approved the Sovereign portfolio guarantee up to 20% first loss for purchase of Bonds or Commercial Papers (CPs) with a rating of AA and below (including unrated with original/initial maturity of up to one year) issued with NBFCs/MFCs/Micro Finance Institutions (MFIs) by Public Sector Banks (PSBs) through an extension of the Partial Credit Guarantee Scheme (PCGS).

About the scheme -

The Cabinet also approved modifications in the existing PCGS on purchase of pooled assets, increasing its coverage by—

- Making NBFCs/HFCs reported under SMA-1 category on technical reasons alone during the last one year period prior to 1.8.2018 eligible. Earlier NBFCs/HFCs reported as SMA-1 or SMA-2 during this period were ineligible under the Scheme.
- Relaxing the net profit criteria to the extent that the concerned NBFC/HFC should now have made a profit in at least one of the financial years of FY2017-18, FY 2018-19 and 2019-20. Earlier, the NBFC/HFC should have made a net profit in at least one of the financial years of FY 2017-18 and 2018-19.
- Relaxing the criteria regarding date of origination of assets to include new assets originating up to at least six months prior to the date of initial pool rating. Earlier, only assets originated up to 31.3.2019 were eligible under the Scheme.
- Extending the Scheme from 30.6.2020 to 31.3.2021 for purchase of pooled assets.

The existing PCGS was issued on 11.12.2019 offering sovereign guarantee of up to 10% of first loss to PSBs for purchasing pooled assets worth rated BBB+ or above worth up to Rs. 1,00,000 crore, from financially sound NBFCs/ MFCs.

Defence Testing Infrastructure Scheme

In order to give a boost to domestic defence and aerospace manufacturing, Raksha Mantri has approved the launch of '**Defence Testing Infrastructure Scheme (DTIS)**' with an outlay of Rs 400 crore for creating state of the art testing infrastructure for this sector.

About Defence Testing Infrastructure Scheme -

- The Scheme would run for the duration of five years and envisages to setup six to eight new test facilities in partnership with private industry.
- This will facilitate indigenous defence production, consequently reduce imports of military equipment and help make the country self-reliant.
- The projects under the Scheme will be provided with up to 75 percent government funding in the form of 'Grant-in-Aid'.
- The remaining 25 per cent of the project cost will have to be borne by the Special Purpose Vehicle (SPV) whose constituents will be Indian private entities and State Governments.
- The SPVs under the Scheme will be registered under Companies Act 2013 and shall also operate and maintain all assets under the Scheme, in a self-sustainable manner by collecting user charges.
- The equipment/systems tested will be certified as per appropriate accreditation.
- While majority of test facilities are expected to come up in the two Defence Industrial Corridors (DICs), the Scheme is not limited to setting up Test Facilities in the DICs only.

Pradhan Mantri Vaya Vandana Yojana

The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, has given its approval to the following for the welfare of and to enable old age income security for Senior Citizens.

Details -

- Extension of Pradhan Mantri Vaya Vandana Yojana (PMVVY) up to 31st March, 2023 for further period of three years beyond 31st March, 2020.

- To allow initially an assured rate of return of 7.40 % per annum for the year 2020-21 per annum and thereafter to be reset every year.
- Annual reset of assured rate of interest with effect from April 1st of financial year in line with revised rate of returns of Senior Citizens Saving Scheme (SCSS) upto a ceiling of 7.75% with fresh appraisal of the scheme on breach of this threshold at any point.
- Approval for expenditure to be incurred on account of the difference between the market rate of return generated by LIC (net of expenses) and the guaranteed rate of return under the scheme.
- Capping Management expenses at 0.5% p.a. of funds of the scheme for first year of scheme in respect of new policies issued and thereafter 0.3% p.a. for second year onwards for the next 9 years.
- Delegating the authority to Finance Minister to approve annual reset rate of return at the beginning of every financial year.
- All other terms and conditions of the scheme remaining the same.

Investments limit -

The minimum investment has also been revised to Rs.1,56,658 for pension of Rs.12,000/- per annum and Rs.1,62,162/- for getting a minimum pension amount of Rs.1000/- per month under the scheme.

About Pradhan Mantri Vaya Vandana Yojana -

- It is a pension scheme announced exclusively for the senior citizens aged 60 years or above.
- The investment limit is Rs.15 lakh/senior citizen and provides an assured return of 8% p.a. for 10 years (now revised to 7.40%).
- It is exempted from Service Tax/ GST and LIC is the implementing agency.
- Premature withdrawal from the scheme is possible in case the money is required for the treatment of terminal or critical illness of the person or spouse.

Swachh Bharat Mission - Urban

For the assessment year 2019-2020, a total of six cities have been certified as 5-Star (Ambikapur, Rajkot, Surat, Mysuru, Indore and Navi Mumbai), 65 cities as 3-Star and 70 cities as 1-Star by the Ministry of Housing and Urban Affairs.

Details -

- The Ministry of Housing and Urban Affairs has also devised the Star Rating Protocol for Garbage Free Cities - a comprehensive framework similar to our examination systems where each ward in every city must achieve a certain standard across 24 different components of solid waste management (SWM) and is graded based on overall marks received.
- The protocol has been devised in a holistic manner including components such as cleanliness of drains & water bodies, plastic waste management, managing construction & demolition waste, etc. which are critical drivers for achieving garbage free cities.

Protocols under SBM-U -

Ministry of Housing and Urban Affairs (MoHUA) launched various initiatives to make SBM-U a successful project. Some of them include -

1. ODF, ODF+ and ODF++ Protocol -

- **Norms under ODF:** No visible faeces shall found in the environment and every household, as well as public/community institutions, should be using safe technology option for disposal of faeces.
- **Norms under ODF+:** Not a single person should be defecating and/or urinating in open. All community and public toilets should be properly maintained and cleaned.
- **Norms under ODF++:** Proper treatment and management of faecal sludge/septage and sewage is safely managed and treated. There should be no discharge or dumping of untreated faecal sludge/septage and sewage in drains, water bodies or open areas.

2. **Water + Protocol** - It is designed to ensure that no untreated wastewater is discharged into the open environment or water bodies.

3. **Star rating protocol for Garbage free cities:** It is based on 12 parameters which follow a **SMART framework** – Single metric, Measurable, Achievable, Rigorous verification mechanism and Targeted towards outcomes.

4. **Material Recovery Facilities (MRFs)** - MoHUA has also partnered with National Highways Authority of India(NHAI) to use the plastic waste for road construction. Additionally, cities have been asked to set up adequate Material Recovery Facilities (MRFs) to handle the segregation, processing and recycle of plastic waste.

5. **Swachh Surekshan** - MoHUA launched the Swachh Survekshan 2020 (SS 2020) league, a quarterly cleanliness assessment of cities and towns in India.

About Swachh Bharat Mission - Urban -

- It comes under the Ministry of Housing and Urban Affairs.
- The programme includes elimination of open defecation, conversion of unsanitary toilets to pour flush toilets, eradication of manual scavenging, municipal solid waste management and bringing about a behavioural change in people regarding healthy sanitation practices.
- The mission aims to cover 1.04 crore households, provide 2.5 lakh community toilets, 2.6 lakh public toilets, and a solid waste management facility in each town.
- Under the programme, community toilets will be built in residential areas where it is difficult to construct individual household toilets. Public toilets will also be constructed in designated locations such as tourist places, markets, bus stations, railway stations, etc.
- The programme will be implemented over a five-year period in 4,401 towns.

Goal Programme

Union Ministry of Tribal Affairs has launched the “GOAL (Going Online As Leaders)” programme in partnership with Facebook.

About the GOAL Programme -

- The GOAL programme is designed to provide mentorship to tribal youth through digital mode.
- The digitally enabled program envisages to act as a catalyst to explore hidden talents of the tribal youth, which will help in their personal development as well as contribute to all-round upliftment of their society.
- The program intends to upskill and empower 5,000 tribal youths in the current phase to harness the full potential of digital platforms and tools to learn new ways of doing business, explore and connect with domestic and international markets.
- The programme has been designed with a long term vision to develop the potential of tribal youth and women to help them acquire skills and knowledge through mentorship in various sectors including horticulture, food processing, bee keeping, tribal art and culture, medicinal herbs, entrepreneurship among others.
- Starting with 5000, the programme can be extended to cover any number of tribal persons who show keen interest in being mentored to achieve their goals.

What is planned?

- In this program, 5000 scheduled tribe youth (to be called as ‘Mentees’) will get an excellent opportunity to get training by experts from different disciplines and fields (to be called as ‘Mentors’).
- There will be 1 mentor for 2 mentees. The program aims to enable Scheduled Tribe (ST) youth in remote areas to use digital platforms for sharing their aspirations, dreams and talent with their mentors.
- All the selected mentees will be provided with smartphones and Internet access (for one year) by Facebook along with exposure to various external forums that will give opportunity to the participants to showcase their entrepreneurial skills and leadership abilities.

Commonwealth of Nations

Union Minister of Health & Family Welfare participated in the 32nd Commonwealth Health Ministers’ Meeting through Video Conference. The theme of the meeting was - Delivering a co-ordinated Commonwealth COVID-19 response.

Commonwealth of Nations -

- The Commonwealth of Nations is an association of independent sovereign states, most of which are former colonies once governed by the United Kingdom as part of the British Empire.
- It was once known as the British Commonwealth (or British Commonwealth of Nations), and many still call it by that name, either for historical reasons or to distinguish it from the many other commonwealths around the world.
- The Queen of the United Kingdom, Elizabeth II, is the Head of the Commonwealth; this title, however, does not imply any political power over member nations.
- The Commonwealth is primarily an organisation in which countries with diverse economic backgrounds have an opportunity for close and equal interaction.
- The primary activities of the Commonwealth are designed to create an atmosphere of economic cooperation between member nations, as well as the promotion of democracy and good governance in them.
- The Commonwealth is not a political union of any sort, and does not allow the United Kingdom to exercise any power over the affairs of the organisation's other members.
- While some nations of the Commonwealth, known as Commonwealth Realms, recognise the British Monarch as their head of state (and thus in theory still have some limited political ties to London), the majority do not.

Background -

- The Commonwealth is the successor of the British Empire; in 1884, while visiting Adelaide, South Australia, **Lord Rosebery** had described the changing British Empire, as its former colonies became more independent, as a "Commonwealth of Nations".
- The formal organisation of the Commonwealth has its origins in the Imperial Conferences of the late 1920s (conferences of British and colonial prime ministers had occurred periodically since 1887), where the independence of the self-governing colonies and especially of dominions was recognised, particularly in the **Balfour Declaration at the Imperial Conference in 1926**, when the United Kingdom and its dominions agreed they were "equal in status and freely associated as members of the British Commonwealth of Nations".
- This relationship was eventually formalised by the **Statute of Westminster in 1931**.

Konark Sun Temple

The Ministry of New and Renewable Energy (MNRE) has taken up the Complete Solarisation of Konark sun temple and Konark town in Odisha.

About Konark Sun Temple -

- Konark Sun Temple, located in the eastern State of Odisha near the sacred city of Puri, is dedicated to the sun God or Surya.
- It is a **monumental representation of the sun God Surya's chariot**; its 24 wheels are decorated with symbolic designs and it is led by a team of seven horses.
- It is a masterpiece of **Odisha's medieval architecture and one of India's most famous Brahman sanctuaries**.
- The Konark temple is widely known not only for its architectural grandeur but also for the intricacy and profusion of sculptural work. It marks the **highest point of achievement of Kalinga architecture** depicting the grace, the joy and the rhythm of life all its wondrous variety.
- The temple declared a world heritage by UNESCO was **built in A.D. 1250, during the reign of the Eastern Ganga King Narasimhadeva-I (A.D. 1238-64)**.
- There are two rows of 12 wheels on each side of the Konark sun temple.
- It is said that the wheels represent the 24 hours in a day and many others believe that they represent the 12 months.
- The **seven horses are said to symbolise the seven days of the week**.
- Sailors once called this Sun Temple of Konarak, **the Black Pagoda** because it was supposed to draw ships into the shore and cause shipwrecks.

Neelam Sanjiva Reddy

President of India Shri Ram Nath Kovind has paid homage to Neelam Sanjiva Reddy at Rashtrapati Bhavan on his birth anniversary.

About Neelam Sanjiva Reddy -

- He was one of the foremost political leaders from Andhra Pradesh. He participated in various freedom struggles against the British and was imprisoned several times.
- He was elected to the Constituent Assembly in India.
- When the Andhra Province was separated from Madras and T. Prakasam became the Chief Minister of Andhra, Sanjeeva Reddy was appointed Deputy Chief Minister. When the new state of Andhra Pradesh was constituted Sanjeeva Reddy became its first Chief Minister and served in that capacity from 1956 to 1959. He again became the Chief Minister of Andhra Pradesh in 1962 for one year.
- After the defeat of the Congress in the Lok Sabha elections of 1977, Sanjiva Reddy was elected with the backing of the Janata Party as the sixth President of India. As president, Reddy worked with Prime Ministers Morarji Desai, Charan Singh and Indira Gandhi.
- Reddy authored a book, '***Without Fear or Favour: Reminiscences and Reflections of a President***', published in 1989.

UMANG App

Indian Meteorological Department (IMD) has taken the leverage of Digital India Programme to utilise 'UMANG App'. It has onboarded 7 services hosted by IMD's website to the UMANG application.

Which services are onboarded?

- **Current Weather** - Current temperature, humidity, wind speed, direction for 150 cities updated 8 times a day. Information on Sunrise/ sunset and moonrise/ moonset are also given.
- **Nowcast**- Three hourly warnings of localised weather phenomena and their intensity issued for about 800 stations, and districts of India by State Meteorological Centres of IMD. In case of severe weather, its impact also is included in the warning.
- **City Forecast** – Past 24 hours and 7 day forecast of weather conditions around 450 cities in India are given.
- **Rainfall Information** - All India district Rainfall information daily, weekly, monthly and cumulative series are available.
- **Tourism Forecast** - Past 24 hours and 7 day forecast of weather conditions of around 100 Tourist cities in India are provided.
- **Warnings** - The alert issued to warn citizens of approaching dangerous weather. It is colour coded in Red, Orange and yellow are the alert levels with Red as the most severe category. Issued twice a day for all districts for the coming five days.
- **Cyclone** - Cyclone warnings and alerts provides the track of cyclonic storms along with likely time and point of crossing of coast. Impact based warnings, area/district wise, are issued so that appropriate preparation including evacuation of vulnerable areas can be done.

About UMANG App -

- UMANG is a Government of India all-in-one single, unified, secure, multi-channel, multi-platform, multi-lingual, multi-service mobile app, powered by a robust back-end platform providing access to high impact services of various organisation (Central and State).
- The Prime Minister launched the UMANG App in 2017 to bring all government services on a single mobile app, with a larger goal to make the government accessible on the mobile phone of our citizens.
- About 660 services from 127 department & 25 states, including utility payments are live and more are in pipeline.

Overseas Citizens of India

Union Home Ministry has relaxed visa and travel restrictions imposed in response to COVID-19, permitting certain categories of Overseas Citizens of India (OCI) cardholders, who are stranded abroad, to come to India.

Who are allowed?

Following categories of OCI Cardholders stranded abroad, have been permitted to come to India -

- Minor children born to Indian nationals abroad and holding OCI cards.
- OCI cardholders who wish to come to India on account of family emergencies like death in family.
- Couples where one spouse is an OCI cardholder and the other is an Indian national and they have a permanent residence in India.
- University students who are OCI cardholders (not legally minors) but whose parents are Indian citizens living in India.

About Overseas Citizens of India -

- An Overseas Citizen of India (OCI) is a person who is technically a citizen of another country having an Indian origin. They were citizens of India on 26th January 1950 or thereafter except who is or had been a citizen of Pakistan, Bangladesh or such other country.
- Multi-purpose and life-long visa are provided to the registered Overseas Citizen of India for visiting India and are also exempted from registration with Foreign Regional Registration Officer or Foreign Registration Officer for any length of stay in India.
- Government of India launched the 'Overseas Citizenship of India (OCI) Scheme' by making amendments to Citizenship Act, 1955 in 2005. On 09 January 2015, the Government of India discontinued the PIO (Persons of Indian Origin) card and merged it with OCI card.
- Launched in 2005, under the Citizenship (Amendment) Act, the OCI card was introduced for fulfilling the demands for dual citizenship among the Indians living in different developed countries. The OCI card provides Overseas Citizenship of India to live and work in India for an indefinite period of time but does not provide the right to vote, hold constitutional offices or buy agricultural properties.
- Any person having citizenship of Bangladesh or Pakistan is not eligible to apply for the OCI card. Even a person having a background of serving any foreign military are also not eligible for the scheme.

Nitrosamine

Institute of Advanced Study in Science and Technology (IASST), Guwahati, has developed an electrochemical sensing platform for detecting carcinogenic or mutagenic compound *N*-nitrosodimethylamine (NDMA) and *N*-nitrosodiethanolamine (NDEA) sometimes found in food items like cured meat, bacon, some cheese, and low-fat milk.

Details -

- The scientists pointed out that with changing food habits of urban Indians, they are exposed to harmful chemicals belonging to Nitrosamine family in cured meats, bacon, some cheese, low-fat dry milk, and fish. Such chemicals include carcinogenic ones like NDMA and NDEA, which may also alter the chemical composition of our DNA. Hence it is important to develop detection techniques to detect them.
- The electrochemical biosensor platform was developed using the ability of NDMA and NDEA, to alter the DNA. Carbon dots (CDs), a carbon-based nanomaterial, was used, which is already established as a biocompatible and environmentally friendly material.

What is Nitrosamine?

- Nitrosamines, or more correctly N-nitrosoamines, refer to any molecule containing the nitroso functional group.
- These molecules are of concern because nitrosamine impurities are probable human carcinogens.
- Although they are also present in some foods and drinking water supplies, their presence in medicines is nonetheless considered unacceptable.

- NDMA and NDEA belong to the so-called “cohort of concern”, which is a group of highly potent mutagenic carcinogens that have been classified by the WHO's International Agency for Research on Cancer as probably human carcinogens.
- Nitrosamines are formed in cured meats because nitrite, and sometimes nitrate, are added to these products during processing. Nitrate is reduced to nitrite by the enzyme nitrate reductase, which occurs in a number of bacteria.
- Nitrite and nitrate have been added to cured meats for many years to prevent outgrowth and toxin formation by *Clostridium botulinum*. Nitrite, in combination with other curing ingredients such as sodium chloride, is particularly effective in inhibiting formation of the deadly botulism toxin. In addition, nitrite reacts with pigments in meat to impart the desirable pink color of cured meats and it prevents the development of off-flavors.

Quantum Technology

Scientists from S. N. Bose National Centre for Basic Sciences (SNBNCBS), Kolkata, an autonomous institute of the Department of Science and Technology have **developed a novel protocol to find out whether a pair of electrons is in an entangled state** so that they can be safely used as resources for facilitating quantum information processing tasks. The protocol has been developed through theoretical and experimental analysis.

What is ‘Quantum Mechanics’?

- It is a fundamental theory in physics which describes nature at the smallest – including atomic and subatomic – scales.
- At the scale of atoms and electrons, many of the equations of classical mechanics, which describe how things move at everyday sizes and speeds, cease to be useful.
- In classical mechanics, objects exist in a specific place at a specific time.
- However, in quantum mechanics, objects instead exist in a haze of probability; they have a certain chance of being at point A, another chance of being at point B and so on.

What is Quantum Technology?

- Quantum Technology is based on the principles of Quantum mechanics, that was developed in the early 20th century to describe nature in the small – at the scale of atomic and subatomic levels.
- The first phase of this revolutionary technology has provided the foundations of our understanding of the physical world, including the interaction of light and matter, and led to ubiquitous inventions such as lasers and semiconductor transistors.
- However, despite a century of research, the quantum world still remains mysterious and far removed from our experiences based on everyday life.
- Thereby, a second revolution is currently underway with the goal of putting properties of quantum mechanics in the realms of computing.
- Conventional computers process information in ‘bits’ or **1s and 0s**, following classical physics under which our computers **can process a ‘1’ or a ‘0’ at a time**.
- Quantum computers compute in ‘qubits’ (or **quantum bits**). They exploit the properties of quantum mechanics, the science that governs how matter behaves on the atomic scale.

Application of Quantum Technology -

- **Secure Communication** - China recently demonstrated secure quantum communication links between terrestrial stations and satellites. This area is significant to satellites, military and cyber security among others as it promises unimaginably fast computing and safe, unhackable satellite communication to its users.
- **Research** - It can help in solving some of the fundamental questions in physics related to gravity, black hole etc. Similarly, the quantum initiative could give a big boost to the Genome India project, a collaborative effort of 20 institutions to enable new efficiencies in life sciences, agriculture and medicine.
- **Disaster Management** - Tsunamis, drought, earthquakes and floods may become more predictable with quantum applications. The collection of data regarding climate change can be streamlined in a better way through quantum technology. This in turn will have a profound impact on agriculture, food technology chains and the limiting of farmland wastage.

- **Pharmaceutical Industry** - India's interest in the pharmaceutical and healthcare industry is huge. Quantum computing could reduce the time frame of the discovery of new molecules and related processes to a few days from the present 10-year slog that scientists put in. For instance, tracking protein behaviour or even modelling new proteins with the help of quantum computers could be made easier and faster. Tackling chronic diseases like cancer, Alzheimer's and heart ailments is a big possibility of the technology.

What is Quantum entanglement?

- Quantum entanglement is one of the peculiarities of quantum mechanics, which makes phenomena such as quantum teleportation and super-dense coding possible.
- It is the physical phenomenon that occurs **when a pair or group of particles is generated, interact, in a way such that the quantum state of each particle of the pair or group cannot be described independently of the state of the others.** Entangled states are key resources to facilitate many quantum information processing tasks and quantum cryptographic protocols.
- However, entanglement is fragile and is easily lost during the transit of photons through the environment. Hence it is extremely important to know whether a pair of photons is entangled, in order to use them as resource.
- Verification of entanglement requires the use of measurement devices, but such devices may be hacked or compromised by eavesdroppers. Device-independent self-testing (DIST) is a method that can be used in order to overcome such a possibility.

What is Device-independent self-testing (DSIT) method?

- This method enables the verification of entanglement in an unknown quantum state of two photons without having direct access to the state, or complete trust in the measurement devices.
- The theory relies on the application of the quantum uncertainty principle while implementing full device independence is a difficult task.
- In several practical situations, one of the parties may be fully trusted, whereas, the other may not be trusted like in the case of server-client relationship in banking transactions. For such situations, quantum information theory enables one-sided DIST (1sDIST).

Alzheimer

Researchers at Indian Institute of Technology (IIT) Guwahati has worked on out-of-the-box ideas that can help prevent or reduce short-term memory losses associated with Alzheimer's disease.

What are the observations?

- In 2019, the IIT Guwahati scientists found that application of a low-voltage, safe electrical field can reduce the formation and accumulation of toxic neurodegenerative molecules that cause short-term memory loss in Alzheimer's disease.
- They found that external electric/magnetic field modulates the structure of these peptide molecules, thereby preventing aggregation.
- Upon exposure to electric field, we could retard the degeneration of nerve cells to an extent of 17–35%. Objectively, this would translate to about 10 years delay in the onset of the disease.
- Working further in this area, the scientists explored the possibility of using 'Trojan peptides' to arrest aggregation of these neurotoxic molecules. The idea of using 'Trojan peptide' comes from mythological "Trojan Horse" used as subterfuge by the Greeks in the battle of Troy.
- The researchers have designed Trojan peptides by adopting a similar approach of 'deceit' to impede the aggregation of the amyloid peptide, arrest the formation of toxic fibrillar assemblies, and reduce poisoning of nerve cells that leads to memory loss.

About Alzheimer -

- It is an irreversible and progressive **brain disorder**.
- The disease slowly **destroys memory**, thinking ability and the capability to carry out simple tasks.
- The possibility of Alzheimer's increases as the age of the population increases.

- Nearly **50 million people** are affected by the disease and the number is expected to increase. China has the highest Alzheimer's affected the population in the world.

'Shahi Lichi' and 'Zardalu Mango'

Bihar Postal Circle has made an agreement with Department of Horticulture, Government of Bihar for logistics of Shahi Lichi from Muzaffarpur and Zardalu Mango from Bhagalpur and its delivery to the door step of the people.

Why?

- Because of lockdown to contain the spread of corona virus, Litchi & Mangoes cultivators have been finding it difficult to carry/transport their fruits to the markets for sale.
- Its supply amongst people has become big challenge and so to meet the demand of public and for giving market space directly to farmers to sell their fruits without any middlemen, the Department of Horticulture, Govt. of Bihar & Department of Posts, Govt of India have joined hands for this initiative.

About Shahi Lichi -

- It is mostly grown in **Muzaffarpur** and its neighbouring districts of **East Champaran, Vaishali, Samastipur and Begusarai**.
- It was accorded the **Geographical Indication (GI) Tag in 2018**.
- The lychee (Litchi chinensis) is the **sole member of the genus Litchi** in the soapberry family, Sapindaceae.
- It is a **tropical and subtropical fruit tree** native to southern **China, Taiwan, Bangladesh and Southeast Asia**, and now cultivated in many parts of the world.
- Prelims Fact - A chemical in the lychee caused hypoglycemia led to a catastrophic fall in the children's blood sugar, when consumed on an empty stomach. It became a cause of widespread deaths of children in the region.

About Zardalu Mango -

- It was accorded the **Geographical Indication (GI) Tag** in 2017.
- It is a **unique product from Bhagalpur district of Bihar** and it is known for its light yellow skin and special aroma.
- It was first planted in Bhagalpur region by **Maharaja Rahmat Ali Khan Bahadur of Kharagpur**.

L7 (Quadricycle)

The Ministry of Road Transport and Highways has issued notification regarding the emission norms for L7 (Quadricycle) category for BS VI.

What is L7 category of vehicles?

- The European Classification for vehicle category notifies vehicles with M, N and L categories.
- L - Motor vehicles with less than four wheels and some lightweight four-wheelers.
- L6 - A vehicle with four wheels whose unladen mass is not more than 350 kg, not including the mass of the batteries in case of BEV's, whose maximum design speed is not more than 45 km/h, and whose power does not exceed 4 kW.
- L7 - Other than that classified for the category L6, whose unladen mass is not more than 450 kg (650 kg for those intended to carrying goods), not including the mass of batteries in the case of BEV's, whose power does not exceed 15 kW.
- There are two categories of quadricycles: light quadricycles (L6e) and heavy quadricycles (L7e).

What are Bharat Stage norms?

- Bharat Stage emission standards, introduced in 2000, are **emission standards that have been set up the Central government to regulate the output of air pollutants from internal combustion engine equipment**, including motor vehicles.
- Bharat Emission Standards (BS) is standard set for automobile industry which quantifies the emission of pollutants like NO, PM etc.

- This concept is borrowed from European Standards which are currently undergoing Euro VI standards as against our BS IV.

Difference between BS-IV and BS-VI -

- The **major difference in standards between the existing BS-IV and the new BS-VI** auto fuel norms is the **presence of sulphur**.
- The newly introduced fuel is estimated to reduce the amount of sulphur released by 80 per cent, from 50 parts per million to 10 ppm.
- As per the analysts, the emission of NOx (nitrogen oxides) from diesel cars is also expected to reduce by nearly 70 per cent and 25 per cent from cars with petrol engines.
- Current rise of pollution and life threatening breathing air in metropolitan cities have pushed government to rethink and decided to follow better standards like BS VI by even skipping BS V.

Kangra Tea

The Indian Council of Medical Research (ICMR) is likely to replace hydroxychloroquine (HCQ) with anti-HIV drugs to improve immunity and possibly reduce viral replication, in the revised protocol. However, the chemicals in Kangra tea could also be effective in boosting immunity as they can block coronavirus activity better than anti-HIV drugs, as per the Institute of Himalayan Bioresource Technology.

How?

Using computer-based models, the scientists screened 65 bioactive chemicals or polyphenols (found in Kangra tea) that could bind to a specific viral protein more efficiently than commercially available anti-HIV drugs approved for treating COVID-19 patients. These chemicals might block the activity of the viral protein that helps the virus to thrive inside human cells.

About Kangra Tea -

- The history of Kangra tea dates back to 1849 when Dr. Jameson, then superintendent of the Botanical Tea Gardens, pronounced the region ideal for tea cultivation.
- Being one of India's smallest tea regions makes Kangra green and black tea all the more exclusive.
- While the black tea has a sweet lingering after taste, the green tea has a delicate woody aroma.
- The demand for Kangra tea has been increasing steadily and much of it is bought by natives and exported to Kabul and Central Asia via Peshawar.
- Kangra tea is a registered Geographical Indication (GI).
- **Tea Attributes:** The first flush of Kangra tea is known for quality, unique aroma and tinge of fruity flavour. A little milder than Darjeeling tea in terms of flavour, Kangra tea has more body and liquor.
- **Elevation** - Teas are grown at elevations ranging from 900 to 1400 metres above sea level.
- **Annual Rainfall** - 270 to 350cm.

Ek Bharat Shreshtha Bharat

Government has decided to take forward the Ek Bharat Shreshtha Bharat programme by using innovative ways in view of the prevailing conditions of COVID19.

What is 'Ek Bharat Shreshtha Bharat' programme?

- "Ek Bharat Shreshtha Bharat" was announced by Hon'ble Prime Minister on 31st October, 2015 on the occasion of the 140th birth anniversary of Sardar Vallabhbhai Patel. Subsequently, the Finance Minister announced the initiative in his Budget Speech for 2016-17.
- Through this innovative measure, **the knowledge of the culture, traditions and practices of different States & UTs** will lead to an enhanced understanding and bonding between the States, thereby **strengthening the unity and integrity of India**.
- All States and UTs will be covered under the programme. There will be pairing of States/UTs at national level and these pairings will be in effect for one year, or till the next round of pairings.
- The State/UT level pairings would be utilised for state level activities. District level pairings would be independent of the State level pairings.

- The activity will be very useful to link various States and Districts in annual programmes that will **connect people through exchanges in areas of culture, tourism, language, education trade etc.** and citizens will be able to experience the cultural diversity of a much larger number of States/UTs while realising that India is one.

Objective of the programme -

The broad objectives of the initiative are as follows:-

- To **CELEBRATE** the Unity in Diversity of our Nation and to maintain and strengthen the fabric of traditionally existing emotional bonds between the people of our Country;
- **PROMOTE** the spirit of national integration through a deep and structured engagement between all Indian States and Union Territories through a year-long planned engagement between States;
- To **SHOWCASE** the rich heritage and culture, customs and traditions of either State for enabling people to understand and appreciate the diversity that is India, thus fostering a sense of common identity;
- **TO ESTABLISH** long-term engagements and
- **TO CREATE** an environment which promotes learning between States by sharing best practices and experiences.

Chardham Pariyojana

Union Minister for Road Transport and Highways has inaugurated the breakthrough event of Chamba Tunnel under *Chardham Pariyojana* through video conference mode.

Details -

- Border Roads Organisation (BRO) achieved this major milestone by digging up a 440 m long Tunnel below the busy Chamba town on Rishikesh-Dharasu road Highway (NH 94).
- The construction of tunnel was a challenging task in terms of weak soil strata, continuous water seepage, heavy built up area on top thereby chances of sinking of houses, land acquisition issues, restrictions during COVID lockdown etc.
- It is a **Horse shoe type tunnel** with 10 mtr carriage way width and 5.5 mtr vertical clearance.

What is Chardham Pariyojana?

- The project proposes the widening of single lane roads into double lanes by up to 10 metres (880-km all-weather roads) developing highways in Uttarakhand and thereby improving access to the **Char Dham (four shrines) – Yamunotri, Gangotri, Badrinath and Kedar Nath** and part of the route leading to **Kailash Mansarovar Yatra**.
- The total cost of the project is estimated at Rs 11,700 crore.
- The project was earlier scheduled to be completed by March 2020.
- Seven stretches have been identified for development under the Char Dham highway project.
- All of these four sites are devoted to a specific deity. **Gangotri** is dedicated to the **Goddess Ganga**, **Yamunotri** is dedicated to the **Goddess Yamuna**, **Kedarnath** is dedicated to **Lord Shiva** and is one of the 12 jyotirlingas and **Badrinath**, is dedicated to **Lord Vishnu**.

Environmental concerns -

- The project evoked widespread concern among environmentalists and has been challenged in the courts.
- Environmentalist groups, led by the Dehradun-based Citizens for Green Doon, had filed petitions last February in the **National Green Tribunal (NGT)** contending that the project was proceeding without environmental clearances and debris was being disposed haphazardly.
- The fragile Himalayan hills slopes were being cut open indiscriminately and the project posed an environmental threat.
- On September 26, 2018, the NGT ruled that an environmental clearance wasn't required and allowed the project to proceed but with several caveats. But it stated the project would cause irreversible damage to regional ecology.
- A seven-member committee of experts led by a former judge of the Uttarakhand court was to ensure that an environmental management plan would be in place and properly adhered to.
- Supreme Court on technical grounds stayed the NGT nod for the project.

- On August 8, 2019, the Supreme court backed portions of the Tribunal's order allowing the project to continue **with assessment by an independent committee**.

Financial Stability and Development Council

Union Minister for Finance and Corporate Affairs has chaired the 22nd meeting of the Financial Stability and Development Council recently.

What is Financial Stability and Development Council?

- FSDC is a non-statutory apex council under Ministry of Finance constituted by Executive Order of Union Government in 2010.
- The **Chairman of the Council is the Finance Minister** and its members include the heads of financial sector Regulators (RBI, SEBI, PFRDA, IRDA), Finance Secretary and/or Secretary, Department of Economic Affairs, Secretary, Department of Financial Services, and Chief Economic Adviser.
- In **May, 2018 government reconstituted FSDC** to include the Minister of State responsible for the Department of Economic Affairs (DEA), Secretary of Department of Electronics and Information Technology, Chairperson of the Insolvency and Bankruptcy Board of India (IBBI) and the Revenue Secretary.
- **Functions** - It aims strengthening and institutionalising the mechanism of financial stability and development. It monitors macro-prudential supervision of the economy. It assesses the functioning of the large financial conglomerates. It addresses intra regulatory coordination issues.
- The **Raghuram Rajan committee (2008)** on financial sector reforms recommended for the creation of FSDC.

Ramkinkar Baij

Ministry of Culture's National Gallery of Modern Art has organised a virtual tour titled 'Ramkinkar Baij' to commemorate the 115th Birth Anniversary of Ramkinkar Baij on 26th May, 2020.

Who is Ramkinkar Baij?

- Ramkinkar Baij was the earliest Indian artist to experiment with abstract sculptural forms. His oil on canvas paintings have a singular experimenting quality going beyond its time, unregimented by dogmas and with only one commitment - to be unstintingly creative.
- Born in Bankura in West Bengal in 1910, Ramkinkar Baij **studied at the Kala Bhavan, Vishwa Bharati University, Santiniketan in 1925**.
- Trained by two European sculptors, one of whom was a disciple of Bourdelle, who were on a visit to Santiniketan on an invitation by Tagore, his style was still uniquely his own. Groomed by his mentors, **Nandalal Bose and Tagore**, the clay modeler turned artist.
- Working at a time when traditional art was transitioning to modern art, Baij's work proved to be crucial to Indian art history. Nature and Baij's own folk background turned out to be the crucial influences in the formation of his own style. Later, he headed the Department of Sculpture at the Kala Bhavan.
- He believed that it is only momentum that creates tension in a work of art. His work is characterised by a tremendous energy; his art is joyous, vital and reaching out to light. It is earthy and dynamic while showing a surging movement or growth.
- His path-breaking work in sculpture has been both acknowledged and respected, first in Santiniketan, then across the country, and internationally as well. His **sand and pebble sculptures** are noted for a typical, lyrical, metrical sensuality, which has an amazing oneness with nature. Indian sculpture, hitherto limited to academic naturalism, was transformed by this artist.
- He **integrated elements of Santhal tribal art and life into his own work** and enhanced them by an understanding of Western expressionism that was gleaned from books at the library of the Kala Bhavan.

- Although primarily known for his expressionistic sculpture, he was a **gifted painter**. This sense of rhythm that his sculpture is noted for is manifest brilliantly in his watercolors. The fluidity of this medium lent itself to his style.
- His works in the **Kalighat tradition interconnected with Cubism** to achieve a peculiarly personal idiom. Both his sculpture and his paintings are unprompted and bold.
- **Awards and Honours** - He was invited to participate in the Salon des Réalités Nouvelles in 1950 and in the Salon de Mai in 1951. In the national honours began to come his way one after the other. In 1970, the Government of India honoured him with the Padma Bhushan for his irrefutable contribution to Indian art. In 1976 he was made a Fellow of the Lalit Kala Akademi. In 1976, he was conferred the honorary Doctoral Degree of 'Desikottama' by Visva Bharati, and in 1979 an honorary D.Litt by Rabindra Bharati University.
- Bajj died on August 2, 1980, in Kolkata.

Veer Savarkar

Prime Minister Narendra Modi has paid tributes to Veer Savarkar on his Jayanti on May 28.

About Veer Savarkar -

- He was commonly known as Veer Savarkar ("brave" in his native Marathi language)
- An Indian independence activist, politician, lawyer, writer, and the formulator of the Hindutva philosophy
- He championed **atheism** and **rationality** and also **disapproved orthodox Hindu belief**. In fact, he even **dismissed cow worship as superstitious**.
- Savarkar was a radical and his Hindutva too was a radical break in the Hindu thought: **anti-caste, reformist, modernist and futuristic**. It was a modern Hindu response to the modern world Organised a youth group named '**Mitra Mela**'.
- In London, Veer Savarkar inspired his fellow Indian students and formed an organisation '**Free India Society**' to fight against Britishers for freedom.
- He was **against foreign goods and propagated the idea of Swadeshi**. In 1905, he burnt all the foreign goods in a bonfire on Dussehra.
- Provided **legal defence to Madan Lal Dhingra**, who was accused in a murder case of a British Indian army officer named Sir William Hutt Curzon Wylie.
- Veer Savarkar also founded the **two-nation theory in his book 'Hindutva'** calling Hindus and Muslims two separate nations. In 1937, Hindu Mahasabha passed it as a resolution. In 1937, he also became the **president of 'Hindu Mahasabha'**.
- A fierce critic of the Indian National Congress (INC) and Mahatma Gandhi; opposed the 'Quit India Movement' and later objected to INC's acceptance of Indian partition. He proposed the **co-existence of two nations in one country**.
- Savarkar wrote a book titled "**The History of the War of Indian Independence**"- wrote about the guerrilla warfare tricks used in 1857 Sepoy Mutiny. He called the 1857 revolt as the '**first war of independence**' of India.
- While the book was banned by Britishers, **Madama Bhikaji Cama** published the book in Netherlands, Germany and France, which eventually reached many Indian revolutionaries.
- Savarkar was arrested in 1909 on charges of plotting an armed revolt against the Morle-Minto reform. He also tried to escape by diving in the water but was arrested. He was sentenced to two life sentences i.e. 50 years in the cellular jail of Andamans, also known as Kala Pani, in 1911.
- Savarkar declared his wish to attain Samadhi and started hunger-strike on February 1, 1966 and passed away on February 26, 1966. He believed that his purpose of life is solved as India has gained Independence.
- In 2002, Port Blair airport at Andaman and Nicobar's Island was renamed after Veer Savarkar International Airport.

AGNEEPRASTHA

Foundation stone for a Missile Park '**AGREEPRASTHA**' was laid recently at INS Kalinga.

What is AGNEEPRASTHA?

- The Missile Park 'AGNEEPRASTHA' once completed will be dedicated to all the Officers, Sailors and Support Staff of INS Kalinga, who have served in this premier op-support Base of the ENC since its establishment in 1981. The Park also commemorates the award of the prestigious Unit Citation to INS Kalinga for the year 2018-19.
- The Missile Park has been set up with a replica of missiles and Ground Support Equipment (GSE) that showcase the evolution of missiles handled by the unit.
- The exhibits have been created from scrap / obsolete inventory which have been reconditioned in-house.
- The main attraction is P-70 'Ametist', an underwater launched anti-ship missile from the arsenal of the old 'Chakra' (Charlie-1 submarine) which was in service with IN during 1988-91.

Aim -

- 'AGNEEPRASTHA' aims to capture glimpses of Missile History of INS Kalinga since 1981 till date.
- 'AGNEEPRASTHA' will also provide a one-stop arena for motivation and stimulation of inquisitive minds regarding the missiles and related technologies, from school children to Naval personnel and their families.
- It is also intended to encourage a feeling of ownership and pride in the role of the Unit, and highlight the necessity of contribution of all personnel irrespective of rank/trade towards the overarching objective of ordnance availability, reliability and delivery on target, each and every time.

National Career Service Project

The Ministry of Labour and Employment under its National Career Service (NCS) project has now started offering free online '**career skills training**' in partnership with TCS ION for its registered job seekers.

What is National Career Service Project?

- It is implemented as a mission mode project to provide a variety of employment related services like career counselling, vocational guidance, information on skill development courses, apprenticeship, internships etc.
- The NCS project has also been enhanced to interlink all employment exchanges with the NCS Portal so that services can be delivered online.
- The scheme provides for part funding to states for IT upgradation and minor refurbishing of employment exchanges and for organising job fairs.
- NCS also offers the functionality of creation of video profiles for job-seekers in partnership with HIREMEE, a platform which provides online assessment and hiring services. Job-seekers can showcase their ability to recruiters using short video clips. All services on NCS are free.

National AI Portal

Union Ministry of Electronics and IT has launched India's national Artificial Intelligence Portal called www.ai.gov.in

About the portal -

- This portal has been jointly developed by the **Ministry of Electronics and IT and IT Industry. National e-Governance Division of Ministry of Electronics and IT and NASSCOM** from the IT industry will jointly run this portal.
- This portal shall work as a one stop digital platform for AI related developments in India, sharing of resources such as articles, startups, investment funds in AI, resources, companies and educational institutions related to AI in India.
- The portal will also share documents, case studies, research reports etc. It has section about learning and new job roles related to AI.

AI for Youth Programme -

- The National Programme is open to students of classes 8 - 12 from Central and State government-run schools (including KVS, NVS, JNV) from across the country - all 28 States and 8 Union Territories and aims to bring about a change in the thought process and create a bridge for the digital divide.
- The Program will be implemented in a phase-wise manner and in its first phase, each of the State Education Department will nominate 10 teachers as per the eligibility criteria. Teachers may also self nominate themselves by fulfilling the eligibility criteria.
- These teachers will be provided orientation sessions aimed to help them understand the premise and identify 25-50 potential students for the Program.
- The identified students will attend online training sessions on AI and understand how to identify social impact ideas/projects that may be created using AI and submit their ideas through a 60 seconds video explaining a proposed AI enabled solution.