



India's Indigenous COVID-19 Vaccine

Dear readers, we have started edristi English edition as well since August, 2015. We are hopeful that it will help us to connect to the broader audience and amplify our personal bonding with each other.

While presenting Day-to-day current affairs, we are very cautious on choosing the right topics to make sure only those get the place which are useful for competitive exams perspective, not to increase unnecessary burden on the readers by putting useless materials. Secondly, we have also provided the reference links to ensure its credibility which is our foremost priority. You can always refer the links to validate its authenticity.

We will try to present the current affairs topics as quickly as possible but its authenticity is given higher priority over its turnaround time. Therefore it could happen that we publish the incident one or two days later in the website.

Our plan will be to publish our monthly PDF on very first day of every month with making appropriate modifications of day-to-day events. In general, the events happened till 30th day will be given place in the PDFs. The necessity of this is to ensure the contents factual authenticity.

Reader's satisfaction is our utmost priority so requesting you to provide your valuable feedback to us. We will warmly welcome your appreciation/criticism given to us. It will surely show us the right direction to improve the content quality. Hopefully the current affairs PDF (from 1st December to 31st December) will benefit our beloved readers.

Current affairs data will be useless if it couldn't originate any competitive exam questions. E-Dristi has been very successful in that direction. Almost all the questions from UPPCS and other examinations have been asked from our materials. You can verify that by matching the question papers and e-Dristi contents from yourselves.

National

India approves two COVID-19 vaccines for emergency use

Question: On 3rd January 2021, Drugs Controller General of India (DCGI) has approved which of the following Covid-19 vaccine/vaccines for emergency use?

a) Covishield

b) Covaxin

c) Sputnik V

d) Comirnaty

i) a and b ii) b and c

iii) a and d iv) none of the above

Answer: i)

Context



- Indian drug regulator CDSCO has granted nod to Covishield by Serum Institute of India, Covaxin by Bharat Biotech for Covid 19 treatment in emergency situation.
- Facts
- After this approval Covishield by Serum Institute of India ,Pune and based on the Oxford AstraZeneca vaccine, and Covaxin by Bharat Biotech will be offered to healthcare workers and frontline workers in India.
- Covishield
- Covishield has been developed by the Oxford University scientists in collaboration with the pharmaceutical company AstraZeneca. In India, its trial was undertaken by the Serum Institute of India (SII), which is also manufacturing the Covishield vaccine for the mass vaccination drive.
- It is developed by using the virus — adenovirus — that causes common cold infections among chimpanzees. Its genetic material is same as that of the spike protein of SARS-CoV-2 coronavirus.
- The Vaccines efficacy was reported at 70.4% in phase trials conducted in U.K.
- Covaxine
- It is developed by Hyderabad based Bharat Biotech in collaboration with the Indian Council of Medical Research (ICMR) – National Institute of Virology (NIV).
- It uses a dead corona virus also called inactivated virus. Under inactivated state, the virus is not capable of infecting people or replicating on its own inside the body of a person after being injected. But a shot of the vaccine prepares the immunity system to recognise the actual virus and fight it if and when infection happens.
- The efficacy of ongoing phase 3 trial on around 22000 people has not been made public yet.

Reference: <https://www.indiatoday.in/coronavirus-outbreak/vaccine-updates/story/covishield-vs-covaxin-a-comparison-of-covid-19-vaccines-in-india-1755615-2021-01-04>

Production of the first coach shell by Marathwada Rail Coach Factory

Question: Marathwada Rail Coach Factory that has recently produced first coach shell is located in which district of Maharashtra?

- (a) Latur (b) Aurangabad
(c) Nanded (d) Osmanabad

Answer: (a)
Related facts:

- On 25 December 2020, Indian Railways' PSU, Rail Vikas Nigam Limited (RVNL) commissioned Marathwada Rail Coach Factory in Latur, Maharashtra with production of the first coach shell.
- The factory has been commissioned in only about two years ago.
- The factory is well equipped with modern industrial ecosystem.
- The factory has an initial capacity of manufacturing 250 MEMU / EMU / LHB / trainset type advanced coaches per annum.
- Rail Vikas Nigam Limited is an 100% owned Mini-Ratna PSU (Public Sector Undertaking) of Ministry of Railways.



Links:

<https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1683895>

Indian SARS-CoV-2 Genomics Consortium (INSACOG) launched

Question: consider the following statements about INSACOG :

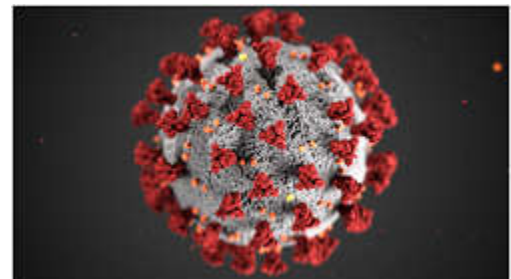
- a) It is coordinated by Department of Biotechnology(DBT), Ministry of Health and Family Welfare(MoH&FW), Indian Council of Medical Research(ICMR) and Central Council of Industrial Research(CSIR).
b) It is consortium of 10 Indian labs set up for the monitoring of genomic variations in the SARS-COV-2 on a regular basis.

Which of the above two are correct?

- calci) a ii) b iii) a and b both iv) none of the above

Answer: iii)
Context

- A newly identified variant of the novel SARS-CoV-2 Virus in the UK, South Africa and some other parts of the world has prompted the launch of Indian SARS-CoV-2 Genomics Consortium (INSACOG).
- This new variant is significantly more transmissible than previously circulating variants, with an estimated potential to increase the reproductive number with an estimated increased transmissibility of up to 70%.



Facts

- INSACOG has been launched. It is coordinated by DBT, MoH&FW, ICMR and CSIR.
- The overall aim of the proposed Indian SARS-CoV-2 Genomics Consortium is to monitor the genomic variations in the SARS-CoV-2 on a regular basis through a multi-laboratory network.
- This vital research consortium will also assist in developing potential vaccines in the future.
- It will also ascertain status of new variant of SARS-CoV-2, establishing a sentinel surveillance for early detection of genomic variation with public health significance.
- It is consortium of 10 labs- DBT-NIBMG Kalyani, DBT-ILS Bhubaneswar, ICMR-NIV Pune, DBT-NCCS Pune, CSIR-CCMB Hyderabad, DBT-CDFD Hyderabad, DBT-InSTEM/ NCBS Bengaluru, NIMHANS Bengaluru, CSIR-IGIB Delhi, and NCDC Delhi.
- DBT-NIBMG, Kalyani is the Co-ordinating Unit of Genome Sequencing Consortium and it will coordinate with National Centre for Disease Control for activities like data analysis, data release etc.

Reference: <http://ddnews.gov.in/health/indian-sars-cov-2-genomics-consortium-insacog-launched>

Sivan K gets one-year extension as secretary of Department of Space

Question: who is current secretary of Department of Space?

- a) K Kastoorirangan b) K Sivan
c) A S Kiran Kumar d) none of the above.

Answer: b)

Facts

- K Sivan tenure as a chairman of Space Commission and Space Secretary has been extended.
- The Appointments Committee of the Cabinet has approved the extension of tenure of K Sivan for a period of one year beyond January 14, 2021, i.e. up to January 14, 2022 or until further orders, whichever is earlier.
- He is also chairman of ISRO.



Space Commission and Department of Space

- The Space Commission is the highest policy-making body for matters related to space exploration in India and is headed by the chairman of ISRO.
- The Government of India constituted the Space Commission and established the Department of Space (DoS) in 1972 and brought ISRO under DoS management on 1 June 1972.

India to set up Lithium Refinery

Question: In which of the following state India's first lithium refinery will be set up?

- a) Maharashtra b) Uttar Pradesh
c) Gujarat d) Punjab

Answer: (c)

Related Facts:-



- According to official information India's first lithium refinery will be set up in Gujarat.
- It has been informed that Manikaran Power Limited, the country's largest electricity trading and renewable energy company, will invest more than Rs 1,000 crore to set up this refinery.
- Australian mining company Neometals has entered into a deal with Manikaran Power Limited to jointly fund a feasibility study to set up India's first lithium refinery.
- Presently, some places are being searched in Sanand and Dholera in Gujarat to establish this refinery.
- It is known that lithium is a rare element, which is not commonly found in India.
- India for this purpose will import lithium from Australia to this lithium refinery and its processing will be done here.
- As India has a plan to become one of the world's largest electric car markets, the country needs lithium as a raw material to produce batteries. India imports most of its lithium-related requirements.
- It should be known that according to the data presented before the Parliament in February 2020 India's lithium-ion batteries import increased about four times in 2018 in comparison to the export of these batteries in 2016.
- It is to be noted that already many lithium ion battery manufacturing plants are operating in Gujarat; the establishment of a lithium refinery will make Gujarat a major center of lithium ion batteries in India.

Link:-

<https://energy.economictimes.indiatimes.com/news/power/australian-firm-partners-with-indian-power-company-to-develop-indias-first-lithium-refinery/69943186>

Gujarat Solar Power Policy, 2021

Question: Recently announced Gujarat Solar Power Policy, 2021 aims at reducing the power costs of the industrial units by almost-

- a) 30% b) 50%

c) 20% d) 60%

Answer: (b)

Related Facts:-

- On December 29, 2020; The Gujarat government announced the Solar Power Policy, 2021.
- State Chief Minister Vijay Rupani has announced this policy for the next five years.
- The policy aims at reducing the power costs of the industrial units by almost 50% while also removing any capacity ceiling for setting up a solar project in the state.
- The policy by the government also allows the consumers to give their premises or roofs on lease to a third party for the generation as well as consumption of power on the same premises.
- The announcement by CM was made in Gandhinagar in the presence of Saurabh Patel, State Energy Minister, and Sunaina Tomar, Principal Secretary (Energy & Petrochemicals).



Chief Objectives of Solar Power Policy, 2021-

- i. It will bring down the production cost for the industries.
 - ii. It will also help the 'Made in Gujarat' brand to increase its presence in the global market.
 - iii. It will increase the production and consumption of solar energy in Gujarat.
- The new solar policy, apart from lifting the cap on the solar plant's size and also allowing the consumers to give their premises or roofs on a lease.
 - It will also allow the group of consumers to set up the solar projects for the self-consumption as a collective ownership project.
 - It will allow them to consume the generated energy as per the ratio of their ownership.
 - The New Solar Policy 2021 has done away with the ceiling on the installed capacity of the solar plant.
 - Previously, the cap on the solar project as allowed by the government was 50% of the contracted demand or sanctioned load.
 - According to the new policy, the government will be able to purchase the surplus energy from the micro, small and medium enterprises, and residential consumers after setting off against their consumption.
 - The consumers will be allowed to sell their surplus solar power at a tariff of Rs. 2.25 per unit.
 - As per the Gujarat state government, DISCOMS will be able to purchase power from small scale solar projects at 20 paise per unit tariff for the projects that are up to 4 MW.
 - The solar power association also welcomes the step of removing the capacity restrictions for all the categories of industrial, commercial, and residential consumers.

Links:-

<https://www.thehindubusinessline.com/news/gujarat-announces-additional-benefits-for-solar-power-producers/article33443639.ece>

National Common Mobility Card (NCMC)

Question: consider following statements about NCMC:

- a) It is an initiative under PM Modi's umbrella initiative of 'One Nation One Card'.
 - b) It is an automatic fare collection system.
 - c) Idea of NCMC was floated by Tarun Ramadorai committee set up by RBI.
- Which of the above are correct?**

i) a, b ii) b and c

iii) a, b, c iv) none of the above

Answer: i)

Context

- PM Modi has launched NCMC services on Delhi Metro's Airport Express Line.



Facts

- It was launched on 4 March 2019.
- It is an inter-operable transport card that would allow the holders to pay for their bus travel, toll taxes, parking charges, retail shopping and even withdraw money.
- The Idea for this card was floated by Nandan Nilkeni committee set up RBI.

How does it work?

- NCMC is an automatic fare collection system card which allows seamless travel by metro, rails and other transport system across country.
- It turns smart phone into a NCMC compliant card which then can be used for fare payments on designated contacts point available at metro, bus and other transport stations.
- NCMC compliant RuPay debit card can be used for payments and other things like shopping and purchases.
- Ministry of housing & urban affairs brought out this card for national mobility.

This card will push digital economy in the country by enhancing digital payments in various mobility services across the country. It will also reduce dependency on cash.

Reference: <https://www.moneycontrol.com/news/india/national-common-mobility-card-all-you-need-to-know-6284331.html>

Pneumosil: India's First Pneumonia Vaccine

Question: who has made India's first indigenous pneumonia vaccine 'Pneumosil'?

- a) Bharat Biotech b) Reddy's lab
- c) Serum Institute of India (SII)
- d) Ranbaxy

Answer: c)

Context



- The Serum Institute of India recently unveiled the first indigenously developed Pneumococcal Vaccine called Pneumosil. The vaccine was launched by the Union Health Minister Harsh Vardhan.

Facts

- Pneumosil was developed through collaboration with Bill and Melinda Gates Foundation and PATH organization. It has been approved by the Drugs Controller General of India.
- The vaccine targets the pneumococcal bacterium, which causes pneumonia and other serious life-threatening diseases such as meningitis and sepsis.
- Pneumococcal disease is a significant contributor under-five mortality rate worldwide.
- World Health Organization in 2018 recommended the inclusion of the pneumococcal conjugate vaccine (PCV) in routine childhood immunisation programmes in all countries.
- PCVs have helped reduce pneumococcal deaths but are not affordable for many nations . Pneumosil presents a affordable option to countries.
- **Key terms**
- **Conjugate:** A type of vaccine that joins a protein to an antigen in order to improve the protection the vaccine provides.
- **Polysaccharide:** A type of vaccine that is composed of long chains of sugar molecules that resemble the surface of certain types of bacteria in order to help the immune system mount a response.

Reference: <https://indianexpress.com/article/explained/pneumosil-vaccine-pneumococcal-disease-7124129/>

Eastern Dedicated Freight Corridor (EDFC)

Question: consider the following statements :

a) Dedicated freight corridors are purposefully built for the movements of freight trains.

b) It will ease up the pressure on existing rail network and also speed up the transportation of cargo.

c) The 1,856 km long EDFC starts from Sahnewal near the city of Ludhiana in the state of Punjab and passes through the states of UP, Bihar, Haryana and Jharkhand.

d) EDFC has its control and command centre at Prayagraj .

which of the above are correct?



i) a,b,c ii) b,c,d iii) a,b,d iv) a,b,c,d

Answer: iii

Context

- PM Narendra Modi has inaugurated the ‘New Bhaupur-New Khurja’ section of Indian Railways’ Eastern Dedicated Freight Corridor and its command centre at Prayagraj on 29 December 2020 through video conferencing.

Facts

About the Eastern Corridor

- Length : 1856 km
- Starts from Sahnewal near Ludhiana (Punjab) and will pass through the states of Punjab, Haryana, Uttar Pradesh, Bihar and Jharkhand and will terminate at Dankuni in West Bengal.
- Construction by: Dedicated Freight Corridor Corporation of India Limited (DFCCIL)
- DFCCIL is dedicated special purpose vehicle set up by government for the purpose of constructing Freight corridors.
- Operation control centre of the Eastern Dedicated Freight Corridor is set up at Prayagraj.
- The 351 km New Bhaupur- New Khurja section of EDFC is situated in Uttar pradesh and is built at a cost of Rs 5,750 crores.
- The EDFC section of New Bhaupur-New Khurja will benefit local industries like the aluminium industry in Pukhrayan region of Kanpur Dehat, glassware industry of Firozabad, asafoetida production of Hathras, textile production and block printing of Etawah, dairy sector of Auraiya, pottery products of Khurja, as well as locks and hardware of Aligarh district.

Need of the DFCs

- Covering a total of 10,122 km, these corridors carry the heaviest traffic and are highly congested. The route carries 52% of passenger traffic and 58% of freight traffic, according to the Make-in-India report of 2017.
- Considering increased transport demands, overtly congested routes and greenhouse gas (GHG) emissions associated with road transport, these freight corridors will help reduce the cost and allow faster transportation.
- Logistics parks and industrial corridors will be built along these routes and thus generating revenues and new jobs.

DFCCIL is also constructing the Western Dedicated Freight Corridor (1504 route km) that connects Dadri in Uttar Pradesh to Jawaharlal Nehru Port in Mumbai and will traverse through the states of UP, Haryana, Rajasthan, Gujarat and Maharashtra.

Reference: <https://www.financialexpress.com/infrastructure/railways/dedicated-freight-corridor-pm-modi-to-inaugurate-indian-railways-new-bhaupur-new-khurja-section-on-edfc/2158887/>

UP Govt to include history of Sikh gurus in school curriculum

Question: which day has been celebrated as Sahibzaada Shadeedi Diwas in Uttar Pradesh?

- i) 27 December ii) 26 December
iii) 27 November iv) none of the above

Answer: i)

Context



- UP Government has celebrated 27 December as Sahibzaada Shadeedi Diwas to mark the martyrdom of four 'Sahibzada' of Sikh guru Guru Gobind Singh and his mother Mata Gujri.

Facts

- The Uttar Pradesh government has decided to include the history of Sikh gurus in the school curriculum in the state.
- Sahibzaada Shadeedi Diwas is a day to pay gratitude to the sons of the Guru and mother who martyred their lives for the motherland, country and religion.

- Guru Gobind Singh had three wives and four sons: Ajit, Jujhar, Zorawar, Fateh. All four of his sons were initiated into the Khalsa and all were executed by Mughal forces before the age of 19.
- The Chief Minister Yogi Adityanath has said that the Sikh society is known for its hard work. The Sikh gurus sacrificed their lives to defend the Hindu religion. The country will always remember this.

Reference: <http://newsonair.com/Main-News-Details.aspx?id=406837>

PM Modi flags off India's first ever driverless train operations

Question: where has been in India the first driver less train operations has been inaugurated?

a) New Delhi Metro b) Kolkata metro c) Mumbai Local train d) none of the above.

Answer: a)

Facts

- On 28 december Prime Minister Narendra Modi flagged off India's first ever driverless train operations on Delhi Metro's Magenta Line which will connect Janakpuri West to Botanical Garden metro stations.
- National Common Mobility Card service was also inaugurated on the Airport Express Line.
- The National Common Mobility Card will enable the passengers to travel using the RuPay-Debit Card issued from any part of the country.
- Event was held virtually.



Reference : <http://newsonair.com/News?title=PM-Modi-flags-off-India%e2%80%99s-first-ever-driverless-train-operations-on-Delhi-Metro%e2%80%99s-Magenta-Line&id=406762>

PM Modi to flag off 100th Kisan Rail

Question: which of the following are correct:

- a) 100th Kisan Rail from Sangola in Maharashtra to Shalimar in West Bengal.
 b) 1st Kisan Rail was introduced from Devlali to Danapur on 7th of August 2020.
 c) Kisan rail was announced in union budget of 2020-21.

i) only a ii) only b iii) all of above iv) none of above



Answer: iii

Context

- Prime Minister Narendra Modi has flagged off the 100th Kisan Rail from Sangola in Maharashtra to Shalimar in West Bengal.
- **Facts**
- Kisan rail was announced in union budget of 2020-21.

About Kisan Rail

- This train will help in bringing perishable agricultural produce like vegetables and fruits to the market in a short period of time
- The train with frozen containers is expected to build a seamless national cold supply chain for perishables .
- This train is being run by Indian Railway.
- It is done as a one of measure to double farmer's income by 2022(Ashok Dalwai committee on Doubling of Farmers' Income)
- 1st Kisan Rail was introduced from Devlali to Danapur on 7th of August 2020

Link:

<http://newsonair.com/News?title=PM-Modi-to-flag-off-100th-Kisan-Rail-from-Sangola-in-Maharashtra-to-Shalimar-in-West-Bengal-today&id=406833>

Safe and Green National Highway Corridors

Question: On 22 December 2020; The Government of India and the World Bank has signed a project deal of how much amount to build safe and green national highway corridors?

- a) \$ 200 million b) \$ 100 million
c) \$ 800 million d) \$ 500 million

Answer: (d)



Related Facts:-

- On 22 December 2020; The Government of India and the World Bank has signed a \$500-million project to build safe and green national highway corridors.
- These corridors will be developed in Rajasthan, Himachal Pradesh, Uttar Pradesh and Andhra Pradesh.
- The \$500-million loan from the International Bank for Reconstruction and Development-IBRD (World Bank).

- The project will also enhance the capacity of the Ministry of Road Transport and Highways (MoRTH) in mainstreaming safety and green technologies.
- The Green National Highways Corridor Project will support MoRTH to construct 783 km of highways in various geographies in the country.
- These projects will integrate safe and green technology designs such as local and marginal materials, industrial by-products and other bioengineering solutions.
- The project will help reduce GHG (greenhouse gas) emissions in construction and maintenance of highways.
- The loan has a maturity of 18.5 years, including a grace period of five years.

Links:-

<https://www.worldbank.org/en/news/press-release/2020/12/22/world-bank-signs-usd500-million-project-to-develop-green-resilient-and-safe-highways-in-india>

Mucormycosis and COVID-19

Question: Consider the following statements regarding Mucormycosis which is recently in news:

- i) Mucormycosis is infection that can create skin conditions like blisters or ulcers, and the infected area may turn black. Other symptoms include pain, warmth, excessive redness, or swelling around a wound.
- ii) It is a Bacterial infection.
- iii) It can also compromise immune system of a person, and cause swelling in lungs with other symptoms.
- iv) Recently there has been a spike of this infection in Covid 19 recovered patients.

Which of the above is correct?

- a) i, ii, iii, iv b) ii, iii c) i, iii, iv d) none of the above.

Answer: c)

Context

- The Gujarat Government recently issued advisory on Fungal infection called “Mucormycosis”.
- Delhi has also seen rise in cases of this infection among covid 19 recovered patients.



Facts

About Mucormycosis

- Mucormycosis (previously called zygomycosis) is a serious but rare fungal infection caused by a group of molds called mucormycetes.

- These molds live in the environment and if ingested can generate the infection.
- Mucormycosis mainly affects people who have health problems or take medicines that lower the body's ability to fight germs and sickness i.e. immunocompromised people.
- It has 50% of mortality rate.
- There are different type of Mucormycosis with different symptoms:-

Rhinocerebral (sinus and brain) mucormycosis infects sinus and brain and can cause one-sided facial swelling, Headache, fever and Black lesions on nasal bridge or upper inside of mouth that quickly become more severe.

Pulmonary (lung) mucormycosis includes fever, cough, chest pain, breath shortness.

Cutaneous (skin) mucormycosis can look like blisters or ulcers, and the infected area may turn black. Other symptoms include pain, warmth, excessive redness, or swelling around a wound.

Gastrointestinal mucormycosis includes abdominal pain, vomiting

Disseminated mucormycosis typically occurs in people who are already sick from other medical conditions.

Mucormycosis And Covid 19

- Mucormycosis is now becoming common among COVID-19 recovered patients. Delhi and Gujarat has seen large number of the cases so far in recovered patients.
- The disease becomes life threatening in already immunocompromised covid 19 recovered patients as it starts infecting the brain. Its rapid spread worsens the condition leading to multiple organ failure. In due process, it damages immunity and makes patients infection-prone.

Link:

<https://www.ndtv.com/india-news/gujarat-issues-health-advisory-on-mucormycosis-fungal-infection-with-50-mortality-rate-2342288>

Recognition of Prior Learning (RPL)

Question: which of the following statements are correct?

i) Recognition of Prior Learning (RPL) programme recognizes the value of learning acquired outside a formal setting and provides a government certificate for an individual's skills.

ii) The programme is being implemented under SANKALP Programme of Ministry of Skill Development and Entrepreneurship (MSDE).

iii) National Skill Development Agency (NSDA) is the implementing agency of the programme.

a) only I b) only ii c) i and ii d) i, ii, iii

Answer: c)

Context



- Ministry of Skill Development and Entrepreneurship (MSDE) is conducting a Special Recognition of Prior Learning (RPL) program for workers, from 21

Facts

- About 70% of our country's population resides in rural India and hence the inclusion of gram panchayats is crucial for the success of District Skill Development Plans and will provide a huge fillip to the Skill India Mission.
- Through RPL, the aim is to align the competencies of the pre-existing workforce of the country to the standardized framework.
- Certification builds confidence, brings respect and provides recognition to the candidates, it has the potential to make skills aspirational.
- Supporting formalization of the informal learning of youth will supplement their efforts in finding sustainable livelihood opportunities and reduce inequalities based on privileging certain forms of knowledge over others.

About RPL

- Recognition of Prior Learning (RPL) programme recognizes the value of learning acquired outside a formal setting and provides a government certificate for an individual's skills.
- Candidates receive exposure to concepts of digital and financial literacy and an accidental insurance coverage for three years at free of cost. No fee is charged from a candidate for participating in the RPL program and every successfully certified candidate will receive INR 500.
- The programme is being implemented under SANKALP Programme of Ministry of Skill Development and Entrepreneurship (MSDE).
- National Skill Development Corporation (NSDC) is the implementing agency of the programme.

SANKALP

- Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) is centrally sponsored scheme and is being funded with the help of World Bank.
- It aims to set up Trainers and Assessors academies with self-sustainable models.
- Additional training academies will also be set up under the scheme.
- The main focus is on greater level of decentralization in skill planning through institutional strengthening at the state level that includes setting up of State Skill Development Missions (SSDMs) and allow the states to come up with State and District level Skill Development Plans.
- It aims at improving the inclusion of marginalized communities including Persons with Disabilities (PwD), Scheduled Castes (SCs), Scheduled Tribes (STs) and also women for providing skill training opportunities.

ink:

<https://pib.gov.in/Pressreleaseshare.aspx?PRID=1682409>

Noida's under construction airport : Design, name and logo approved

Question : UP chief minister Yogi Adityanath has recently approved the design,name and logo of Noida's under construction airport. Which bird has been selected as the logo of the airport under construction ?

(a) Stork (b) Eagle (c) Pigeon (d) Peacock

Answer (a)

Related facts

- UP chief minister Yogi Adityanath has recently(December 2020) approved the design,name and logo of Noida's under construction airport.
- Airport will be constructed in Noida's Jewar.
- CM's announcement regarding airport

Name	Noida International Greenfield Airport
Logo	A picture of stork(the state bird)
Design	It will be designed on the lines of world-famous airports in London, Moscow and Milan

About the airport

- The initial capacity of the airport, proposed to be built in four phases, will be 12 million passengers per year, which will be expanded to 70 million passengers per year by 2050.
- Initially, it will have two runways, which will be increased to five in due course of time.
- Acquisition of the land(1,334 hectares) has been completed by the Gautam Buddha Nagar administration.
- Also, 48.097 hectares have been acquired for rehabilitation purposes.



Significance

- Airport will give a boost to exports and increase employment opportunities for people in the state.
- It will lead to the development of industrial infrastructure that will increase employment opportunities, encourage manufacturing and exports.

Status of Leopard in India 2018 report released

Question: which of the following statements are correct?

- i) The 'Status of Leopard in India 2018' report was released by Union environment minister Prakash Javadekar.
- ii) Karnataka has largest population of leopard.
- iii) Last such census of leopard was carried out in 2014.

a) ii and iii b) i and ii c) i and iii d) all of the above

Answer: c)

Context

- Environment Minister Prakash Javadekar has released the 'Status of Leopard in India 2018' report.

Facts

- India now has 12,852 leopards.
- This amounts to 60% increase in leopard population from the 2014 level when last report was released.
- MP (3,421), Karnataka (1783) and Maharashtra (1690) are the top three states with highest numbers of leopard.
- In a study it was found that there are four distinct sub-populations of leopards in India with high genetic variations-leopards of the Western Ghats, the Deccan Plateau semi-arid region, the Shivalik mountains, and the Terai region in North India.



Link:

<https://www.hindustantimes.com/india-news/india-s-leopard-population-increases-by-60-reaches-12-852-govt-report/story-FI305wpjJ71nk9Cuer3duL.html>

India to bring more nations into coastal radar network

Question: which of the following statements are correct?

- a) Mauritius, Seychelles and Sri Lanka have already been integrated into the country's coastal radar chain network.
- b) Information Management and Analysis Centre (IMAC) is located at Gurugram and was operationalised in 2014.

i) only a ii) only b iii) both a and b iv) none

Answer: iii

Context



- India is planning to bring Maldives, Myanmar , Bangladesh and Thailand into its coastal radar network

Facts

- India is planning to further expand its coastal radar chain network meant to enable real-time monitoring of the high seas for threats and for providing assistance for capacity building to Indian Ocean littoral states.
- Mauritius, Seychelles and Sri Lanka have already been integrated into the country's coastal radar chain network.
- The Indian Navy's Information Management and Analysis Centre (IMAC) located in Gurugram is the nodal agency for maritime data fusion.

About IMAC

- IMAC is the nodal agency for maritime data fusion. Located in Gurugram, it was set up after the 26/11 Mumbai terror attacks.
- At the Navy's Information Fusion Centre for the Indian Ocean Region (IFC-IOR) which is meant to promote Maritime Domain Awareness, three more International Liaison Officers (ILO) are expected to join soon. The ILOs from France, Japan and the U.S. have joined the centre.
- IFC-IOR was set up by Indian Navy in December 2018 within the premises of the Information Management and Analysis Centre (IMAC) in Gurugram.
- It was set up to track maritime movements in the region.

Link:

<https://www.thehindu.com/news/national/india-looks-at-integrating-more-countries-into-coastal-radar-network/article33379243.ece>

India's first hypersonic wind tunnel test facility

Question: consider following statements:

- India's first Advanced Hypersonic Wind Tunnel test facility is in Hyderabad.
- PM Narendra Modi inaugurated the facility recently.
- India is the third country after United States and Russia to have such facility.

Which of the above are correct?

- a) i and ii b) ii and iii c) i and iii d) all of the above

Answer: c)

Context

- The Defence Minister Rajnath Singh recently inaugurated the Advanced Hypersonic Wind Tunnel (HWT) test facility in Hyderabad which is indigenously built by DRDO with participation of local industries.



Facts

- Wind tunnels are large tubes with air blowing through them. The tunnels are used to replicate the actions of an object flying through the air or moving along the ground. Researchers use wind tunnels to learn more about how an aircraft will fly.
- The Hypersonic flow is a flow where the speeds are much higher than the local speed of sound. The hypersonic flow is generally defined as the flow at Mach 5 or greater.
- The recently inaugurated Hypersonic Wind Tunnel Test Facility will simulate hypersonic flow over a wide spectrum. It will play a major role in realizing highly complex futuristic aerospace and defence system.
- The state-of-the-art HWT Test facility is “pressure vacuum driven enclosed free jet facility having nozzle exit diameter of 1 metre and will simulate Mach No 5 to 12 (Mach represents the multiplication factor to the speed of sound).
- After America and Russia, India is the third country to have such a large facility in terms of size and operating capability.

Link:

<https://www.news18.com/news/india/rajnath-singh-inaugurates-indias-1st-hypersonic-wind-tunnel-facility-heres-what-it-means-for-us-3194777.html>

India Workplace Equality Index

Question : India Workplace Equality Index is related to which community ?

- (a) Physically handicapped (b) Womens (c) LGBT+(LGBT and related communities)
(d) None of the above

Answer (c)

Related facts

- India Workplace Equality Index has launched on December 10, 2020.
It is India’s first LGBT+(LGBT and related communities) workplace equality index.
- It is a benchmarking tool for employers to measure progress on LGBT equality and inclusion in the workplace.
- The index measures nine areas: policies and benefits, employee lifecycle, employee network group, allies and role models, senior leadership, monitoring, procurement, community engagement and additional work.
- It is notable that many Indian companies are promoting LGBT+ inclusion at the workplace.



- Cummins India(manufacturer of diesel and natural gas engines) has been honoured as the 'Silver' employer at the India Workplace Equality Index (IWEI) Top Employers 2020.
- Twenty-one firms won under the gold category, while 18 were placed under silver and 13 got bronze.

Originator of IWEI

- Hotelier-activist Keshav Suri through his non-profit Keshav Suri Foundation, partnered with Pride Circle, Stonewall UK and FICCI, to bring the IWEI to India Inc.

LGBT

- LGBT stands for — lesbian, gay, bisexual, and transgender.

Link:

<https://indianexpress.com/article/india/indias-1st-lgbt-workplace-equality-index-launched-7100163/>

Human Freedom Index 2020

Question: consider the following statements:

- India is ranked at 110 out of 162 countries.
- The index is published by American think tank Cato Institute and Fraser Institute of Canada.
- It measures human freedom which encompasses personal, civil and economic freedom.

Which of the above are correct?

- a) I b) i and ii c) ii and iii d) none

Answer: c)

Context

- American think tank Cato Institute and Fraser Institute in Canada has released Human Freedom Index (HFI) 2020 recently.



About Human Freedom Index (HFI)

- The Human Freedom Index presents the state of human freedom in the world based on a broad measure that encompasses personal, civil, and economic freedom.

- Human Freedom is a social concept which is associated with the absence of coercive constraints.

HFI 2020

- It is 6th annual index which takes into account 76 indicators of personal, civil, and economic freedoms to rank 162 countries from 2008 to 2018.
- Index has noted a decrease in personal freedoms since 2008 globally.

Rankings

- New Zealand was ranked one in the index, followed by Switzerland and Hong Kong. However “Given the Chinese Communist Party’s unprecedented intervention in Hong Kong in 2019 and 2020, the authors expect the territory’s freedom score to decline notably in future editions of the index”.
- The three least-free countries in descending order are Venezuela, Sudan, and Syria.
- Out of 10 regions, the highest levels of freedom are in North America (Canada and the United States), Western Europe, and East Asia. The lowest levels are in the Middle East and North Africa, sub-Saharan Africa, and South Asia.

India’s performance

- India is ranked at 111 out of 169 countries.
- India was at 94 place in 2019 edition of index.
- In the neighbourhood China is at 129 rank, Bangladesh is at 139 and Pakistan is at 140.

HFI finds human freedom has direct relationship with the prosperity of the country. It also has strong relation with the healthiness of Democracy of the country.

Link:

<https://www.thehindu.com/news/national/india-ranks-111-out-of-162-countries-on-personal-freedom-index/article33358167.ece>

West Bengal’s first deep sea port

Question : In which place first deep sea port of West Bengal will be constructed ?

(a)Tajpur (b)Digha (c)Petuaghat (d)Junput

Answer (a)

Related facts

- First deep sea port of West Bengal will be constructed in Tajpur(Purba Medinipur district).
- Chief Minister of West Bengal has recently(December 2020) announced this.



Benefits

- Port will be built at a cost of Rs 15,000 crore and will generate employment for 25,000 people.
- Both East and West Medinipur district will benefited from this port.
- The concentration of iron and steel industries around Kharagpur will get a boost by having a port at their doorstep for exports.
- It is notable that Bengal accounts for 13 percent of country's iron-steel exports.
- Seafood exports from Medinipur will get a boost, to export to south-east Asia and Japan, benefitting lakh of fisherman and creating new jobs and new infrastructure for seafood processing.

Link:

<https://www.aninews.in/news/national/general-news/west-bengal-cabinet-approves-construction-of-states-first-deep-sea-port-in-tajpur20201207230052/>

Maharashtra : Declaration of new conservation reserves and sanctuary

Question : How much new conservation reserves are declared by Maharashtra Government recently ?

(A)Six (B)Twelve (C)Eight (D)None of the above

Answer (D)

Related facts

- Maharashtra Government has recently(December 2020) decided to declare ten new conservation reserves (CRs) along with a new sanctuary – Kanhargaon sanctuary (the state's 50th) in Chandrapur district. Ten new conservation reserves(CRs)
- Government(State Board for Wildlife in Maharashtra) decided to establish 10 CRs at Mahendri, Amboli-Dodamarg (Sindhudurg), Jor-Jambhli (Satara), Muniya (Nagpur) and Chandgad, Panhalgad, Vishalgad, Gaganbawda, Mayni and Ajra-Bhudargad.
- Maharashtra : A Brief Overview of Forestry Scenario
Maharashtra, the third largest State in the country is ranked second among the States in terms of the recorded forest area.
- Recorded Forest Area (RFA) in the State is 61,579 sq km of which 49,546 sq Km is Reserved Forests, 6,733 sq km is Protected Forest and 5,300 sq km is Unclassed Forests.
- In Maharashtra, during the period 1st January 2015 to 5th February 2019, a total of 3797.16 hectares of forestland was diverted for nonforestry purposes under the Forest Conservation Act, 1980 (MoEF & CC, 2019).
- As per the information received from the SFD, a total area of 1,47,814 ha has been notified as reserved forests during 2014 to 2019.
- Six National Parks, 48 Wildlife Sanctuaries and 6 Conservation Reserves constitute the Protected Area network of the State covering 3.03% of its geographical area.



Link:

<https://indianexpress.com/article/india/state-wildlife-board-declares-10-new-conservation-reserves-and-1-new-sanctuary-7092136/>

Karad Janata Sahakari Bank

Question : RBI has recently cancelled the licence of The Karad Janata Sahakari Bank Ltd. In which district Karad situated in Maharashtra ?

(a) Satara (b) Nagpur (c) Nasik (d) Jalgaon

Answer (a)

Related facts

- The RBI on Tuesday(8 December 2020) said it has cancelled the licence of The Karad Janata Sahakari Bank Ltd, Karad, Maharashtra.

Reason

- Bank does not have adequate capital and earning prospects.

Involvement of DICGC

- More than 99 per cent of the depositors of the bank will get full payment of their deposits from DICGC.
- DICGC stands for Deposit Insurance and Credit Guarantee Corporation.
- It is a wholly owned subsidiary of Reserve Bank of India.
- On liquidation, every depositor is entitled to repayment of his/her deposits up to a monetary ceiling of Rs 5 lakh only from the Deposit Insurance and Credit Guarantee Corporation (DICGC) as per usual terms and conditions.



Link:

<https://economictimes.indiatimes.com/industry/banking/finance/banking/reserve-bank-of-india-cancels-license-of-maharashtras-karad-janata-sahakari-bank/articleshow/79627922.cms?from=mdr>

Human Development Index 2020

Question : Consider the following statements about Human Development Index(HDI) 2020

- It is released by United Nation Development Programme (UNDP) every year.
- In the 2020 edition of Human Development Report a new metric is introduced called Planetary Pressure-



Adjusted HDI.

iii) India fell two places below to 131 positions from its 2019 rank.

Which of the above are correct?

- a) i and ii b) ii and iii
c) i, ii and iii d) none of the above

Answer: c)

Context

- United Nations Development Programme has released the 2020 edition of Human Development Report (HDR).
- Human Development Index (HDI) is part of the report.
- This year HDR is titled as The Next Frontier, Human Development and the Anthropocene.

Background

- The first HDR was launched in 1990 by the Pakistani economist Mahbub ul Haq and Indian Nobel laureate Amartya Sen.
- Since then reports have been released most years, and have explored different themes through the human development approach, which places people at the center of the development process.

What is HDI?

- HDI is a statistical tool to measure a nation's socioeconomic development. It is mostly measured by level of healthcare, education and standard of living available to people of that country.

What is new in 2020 edition?

- In 2020 edition UNDP has introduced a new metric called Planetary Pressure Adjusted HDI or PHDI.
- PHDI reflects the impact of Human activities on planet earth and hence on Human Development. It includes each country's carbon emission per capita and its material footprint.

Rankings

- India dropped two ranks, standing at 131 out of 189 countries.
- If the Index were adjusted to assess the planetary pressures caused by each nation's development, India would move up eight places in the ranking, according to the report.
- Norway, which tops the HDI, falls 15 places if this metric is used, leaving Ireland at the top of the table.
- In fact, 50 countries would drop entirely out of the "very high human development group" category, using this new metric.
- China ranked 85 and Niger was at bottom at 189.

Impact of Pandemic

- Although this year's report covers 2019 only, and does not account for the impact of COVID, it projected that in 2020, global HDI would fall below for the first time in the three decades since the Index was introduced.

Link:

<https://www.thehindu.com/news/national/india-ranks-131-in-2020-un-human-development-index/article33348091.ece>

MP Local Area Development Scheme (MPLADS)

Question : which of the following statements regarding MPLADS are correct?

- It was launched in December 1993.
- It provides a mechanism for MP's by which they can recommend work of developmental nature for creation of durable community assets and for provision of basic facilities including community

infrastructure, based on locally felt needs.

iii) MPLADS provide for an annual fund of Rs 2 crore.

a) Only I b) Only ii c) i and iid) None of the above

Answer: c)

Context

- Members of all parties have unanimously asked the government to release funds for the projects sanctioned in 2018 and 2019, which were under way before the funds were suspended due the COVID-19 pandemic.

Background

- Union Government has suspended MPLADS scheme using Disaster Management Act in April this year.

Facts

- The MPLADS is a Plan Scheme fully funded by Government of India.
- Annual entitlement to per MP constituency under MPLADS is Rs 5 crore.
- Launched in December, 1993.
- Seeks to provide a mechanism for the Members of Parliament to recommend works of developmental nature for creation of durable community assets and for provision of basic facilities including community infrastructure, based on locally felt needs.

How Funds are released?

- Funds are released in the form of grant in aid directly to district administration.
- Funds do not lapse and if not used within a year, they are carried forward to next year.
- MP's only have recommendary role with regards to projects.
- The district authority is empowered to examine the eligibility of works, sanction funds and select the implementing agencies, prioritise works, supervise overall execution, and monitor the scheme at the ground level.
- At least 10% of the projects under implementation in the district are to be inspected every year by the district authority.

Link:

<https://www.thehindu.com/news/national/mplad-funds-government-urged-to-release-money-for-projects-sanctioned-in-2018-2019/article33329785.ece>

Shakti Bill: Maharashtra's proposed laws against sexual offences

Question: Consider following facts about Shakti Bill:-

i) Shakti bill proposes amendment in existing IPC and CRPC related with rape and other violent crimes against women and children.



ii) Bill was introduced in Maharashtra Assembly recently.

iii) Bill is modeled on Disha Act of Andhra Pradesh.

Which of the above are correct?

a) I b) ii c) iii d) all of the above

Answer: d)

Context

- Maharashtra government has tabled two bills namely Maharashtra Shakti Criminal Law (Maharashtra Amendment) Act 2020 and the Special Court and Machinery for Implementation of Maharashtra Shakti Criminal Law 2020 bill in the state assembly recently.

Facts

- Shakti Bill is modeled on the Disha Bill of Andhra Pradesh.
- The Shakti Act proposes death penalty in cases of rape, acid attack, and serious crimes against children.
- It provides for completing probe in a case within 15 days and trial within 30 days.
- Special police teams and separate courts will be set up for investigation and trial of cases against women and children under the new legislation. As many as 36 special courts, each having a special public prosecutor have been proposed to be set up.

Why activist are opposing the bill

- An amendment has been proposed to Section 375 (rape) of the IPC, to add an “explanation” that says that in cases where parties are adults and their conduct suggest there was “consent or implied consent”, a presumption of consent will be made. This, the activists say, “feeds into the patriarchal construct of consent and conduct of women”.
- 15 days timeframe for collecting the evidence will not be sufficient and hence probe can be hushed up by police and hence further reduce the conviction rates.
- Section 12 of The Special Courts and Machinery for the Implementation of Shakti Act, 2020, will punish the filing of false complaints. This, according to the signatories, “perpetuates the patriarchal notions of viewing women with suspicion, as unworthy of being believed” — and will deter victims from reporting sexual offences.

Link:

<https://timesofindia.indiatimes.com/city/mumbai/maharashtra-tables-two-bills-on-shakti-act-in-assembly-despite-outcry/articleshow/79732907.cms>

India's First International REIT Fund of Funds

Question : Kotak AMC has recently launched India's first International REIT Fund of Funds. What is a REIT fund ?

(a) Real Estate Investment Trust (b) Real Estate Investment Treasure

(c) Real Estate Investors Trust (d) None of the above

Answer (a)

Related facts

- Kotak Mahindra Asset Management Company Limited has recently(December 2020) announced the launch of Kotak International REIT Fund of Funds.

Characteristic of Funds

- It is India's first diversified REIT(Real Estate Investment Trust) Mutual Fund.
- Kotak International REIT Fund of Funds is an open-ended mutual fund scheme that will invest in units of SMDAM(Sumitomo Mitsui DS Asset Management Company Limited) Asia REIT Sub Trust Fund.
- This mutual fund scheme will have a diversified investment portfolio comprising of listed REITs which will invest in real estate projects like residential, office, data centres, warehousing, retail and hospitality.
- The New Fund Offer (NFO) opens for subscription on 7th December, 2020 and closes on the 21st December, 2020.
- SMDAM is the subsidiary of Sumitomo Mitsui Banking Corporation and is one of the largest investment management companies in Japan.



Link:

<https://assetmanagement.kotak.com/press-release>

Vision 2035 – Public Health Surveillance in India

Question: Who has released “Vision 2035 – Public Health Surveillance in India”?

- a) Ministry of Health and Family Welfare, GOI b) NITI Aayog
c) Lancet international d) None of the above

Answer: b)

Context

- NITI Aayog has released a white paper “Vision 2035 – Public Health Surveillance in India” on 14 December 2020.



Vision of the Document

- To make India's public health surveillance (PHS) system more responsive and predictive to enhance preparedness for action at all levels.

- Citizen-friendly public health surveillance system will ensure individual privacy and confidentiality, enabled with a client feedback mechanism.
- Improved data-sharing mechanism between Centre and states for better disease detection, prevention, and control.
- India aims to provide regional and global leadership in managing events that constitute a public health emergency of international nature.

Steps suggested to achieve the desired level of surveillance

- Raise the profile of PHS.
- Create/ strengthen an independent Health Informatics Institution.
- Define the scope of Surveillance into broad Categories of diseases / conditions, keep it simple and strategic.
- Use of WHO STEPwise approach to include NCD Surveillance.
- Prioritise Disease/ Condition that will be the focus for Surveillance/Disease elimination.
- Streamline Data Sharing, analyzing, dissemination and use for action.
- Align with Ayushman Bharat.
- Strengthen Lab infrastructure, referral network and community based Surveillance.

The white paper was released by NITI Aayog Vice Chairman Dr Rajiv Kumar, Member (Health) Dr Vinod K Paul and CEO Amitabh Kant.

Link:

<http://www.newsonair.com/News?title=NITI-Aayog-releases-a-white-paper-%26%2339%3B%26%2339%3B-Vision-2035—Public-Health-Surveillance-in-India%26%2339%3B%26%2339%3B&id=406078>

Vigyan Yatra Flagged Off Ahead IISF 2020

Question: which of the following statements about Vigyan Yatra are correct?

- Vigyan Yatra is a promotional activity ahead of India International Science Festival (IISF) 2020.**
- Indian Association of Cultivation of Science (IACS), Kolkata has recently organised Vigyan Yatra .**

a) I b) ii c) both i and ii d) none of the above

Answer: c)

Context

- The Ministry of Science and Technology has announced that the Indian Association of Cultivation of Science (IACS), Kolkata has recently organized the Vigyan Yatra, the promotional activity of the India International Science Festival.



Facts

- The sixth edition of the India International Science Festival (IISF) will be conducted from December 22 to 25, 2020 on a virtual platform.
- Vigyan Yatra is a promotional activity under IISF 2020 in which Science exhibition mobile vans will be dispatched across various cities for propagation of science.
- 30 locations across the country have been identified across the country where the yatra will be conducted.
- IACS Kolkata conducted the Vigyan Yatra online. The programme was inaugurated by Director IACS, Santanu Bhattacharya. The Central Institute of Mining and Fuel Research Dhanbad also conducted the Vigyan Yatra on Youtube under the east segment.

Aim of Yatra

- Aim is to promote scientific temper and inculcate the culture of science among the masses.
- Ministry of Science and Tech has also said that program will help in igniting the minds of the youngsters because science exhibition mobile vans are viewed by all the local schools and university students which create interest in science and generate awareness about the IISF.

Link:

<https://www.ndtv.com/education/vigyan-yatra-flagged-off-ahead-iisf-2020>

India's Indigenous mRNA Vaccine got approval for Human Trial from DCGI

Question: recently mRNA based COVID-19 vaccine has been approved in India for human trial. Consider following statements regarding above vaccine-

- Name of this vaccine is HGCO-19
- It is being manufactured by Hyderabad based Bharat Biotech Limited
- This vaccine has been approved by DCGI for face-1 and face-2 human trial

Which of the above statement/statements is/are incorrect-

Select the answer from following code-

- a) I b) i & ii c) iii d) ii

Answer: (d)

Related Facts:

- On 9 December 2020; Drug Controller of India (DCGI) has given its approval for the human trial of India's indigenous mRNA based vaccine.
- The mRNA vaccine developed by the Pune-based Gennova Biopharmaceuticals, has received approval from DCGI to carry out Phase I/II clinical trials on humans.
- The subject expert committee of the DCGI, which met here on 09 December, 2020; had approved its clinical trials.



- Gennova's vaccine candidate, HGCO19, uses the same platform technology as those used by Covid-19 vaccines developed by Pfizer-BioNTech and Moderna.
- Ministry of science and technology is a statement on 11 December 2020 informed that its seed grant came from the Ind-CEPI grant of the Department of Biotechnology (DBT).
- The mRNA vaccines do not use the conventional model to produce immune response.
- Instead, the mRNA vaccine carries the molecular instructions to make the protein in the body through a synthetic RNA of the virus.
- The host body uses this to produce the viral protein that is recognised, thereby making the body mount an immune response against the disease.
- Vaccines-based on mRNA are scientifically the ideal choice to address a pandemic because of their rapid developmental timeline.
- The mRNA vaccine is considered safe as it is non-infectious, non-integrating in nature, and degraded by standard cellular mechanisms.
- They are expected to be highly efficacious because of their inherent capability to be translatable into the protein structure inside the cell cytoplasm.
- Additionally, mRNA vaccines are fully synthetic and do not require a host for growth.
- Therefore, they can be quickly manufactured in an inexpensive manner to ensure their availability.
- Due to above factors they have greater accessibility for mass vaccination on a sustainable basis.
- HGCO19 has been developed in collaboration with HDT Biotech Corporation of the US and it has already demonstrated safety, immunogenicity and neutralisation antibody activity in animals.
- The neutralising antibody response of the vaccine in mice and non-human primates was comparable with the sera from convalescent patients of Covid-19.
- HGCO19 is stable at 2-8 degree Celsius for two months. Gennova has completed all preliminary work and should initiate the Phase I/II human clinical trials soon.

Links:-

<https://www.thehindubusinessline.com/companies/indigenous-mrna-vaccine-gets-nod-for-human-trials/article33309155.ece>

Acquisition of BOI AXA Trustee Services

Question : Bank of India will acquire 49% stake in BOI AXA Trustee Services Pvt Ltd(BATS).This acquisition will be done through a SPA. What is a SPA ?

- (A)Share Purchase Agreement (B)Share Plus Arrangement
(C)Share Purchase Adjustment
(D)Share Protection Agreement

Answer (A)

Related facts



- Bank of India has recently(December 2020) announced the acquisition plan of BOI AXA Trustee Services Pvt Ltd(BATS).
- This acquisition will be done through a SPA(Share Purchase Agreement).
- Bank of India will acquire 49% stake in BOI AXA Trustee Services Pvt Ltd(BATS).
- Following the transaction, BOI AXA Trustee Services Pvt Ltd (BATS) – will become Bank of India's fully owned subsidiary.
- Currently, Bank of India holds 51% equity shares in BATS.

Link:

<https://www.thehindu.com/business/Industry/bank-of-india-to-acquire-49-stake-each-in-boi-axa-investment-managers-boi-axa-trustee-services/article33239455.ece>

India drops to 2nd position, Chile takes back its 1st place in BNEF's Climatescope energy market ranking

Question: which of the following statements are correct?

- i) CLIMATESCOPE Survey 2020 is done by Bloomberg New Energy Finance Limited (BNEF)
- ii) This survey presents the attractiveness of emerging markets for clean energy investment.
- iii) India ranked 2nd in 2020 edition of survey.

a) only I b) only ii c) only iii d) all of the above.

Answer: d)

Context



- In BNEF's Climatescope survey, 'Emerging Markets Outlook 2020: Energy Transition in World's Fastest Growing Economy'; India with score of 2.6 drops to 2nd position from its 1st rank in 2019.

Facts

- Climatescope is BloombergNEF's (BNEF) public view on the energy transition in emerging markets.
- Climatescope 2020 encompasses 108 emerging markets, as well as 29 developed nations.
- After nine years covering exclusively emerging markets, Climatescope 2020 expanded to include developed economies.

Ranking

- Chile regained its top position in 2020 edition of survey.
- India slips to 2nd position from its 1st position in 2019.
- Brazil bagged 3rd spot.

India's Performance

- For India, its ambitious policy framework and copious capacity expansions make it an attractive market for clean energy investment.
- The government has set renewable energy target of 175 GW by 2020.
- Country's drop to second position is mainly the result of a decline in clean energy investment, which fell 12 percent in 2018-2019 and has plummeted 32 percent since 2017.
- As per BNEF, India and China still remains the biggest emerging market for clean energy investment.

Methodology of Survey

- The Climatescope 2020 methodology includes 123 indicators and sub-indicators split into three key topic areas that encompass each market's previous accomplishments, current investment environment, and future opportunities for clean energy growth.
- These indicators are Fundamentals, Opportunities and Experience.
- Fundamentals. This topic area encompasses a country's clean energy policies, power sector structure and regulations as well as local barriers that might obstruct renewable energy development.
- Opportunities. This includes future opportunities for clean energy growth available in a market.
- Experience. This includes a market's volume of installed clean energy and historical levels of renewable energy investment.

Link:

<https://global-climatescope.org/>

Ministry of Electronics and Information Technology : Kaspersky — CERT-In deal

Question : CERT-In is the nodal agency of Ministry of Electronics and Information Technology(MoEIT). Kaspersky(A multinational cybersecurity and anti-virus provider) has signed a MoU with the CERT-In.What is the full form of CERT-In ?

- (a) Indian Computer Emergency Response Team
- (b) Indian Cyber Expert Response Team
- (c) Indian Cyber Emergency Response Team
- (d) None of the above

Answer (a)

Related facts

- Kaspersky(A multinational cybersecurity and anti-virus provider) has recently(November 2020) signed a MoU with the CERT-In.
- CERT-In(Indian Computer Emergency Response Team) is the nodal agency to deal with cyber security threats.



- It comes under the Ministry of Electronics and Information Technology of the Government of India.

About the deal

- Both party will work together for building a cooperative relationship and facilitate the fulfillment of mutual goals for creating a safe & secure cyber space in the country.
- **The primary activities entailed via this MOU include:**
- Sharing of relevant technical information, threat intelligence, and data feeds by Kaspersky with CERT-In in order to enhance information security in India.
- Providing expert support and technical exchange such as cyber security incident reporting, incident analysis and response, cyber security audit, and malware analysis.
- Execution of training programs within the framework of Kaspersky Global Transparency Initiative such as Code Review and Assessment Training.
- Execution of joint projects such as supporting awareness initiatives undertaken by CERT-In in India and partnering with Kaspersky Innovative Arm (Kaspersky iHub) through mentorship and accelerator programs for supporting Indian start-ups with innovative cyber security projects.

Link:

<https://www.crn.in/news/kaspersky-cert-in-sign-mou-for-improving-mutual-cyber-security-capabilities/>

Contraction in India's GDP : OECD Projection

Question : 'A Brighter Outlook But Recovery Will Be Gradual' is a report released by OECD. This report projects contraction in India's GDP(2020) at —
(a) -9.9 percent (b) -8.2 percent (c) -7.2 percent (d) -6.8 percent

Answer (a)

Related facts

- 'A Brighter Outlook But Recovery Will Be Gradual' is a report released by OECD. This report projects contraction in India's GDP(2020) at -9.9 percent.

Highlights of the report

- OECD cuts India's GDP(2020) contraction rate to 9.9% from 10.2% earlier.
- It forecast that the economy would rebound to 8 per cent in the next fiscal year and 5 per cent a year later, but gross domestic product (GDP) loss would be substantial.

- Vaccination campaigns, concerted health policies and government financial support are expected to lift global GDP by 4.2% in 2021 after a fall of 4.2% this year.
- The recovery would be stronger if vaccines are rolled out fast, boosting confidence and lowering uncertainty.
- The bounce-back will be strongest in the Asian countries that have brought the virus under control but even by the end of 2021, many economies will have shrunk from 2019 levels before the pandemic.

Link:

<http://www.oecd.org/economic-outlook/december-2020/>

Two new Zoos granted recognition by Central government

Question: In which of the following city Shaheed Ashfaq Ullah Khan Prani Udyaan is located?

- a) Patna b) Chandigarh c) Gorakhpur
d) Lucknow

Answer: (c)

Related Facts:-



- On 07 December, 2020; Central Zoo Authority given recognition to two zoos situated each, in the two states of India.
- Central Zoo Authority taken this decision at its 37th General Body meeting chaired by Union Minister for Environment, Forest and Climate Change, Shri Prakash Javadekar.
- Two new zoos which have been recognised by the authority are the Rajgir Zoo Safari in Nalanda, Bihar and Shaheed Ashfaq Ullah Khan Prani Udyaan in Gorakhpur, Uttar Pradesh.
- The Environment Minister also applauded the 15 select zoos in the country for good progress in developing a 10-year Vision Plan.
- The vision plan of these zoos is formulated for the up-gradation of to global standards which is hoped to 'twin' top Indian and foreign zoos.
- The plan also seeks to bring in the corporate sector to invest in modernization as part of this project.
- The Minister also said that early next year an Investors summit will also happen to take this agenda forward.
- **Rajgir Zoo Safari, Nalanda, Bihar-**
- Rajgir Zoo Safari, The zoo is established exclusively comprising on only safari enclosures which, on contrary to conventional enclosure, offer larger space for captive animals.
- There are five safari enclosures and a walk-in proposed in the zoo.

- The zoo proposes to house Lion, Bear, Tiger, Leopard and a mixed safari of common herbivore species such as Spotted Deer, Sambar among others.
- The zoo is located close to the historically important Nalanda and is expected to have a high footfall.
- The establishment of the zoo was personally monitored by the Chief Minister of the state.
- The zoo will display wild animals in naturalistic safari enclosures and promote awareness of towards wildlife conservation.
- **Shaheed Ashfaque Ullah Khan Prani Udyaan-**
- This zoo is situated in the spiritual land of Gorakhpur in UP and has a high visitation.
- With its recognition by the central authority, the state of Uttar Pradesh has a total of 9 zoos.
- The establishment of this zoo is personally monitored by the Chief Minister of the state.
- The zoo features enclosures for a range of birds, herbivores and carnivores.
- The zoo aims to create awareness through naturalistic enclosures and create long-lasting visitor experience.
- It has state-of-the-art visitor facilities like 4D Theatre, battery-operated train and accessibility to Divyangjan

Link:-

<https://pib.gov.in/Pressreleaseshare.aspx?PRID=1678908>

Construction of new Parliament building : Five – member panel formed

Question : Government has recently formed a five-member committee to oversee construction of the new Parliament building. Who requested the formation of this committee ?

- (a) Lok Sabha Speaker, Om Birla
- (b) Rajya Sabha Chairman, M V Naidu
- (c) Minister of Parliamentary Affairs, P.Joshi
- (d) Home minister, Amit Shah

Answer (a)

Related facts



- Government has recently(1 December 2020) formed a five-member committee to oversee construction of the new Parliament building.
- Lok Sabha Speaker Om Birla requested the formation of this committee.
It is notable that he was given a presentation of the project by the nodal agency for construction.

- CPWD(Central Public Works Department) is the the nodal agency for construction of new Parliament building.

Structure of the committee

- Structure of the committee is as follow —
 1. Joint secretary level three officers — from Lok Sabha Secretariat,CPWD and the Ministry of Housing and Urban Affairs
 2. Two representatives from Tata Projects and HCP respectively.

The committee would act as the link between the Lok Sabha Secretariat and private contractor.

Chronology of Indian Parliament building

Date	Details
12 February 1921	Foundation stone of Parliament house laid down, Founder – H.R.H. the Duke of Connaught
18 January 1927	The opening ceremony was concluded by the Governor General of India, Lord Irwin(Cost of construction — Rs. 83 lakh)
2 September 2019	The government floated a request for proposal for the “development or redevelopment of Parliament Building, Common Central Secretariat and Central Vista.”
	The Central Vista is a grand redevelopment project for building what will be the power corridor of India, having a new Parliament building, a common central secretariat and revamped three-km-long Rajpath, from the Rashtrapati Bhavan to the India Gate. Target for completion of the construction is August, 2022.(Around 75th Independence Day of India)

7 December 2020	Supreme Court allowed ground-breaking ceremony with some conditions
	Conditions — The Supreme Court warned the government not to carry out any work on the Central Vista project until it decides on a bunch of 10 petitions challenging the mega redevelopment plan.

Link:

<https://economictimes.indiatimes.com/news/politics-and-nation/5-member-panel-formed-to-oversee-construction-of-new-parliament-building/articleshow/79498935.cms?from=mdr>

UP government Tharu Tribe promotion scheme

Question: consider the following statements

- Tharu lives mostly live in Terai lowlands around amid Shivaliks and lower Himalayas in Uttar Pradesh, Uttarakhand and Bihar.
- According to the 2011 census, the Scheduled Tribe population in Uttar Pradesh was more than 11 lakh; this number is estimated to have crossed 20 lakh now.
- Tharu tribes mourn Diwali festival.

Which the above are correct

- a) I b) ii c) iii d) all of them

Answer: (d)

Context

- The Uttar Pradesh government has recently embarked upon a scheme to take the unique culture of its ethnic Tharu tribe across the world. The intention is to put Tharu villages on the tourism map, and to create jobs and bring economic independence to the tribal population.



Facts

- The state government is working to connect Tharu villages in the districts of Balrampur, Bahraich, Lakhimpur and Pilibhit bordering Nepal, with the home stay scheme of the UP Forest Department.
- In the scheme tourist will be provided home stay at the houses of Tharu people in their villages.
- People will experience food, culture, artifacts and hospitality of Tharu people.
- The Uttar Pradesh Forest Corporation will train the Tharu people to communicate effectively with visitors, and encourage villagers to acquaint them with aspects of safety and cleanliness, and with the rules of the forest.

Who are Tharu people ?

- The Tharus live in both India and Nepal. In the Indian terai, they live mostly in Uttarakhand, Uttar Pradesh, and Bihar.
- They speak various dialects of Tharu, a language of the Indo-Aryan subgroup, and variants of Hindi, Urdu, and Awadhi. In central Nepal, they speak a variant of Bhojpuri, while in eastern Nepal they speak a variant of Maithili.
- Tharu worship Lord Shiva as Mahadev and call their deity as 'Narayan'.
- Tharu women have stronger property rights as compared to women in other part of north India.

Link:

<https://indianexpress.com/article/explained/explained-who-are-the-tharu-tribals-of-the-up-terai-7095740/>

India in top 10 country in Climate Change Performance Index(CCPI-2021)

Question : Consider the following statements about CCPI 2021:-

- i) It is designed by the German environmental and development organisation Germanwatch e.V.
- ii) It has been continuously published with the help of NewClimate Institute and Climate Action Network International and with financial support from Barthel Foundation since 2005.
- iii) India has achieved 9th rank in the CCPI 2021 .

Which of the following above are correct?

- a) i and ii b) ii and iii
- c) i and iii d) None of the above

Answer: (a)

Context

- Germanwatch along with NewClimate Institute and Climate Action Network International and with financial support from Barthel Foundation has released Climate Change Performance Index 2021.



Facts

- Objective: To enhance transparency in international climate politics.
- First published in 2005 and an updated version is presented at the UN Climate Change Conference annually.
- The CCPI evaluates 57 countries and the European Union, which together generate 90%+ of global greenhouse gas emissions.
- Using standardised criteria, the CCPI looks at four categories, with 14 indicators: Greenhouse Gas Emissions (40% of the overall score), Renewable Energy (20%), Energy Use (20%), and Climate Policy (20%).

- No country has performed well enough in all CCPI index categories to achieve an overall very high rating. The first three positions in the overall ranking therefore remain empty.

Rankings

- Sweden is ranked at top with 4th rank followed by UK and Denmark at 5th and 6th place respectively.
- India is ranked at 10th position, one position down from its 9th position in 2019.
- United States is placed at bottom at 61th position and China the largest producer of green house gas is placed at 33th position.
- Although none of the countries assessed are on the path of achieving their climate change goals as per Paris Agreement for climate change.

Paris Agreement

- The Paris Agreement central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.
- Paris agreement provides for Nationally Determined Contribution (NDC) for each country that the country has to set itself for reaching the ser goals of Paris agreement.
- Paris Agreement was signed in 2015.

Link:

<https://timesofindia.indiatimes.com/india/india-in-top-10-performers-on-climate-change-index/articleshow/79612075.cms>

Arunachal Kiwi gets Organic Fruit Certification

Question: Which state Kiwifruit has first obtained the organic fruit certification?

(a) Arunachal Pradesh (b) Himachal Pradesh (c) Sikkim (d) Meghalaya

Answer: (a)

Related facts:

- Arunachal Pradesh became the first state in India to get the organic fruit certification for the Kiwis grown in Zero Valley.
- The organic certification was provided by the Mission Organic Value Chain Development for North East Region (MOVCD-NER), a scheme for the northeastern states by the Ministry of Agriculture & Farmers' Welfare under the Central government.



- Organic fruit certification implies that there are no chemical fertilisers or pesticides involved in its cultivation process.
- Such certification involves years long strict scientific assessment by the regulatory body, Agricultural and Processed Food Products Export Development Authority (APEDA).
- Kiwis of Ziro Valley — located in Lower Subansiri district — were certified as organic following a standard three-year-process.

About Kiwi fruit:

- The Kiwifruit (*Actinidia deliciosa*) or Chinese gooseberry, originally grew wild in China.
- It was introduced in New Zealand in 1904 by a schoolteacher who had returned from China with the seeds. The New Zealanders called it “kiwi” after their national bird.
- Kiwi is a deciduous fruiting vine native to Yangtze river valley of south and central China. It is also called “China’s miracle fruit” and “Horticulture wonder of New Zealand”.
- A domesticated variety of kiwi was introduced as a commercial fruit only in 2000 in Arunachal Pradesh.
- Kiwi cultivation is conducive to areas experiencing 700-800 chilling hours (no. of hours during which temperature remains at or below 7°C during the winter season).
- The plant can be grown at 800-1500 m. above mean sea level. A rainfall of about 150 cm./year is sufficient.
- Deep, rich, well-drained sandy loam soils are ideal for cultivation of kiwi. A soil pH slightly less than 6.9 results in maximum yield but higher pH upto 7.3 adversely affects the yield due to Mn deficiency.

Links:

<https://indianexpress.com/article/explained/explained-the-rise-of-the-wild-arunachal-kiwi-7074129/>

Digital payment security control directives by RBI

Question: which bank was temporarily stopped by RBI recently from issuing new credit cards and launching new digital banking initiative?

a) SBI b) ICICI c) HDFC d) PNB

Answer: c)

Related Fact:

Context

- RBI has recently barred HDFC bank temporarily from issuing new credit cards and launching new digital banking services because of outage in services at bank in last 2 years.



Facts

- RBI will be issuing digital payment security control direction for regulated entity for improving the security of digital payment channels and also to improve the consumer services offered by these entities.
- The Directions propose the setting up of robust governance structure. It includes implementation of common minimum standards of security controls for mobile banking, internet, and card payments. Digital payments will also be covered in it. It will bring a common standard for mobile banking, internet banking and card payments.
- The credit card transactions have increased by 6.7% between October 2020 and November 2020. In September 2020, the number of credit card transactions was at 1.8 million. It increased to 2.07 billion in October and 2.21 billion in November. This shows the fast transition of India towards digital payments.
- Currently there are no security protocols and authentication method available for debit card, credit card or mobile wallet payments. With ever increasing growth in paperless payment system use, it is imperative to provide for robust security mechanisms.

Link:

<https://www.livemint.com/industry/banking/rbi-to-come-out-with-digital-payment-security-control-directions-das-11607066602813.html>

Voting rights of NRI

Question: Consider the following statement:

i) Indian government has given voting rights to NRIs since Independence.

ii) NRIs can vote through postal ballots.

Which of the above statements are correct?

a) I b) ii c) both d) none

Answer: (d)

Related Fact:

- Election Commission (EC) has approached the Law Ministry to permit NRIs to cast their votes through postal ballots.
- Till now an NRI can only vote in the constituency in which her place of residence, as mentioned in the passport, is located. She can only vote in person and will have to produce her passport in original at the polling station for establishing identity.
- NRIs got voting rights only in 2011 by an amendment to the Representation of Peoples Act, 1950.



Current voting procedure in India

The Government of India allows its citizens to vote in three different ways namely by post, in person and through proxy. Proxy voting was introduced in 2003, only for NRIs residing in few listed countries. On the other hand, postal ballot involves ballots being sent by posts.

The Supreme Court in 2013 and 2014 formed a 12-member committee. Committee was to study the three main options for voting i.e. online voting, voting by post and

voting at an Indian mission abroad. Online polling was rejected as it felt that it could compromise the secrecy of voting. The Committee also recommended that additional alternative options of proxy voting and e-postal ballot voting should be provided. The Law Ministry agreed to the recommendations made on proxy voting.

Conclusion

- Currently postal ballots are allowed for some class of citizen, present proposal is for overseas citizen of India.

Link:

<https://indianexpress.com/article/explained/how-nris-could-vote-by-post-7088800/>

6th India International Science Festival 2020

Question: Consider these statements:

i) 6th India International Science Festival 2020, is being organized by Ministries of Science and Technology, Earth Sciences, Health and Family welfare, GOI.

ii) Event theme is “Innovate for India”.

Which of the above statements are correct?

a) I b) ii c) i and ii both d) none

Answer: (a)

- 6th India International Science Festival 2020, will be organized by ministry of Science and Technology, Earth Sciences, Health and family welfare, GOI in virtual mode between 22-25 December 2020.
- Theme of event is, “Science for Self-reliant India and Global Welfare.”
- Speaking at the curtain raiser for the 6th India International Science Festival 2020 being organized by Council of Scientific and Industrial Research and Institute of Mineral and Materials Technology, Minister of petroleum and natural gas, Dharmendra Pradhan has appealed the scientific community to “Innovate for India”(I4I) and create competitive advantage to make India atmanirbhar.



Link:

<https://www.newindianexpress.com/states/odisha/2020/dec/06/dharmendra-pradhan-urges-scientiststo-innovate-for-india-2232508.html>

Ministry of Social Justice & Empowerment : New initiatives for Transgender community

Question : Which one of the following initiative has recently(November 2020) launched by Ministry of Social Justice & Empowerment ?

(a) National Portal for Transgender Persons



(b) A skill development center for Transgender Persons

(c) An University for Transgender Persons

(d) None of the above

Answer (a)

Related facts

Ministry of Social Justice & Empowerment(MoSJE) has recently(November 2020) launched new initiatives for transgender community.

These initiatives are as follows —

Initiative	Details
National Portal for Transgender Persons	Launching date – 25 th November 2020
	e-Launched by MoSJE Minister Thaawarchand Gehlot in Vadodara,Gujarat
	Portal would help a transgender person in applying for a Certificate and Identity card digitally from anywhere in the country
	It helps the transgender person to get the I-Card without any physical interface and without having to visit any office
	Once the Certificate and I-card are issued, the applicant can download them from the Portal itself. In case of delay or rejection, the applicant has the options to submit grievances through the Portal which are forwarded to the concerned person and will be resolved at the earliest.
	The portal will play an important role in compliance with the Transgender Persons (Protection of Rights) Act, 2019.
Garima Greh: A Shelter Home for Transgender	Inauguration date – 25th November 2020

Persons	
	e-Inaugurated in Vadodara,Gujarat by MoSJE Minister
	It will be run in association with Lakshya Trust(entirely run by the Transgenders).
	Basic facilities such as shelter, food, medical care and recreation will be provided in the Garima Greh.
	It will provide support for the capacity-building/skill development of persons in the Community
	Ten cities have been identified to set up the 13 Shelter Homes
	The cities include Vadodara, New Delhi, Patna, Bhubaneswar, Jaipur, Kolkata, Manipur, Chennai, Raipur, Mumbai, etc.
	The scheme will rehabilitate a minimum of 25 transgender persons in each Garima Greh(a pilot project).

Other efforts towards ensuring welfare of Transgender persons

- The Transgender Persons (Protection of Rights) Act, 2019 came into effect on 10th January 2020 which is the first concrete step towards ensuring welfare of Transgender persons.
- Transgender Persons (Protection of Rights) Rules, 2020 Notified on 29 September, 2020.

Link:

<https://pib.gov.in/PressReleaselframePage.aspx?PRID=1675629>

WHO expects 500 million doses of the COVID-19 vaccine in the first quarter of 2021

Question: Which of the following statement is incorrect regarding the COVAX Initiative planned by WHO?

The initial plan of the COVAX initiative is to vaccinate-

- a) At least 20 percent of the high-risk population in the participating countries
- b) Healthcare workers c) Frontline workers
- d) All the people below the age of 65 years.

Answer: (a)

Related Facts:

- On December 4, 2020; The World Health Organization (WHO) announced that it is hoping to have at least 500 million doses of the COVID-19 vaccine in the first quarter of 2021 through the COVAX facility.
- WHO Chief Scientist Soumya Swaminathan stated in this regard at the Geneva news conference on December 4, 2020.

COVAX Initiative:

- COVAX is co-led by Gavi, the Coalition for Epidemic Preparedness Innovations (CEPI) and WHO.
- Its aim is to accelerate the development and manufacture of COVID-19 vaccines, and to guarantee fair and equitable access for every country in the world.
- 189 countries till now have joined the COVAX facility.
- The initial plan of the COVAX initiative is to vaccinate at least 20 percent of the high-risk population in the participating countries.
- It will include-

I. Healthcare workers

II. Frontline workers

III. People above the age of 65 years.

- Soumya Swaminathan, who is at present WHO Chief Scientist, said that the WHO's goal is to get at least 2 billion doses by the end of 2021.
- WHO thinks that above amount will be enough to vaccinate 20 percent of the populations of countries that are part of COVAX.
- As per WHO, this would be enough to bring to an end the acute phase of the COVID-19 pandemic by reducing mortality rate and the impact on health systems.
- WHO is optimistic that out of the 2 billion doses, about half a billion is expected to be available for distribution across countries in a fair manner in the first quarter of 2021.
- WHO Chief said that some countries possibly start getting vaccine doses by the end of the first quarter of 2021.



- She expressed hope that few countries may start vaccination earlier as well.
- The majority of the vaccine tranches are expected to start moving out to the respective countries in the second quarter of 2021.
- Main Objectives of COVAX Facility:-
- It aims to help buy and manufacture and equitably distribute COVID-19 vaccine shots across the world.
- It wants to ensure that the safest vaccine reaches each corner of the world.
- The facility is working alongside governments to ensure the effective COVID vaccine is available worldwide.
- It is ensuring that all participating nations must get the best chance of gaining fast access to doses of the most effective COVID-19 vaccine.

Links:-

<https://www.hindustantimes.com/world-news/who-hopes-to-have-500-million-vaccine-doses-via-covax-scheme-in-first-quarter-2021/story-nq4JJeBtq4evDvNB1PKLYL.html>

Digitised online Human Resource Management System of Indian railway

Question : Indian Railway has recently(November 2020) launched different modules of HRMS(Human Resource Management System). These completely digitized online modules of HRMS are expected to create a big impact on the functioning of all the employees and will make them more tech savvy. Which of the following module has been launched ?

- (1)Employee Self Service module
- (2)Provident Fund Advance module
- (3)Settlement module

Answer with the help of codes given below —

- (A)Only (1) (B)Only (2) (C)Both (1) & (2)
(D)All (1),(2) & (3)

Answer (D)
Related facts



- Indian Railway has launched different modules of HRMS(Human Resource Management System) through video conferencing on November 26, 2020.
- These completely digitized online modules of HRMS are expected to create a big impact on the functioning of all the employees and will make them more tech savvy.
- The modules will benefit over 2.5 million families of both serving and retired Railway employees.

Objective

- It is a step towards realizing the vision of Hon'ble Prime Minister to transform India into a digitally empowered society and knowledge economy.

Modules

- Three modules have been launched which are as follows —

Modules	Details
Employee Self Service(ESS)	This module enables railway employees to interact with various modules of HRMS including communication regarding change of data.
Provident Fund(PF) Advance	This module enables Railway employees to check their PF balance and apply for PF advance online. Advance processing will be online, and employees will also be able to see the status of their PF application online.
Settlement	This module digitizes the entire settlement process of retiring employees. Employees can fill their settlement / pension booklet online. Service details are fetched online, and pension is processed online completely. This will eliminate use of paper and it also facilitates monitoring for timely processing of settlement dues of retiring employees.

Several other modules of HRMS are already operational in the Indian Railways such as —

1. Employee Master module
2. Electronic Service Record module
3. Annual Performance Appraisal Report (APAR) module
4. Electronic Pass module

HRMS is a high thrust project for Indian Railways to leverage improved productivity and employee satisfaction.

Link:

<http://newsonair.com/News?title=Railway-launches-completely-digitized-online-Human-Resource-Management-System&id=405021>

Ministry of Electronics & IT : Blocking of 43 mobile apps

Question : Government of India has recently issued an order for blocking 43 mobile apps. This order has been issued under which act ?

- (a) Section 69A of the Information Technology Act
- (b) Section 68A of the Information Technology Act

(c) Section 67A of the Information Technology Act

(d) Section 66A of the Information Technology Act

Answer : (a)

Related facts

- Government of India has recently (November 2020) issued an order for blocking 43 mobile apps.
- The order has been issued under Section 69A of the Information Technology Act.

Background

- The order was given based on the inputs regarding these apps for engaging in activities which are prejudicial to sovereignty and integrity of India, defence of India, security of state and public order.

Role of I4C

- Above mentioned inputs were given by the I4C (Indian Cyber Crime Coordination Center).
 - I4C deals with Cybercrime in India, in a coordinated and effective manner.
 - It is affiliated to the Ministry of Home Affairs, Government of India.
- Formerly blocked mobile apps —

Date	Number of apps
29th June, 2020	59
2nd September, 2020	118

- Government is committed to protect the interests of citizens and sovereignty and integrity of India on all fronts and it shall take all possible steps to ensure that.

Link:

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1675335#:~:text=MEITY%20issues%20order%20for%20blocking,of%20the%20Information%20Technology%20Act&text=Ministry%20of%20Electronics%20and%20Information,access%20to%2043%20mobile%20apps.>

Child-friendly police station

Question: Maharashtra's first child-friendly police station has been launched in which city?

(a) Pune (b) Mumbai (c) Nagpur (d) Aurangabad



Answer: (a)
Related facts:

- On 1st December 2020, a 'Balsnehi(child-friendly) police station' has been set up on the premises of the Lashkar Police Station in Pune Camp.
- The police station has been set up in accordance with guidelines laid down by the National Commissioner for Protection of Child Rights.
- In a first-of-its-kind initiative, the child-friendly police station provides a curative and preventive approach at rehabilitating children in need.
- The police station aims to prevent juvenile crimes and raise the moral standard of children.
- The police station provides a compatible environment so that children can report cases without fear.

Links:

<https://indianexpress.com/article/cities/pune/states-first-child-friendly-police-station-inaugurated-in-pune-7074508/>

Best Performing Police Stations in India

Question: Which has been chosen the best performing Police Station in the country?

- (a) NongpokSekmai, Manipur (b) Kharsang, Arunachal Pradesh
(c) Sanguem, Goa (d) Pakyong, Sikkim

Answer: (a)
Related facts:

- On 3 December 2020, Ministry of Home Affairs published the list of best performing Police Stations.
- The move aims to incentivize more effective functioning of police stations and bring healthy competition among them.
- This is in accordance with the directions of the Prime Minister Narendra Modi, while addressing the Directors General of Police during the 2015 Conference in Kutch, Gujarat.



Best Performing Police Station:

- Nongpok Sekmai police station in Manipur's Thoubal district has been chosen as best performing Police Station in the country.
- AWPS-Suramangalam police station in Tamil Nadu's Salem district and Kharsang in Arunachal Pradesh's Changlang district have been adjudged as the second and third best performing police stations.
- These police stations have been ranked on the basis of data analysis, direct observation and public feedback.

Links:

<https://pib.gov.in/PressReleaselframePage.aspx?PRID=1677906>

Orunodoi scheme

Question: Which state government has launched the Orunodoi scheme?

(a) Assam (b) Tripura (c) Odisha (d) Karnataka

Answer: (a)

Related facts:

- On 1 December 2020, Assam government launched the 'Orunodoi' scheme.
- The scheme aims to cater to the health and nutritional needs of poor families and relieve them of the distress of poverty.
- As per scheme, financial assistance of 830 Rs will be credited to the bank accounts of the women of the families.
- The scheme will provide assistance to over 18 lakh families in the state
- The scheme will be rolled out initially in 29 districts.

**Links:**

<http://newsonair.com/Main-News-Details.aspx?id=405307>

First Ever Virtual Aadi Mahotsav

Question: Consider the following statements:

(1) Tribal Affairs Minister Arjun Munda launched the first ever Virtual Aadi Mahotsav on December 1, 2020.

(2) Aadi Mahotsav is a national tribal festival commenced in 2017.

Of the above correct statement/s is/are:

- (a) Only 1 (b) Only 2
(c) Both 1&2
(d) None of the above

Answer: (c)

Related facts:

- On 1 December 2020, Tribal Affairs Minister Arjun Munda launched the first ever virtual edition of Aadi Mahotsav- Madhya Pradesh.
- The 10-day long Aadi Mahotsav will showcase the tribal craft and culture of Madhya Pradesh on the Tribes India website.



- Aadi Mahotsav is a national tribal festival and a joint initiative of Ministry of Tribal Affairs, Government of India & Tribal Cooperative Marketing Development Federation of India (TRIFED).
- It was commenced in year 2017.

Links:

<https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1677381>

UP govt passes ordinance to ban unlawful religious conversions for marriage

Question: Which state has passed the ordinance to ban unlawful religious conversions for marriage?

(a) Jharkhand (b) Rajasthan (c) Uttar Pradesh (d) Tripura

Answer: (c)

Related facts:

- On 28 November 2020, Governor Anandiben Patel gave her assent to The Uttar Pradesh Prohibition of Unlawful Conversion of Religion Ordinance, 2020.
- The ordinance deals with religious conversion for the sake of marriage. It declares those religious conversions null and void done solely for the marriage.
- Uttar Pradesh became the third state after Haryana and Madhya Pradesh to seek a law to check such unlawful religious conversions.



Provisions:

- The law prohibits conversion from one religion to another by “misrepresentation, force, fraud, undue influence, coercion, allurement or marriage”.
- The ordinance treats this as cognizable and non-bailable offence and provides for a jail term of 1 to 5 years and a minimum fine of Rs 15,000.

- In case of minor woman or a woman from the Scheduled Caste or Scheduled Tribes communities, unlawful religious conversion will attract jail term of 3 to 10 years with a fine of ₹25,000.
- The ordinance provides for cancellation of registration of social organisations conducting mass conversions, imprisonment of 3 to 10 years and Rs 50,000 penalty.
- Those who want to convert their religion after marriage will have to submit application by two months in advance.
- The law came into force with immediate effect after its approval by the Governor.

Links:

https://images.assettype.com/barandbench/2020-11/091266ee-6a3b-46e3-ae24-f4dbc9770456/Uttar_Pradesh_Interfaith_ordinance_2020.pdf

Essential Services Maintenance Act (ESMA)

Question: Which state has invoked Essential Services Maintenance Act (ESMA) on November 25, 2020?

(a) Uttar Pradesh (b) Kerala (c) West Bengal (d) Odisha

Answer: (a)

Related facts:

- On 25 November 2020, Uttar Pradesh government has imposed Essential Services Maintenance Act (ESMA) in the state.
- The Act will be in effect for six months.
- The Essential Services Maintenance Act, 1968 empowers state government to prohibit the strikes in workplaces for a period of six months.
- Those instigating strikes will be treated imprisonment for a term which may extend to one year, or fine which may extend to Rs 1,000, or with both.
- Earlier the act was imposed in the state on 22nd May this year.



Links:

<https://www.nationalheraldindia.com/national/essential-services-maintenance-act-invoked-in-uttar-pradesh-section-144-in-lucknow>

Shipping Ministry renamed

Question:What is the new name of shipping ministry?

- (a) Ministry of Maritime Affairs
- (b) Ministry of Shipping and Ports
- (c) Ministry of Ports, Shipping and Waterways
- (d) Ministry of Waterways



Answer: (c)

Related facts:

- On 8th November 2020, Prime Minister Narendra Modi renamed the Ministry of Shipping as the Ministry of Ports, Shipping and Waterways.
- The name gives more clarity to the work done by Shipping Ministry as it has been handling Ports and Waterways works in India.
- In most of the advanced economies, the Shipping Ministry is also responsible for Ports and Waterways.

Links:

<https://pib.gov.in/PressReleasePage.aspx?PRID=1671210#:~:text=The%20Prime%20Minister%20renamed%20the,more%20clarity%20in%20the%20work.>

Ro-Pax ferry service

Question: Prime Minister Narendra Modi launched Ro-Pax ferry service between which ports in Gujarat?

- (a) Hazira and Ghogha (b) Dahej and Ghogha (c) Broach and Koka
- (d) Sikka and Mandavi

Answer: (a)

Related facts:



- On 8th November 2020, Prime Minister Narendra Modi e-inaugurated the Ro-Pax terminal at Hazira and flagged off the Ro-Pax ferry service between Hazira and Ghogha in Gujarat.
- The Ro-Pax ferry service will work as a Gateway to South Gujarat and Saurashtra region.
- The improved connectivity between South Gujarat and Saurashtra region will shorten the distance from 370km to 90km.

- The enhanced connectivity will reap greater inflows of tourist visiting Asiatic lion in Gir National Park Gujarat.

Links:

<https://pib.gov.in/PressReleaselframePage.aspx?PRID=1671210>

International International Conference on Gender Equality

Question: Second edition of International Conference on Gender Equality (ICGE) in February 2021 the will begin at-

a) Kozhikode b) Chennai c) New Delhi d) Kolkata

Answer: (a)

Related Facts:-



- On 11 February 2021 the second edition of International Conference on Gender Equality (ICGE) will begin for three days at Kozhikode, Kerala.
- The Gender Park, in partnership with UN Women, is organizing this conference in coming February.
- The conference will help in enabling stakeholders to engage with different aspects of sustainable entrepreneurship and social businesses.
- The conference will be held at the Gender Parks Kozhikode campus in a partially- digital (hybrid) format, given the prevalence of Covid-19.
- The focal theme is Gender in Sustainable Entrepreneurship and Social Business: 'The Mediating Role of Empowerment, seeking to throw light on the critical linkages between entrepreneurship, economic growth and poverty reduction'.
- Kerala Minister for Health, Social Justice and Women & Child Development K K Shailaja announced the conduct of the conference by releasing the brochure.
- UN Women Deputy Country Representative Nishtha Satyam, Biju Prabhakar, Secretary, Social Justice and Women & Child Development will be present on the occasion.
- Dr P T M Sunish, CEO of The Gender Park, an autonomous body under the state government, will also be present on the occasion.
- Around 50 speakers, primarily industry experts and academics, will address the event featuring several delegates.
- The conference will include budding entrepreneurs and social innovators from national and international quarters. They will share knowledge and experiences.
- Shailaja said the conference envisages an initiation of policy-level dialogue and gender-sensitive interventions for socially-inclined entrepreneurship models.
- The Gender Park had in November 2015 hosted the first ICGE in association with UN Women.

- **The Gender Park:**
- The Gender Park was established in 2013, is an initiative of the Government of Kerala to work towards gender equality and empowerment in the state.
- It is headquartered in the state's capital, Thiruvananthapuram.
- Its main 24-acre campus is set at Silver Hills, Kozhikode

Links:-

<https://www.hindustantimes.com/kerala/kerala-gender-park-to-host-3-day-global-meet-at-kozhikode-in-february/story-FqjFrzXKye1XzzEGJE69BN.html>

Global Terrorism Index 2020

Question: Consider the following statements:

(1) Global Terrorism Index 2020 ranks Afghanistan as the most terrorism impacted country.

(2) India has been ranked 8th in the Global Terrorism Index 2020.

Of the above correct statement/s is/are:

(a) Only 1 (b) Only 2 (c) Both 1&2 (d) None of the above

Answer: (c)

Related facts:

- Global Terrorism Index 2020 has been published.
- It is issued annually by the Institute for Economics and Peace (IEP), Sydney (Australia) to measure the impact of terrorism on the countries.
- It took 163 countries, 99.7 per cent of the world's population in its study.



The Index 2020:

- Afghanistan with GTI score of 9.592 is impacted most by terrorism. It is followed by Iraq, Nigeria, Syria and Somalia under top 5.
- India with a GTI score of 7.353 is the 8th most impacted country by terrorism. Its neighbor Pakistan has been adjudged 7th rank.
- Uzbekistan is the least affected country on 134th rank. Qatar is on 133rd position.

World facts:

- In 2019, deaths from terrorism fell for the fifth consecutive year, after peaking in 2014. The total number of deaths fell by 15.5 per cent to 13,826.
- South Asia remains the region most impacted by terrorism in 2019.
- The largest increase in deaths from terrorism occurred in Burkina Faso, where deaths rose from 86 to 593, a 590 per cent increase.
- The four terrorist groups responsible for the most deaths in 2019 were the Taliban, Boko Haram, ISIL and Al-Shabaab.

- The Taliban were the deadliest terrorist group for the second consecutive year.

India in the Report:

- India has been ranked 8th recording 558 terrorist attacks and 277 deaths from terrorism in 2019.
- Jammu and Kashmir remained the region most impacted by terrorism in 2019, with 165 attacks, resulting in 103 deaths, most of which were perpetrated by Islamist groups.
- The second most impacted region was Chhattisgarh, in the centre of the red corridor. Chhattisgarh suffered 85 attacks in 2019, resulting in 53 deaths, all from Maoist extremists.
- In 2019, Maoists, the Communist Party of India (Maoist) and Jaish-e-Mohammad (JeM) were responsible for over two thirds of the total deaths and almost half of the total attacks.

Links:

<https://www.visionofhumanity.org/wp-content/uploads/2020/11/GTI-2020-web-1.pdf>

U.K. becomes first country to approve coronavirus vaccine

Question: Which is the first country to approve the coronavirus vaccine?

(a) United Kingdom (b) United States of America (c) Germany (d) Spain

Answer: (a)

Related facts:

- Britain has become the first country in the world to approve the Pfizer-BioNTech coronavirus vaccine on December 2, 2020.
- The vaccine will be made available for general use next week.
- Its approval by the British regulatory body MHRA (Medicines and Healthcare products Regulatory Agency) came after a final analysis of the Phase 3 trial of the vaccine which shows it was 95% effective in preventing infections, even in older adults, and caused no serious safety concerns.
- Before UK, similar approvals for emergency use of coronavirus vaccine has been given by Russia and China.



- However, scientists cautioned then that nodding for public use without results of phase 3 trials can be dangerous and even life threatening.

Links:

<https://edition.cnn.com/2020/12/02/uk/pfizer-coronavirus-vaccine-uk-intl-hnk/index.html>

Economics

NPCI data : UPI market share of different online payment service providers

Question: Which companies have more than eighty two percent share of UPI market (in volume terms) in November 2020 ?

- (a) BHIM and WhatsApp (b) BHIM and Paytm (c) Amazon Pay and WhatsApp
(d) None of the above

Answer- (d)

Related facts]

- NPCI(National Payments Corporation of India) prescribes rules, regulations, guidelines, and the respective roles, responsibilities and liabilities of the participants, with respect to UPI.
- It has recently (December 2020) released the share pattern of UPI market which are as follows —



Online payment service providers	Volume(in November 2020) (mn)	Value(in November 2020) (in crore rupees)
Google Pay	960.02	161418.19
PhonePe	868.40	175453.85
Paytm Payments Bank	260.09	28986.93
Amazon Pay	37.15	3524.51

BHIM	23.56	7472.20
WhatsApp	0.31	13.87

- Above mentioned table shows that Google Pay and PhonePe together have more than 82 per cent of the market by volume and more than 86 per cent by value.
- Google Pay, PhonePe, Paytm, and Amazon Pay account for 96.17 per cent of the UPI market by volume and 94 per cent by value.

Capping on third-party applications (apps)

- It is notable that NPCI had recently imposed 30-per cent cap on third-party applications (apps) on total volume transactions processed via UPI, effective January 1, 2021.
- However, the existing third-party app providers processing over 30 per cent transactions will have a period of two years from January 2021, to comply with the same in a phased manner.
- This move is aimed at derisking the concentration risk from one or two players that currently dominate the UPI market share and ensure new players are given equal opportunity.

Link:

https://www.business-standard.com/article/companies/google-pay-phonepe-account-for-82-of-upi-market-by-volume-in-nov-120120701276_1.html

Contraction in India's economy : ADB forecast (Asian Development Outlook Supplement)

Question : How much contraction in India's economy estimated in financial year 2021?

(a) 8 percent (b) 7 percent (c) 9 percent (d) none of the above

Answer- (a)

Related facts

- ADB (Asian Development Bank) has recently (December 2020) upgraded its forecast for the Indian economy.

Upgradation/Forecast

- Contraction in India's economy is estimated at eight percent in financial year 2021 (2020-21).
- It was estimated at nine percent earlier.
- This upgradation is due to back of faster recovery.

- Growth will return in 2021-22, at 7.2 per cent in South Asia and 8 per cent in India,

Inflation forecast

- With regard to inflation, ADO (Asian Development Outlook supplement) said, it is expected to ease in the coming months, and the 4 per cent update projection for 2021-22 is maintained.
- In India, supply chain disruption brought food inflation to an average of 9.1 per cent in the first 7 months of 2020-21, pushing headline inflation to 6.9 per cent in the same period.
- As a result, ADO revised India's inflation from 4.5 percent to 5.8 percent for the current fiscal.

Link:

https://www.business-standard.com/article/pti-stories/india-s-recovery-faster-than-expected-ADB-cuts-contraction-projection-to-8-for-fy21-120121000587_1.html

Draft guidelines on standard personal accident insurance policies

Question : On which date draft guidelines on standard personal accident insurance policies issued?

- (a) 4 December 2020 (b) 2 December 2020 (c) 29 November 2020
(d) None of the above

Answer : (d)

Related facts

- IRDAI has recently (9 December 2020) issued draft guidelines on standard personal accident insurance policies.
- All general and standalone health insurers will have to offer this product from April 1, 2021.



Entry age

- The minimum and maximum entry age has been kept at 18 years and 70 years, respectively.
Minimum & Maximum sum assured
- Minimum & Maximum sum assured will be in range of 2.5 lakh rupees to rupees one crore respectively.

Objective

- IRDAI wants to enforce a standard product with common coverage across the sector.

Benefit

- Irdai proposed a payout equal to 100% of the sum insured in case of death or permanent total disablement because of the accident.
- For permanent partial disablement, the payout percentage will vary according to the type of disablement.
- These will be mandatory insurance benefits.
- Insurers can offer optional covers along with the base plan, which will provide coverage for temporary total disablement and education grant for dependent children.
- The optional cover will also pay out up to 10% of the base sum insured for hospitalization for a minimum of 24 hours as the result of an accident.

Link:

https://m.hindustantimes.com/business-news/rs-1-crore-cap-in-draft-norms-on-standard-accident-insurance-policies-irdai/story-yo70KmV8nJrMAWtJrsFAAM_amp.html

Exim Bank to provide \$ 448 million line of credit for Uzbekistan

Question: Exim Bank of Which of the following country has recently signed a lone agreement of \$ 448 million with Uzbekistan?

a) India b) China c) USA d) Japan

Answer: (a)

Related Facts:-

- On 12 December 2010; Exim Bank has extended a Line of Credit (LOC) of \$448 million to the Government of Republic of Uzbekistan.
- This Line of Credit (LOC) is being provided to Uzbekistan on behalf of the Government of India.
- It should be known that Export-Import Bank (Exim-Bank) is a specialized financial institution, wholly owned by Government of India.
- The LOC, extended to Uzbekistan by India, is for financing various projects in the Roads & Transport, Water and Technology & Communication sectors in that country.
- With the signing of this LOC Agreement, Exim Bank has now in place 266 Lines of Credit, covering different companies.
- There are 62 countries in Africa, Asia, Latin America, CIS and the Oceania, with credit commitments of around \$26.59 billion, available for financing exports from India.
- Besides promoting India's exports, Exim Bank's LOCs enable demonstration of Indian expertise and project execution capabilities in emerging markets.



Links:-

<https://www.thehindubusinessline.com/money-and-banking/exim-bank-extends-loc-of-448-million-to-uzbekistan/article33314032.ece>

V shaped economy recovery

Question: Which of the following statements are correct:

i) V shaped economy recovery means deep recession followed by sharp rise back.

ii) It is result of government's easy money policy and economic stimulus.

a) I b)ii c)both i and ii d) none

Answer: (c)

Related Fact:

- A V-shaped recovery is a type of economic recovery that resembles the shape of alphabet V in charting.
- The Finance Ministry in its latest Monthly Economic Review report has stated that the Indian Economy is witnessing a V-shaped recovery .The decline in GDP has narrowed to 7.5% in the second quarter of 2020-21 from 23.9% in April-June quarter.



Easy Money Policy

An **easy money policy** is a monetary policy that increases the money supply usually by lowering interest rates. It occurs when a country's central bank decides to allow new cash flows into the banking system. Since interest rates are lower, it is easier for banks and lenders to loan money, thus likely leading to increased economic growth.

Link:

<https://indianexpress.com/article/business/economy/indian-economy-witnessing-v-shaped-recovery-finance-ministry-finmin-report-7084331/>

Scientific

Defense/Science Short Notes

DRDO, Indian Navy conduct successful maiden test trial of
SAHAYAK-NG

Question: which of the following statements are correct?

a) SAHAYAK-NG is India's first indigenously designed and developed Air Dropped Container.

b) It was developed by Defence Research and Development Organisation (DRDO) along with partnership of local industries.

i) a ii) b iii) a and b iv) None of the above.

Answer: iii)

Context

- Defence Research and Development Organisation, DRDO along with Indian Navy has



conducted the successful maiden test trial of SAHAYAK-NG.

- Facts
- SAHAYAK-NG is India's first indigenously designed and developed Air Dropped Container.
- It was dropped from IL 38SD aircraft of Indian Navy off the coast of Goa.
- It will enhance Indian Navy's operational logistics capabilities and provide critical engineering stores to ships which are deployed more than 2000 km from the coast.
- It reduces the requirement of ships to come close to the coast to collect spares and stores.
- Sahayak-NG is GPS aided air dropped container and have the capability to carry a payload that weighs up to 50 kg and can be dropped from heavy aircraft.
- It is advanced version of SAHAYAK Mk 1.
- Two DRDO laboratories, NSTL, Visakhapatnam and ADRDE, Agra were involved in the development of SAHAYAK-NG container along the industry partner M/s Avantel for GPS integration.

Reference: <http://newsonair.com/Main-News-Details.aspx?id=407001>

Indian Space Start-up tested Solid fuel Rocket

Question: Which of the following Indian Space Start-up has recently tested Solid fuel Rocket named as Kalam-5?

- a) Skyroot Aerospace b) Dhruva Space c) Bellatrix Aerospace
d) Manastu Space Technologies

Answer: (a)

Related Facts:-

- On 22 December 2020; Skyroot Aerospace, has successfully test-fired a solid propulsion rocket engine.
- Skyroot Aerospace is a Hyderabad based start-up in the space sector, which test-fired a rocket engine named as Kalam-5.
- Testing was done at a private test facility, in Nagpur last week, owned by Myntra Solar Industries.
- Solar Industries is a major explosives manufacturer and a leading Space and Defence contractor and also a partner and investor in Skyroot.
- It is the country's first private sector company to successfully test-fire a solid propulsion rocket stage engine designed and developed by it.
- It has been built with advanced carbon composite structure in a completely automated process.
- A carbon composite case is challenging to design and manufacture and is five times lighter than steel.
- This is Skyroot's first of five Kalam series of solid rocket motors. The remaining four motors are in various stages of manufacturing and are expected to be tested in 2021.



- Kalam-5 is a demonstrator solid rocket propulsion stage with exactly same propellant, materials and interfaces as the three solid propulsion stages of Vikram-1 launch vehicle.
- It gives a peak Sea Level thrust of 5.3kN and is designed to take 66 atmospheres and 30000C of combustion pressure and temperature respectively. This is also 1:4 scale in size of Vikram-1 third stage.
- Solid motors are high-thrust, low-cost rocket engines with propellant in solid form. They are highly reliable as they have very few moving parts.
- Co-Founder and CEO of Skyroot Pawan Kumar Chandana, said that Kalam-5 uses 15 different advanced materials, nine different manufacturing processes, and has zero moving parts.
- Naga Bharath Daka, Co-Founder and COO, said that to express a tribute to our beloved and renowned rocket scientist Dr APJ Abdul Kalam, we named our solid propulsion stages.
- Chandana also said that this is a major milestone for Skyroot and for the Indian private space sector.
- He informed that the test results closely matched our predictions and this success gives great confidence for our Vikram-I vehicle development.
- It has also been informed by him that test-firing of Vikram-1 launch vehicle's 3rd Stage (Kalam-100) is planned in a few months at ISRO facilities
- Skyroot Aerospace is aiming at its first launch vehicle Vikram-I with the help of ISRO in December 2021.
- Skyroot is backed by funding by Mukesh Bansal of Myntra, Solar Industries, Vedanshu Investments and others.

Links:-

<https://www.thehindubusinessline.com/news/science/skyroot-aerospace-test-fires-solid-propulsion-rocket-engine/article33435557.ece>

Yaogan-33 a new remote sensing satellite

Question: Yaogan-33 is a new remote sensing satellite, which has recently been launched by-

a) Japan b) China c) South Korea d) North Korea

Answer: (b)

Related Facts:-

- On 27 December 2020; China has successfully launched the Yaogan-33 a new remote sensing satellite into space.
- It was launched aboard a Long March-4C rocket and entered the planned orbit successfully.
- According to Xinhua news agency the satellite was launched from the Jiuquan Satellite Launch Centre in northwest China.
- It was the 357th flight mission of the Long March carrier rocket series, the report said.
- The mission also sent a micro and nano technology experiment satellite into orbit.



- The two satellites will be used for scientific experiments, land resources survey, crop yield estimation and disaster prevention and reduction.

Links:-

<https://economictimes.indiatimes.com/news/science/china-launches-remote-sensing-satellite/articleshow/79986213.cms>

COVID-19 Vaccine Market Dashboard

Question: On 21 December 2020; the COVID-19 Vaccine Market Dashboard has been launched by-

a) WHO b) UNICEF c) USA d) UNESCO

Answer: (b)

Related Facts:

- On 21 December 2020; UNICEF has launched the COVID-19 Vaccine Market Dashboard.
- It is an interactive tool to help track the developments in the rapidly evolving Covid-19 vaccine market.
- It will work as the designated procurement coordinator and procurement agent for COVAX.
- It will also monitor the efforts of the COVAX Facility to ensure fair and equitable access for every country in the world.
- **In this first release, the dashboard provides a regularly updated overview about-**
 - The global research and development pipeline.
 - The projected production capacity.
 - Publicly announced bilateral and multilateral supply agreements, as well as reported price points.
 - Once the ongoing joint UNICEF-PAHO tender on behalf of the COVAX Facility is complete, the dashboard will be expanded to provide visibility on progress towards the goal of the COVAX Facility to secure 2 billion vaccine doses by the end of 2021.
 - In 2021, the dashboard will provide an update on the status of procurement by UNICEF and other buyers participating in the COVAX Facility.
 - It will also track the status of deliveries by UNICEF and other participating national and institutional buyers.
 - The COVID-19 Vaccine Market Dashboard is a testament to UNICEF's firm commitment to transparency, recognizing that the free flow of information and correcting information asymmetries is critical to underpin efficient markets.



ABOUT COVAX

- COVAX is one of three pillars of the Access to COVID-19 Tools (ACT) Accelerator.
- It was launched in April 2020; by the World Health Organization (WHO), the European Commission and France in response to this pandemic.
- COVAX Brought together governments, global health organisations, manufacturers and scientists etc.
- The aim of COVAX is providing innovative and equitable access to COVID-19 diagnostics, treatments and vaccines.
- It is the only truly global solution to this pandemic because it is the only effort to ensure that people in all corners of the world will get access to COVID-19 vaccines once they are available, regardless of their wealth.

Link:-

<https://www.unicef.org/press-releases/unicef-launches-covid-19-vaccine-market-dashboard>

Vaccine for new Corona Virus Strain can be developed in Six Weeks

Question: Which of the following company has recently declared that it can develop vaccine for new corona virus strain in just six weeks?

a) Bharat Biotech b) Jyudus Cadila c) BioNTech d) Moderna

Answer : (c)

Related Facts :

- On 22 December 2020; German pharmaceutical company BioNTech declared that if needed, it could also provide a vaccine to combat the new strain of corona virus in six weeks.
- It should be known that around second week of December 2020 the new SARS-CoV-2 variant was revealed to be the reason behind the rapid surge in Covid-19 cases in South and East England.
- This new strain of corona virus is being referred to as VUI (Variant Under Investigation) 202012/01, or the B.1.1.7 lineage.
- UK Health Secretary Matt Hancock told the House of commons on 14 December 2020.
- UK authorities have already notified the World Health Organization about the variant.
- Public Health England (PHE) announced that 1,108 cases with this variant have been identified as of 13 December 2020, predominantly in the South and East of England.
- The variant is the result of multiple mutations in the spike protein of the novel coronavirus SARS-CoV-2, as well as mutations in other genomic regions of the RNA virus.
- Ugur Sahin, the co-founder of BioNTech said that there is greater possibility present vaccine will work against the mutated strain detected in Britain
- He also affirmed that if needed they can also make vaccine for the mutated version of the virus in six weeks.



Links:-

<https://indianexpress.com/article/explained/simply-put-decoding-the-virus-variant-7114202/>

India-Maldives Defence Cooperation Webinar and Expo

Question: MNDF is an abbreviation for the national defence force of which of the following country?

a) Sri Lanka b) Myanmar c) China d) Maldives

Answer: (d)

Related Facts:-

- On 17 December 2020; a webinar and Expo between India and Maldives were held.
- The Theme of webinar was 'Joint Indo Maldives High Level Defence Engagement'.
- During the webinar, the Maldives National Defence Force (MNDF) made a detailed presentation on their requirements.
- It was organised under the aegis of Department of Defence Production (DDP), Ministry of Defence (MoD) through Federation of Indian Chambers of Commerce and Industry (FICCI).
- This webinar is the part of Aero India 21 series of webinars which is being organised to boost defence cooperation and engagements with friendly foreign countries.
- Both sides spoke about close, cordial and multi-dimensional relationship between the countries.
- Additional Secretary (DP) Shri Sanjay Jaju mentioned that India has a pre-eminent position in the Maldives.
- This is in accordance with the Neighbourhood First Policy of the Indian government.
- He said that the country remains a committed development partner for a stable, prosperous and peaceful Maldives.
- Shri Jaju further said that Indian ecosystem is fast progressing in realising the dream of an 'Atmanirbhar Bharat' through the government's flagship 'Make in India' initiative.
- Self-reliant India or the Atmanirbhar Bharat program is not inward-looking but it is to create an ecosystem where India is integrated with the global ecosystem.
- It is about producing cost effective quality products not just to meet the domestic requirements but also cater to the requirement of the world.



- He said that the friendly nations, including the Maldives are in our central focus in this regard.
- 11 Indian Defence Companies highlighted their capabilities, product offerings and solutions.
- Some of such companies are Bharat Electronics Limited, Mazagon Dock Shipbuilders Ltd, Tata Advanced Systems Ltd (TASL), etc.
- Chief of Defence Force of Maldives National Defence Force (MNDF) Major General Abdulla Shamaal, High Commissioner of India to the Maldives Shri Sunjay Sudhir and other senior MoD officials from both sides participated in the webinar.
- The webinar was also attended by more than 375 participants and 41 virtual exhibition stalls have been set up in the Expo.

Link:-

<https://pib.gov.in/PressReleasePage.aspx?PRID=1681479>

Armed Forces got Three DRDO Systems

Question: Instruments Research & Development Establishment (IRDE) is a laboratory of the Defence Research & Development Organization (DRDO) located in-

a) Kolkata b) Pune c) Lucknow d) Dehradun

Answer: (d)

Related Facts:-



- On 18 December 2020; Defense Minister Shri Rajnath Singh today handed over three indigenously developed systems to Indian defense forces.
- These are the Defence Research and Development Organisation (DRDO) systems which have been provided to Army, Navy and the Air Force at a function held in DRDO Bhawan.
- The details of three systems handed over by Defense Minister to the Chiefs of three forces respectively are as follows-
 - I. Indian Maritime Situational Awareness System (IMSAS) to the Chief of Naval Staff Admiral Karambir Singh.
 - II. ASTRA Mk-I Missile to Air Chief Marshal Rakesh Kumar Singh Bhadauria
 - III. Border Surveillance System (BOSS) to the Chief of Army Staff General MM Naravane.
- Chief of Defence Staff General Bipin Rawat in his address congratulated the scientific fraternity for their achievements.
- Handing over of these products was done in the presence of Raksha Rajya Mantri Shri Shripad Yesso Naik, the Guest of Honour and Chief of Defence Staff General Bipin Rawat.

- Raksha Mantri Shri Rajnath Singh also gave away awards to DRDO scientists for outstanding contributions in various categories during the function.
- The awards include DRDO Lifetime Achievement Award – 2018 to Shri N V Kadam for his contributions for developing control and guidance schemes for missiles.
- Excellence awards were given to academia and industry for technology absorption.
- Besides, individual awards, team awards, technology spin-off awards, techno managerial awards and awards in other categories were also given.
- Shri Rajnath Singh lauded the role of DRDO scientists in combating COVID-19 pandemic.
- He congratulated all the scientists who received the awards and wished them the very best for their future endeavours.
- Speaking on the occasion, Raksha Rajya Mantri Shri Shripad Naik said that DRDO is playing an important role in self-reliance of Defence.
- **Description of the Systems:**
- BOSS- It is an all-weather electronic surveillance system successfully designed and developed by Instruments Research & Development Establishment (IRDE), Dehradun.
- The system has been deployed at Ladakh border area for day and night surveillance.
- The system facilitates monitoring and surveillance by automatically detecting the intrusions in harsh high-altitude sub-zero temperature areas with remote operation capability.
- The system is being produced by Bharat Electronics Limited (BEL), Machlipatnam.
- IMSAS- The IMSAS is state-of-the-art, fully indigenous, high performance intelligent software system that provide Global Maritime Situational Picture, Marine planning tools and Analytical capabilities to Indian Navy.
- The system provides Maritime Operational Picture from Naval HQ to each individual ship in sea to enable Naval Command and control (C2).
- Centre for Artificial Intelligence & Robotics (CAIR), Bengaluru and Indian Navy has jointly conceptualised and developed the product and the BEL, Bengaluru has implemented it.
- ASTRA Mk-I – The ASTRA Mk-I is the indigenously developed first Beyond Visual Range (BVR) Missile, which can be launched from Sukhoi-30, Light Combat Aircraft (LCA), Mig-29 and Mig-29K.
- Globally, very few countries have expertise and capabilities to design and produce this class of weapon system.
- Secretary, DDR&D & Chairman DRDO Dr G Satheesh Reddy stated that DRDO is committed to the development of advanced systems and technologies for Defence.
- Mr. Reddy also stated on the occasion that the DRDO strives to create robust ecosystem of Defense design, development and production along with academia, industry and armed forces.

Link:-

<https://pib.gov.in/Pressreleaseshare.aspx?PRID=1681732>

One Web launched the 36 communications satellites

Question: Which of the following Indian billionaire entrepreneur, philanthropist who along with the British Government recently acquired OneWeb a global communications network company?

a) Rattan Tata b) Sunil Bharti Mittal c) Mukesh Ambani d) Anil Ambani

Answer: (b)

Related Facts

- On 18 December 2020; Bharti Global and U.K. government-led OneWeb launched the 36 communications satellites.
- It aims to offer high-speed internet from its constellation of satellites in India by mid-2022.
- One Web is a global communications network powered from space, headquartered in London.
- It should be known that OneWeb, the satellite internet group recently rescued from bankruptcy.
- Recently billionaire Sunil Bharti Mittal-run Bharti Group along with the British government taken over this company.
- Now the Low Earth Orbit (LEO) broadband satellite communications company OneWeb recommenced its satellite launch programme.
- The company has launched the 36 satellites on 18 December 2020, from a Soyuz launch vehicle, which began from the Vostochny Cosmodrome, in Russia.
- This takes the total in-orbit constellation to 110 satellites, part of OneWeb's 648 LEO satellite fleet that will deliver high-speed, low-latency global connectivity.
- The launch puts OneWeb on track to offer global services to customers from late 2021.
- Its network will fully come into global service in 2022 starting with the United Kingdom, Alaska, Northern Europe, Greenland, Iceland, the Arctic Seas, and Canada.
- OneWeb has secured global priority spectrum rights and now successfully completed four launches and aims to offer high-speed internet from OneWeb satellites in India by mid-2022.
- Sunil Bharti Mittal, Founder and Chairman of Bharti Enterprises, said this launch is one of many steps we have taken to operationalise one of the world's first LEO constellation
- Mittal said there is an overwhelming demand for broadband as the pandemic has taxed infrastructure everywhere and many people worldwide are left with little to no options to access the internet.



- OneWeb's system will help meet existing and future demand by delivering broadband connectivity to the communities, towns, regions left unconnected or under-connected.
- Bharti Global an overseas arm of Bharti operates out of London and has investments in telecom, technology, hospitality, transportation and energy.

Link:-

<https://www.thehindu.com/sci-tech/science/oneweb-announces-launch-of-36-satellites-to-offer-hi-speed-internet-in-india-by-mid-2022/article33377289.ece>

ISRO's SSA Control Centre: NETRA

Question: What is the purpose of recently inaugurated ISRO's SSA Control Centre, NETRA?

- a) Tracking of Gaganyaan mission
- b) Tracking enemy Satellite
- c) Controlling communication Satellite
- d) Protecting high valued space assets from space debris close approaches and collisions.

Answer: (d)

Related Facts:

- On 14 December, 2020, the ISRO SSA Control Centre was started at its ISTRAC campus Peenya, Bengaluru.
- ISRO's SSA Control Centre named as NETRA was formally inaugurated by the Chairman, ISRO/Secretary, DOS Dr. K. Sivan.
- It has been set up as a 'Directorate of Space Situational Awareness and Management (DSSAM)'.
- It will be used to protect high valued space assets from space debris close approaches and collisions.
- The NETwork for space object TRacking and Analysis (NETRA) will monitor, track and protect India's space assets.
- On this occasion Mr. Sivan re-iterated the need for setting up a state-of-the art facility dedicated to SSA activities on par with international agencies.
- The control centre is envisaged to function as a hub of all SSA activities within India.
- Concurrent processing of data from the upcoming observational facilities for space objects' orbit determination, correlation and catalogue generation will take place here.
- There will be provision to schedule and remotely operate the observational facilities from the control centre.
- Other core SSA activities will comprise close approach analysis between ISRO's satellite and launch vehicles.
- The NETRA will help in timely dissemination of advance alerts on upcoming critical conjunctions for collision avoidance of operational assets of ISRO.



- It will coordinate in prediction of atmospheric re-entry of derelict satellites and rocket bodies.
- In addition, dedicated labs will also be set up in this control centre for Space Debris mitigation and remediation, compliance verification of UN/IADC guidelines and various R&D activities.
- The R&D activities will encompass space object fragmentation and break up modelling, space debris population and micrometeoroid environment modeling.
- It will also undertake Space Weather studies, Near Earth Objects and planetary defence studies etc.
- The establishment of ISRO SSA Control Centre marks an important milestone towards enhancement and augmentation of ISRO's SSA capabilities.
- The main elements of NETRA would be radar, an optical telescope facility, and a control centre.
- Mr Sivan hopefully acclaimed that the NETRA will pave the way for greater self-reliance under the ambit of Atmanirbhar Bharat.
- Only the US, Russia and Europe have similar facility in place to track space objects and share collision warnings.

Links:-

<https://m.dailyhunt.in/news/india/english/adda247-epaper-adda/isro+sets+up+dedicated+control+centre+netra+for+ssa-newsid-n237124764>

New Species of Pygmy Grasshopper Discovered

Question: Recently researchers discovered new species of pygmy grasshopper from the forests of Eravikulam National Park in-

a) Kerala b) Tamil Nadu c) Telangana d) Andhra Pradesh

Answer: (a)

Related Facts:-

- A new species of pygmy grasshopper discovered by researchers from the forests of Eravikulam National Park, Kerala.
- Researchers have made this discovery on the basis of a 100-year-old undescribed specimen found in a museum in Spain.
- This species has been named *Tettilobus trishula* for its trident-shaped protrusion in the pronotum resembling Lord Shiva's three-pronged spear.
- The three prongs are made of highly-compressed median carina and elevated curved external (large trishula) and internal (small trishula) lateral carinae of the pronotal apex.
- The new wide-nosed pygmy grasshopper species has been described by a team of researchers.
- The researchers who made their contribution in this discovery are Dhaneesh Bhaskar, regional vice-chair for Asia, IUCN SSC Grasshopper Specialist Group, Switzerland, wildlife expert P S Easa and others.
- The discovery has been published in the Journal Zootaxa.



- They had found an old specimen of this kind of grasshopper during their visit to MNCN (National History Museum in Madrid, Spain).
- It had been collected by researchers from Spain more than 100 years ago from the border between Kerala and Tamil Nadu
- Though it was recognized already by Ignacio Bolívar as a new species, and labelled *Potua suspecta* (París 1994), it was never published as a new species.
- **Home of this Grasshopper:**
- It is found in Sri Lanka and in the dense rainforests of Western Ghats in India.
- In the Indian subcontinent there may be present as maximum as 200 species of pygmy grasshopper.
- Most recently in 2018 it was observed by the researcher Dhaneesh Bhaskar in Western Ghats, its natural habitat.
- These grasshoppers feed on mosses and carcass or detritus.

Link:-

<https://www.downtoearth.org.in/news/wildlife-biodiversity/red-list-assessment-of-indian-grasshoppers-to-kickstart-74646>

Israel successfully test fired 3 multi-range missile defense systems

Question: Recently Israel successfully test fired 3 multi-range missile defense systems. Which of the following statement is incorrect regarding above information?

- a) These three missile defense system tested by Israel are named as Arrow, David's Sling and Iron Dome.
- b) The test of these three anti missile defense system was conducted over the Indian Ocean.
- c) These tests were conducted in joint coordination between the Israel Missile Defense organisation (IMDO) and US Missile Defense Agency (MDA).
- d) Israel has conducted these tests, keeping in the view of threat from Iranian-backed Shiite militant group Hezbollah in neighboring Lebanon, and from Iran.

Answer: (b)

Related Facts:-

- On 15 December 2020; Israel successfully test fired 3 multi-range missile defense systems.
- These three missile defense system tested by Israel are named as Arrow, David's Sling and Iron Dome.
- The test of these three anti missile defense system was conducted over the Mediterranean Sea.
- It should be noted that Israel has conducted a series of live fire drills with its multi-range missile-defense system, to contain arch-enemy Iran and its proxies along Israel's northern and southern borders.
- Defense officials said it was the first time they have conducted an integrated test bringing together the various components.



- Missile, Arrow intercepts long-range missiles. It has been jointly developed by US and Israel.
- David's Sling is surface to air missile meant to shoot down medium-range missiles.
- The Iron Dome is an air defense system, has been used for years to defend against incoming rocket fire from the Gaza Strip.
- These tests were conducted in joint coordination between the Israel Missile Defense organisation (IMDO) and US Missile Defense Agency (MDA).
- It is being expected that using this approach, a variety of threats may be identified and intercepted via full coordination and interoperability between the systems.
- It is an ultimate reality that Israel faces a wide range of rocket and missile threats from Palestinian militants in Gaza, from the Iranian-backed Shiite militant group Hezbollah in neighboring Lebanon, and from Iran.
- The drills showcased the capability of the systems to intercept a range of aerial targets, from drones to long range ballistic missile.

Links:-

<https://economictimes.indiatimes.com/news/defence/with-eye-on-iran-israel-tests-missile-defense-system/articleshow/79744604.cms>

China successfully launched two satellites from XSLC

Question: On 10 December, 2020; which of the following rocket was used by China to successfully launch two satellites for the detection of gravitational waves?

a) Long March 1 b) Long March 2 c) Long March 2A d) Long March-11

Answer: (d)

Related Facts:-

- On 10 December, 2020; China successfully launched two satellites for the detection of gravitational waves.
- A Long March-11 carrier rocket blasted from the Xichang Satellite Launch Centre in Sichuan Province projected these satellites into planned orbit.
- The two satellites, which compose the Gravitational Wave High-energy Electromagnetic Counterpart All-sky Monitor (GECAM) mission.
- The GECAM satellites will be used to monitor high-energy celestial phenomena.
- There are various kind of high-energy celestial phenomena e.g gravitational wave gamma-ray bursts, high-energy radiation of fast radio bursts, special gamma-ray bursts and magnetar bursts.
- GECAM satellites will study all above high-energy celestial phenomena as well as use their instruments to study neutron stars, black holes and other compact objects and their merger processes.



- They will also detect high-energy radiation phenomena in space, such as solar flares, Earth gamma flashes and Earth electron beams, providing observation data for scientists.
- The GECAM project is carried out by the Chinese Academy of Sciences.

Link:-

<https://www.hindustantimes.com/world-news/china-successfully-launches-two-satellites-for-gravitational-wave-detection/story-3TDh05svfDFswRWEOfz3JN.html>

DRDO successfully demonstrates quantum communication between two labs

Question: which of the following statements are correct?

- i) DRDO has recently used quantum communication between two of its labs.
 - ii) Quantum communication is used for just increasing the speed of communication in the network.
 - iii) Technology used by DRDO for this is known as Quantum Key Distribution (QKD) technology.
- a) only I b) i and ii c) i and iii d) all of above

Answer: c)

Context

- The Defence Research and Development Organisation (DRDO) has recently successfully demonstrated communication between its two labs using Quantum Key Distribution (QKD) technology.

Facts

- DRDO's two labs the Defense Research and Development Laboratory (DRDL) and The Research Centre Imarat (RCI) has participated in this demonstration of quantum communication between themselves.
- Quantum Key Distribution (QKD) technology was used for this communication network.
- Quantum Key Distribution (QKD) technology is used for providing very robust encryption system which makes the communication highly secure and very very difficult to penetrate.



Quantum Key Distribution (QKD) technology

- In the QKD technology, encryption keys are sent as qubits in a fibre optic cable.
- Qubits are the smallest unit in quantum communication system. They are same as bits in classical computing system.

- Qubits are encoded on photons. QKD is designed in a way that if an illegitimate entity tries to read the transmission, it will disturb the qubits. This will generate transmission error and legitimate end user will be informed immediately.
- Time-bin encoding is used to encode qubit on a photon.

Link:

<https://www.thehindu.com/sci-tech/technology/drdo-successfully-demonstrates-quantum-communication-between-two-labs/article33292632.ece>

SpaceX launched new generation cargo ship to ISS

Question: With the recent launch of SpaceX's new generation cargo ship to ISS, its launch vehicle Falcon 9 rocket has completed its total..... successful missions.

Which of the following figure is the correct option to be filled in the blank space provided in above statement?

a) 6 b) 78 c) 55 d) 100

Answer: (d)

Related Facts:-

- On 6 December 2020; SpaceX successfully launched new generation cargo ship to International Space Station ISS.
- It is a new resupply mission, which had taken an upgraded Dragon cargo craft to the International Space Station for NASA.
- The new Dragon cargo capsule left for ISS on a two-stage Falcon 9 rocket which blasted off from Pad 39A at NASA's Kennedy Space Center on December 6, 2020.
- It was the 24th launch of SpaceX and marking the company's 21st cargo mission for NASA in the year 2020.
- It was also a milestone 100th successful launch of a Falcon 9 over 101 missions for SpaceX.
- Approximately 9 minutes later, the booster's first stage returned to Earth, landing on one of SpaceX's drone ships in the Atlantic Ocean in a smooth touchdown.
- The massive ship, called "Of Course I Still Love You," is one of two in the company's fleet of recovery vessels that catch falling boosters and return them to port for later reuse.
- The cargo craft is toting 6,400 lbs. (2,903 kilograms) of supplies and science investigations.
- The research gear will support a variety of experiments in the life sciences, regenerative medicine and many other fields.
- Dragon will arrive at the station and dock at the Harmony module's space-facing port just over 24 hours after it launched.



- Once it reaches the space station, there will be two Dragon vehicles attached to the laboratory for the first time.
- The other is the Crew Dragon Resilience, which launched on 15 November 2020 carrying a crew of four astronauts.
- The upgraded version of cargo Dragon has advantages of its previous iteration.
- It is designed to hold about 20% more cargo, it's bigger on the inside than its predecessor.
- The craft can even store powered payloads while on orbit, and can stay on station twice as long as the previous cargo Dragons.
- One of the important upgrades this time SpaceX done is that the cargo ships will now splash down in the Atlantic Ocean (versus the Pacific splashdowns of past flights), providing a faster return on science.
- With this kind of facility, the researchers can get their samples and data back faster — in as little as 4 to 9 hours after splashdown.
- This facility for SpaceX means that crews can get the vehicle back quicker and start performing inspections and maintenance before the Dragon's next flight.

Links:

<https://www.space.com/spacex-dragon-nasa-crs-21-launch-success>

Japanese space probe Hayabusa-2 landed with rock samples

Question: Recently Japanese space probe Hayabusa-2 landed with rock samples from which of the following asteroid?

- Vesta
- Apophis
- Pallas
- Ryugu

Answer: (d)

Related Facts:-

- On 6 December 2020; space probe Hayabusa-2 landed with rock samples in the remote Australian outback.
- It is a Japanese space probe carrying the first extensive samples of an asteroid has completed its six-year mission.
- We humans are constantly in the quest to know that from where molecules like water came upon the earth and Hayabusa2 mission can help in this search.
- This mission by the Japan Aerospace Exploration Agency (JAXA) also seeks to answer some fundamental questions about the origins of the solar system.
- The spacecraft, launched from Japan's Tanegashima space centre in 2014, took four years to reach the asteroid Ryugu before taking a sample and heading back to Earth in November 2019.



- Asteroids are believed to have formed at the dawn of the solar system, and scientists say this one may contain organic matter that may have contributed to life on Earth.
- Japan Aerospace Exploration Agency (JAXA) gave this information that in the early hours on 06 December 2020, the capsule lit up as it reentered the earth's atmosphere.
- It then landed in the Woomera restricted area, around 460 kilometers north of Adelaide, Australia where it was found by scientists and brought to a local research station.
- Agency said on Twitter that the helicopter carrying the capsule arrived at local headquarters and the capsule was brought inside the building.

Asteroid 162173 Ryugu:-

- Ryugu is a diamond shaped space rock and orbiting the sun between the Earth and Mars.
- Ryugu is classified as a carbonaceous, or C-type asteroid, which means it contains a lot of carbon and water.
- The asteroid to be about 2,952 feet (900 meters) in diameter.

Links:-

<https://www.thehindu.com/sci-tech/science/japans-hayabusa2-carrying-asteroid-rocks-lands-in-australian-outback/article33262492.ece>

Researchers have developed a Lattice form in the shape of Damaru

Question: Researchers from which of the following Indian institute have developed a lattice form in the shape of damaru?

a) IISc b) CSIR c) DRDO d) IIT Kanpur

Answer: (d)

Related Facts:-

- IIT Kanpur Researchers have developed micro-structured hour-glass shaped meta-structure in the lattice unit.
- This is a Damaru shape Lattice that finds applications in stealth submarines and high speed trains.
- IITians got Inspiration from the shape of Damaru which is used in ancient Hinduism and Tibetan Buddhism.
- Damaru is actually a two-headed drum musical instrument used by lord Shiva, he has produced a special sound through this musical instrument to create and regulate the universe.
- They have demonstrated how with the use of this lattice structure one can get a wider variation of propagation and stop bands.



In this application, IIT Kanpur researchers have shown the nature of stiffness of a vibrating medium could be altered drastically by controlling the lattice micro-structure from regular honeycomb to auxetic honeycomb structure.

Lattice based meta-structures have shown tremendous application in electro-magnetic and sonic wave absorption.

- It could in principle create 'invisibility' of an object either in optical or in acoustic domain.
- Existing lattice and crystal based phonetic materials have however, practical limitations in terms of customizability.
- Existing lattice can only be generally used in a narrow band of frequency.

Now this newly invented lattice has wide applications in the field of vibration isolation in high speed trains, stealth submarines and helicopter rotors.

- The work is published in the scientific report on 1st December, 2020 with the title, Exploring the dynamics of hourglass shaped lattice Metastructures.

Link:-

<http://www.newsonair.com/News?title=IIT-Kanpur-Researchers-develop-%E2%80%98Inspired-Lattice-that-finds-applications-in-stealth-submarines%2Chigh-speed-trains&id=405410#:~:text=IIT%20Kanpur%20in%20its%20press,create%20and%20regulate%20the%20universe.>

ISRO got biggest Cryogenic Propellant Tank

Question: Which of the following company has recently delivered the biggest cryogenic propellant tank to the Indian Space Research organization?

- a) Larsen & Toubro. b) Tata Group. c) Hindustan Aeronautics Limited
d) Alpha Design Technologies

Answer: (c)

Related Facts:

- Recently Hindustan Aeronautics Limited has delivered the biggest cryogenic propellant tank to the Indian Space Research Organisation.
- Named as C32-LH2 tank is a developmental cryogenic propellant tank of aluminium alloy.
- It is designed for improving the payload capability of the GSLV MK-III launching vehicle.
- The diameter of C32-LH2 tank is four-meter and its length is eight meters.
- The tank can take on 5,755 kg of propellant in the 89 cubic meter space.
- HAL said the total length of weld carried out in the tank was 115 meters at different stages to the quality requirement of 100% tests on radiography.
- Dye penetrant and leak-proof tests were carried out.
- The propellant tank was handed over by M S Velpari, Director (Operations) of HAL to Dr V Narayanan, Director (LPSC) of ISRO recently.

Range of HAL activities:

- HAL in past already has supplied critical structures, tankages and satellite structures for the PSLV, GSLV-MkII and GSLV-Mk-III launch vehicle.

- Various new projects like PS2/GS2 integration, semi-cryo structure fabrication and manufacture of cryo and semi-cryo engines are being taken up at HAL.
- The firm is currently also building hardware for full-fledged launch vehicle GSLV Mk-III for the Gaganyaan Programme.

Links:-

<https://www.deccanherald.com/city/top-bengaluru-stories/hal-delivers-biggest-ever-cryogenic-propellant-tank-to-isro-921718.html>

New Species of Frog Discovered

Question: Recently researchers discovered new species of a frog which is named after the city of-

a) Bengaluru b) Kanpur c) Lucknow d) Itanagar

Answer: (a)

Related Facts:

- Recently researchers from Zoological Survey of India (ZSI) and other prominent world institutions discovered a new species of frog.
- A group of researchers encountered a new species of frog while documenting Amphibians in the Deccan Plateau parts of Karnataka.
- They found this new species of borrowing frog from a highly populated city Bengaluru, the capital of Karnataka.
- This new species *Sphaerotheca Bengaluru* is being named after the city to highlight the lacunae in documentation of amphibians from non-forested areas and to restore frog habitats in Bengaluru.
- The findings regarding this discovery have been published in the international journal *Zootaxa*, published from New Zealand.
- The researchers said in a press release that the new species was described based on the morphological differences and molecular approach with the known species of the borrowing frogs (across the distribution range, South Asia).
- **The group of researchers includes-**



- 1) Deepak P., assistant professor, Mount Carmel College, Bengaluru.
- 2) Scientist K.P. Dinesh from Zoological Survey of India (ZSI) Pune.
- 3) Dr. Annemarie Ohler from the Institute of Systematics, Evolution, Biodiversity, National Museum of Natural History, France.
- 4) Kartik Shanker from Centre for Ecological Sciences, Indian Institute of Science Bengaluru.
- 5) Scientist B.H Channakeshavamurthy from ZSI, Calicut.
- 6) J.S. Asha Devi, professor, Yuvaraj College, Mysuru.

- Researchers stressed that there was a huge responsibility to conserve the species and make the habitat conducive for them.
- Researchers also made it clear that they were not biased towards a specific biogeographic location or ecosystem and were documenting amphibians throughout India.
- They are trying to understand the patterns of new species discoveries in the country.
- Their main emphasis is in attempting to unravel the new species from the fastest growing cities which are witnessing the challenge of rapid urbanization.

Link:-

<https://www.thehindu.com/news/national/karnataka/new-species-of-burrowing-frog-named-after-bengaluru/article33198999.ece>

GMRT accorded prestigious IEEE Milestone status

Question: IEEE (Institute of Electrical and Electronics Engineers) is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

In which of the following country headquarters of IEEE is located?

a) UK b) Sweden c) USA d) India

Answer: (c)

Related Facts:-

- On November 23, 2020; the Giant Metrewave Radio Telescope (GMRT) has been selected as a Milestone facility by the U.S.-based Institute of Electrical and Electronics Engineers (IEEE).
- (IEEE) is the world's largest technical professional organization dedicated to advancing technology in all areas related to electrical and electronics engineering.
- The IEEE Milestones programme honours significant technical achievements which have global or regional impact.
- This is only the third such IEEE 'Milestone' recognition for an Indian contribution.
- The previous two Indian IEEE Milestones were as follows-
 - I. For the pioneering work done by Sir J.C. Bose to demonstrate the generation and reception of radio waves in 1895 (recognised in 2012).
 - II. For the Nobel Prize-winning (in 1930) 'scattering of light' phenomenon observed by Sir C.V. Raman in 1928.
- It should be known that IEEE's India office and its Pune branch had initiated the proposal to nominate GMRT for this recognition.
- IEEE's committee took this decision, considering the global impact of GMRT with users from over 40 countries and the fact that it was designed and built entirely in India.



- The formal proposal was submitted, in cooperation with the Pune-based National Centre for Radio Astrophysics (NCRA), to the IEEE early this year.
- Team from IEEE India conducted an initial review of the history and accomplishments of the GMRT.
- Following a review process, which included appraisal by international experts, the proposal was first put up to the History Committee of the IEEE, which cleared it for approval in October 2020..
- It was then submitted to the IEEE Board of Directors for final approval, which was granted on November 23, 2020.
- The GMRT is the third IEEE Milestone in India.
- This IEEE milestone not only recognises the contributions of scientists and engineers of India, it also helps to attract young talent towards fundamental science and engineering.
- A number of technical innovations pioneered by the GMRT, conceived by pioneering radio astronomer, late Professor Govind Swarup, are mentioned in the citation for the award
- It (the GMRT) pioneered new techniques in antenna design, receiver systems, and signal transport over optical fiber.
- The citation also recognises the scientific work done using GMRT.
- The GMRT has produced important discoveries in domains such as pulsars, supernovae, galaxies, quasars, and cosmology, greatly enhancing our understanding of the Universe.

Links:-

<https://www.thehindu.com/news/cities/mumbai/gmrt-accorded-prestigious-ieee-milestone-status/article33196253.ece>

ISRO TO GET SATELLITE TRACKING FACILITIES FOR MISSION GAGANYAAN

Question: Which of the following country will provide temporary ground tracking station for India's proposed Gaganyaan Mission?

a) USA b) Australia c) Germany d) Japan

Answer: (b)

Related Facts:-

- Australia is going to provide temporary ground tracking station for India's proposed Gaganyaan Mission.
- Australian Minister of industry, Science and Technology Karen Andrews stated recently in this regard.
- She informed this during a virtual address by her in the 2020 Bengaluru tech Summit on 21 November 2020



- As part of the steps to deepen cooperation in civil space activities, the Indian and Australian space agencies are working together to temporarily locate Indian tracking facilities in Australia.
- This will support India's planned human space flight program-Gaganyaan.

Magnitude:

In 2018 Indian Prime Minister Narendra Modi (Narendra Modi) announced the Gaganyaan plan.

- This is India's first human space flight program (HSP) costing Rs 10,000 crore.
- Gaganyaan plan is scheduled to be completed by India in 2022 on the occasion of 75 years of independence.
- First time in Indian space history the country is going to send its people in space directly from our land.
- Gaganyaan is designed to allow 3-7 crew members to stay in space for 3-7 days in a 400-kilometre orbit (low earth orbit or LEO).
- Four pilots from the Indian Air Force (IAF) were shortlisted for the training of Gaganyaan astronauts.
- Most importantly the selected astronauts have started 12-month training at the Gagarin Research and Test Astronaut Training Center (GCTC) in Moscow. If the plan achieves desired goal, India may become the fourth country to send personnel to space after the Soviet Union, the United States and China.
- It should be known that Denmark also plans to conduct a manned space flight in 2022
- **Launch vehicle for the mission:**
- GSLV Mk III is a three-stage heavy-lift vehicle that will be used to launch Gaganyaan because it has the necessary payload capacity.

Test flights of Gaganyaan:

- First test flight of the unmanned mission Gaganyaan will commence in near future. ISRO has introduced the first female robot as a "female" astronaut Vyomamitra. Vyommitra will fly in space during the first test flight of the unmanned mission Gaganyaan.
- This humanoid will simulate the human functions needed in space before real astronauts take off before August 2022.

- **Background of Cooperation:-**

In 2012, the two countries signed a formal memorandum of understanding to provide support for India and Australia's space cooperation.

- Since 1987 Australia and India have been in continuous touch and cooperating for-
- Supporting the data calibration and laser-firing of Indian satellites.
- Launch of Australian satellites and conducting joint research.
- **Recent developments:-**
- At the virtual summit in June, the two countries upgraded their bilateral relationship to a "comprehensive strategic partnership"
- They also reached practical agreements on cybersecurity, emerging technologies and important minerals.

Links:-

<https://www.thehindu.com/news/national/australia-to-temporarily-host-isro-satellite-tracking-facilities/article33141647.ece>

MQ 9B Sea Guardian Unarmed Drone

Question: Which one among the following in India recently has acquired two MQ 9B Sea Guardian Unarmed Drone from US?

- a) Indian Navy
- b) Indian Army
- c) Indian Air Force
- d) BSF

Answer: (a)

Related Facts:-

- On 21 November 2020; Indian Navy has inducted, two American MQ 9B Sea Guardian unarmed drone.
- These drones have been inducted into the flying operations at Indian Navy base at INS Rajali in Tamil Nadu.
- India at present acquired these drones on lease from US for one year.
- **Features of MQ 9B Sea Guardian:**



MQ 9B Sea Guardian is the maritime variant of the Predator MQ9 Unmanned Aerial Vehicle (UAV).

- It has the capacity remain continuously in the sky for 40 hours and a maximum flying altitude of 40,000 feet.

- It has 3600 maritime surveillance radar and an optional multimode maritime surface search radar.
- It can be used in operations such as Anti-Surface Warfare, Anti-Submarine Warfare.
- Sea Guardian drone is also useful for Humanitarian Assistance/Disaster Relief, Search and Rescue, Law Enforcement (Drug Trafficking, Illegal Immigration and Piracy), etc.
- **Need of the Time:**
- The Navy has for the first time inducted two surveillance drones through a lease agreement with an American firm.
- This deal has been done, using the emergency powers granted by the Centre to the Armed forces amid the standoff with aggressive neighbor China.
- It should be known that under the emergency power, the government has granted emergency funds up to Rs. 500 crore per procurement project to the three armed services to buy ammunition and weapons in view of the escalating border standoff with China.
- Drones were procured under the option for leasing military platforms introduced in the Defence Acquisition Procedure (DAP) 2020.
- **Importance:-**
- Indian acquired these drones as they are meant for carrying out surveillance in the Indian Ocean Region.
- These drones can at the same time be deployed on the China border if asked for, or if needed.
- Most importantly the Navy's P8I Poseidon aircraft already have been deployed in Ladakh.
- The P-8I aircraft is a variant of the P-8A Poseidon aircraft that have been developed by Boeing Company.
- Boeing's P-8A Poseidon is designed for long-range Anti-Submarine warfare (ASW), Anti-Surface Warfare (ASuW), and intelligence, surveillance and reconnaissance (ISR) missions.
- **The Defence Acquisition Council:**
- The Defence Acquisition Council (DAC) is the highest decision-making body in the Defence Ministry.
- DAC has been constituted for deciding on new policies and capital acquisitions for the three services (Army, Navy and Air Force) and the Indian Coast Guard.

Link:-

<https://www.thehindu.com/news/national/navy-inducts-two-sea-guardian-drones-on-lease-from-us/article33178519.ece#:~:text=The%20Indian%20Navy%20has%20inducted,on%20lease%20for%20one%20year.&text=The%20recently%20released%20Defence%20Acquisition,option%20for%20leasing%20military%20platforms.>

Sports

Cricket

ICC Team of the Decade

Question: who is declared as captain of International Cricket Council's (ICC) ODI and T20I Cricket team of decade?

i) Virat Kohli ii) Aaron Finch iii) M S Dhoni iv) Kane Williamson

Answer: iii)

Facts

- ICC announced the Men's T20I, ODI and Test teams of the decade on Sunday, naming former India captain MS Dhoni as the leader of both ODI and T20I sides.
- Virat Kohli was named as captain of Test team of decade.
- ICC's T20I Team of the Decade: Rohit Sharma, Chris Gayle, Aaron Finch, Virat Kohli, AB de Villiers, Glenn Maxwell, MS Dhoni (c), Kieron Pollard, Rashid Khan, Jasprit Bumrah, and Lasith Malinga.
- ICC's ODI Team of the Decade: Rohit Sharma, David Warner, Virat Kohli, AB de Villiers, Shakib Al Hasan, MS Dhoni (c), Ben Stokes, Mitchell Starc, Trent Boult, Imran Tahir and Lasith Malinga.
- ICC's Test Team of the Decade: Alistair Cook, David Warner, Kane Williamson, Virat Kohli (c), Steve Smith, Kumar Sangakkara, Ben Stokes, Ravi Ashwin, Dale Steyn, Stuart Broad, James Anderson.
- In the women's T20I team of the decade, India's Harmanpreet Kaur and Poonam Yadav have been picked and Australia's Meg Lanning has been named the captain of that side.



Reference: <https://indianexpress.com/article/sports/cricket/icc-team-of-the-decade-ms-dhoni-captain-t20i-odi-virat-kohli-test-captain-7122178/>

Sports Miscellaneous

Yogasana is now a competitive sport

Question: which country has formally recognised Yogasana as competitive sports in December 2020?

i) UAE ii) USA iii) India iv) Japan

Answer: iii)

Context



- The Sports Ministry of India has formally recognised Yogasana as a competitive sport.

Facts

- Sports Minister Kiren Rijju and Minister of AYUSH Shripad Yesso Naik formally promoted yogasana as a competitive sport.
- It was done to promote yoga among people for the improvement of their physical and mental wellbeing.
- It will also enable yoga to get government funding for its propagation and promotion.
- An International Yogasana Sports Federation was formed under the presidentship of yoga guru Baba Ramdev with DR HR Nagendra as secretary general in November last year.
- A National Yogasana Sport Federation of India (NYSFI) was also established for preservation and development of yoga as a competitive sport. It was recognised by the sports ministry as a National Sports Federation (NSF) last month.

Future plans

- Yogasana will be inducted into Khelo India school and university games.
- A pilot championship — National Individual Yogasana Sport Championship — has also been proposed to be organised in February next year, followed by district, state, national and World Championships.

The aim of declaring Yogasana as competitive sport is to promote competitive spirit among people vis-à-vis yogasana and hence promote culture of Yoga practice among them for their mental and physical upliftment. It will also generate an ecosystem of yoga and yoga practices leading to generation of various job opportunities.

Link:

<https://indianexpress.com/article/sports/sport-others/sports-ministry-formally-recognises-yogasana-as-competitive-sport-7108740/>

Short Notes

Personalities

Vineet Agarwal

Question: Who has been newly appointed the President of ASSOCHAM?

- (a) Vineet Agarwal
- (b) Rajvir Rathi
- (c) Nirupama Sharma
- (d) Jaidev R. Shroff



Answer: (a)
Related facts:

- Vineet Agarwal took over as the new President of apex industry body Assocham (The Associated Chambers of Commerce and Industry of India).
- He replaced Niranjana Hiranandani.
- Sumant Sinha, is the new Senior Vice-President of Assocham.

Links:

<https://timesofindia.indiatimes.com/business/india-business/vineet-agarwal-takes-over-as-new-assochem-president/articleshow/79838185.cms>

Arya Rajendran

Question: Who became the youngest person in India to occupy the post of mayor anywhere in the country?

- (a) Arya Rajendran (b) Sabitha Beegam (c) Sanjeev Ganesh Naik
(d) Rekha Priyadarshini

Answer: (a)

Related facts:

- On 28 December 2020, Twenty one-year-old Arya Rajendran was elected as the youngest Mayor of India. She was elected mayor of the Thiruvananthapuram Corporation, Kerala.
- She is a college student and Communist Party of India (Marxist) member.
- Arya Rajendran was mayoral candidate from the CPI(M)-led Left Democratic Front(LDF).
- Left Democratic Front(LDF) has won 51 wards in the 100-member corporation of the Kerala capital in the recent civic body polls.
- Arya is a second-year student of Bachelor of Science (B.Sc) in Mathematics at the All Saints College.
- She is also the state president of Balasangam, the children's wing of the CPI(M).



Links:

<https://www.timesnownews.com/india/kerala/article/kerala-21-year-old-arya-raijendran-becomes-india-s-youngest-mayor-from-thiruvananthapuram-municipal-corporation/700030>

Dr Harsh Vardhan nominated as member of GAVI board

Question: who is appointed as member of GAVI board recently?

- a) Dr Sawminathan
b) Dr Harsh Vardhan



- c) Rajesh Bhusan
- d) none of the above

Answer: b)

Facts

- Dr Harsh Vardhan, Union Minister of Health and Family Welfare was recently nominated as a board member of Global Alliance for Vaccines and Immunisation, (GAVI) by GAVI.
- The term of the minister as a member in the GAVI board will be between 2021 and 2023.
- Minister will represent South East Area Regional Office/Western Pacific Regional Office in the GAVI board.
- Currently this office is held by Myanmar.
- GAVI is Global Alliance for Vaccines and Immunisation It works to achieve the objective of “Immunisation for All”.
- The GAVI Board is responsible for policy making, providing strategic directions, overseeing the operation of the alliance and to monitor programme implementation.

Reference: <http://newsonair.com/News?title=Dr-Harsh-Vardhan-nominated-as-member-on-GAVI-Board-by-Global-Alliance-for-Vaccines-%26-Immunisation&id=406937#:~:text=Harsh%20Vardhan%20has%20been%20nominated,Alliance%20and%20monitors%20programme%20implementation>.

Director General Border Roads (DGBR)

Question : Who has been newly appointed as Director General Border Roads (DGBR)?

- (a) Rajeev Chaudhry (b) Harpal Singh
- (c) SK Shrivastava (d) RM Mittal



Answer: (a)

Related facts:

- On 1 December 2020, Lieutenant General Rajeev Chaudhry assumed the charge as 27th Director General Border Roads (DGBR).
- Prior to this, he was holding the appointment of ADG LW&E in QMG's Branch at Integrated Headquarters of Ministry of Defence (Army).

About BRO:

- The Border Roads Organisation (BRO) (Indian army corps of engineers) develops and maintains road networks in India's border areas and friendly neighboring countries. It was formed on 7 May 1960.
- BRO is operational in 21 States and 1 Union Territories in India.
- It also maintains operations in neighboring countries such as Afghanistan, Bhutan, Myanmar, and Sri Lanka.

Links:

[https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1677711#:~:text=Lieutenant%20General%20Rajeev%20Chaudhry%20assumes,Director%20General%20Border%20Roads%20\(DGBR\)&text=Lt%20Gen%20Rajeev%20Chaudhry%20assumed,on%20the%2001%20December%202020.](https://www.pib.gov.in/PressReleaseDetailm.aspx?PRID=1677711#:~:text=Lieutenant%20General%20Rajeev%20Chaudhry%20assumes,Director%20General%20Border%20Roads%20(DGBR)&text=Lt%20Gen%20Rajeev%20Chaudhry%20assumed,on%20the%2001%20December%202020.)

Indian origin Anil Soni appointed as CEO of WHO Foundation

Question: Anil Soni is appointed as CEO of which foundation?

- i) WHO foundation
- ii) Oxfam
- iii) Amnesty international
- iv) Gates foundation

Answer : (i)



Facts

- World Health Organisation has appointed Indian-origin Anil Soni as the Chief Executive Officer for the WHO Foundation.
- He will start his term from January 1 next year.
- Anil Soni is a proven innovator in global health who has spent two decades in service of communities affected by HIV/AIDS and other infectious diseases.

Link:

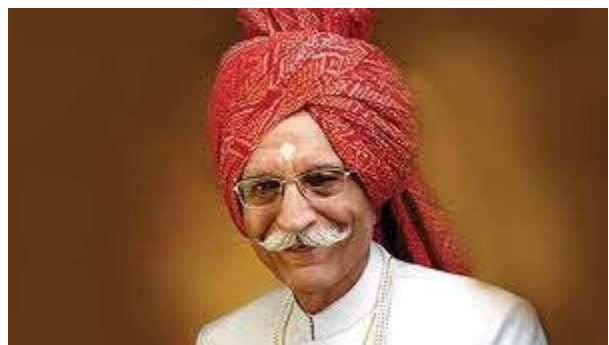
<http://newsonair.com/News?title=Indian-origin-Anil-Soni-appointed-as-CEO-for-WHO-Foundation&id=405702>

Dharampal Gulati

Question: Mahashay Dharampal Gulati who passed away on 3 December 2020

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<http://www.edristi.in/>



was owner of which Indian spice company?

- (a) MDH Spices
- (b) Everest Spices
- (c) Catch Spices
- (d) Badshah Masala

Answer: (a)

Related facts:

- On 3 December 2020, 'Mahashay' Dharampal Gulati, owner of the famous spice company MDH Masala, passed away following a cardiac arrest in New Delhi. He was 98.
- Popularly known as the 'Spice King', he was born in 1923 in Sialkot, Pakistan.
- In 2019, the Government of India honoured him with Padma Bhushan, the third-highest civilian award in the country.
- Gulati was India's highest-paid FMCG (Fast Moving Consumer Goods) CEO in the year 2017.
- Expanded as Mahashian Di Hatti, MDH spice company was initially founded by his late father Mahashay Chunni Lal Gulati.

Links:

<https://indianexpress.com/article/lifestyle/life-style/mdh-spices-owner-iconic-face-dharampal-gulati-dies-97-lesser-known-interesting-facts-masala-king-7082914/>

New chairman of International Cricket Council

Question: Who has been elected the new chairman of International Cricket Council?

- (a) Greg Barclay
- (b) Imran Khwaja
- (c) Shashank Manohar
- (d) Manu Sawhney

Answer: (a)

Related facts:



- New Zealand's Greg Barclay has been elected as the new Independent Chairman of the International Cricket Council (ICC).
- He succeeded Shashank Manohar who stepped down in July this year.
- Barclay, an Auckland-based commercial lawyer, has been a director of New Zealand Cricket (NZC) since 2012 and is currently NZC's representative on the board of the International Cricket Council.

Links:

<https://www.icc-cricket.com/media-releases/1907747>

Diego Maradona

Question: Legendary footballer Diego Maradona who passed away on November 25, 2020 played for which country's



national team?

- (a) Brazil
- (b) Germany
- (c) France
- (d) Argentina

Answer: (d)

Related facts:

- Legendary Argentine footballer, Diego Maradona passed away on November 25, 2020 suffering a heart attack.
- Maradona had begun his professional career with Argentinos Juniors at the age of 16 and emerged later as the greatest players to ever play the game of football.
- He represented Boca Juniors, Barcelona, Napoli, Sevilla, and Newell's Old Boys as a player.
- He played four FIFA World Cups. He captained Argentina in 1986 World Cup in Mexico.
- Maradona is popularly remembered for his role in taking Argentina to their second World Cup title in 1986 defeating West Germany in the final. He won the Golden Ball as the tournament's best player.
- In the 1986 World Cup quarter-final against England, Maradona scored two of the most famous goals in football history.
- The first goal was an unpenalized handling foul known as the "Hand of God".
- The second goal followed a 60 m (66 yd) dribble past five England players, voted "Goal of the Century" by FIFA.com voters in 2002.
- He became the coach of Argentina's national football team in November 2008. He was in charge of the team at the 2010 World Cup in South Africa.
- Maradona was given the nickname "El Pibe de Oro" ("The Golden Kid").

Links:

<https://indianexpress.com/article/sports/football/diego-maradona-dies-dead-age-7066485/>

Awards & Honors

ICC Awards of the Decade

Question: Who has won Sir Garfield Sobers Award for ICC Male Cricketer of the Decade?

- (a) Virat Kohli (b) M S Dhoni
- (c) Kane Williamson (d) Joe Root



Answer: (a)

Related facts:

- On 28 December 2020, International Cricket Council (ICC) announced winners of the prestigious ICC Awards of the Decade.
- The awards included Rachel Heyhoe-Flint for Best Female Player and Sir Garfield Sobers for Best Male Player.
- The ICC Awards of The Decade recognizes best players across Cricket over the past 10 years.

Awardees:

- Sir Garfield Sobers Award for ICC Male Cricketer of the Decade- Virat Kohli
- Rachael Heyhoe-Flint Award for ICC Female Cricketer of the Decade- Ellyse Perry
- ICC Men's Test Cricketer of the Decade- Steve Smith
- ICC Men's ODI Cricketer of the Decade- Virat Kohli
- ICC Women's ODI Cricketer of the Decade- Ellyse Perry
- ICC Men's T20I Cricketer of the Decade- Rashid Khan
- ICC Women's T20I Cricketer of the Decade- Ellyse Perry
- ICC Men's Associate Cricketer of the Decade- Kyle Coetzer
- ICC Women's Associate Cricketer of the Decade- Kathryn Bryce
- ICC Spirit of Cricket Award of the Decade- MS Dhoni

Links:

<https://www.icc-cricket.com/media-releases/1956755>

DRDO Scientist of the Year Award

Question: Who has been conferred the DRDO's Scientist of the Year award?

(a) Hemant Kumar Pandey (b) Sudhir Kamath (c) A K Singh (d) Tessy Thomas

Answer: (a)

Related facts:

- Senior scientist Hemant Kumar Pandey has been conferred DRDO's "Scientist of the Year Award".
- He has been conferred for his contribution in developing several herbal medicines, including the popular drug Lukoskin meant for the treatment of leucoderma.
- Leucoderma or Vitiligo is an auto-immune disorder in which white patches get developed on the skin. It is neither contagious nor life-threatening.
- The scientist has developed six herbal drugs so far, others include drugs for treatment of eczema and toothache as well as an anti-radiation cream.
- Defence Minister Rajnath Singh had felicitated the scientist. The award comprises a certificate and cash prize of Rs 2 lakh.



Links:

<https://www.outlookindia.com/newsscroll/lukoskin-developer-hemant-kumar-pandey-gets-drdo-scientist-of-the-year-award/1999817>

Digital India Awards 2020

Question: consider the following statements about Digital India Awards:

- Digital India Award (DIA) has been instituted under the ambit of National Portal Of India .**
- DIA awards are given to recognize the various initiative and innovation done by various government ministries, organizations and departments at all level- centre, state and across all India .**
- National Portal Of India is developed and run by NIC.**
- Bihar won the DIA award in Pandemic category in 2020.**

Which of the above are correct?

- i) a,b,c,d ii) a,c,d iii) a,b,d iv) b,c,d

Answer: iii

Context

- President Ram Nath Kovind will confer Digital India Awards on 30 December 2020.

Facts

- The Chief Minister Secretariat of Bihar, National Informatics Centre and the Disaster Management Department have been jointly chosen as winners in "Pandemic Category" in Digital India Awards, 2020.
- Bihar won the award for its digital innovation for providing help to its people during the time of pandemic .Nearly 21 lakhs people-majority of them migrant-



labourers, stranded outside the state were provided assistances and cash through digital platforms called-' Bihar Parvasi Sahayta Mobile App'.

- The Uttar Pradesh Food and Civil supplies department has been chosen winner in Digital India Awards 2020 under 'Excellence in Digital Governance' category. UP won the award for its e-POS (Points of Sale)-based food distribution, GPS tracking of vehicles transporting food grains and online billing and payment for the food grains purchased from farmers.

About Digital India Awards

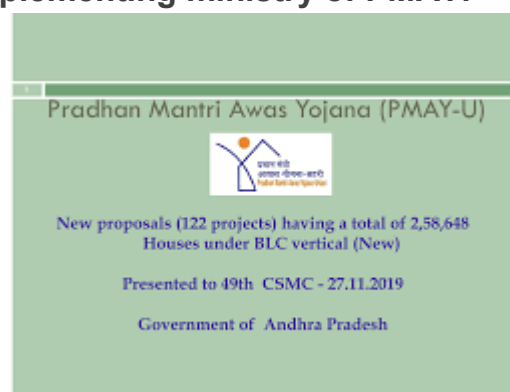
- Digital India Awards are given every year to various government entities across all level – centre, state and across India , for their innovation and initiative in promoting digital governance.
- This year the entire process for DIA 2020 right from submitting nominations to screening of the entries to final conferring of the awards is being done completely online.
- **This year awards are given in following categories:-**
- **INNOVATION IN PANDEMIC**-To felicitate a Government Entity which has developed outstanding and innovative and digital solution during pandemic to ease the citizens' hardship in taking activities like communication, health, education, travel etc. or to ensure continuity of government services.
- **EXCELLENCE IN DIGITAL GOVERNANCE – MINISTRY/DEPARTMENT (CENTRAL, STATE AND DISTRICT)**-To felicitate a Ministry or Department of the Government which has a comprehensive digital presence and displays a high level of Intra/Inter Department Integration in its digital initiatives. It is awarded to Ministries, States/Union Territories and to Districts separately.
- **Open Data Champion:** It acknowledges ministries and departments that release data sets in a timely and proactive way. It is also essential that the data released should be in compliance with the National Data sharing and Accessibility Policy.
- **Exemplary Product:** The Digital India Award honours those products that have made their mark in Digital Governance. The product should have proved its high degree of configurability, replicability, scalability.
- Digital India Award (DIA) has been instituted under the ambit of National Portal Of India which is a joint initiative of NIC and Ministry of Electronics and Information Technology, Government of India.

Reference: <https://digitalindiaawards.gov.in/>

Vishakhapatnam: Best Performing Civic Body in Pradhan Mantri Awas Yojana(PMAY) Awards

Question: which of the following statements are correct:

- i) Ministry of Housing and Urban Affairs is implementing ministry of PMAY.
- ii) Vishakhapatnam Municipal Corporation is adjudged as the best performing civic body for 2019 under PMAY awards.
- iii) Mirzapur won the best performing



Municipal body.

a) i, ii,iii b) i,ii c) iii d) none

Answer: a)

Context

- Vishakhapatnam was adjudged as best Municipal Corporation under the Annual Awards for Excellence that recognises outstanding contribution of Pradhan Mantri Awas Yojana-Urban in 2019.

Facts

- Mirzapur won the best performing Municipal body. Nagar Panchayat Malihabad Lucknow was selected for the first place and Hariharpur was selected for the second place.
- A total of five awards are presented. They are as follows:
 - Best Performing States
 - Best Performing Municipal Corporation
 - Best Performing Municipality
 - Best House Construction
 - Special Awards to recognise best practices
- The information for the purpose of evaluation is taken from the Monthly Progress Report uploaded by States and Union Territories in Pradhan Mantri Awas Yojana.

Link: <https://www.amarujala.com/gorakhpur/pm-will-give-award-to-nagar-panchayat-hariharpur-for-best-work-in-pradhan-mantri-awas-yojan>

UNEP's 2020 Young Champions of the Earth Award

Question: which of the following statements are correct?

- i) Young Champions of Earth prize is awarded every year by United Nations Environment Programme.
- ii) This Award is given to 7 young entrepreneurs under the age of 30 for their ideas in the field of sustainable environment change.
- iii) Vidyut Mohan from India is one of the recipient of the prize for the year 2020.

a) i and ii b) ii and iii c) i, ii and iii
d) None of the above



UNEP names seven dynamic environmentalists as its 2020 Young Champions of the Earth

Answer: c)

Context

- The UN Environment Programme (UNEP) has named seven young scientists, engineers, entrepreneurs and activists from across the globe as its 2020 Young Champions of the Earth on 15th December.

Facts

- The Young Champions of the Earth prize is awarded every year to seven entrepreneurs who hail from 7 different geographical region.
- Nzambi Matee (Kenya from Africa), Xiaoyuan Ren (China from Asia Pacific), Vidyut Mohan (India from Asia Pacific), Lefteris Arapakis (Greece from Europe), Max Hidalgo Quinto (Peru from Latin America and the Caribbean), Niria Alicia Garcia (USA from North America), Fatemah Alzelzela (Kuwait from West Asia) are the 7 winners.
- Vidyut Mohan from India is 29 years old young entrepreneur who has been awarded the prize in Asia and The Pacific Region. He co-founded Takachar, which builds affordable and portable biomass upgrading equipment, allowing farmers to earn extra income and prevent open burning by converting crop waste into fuels, fertilizers and activated carbon.

Background

- The Young Champions of the Earth prize is awarded every year to seven entrepreneurs under the age of thirty. These entrepreneurs should have bold ideas for sustainable environmental change.
- The winners of the award receive mentoring, seed funding, communications support to amplify their efforts.
- Aim of the Award is to encourage youth to initiative in tackling most pressing of issues of environment change and sustainable development.

About United Nations Environment Programme

- UNEP is headquartered at Nairobi, Kenya.
- It was founded in 1972 by Canadian businessman and philanthropist Maurice Strong, its first director, after the United Nations Conference on the Human Environment (Stockholm Conference).
- It is part of United Nation Development Group and provides coordination in various UN activities related with environment protection. It also provides assistance to developing countries in forming policies which are in line with environment protection and sustainable development.

Link:

<https://www.unenvironment.org/news-and-stories/press-release/unep-names-seven-dynamic-environmentalists-its-2020-young-champions>

Ramanujan Prize for Young Mathematicians 2020

Question: which of the following statement about Ramanujan Prize for Young Mathematicians 2020 is

<http://www.edristi.in/>

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correct?

i) This prize is awarded annually to a researcher from a developing country and is funded by the Department of Science and Technology of the Government of India.

ii) This year's prize has been awarded to Dr. Carolina Araujo, Mathematician from the Institute for Pure and Applied Mathematics (IMPA), Rio de Janeiro, Brazil.

a) I b) ii c) both i and ii d) none

Answer: c)

Context

- The year 2020 Ramanujan Prize for Young Mathematicians was awarded to Dr. Carolina Araujo, Mathematician from the Institute for Pure and Applied Mathematics (IMPA), Rio de Janeiro, Brazil, in a virtual ceremony on 9th December 2020.

Facts

- Ramanujan Prize for Young Mathematicians is awarded annually to a researcher from a developing country.
- Award is funded by the Department of Science and Technology of the Government of India in association with ICTP (International Centre for Theoretical Physics) Italy, and the International Mathematical Union (IMU) .
- The Award was given to Dr. Carolina Araujo for her outstanding work in algebraic geometry. Her work area focuses on birational geometry, which aims to classify and describe the structure of algebraic varieties.
- Dr. Carolina Araujo, who is Vice President of the Committee for Women in Mathematics at the International Mathematical Union, is the first non-Indian women mathematician to receive this prize.

About the Prize

- The Prize is given every year to young mathematicians less than 45 years of age who have conducted outstanding research in a developing country.
- The award has been supported by DST in the memory of genius mathematician Srinivasa Ramanujan.
- The Ramanujan Prize for young mathematicians from developing countries has been awarded annually since 2005. It was originally instituted by ICTP, the Niels Henrik Abel Memorial Fund, and the International Mathematical Union (IMU). The participation of the Abel Fund ended in 2012; the Department of Science and Technology of the Government of India (DST) has now agreed to fund the Prize for a 5 year period, starting with the 2014 Prize.
- Ritabrata Munshi from the Indian Statistical Institute, Kolkata, India and the Tata Institute of Fundamental Research, Mumbai is only Indian who has won the Award in 2018.

Link:

<https://www.ndtv.com/education/brazils-carolina-araujo-becomes-first-non-indian-win-ramanujan-prize-for-young-mathematicians>

Commission & Committee

India-Mongolia 7th Meeting of Joint Committee on Cooperation

Question: India and Mongolia during the virtual meet acknowledged that 2020 marks the.....anniversary of the diplomatic relations.

Which of the following is the correct figure to be filled in the blank in above statement?

a) 4th b) 56th c) 65th d) 25th

Answer: (c)

Related Facts:



- On 3 December 2020; India-Mongolia 7th Meeting of Joint Committee on Cooperation was held, in a virtual mode.
- Minister of External Affairs, S Jaishankar from India and L Oyun-Erdene, Chief Cabinet Secretary of Mongolia had participated in this virtual meeting.
- The ministers of India and Mongolia during the virtual meet acknowledged that 2020 marks the 65th anniversary of the diplomatic relations established between both the countries.
- Both these representatives from the two nations, comprehensively discussed on various issues covering bilateral cooperation.
- The ministers, during the meeting, also recalled PM Modi's visit to Mongolia in May 2015 and President of Mongolia, Khaltmaagiin Battulga's visit to India in September 2019.
- **Other details of the meeting :-**
- The arrangement of special flights between the two nations discussed in this bilateral meeting and both the ministers expressed satisfaction over this kind of arrangement.
- Tackling of the COVID-19 was also an important matter of discussion in this meeting.
- The procurement of vaccines by Mongolia from India was one of the important items discussed in this meeting.
- The coordination between India and Mongolia in regional and multilateral forums was also evaluated during the meeting.

- They also agreed to continue to support each other in relevant international forums.
- **Promotion of clean Energy :**
- India welcomed the decision by Mongolia to join the International Solar Alliance- ISA.
- India is of the view that the initiative will promote the use of clean energy in both the nations and the world.
- In the meeting Mongolia agreed to establish an AYUSH information cell in Ulaanbaatar as early as possible.
- India also appreciated Mongolia for 'a visa on arrival' status for the Indian citizens.
- It should be known that the relations between the two countries have grown stronger and deeper, especially in the last few years.
- Both the countries have agreed to hold the next meeting in 2021.
- On this occasion Both India and Mongolia have also jointly released a commemorative stamp which has been issued by Mongol Post.

Links:-

<https://www.mea.gov.in/press-releases.htm?dtl/33256/7th+Meeting+of+IndiaMongolia+Joint+Committee+on+Cooperation#:~:text=The%207th%20meeting%20of%20the,Cabinet%20Secretary%2C%20Government%20of%20Mongolia.>

Planning & Project

Ayushman Bharat PM-JAY SEHAT scheme

Question: Prime Minister Narendra Modi launched Ayushman Bharat PM-JAY SEHAT to extend health insurance coverage to all the residents of which State/Union Territory?

(a) Himachal Pradesh (b) Uttarakhand (c) Ladakh (d) Jammu & Kashmir

Answer: (d)

Related facts:

- On 26 January 2020, Prime Minister Narendra Modi launched the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) Social Endeavour for Health and Telemedicine (SEHAT) scheme via video-conferencing to extend coverage to all the residents of the Union Territory of Jammu & Kashmir.

- The Scheme provides free of cost insurance cover. It provides financial cover upto Rs. 5 lakh per family on a floater basis to all residents of the UT of J&K.
- Floater basis, means that every member of the family is insured under one plan. The family can avail the medical benefits of up to Rs 5 lakh.
- The scheme would work in convergence with Pradhan Mantri Jan Arogya Yojana (PMJAY).
- At present about 6 lakh families of the state are getting the benefit of Ayushman Bharat Scheme. All 21 lakh families will get the same benefit after the SEHAT scheme.



Ayushman Bharat Yojana:

- Ayushman Bharat, a flagship scheme of Government of India, was launched on 23rd September 2018 as per recommendations of the National Health Policy 2017, to achieve the vision of Universal Health Coverage (UHC).
- Universal Health Coverage (UHC) includes the full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care and enables everyone to access the services, protecting people from the financial consequences of paying for health services out of their own pockets and reducing the risk that people will be pushed to poverty.
- The Ayushman Bharat program, with its two pillars – Health and Wellness Centres and Pradhan Mantri Jan Arogya Yojna – is envisaged to achieve UHC.
- Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) provides a defined benefit cover of Rs. 5 lakh per family per year. This cover will take care of almost all secondary care and most of tertiary care procedures.

Links:

<https://pib.gov.in/PressReleaselframePage.aspx?PRID=1683373#:~:text=PM%20to%20launch%20Ayushman%20Bharat,of%20J%26K%20on%2026%20December&text=Prime%20Minister%20Shri%20Narendra%20Modi,12%20noon%20via%20video%20conferencing.>

ISRO plans for Green Propulsion

Question: Green Propulsion means-

- a) Projecting green colored rocket
- b) Fuel used in the rocket is green in color
- c) Propulsion area of rocket has green plants
- d) Less toxic chemical propellant

Answer: (d)

Related Facts:-

- On 26 December 2020; K Sivan, Chairman Indian Space Research Organisation announced that ISRO is developing green propulsion for its ambitious human space flight mission, Gaganyaan.
- He has announced about the plan, when speaking on the occasion of 16th convocation of SRM Institute of Science and Technology, Chennai.
- ISRO is planning to adopt green propulsion for use in every stage of a rocket.
- Mr. Sivan said, as India continues to focus on economic growth, it needs to ensure that environmental damage is limited by adopting green technologies.
- He said that ISRO has made space grade lithium-ion batteries and this technology is useful for mass adoption of electric vehicle.
- It should be noted that the ISRO had planned to launch its maiden human space flight mission 'Gaganyaan' by December 2021.



Links:-

<https://www.businessinsider.in/science/space/news/isro-developing-green-propulsion-for-human-space-mission-gaganyaan-says-chairman-k-sivan/articleshow/79966986.cms>

Jagananna Jeeva Kranthi scheme

Question : Which state has launched the Jagananna Jeeva Kranthi scheme ?

(a)Andhra Pradesh (b)Telangana (c)Karnataka (d)Tamilnadu

Answer (a)

Related facts

- YS Jagan Mohan Reddy(CM Andhra Pradesh) has recently(10 December 2020) launched the Jagananna Jeeva Kranthi scheme.
- Under the scheme sheep and goats(total 249151) would be distributed to the beneficiaries of YSR Cheyutha and YSR Aasara.
- The estimated cost of distribution of these animals is 1869 crore rupees.
- The distribution will be done in a phased manner.
- Speaking on the occasion of launching ceremony, the Chief Minister expressed satisfaction over launching another women empowerment scheme.
- It is notable that CM Jagan Mohan Reddy has recently been launched many other women empowerment schemes.



Pact

- The State government has also entered into an MoU with Allana Group to procure sheep and goats and market the meat products, so as to provide a stable market for the beneficiaries of the Jagananna Jeeva Kranthi.

Link:

<https://www.newindianexpress.com/states/andhra-pradesh/2020/dec/11/jagananna-jeeva-kranthi-scheme-launched-2234648.html>

Atmanirbhar Women Gold Scheme

Question : Which bank has launched the Atmanirbhar Women Gold Scheme ?

(a)Bank of Baroda (b)Indian Bank (c)PNB (d)SBI

Answer (a)

Related facts

- Bank of Baroda has recently(December 2020) launched the Atmanirbhar Women Scheme as part of its Baroda Gold Loan.
- The scheme was launched at BOB's Ramamurthy Nagar branch in Bengaluru and simultaneously in 18 branches coming under 18 zones in the country, virtually by MD & CEO of Bank.



Scheme

- Under the scheme, the bank is offering loans at 0.50 per cent concession for women.
- The bank under the gold loan scheme is also offering agri-gold loan at 0.25 percent concession and for retail loan at 0.50 per cent concession.
- This Atmanirbhar scheme is exclusively meant for helping women to be self-reliant.
- The organised gold loan market is expected to grow at an annual rate of 15.7 per cent to ₹4.61-lakh crore in FY22 from ₹3.44-lakh crore in FY20.

Link:

<https://www.thehindubusinessline.com/money-and-banking/bob-launches-atmanirbhar-women-gold-scheme/article33272257.ece>

YSR Free Crop Insurance' Scheme

Question: Recently Chief Minister of which of the following state has launched YSR free Crop insurance Scheme?

a) Uttar Pradesh b) Rajasthan c) Andhra Pradesh d) Karnataka

Answer: (c)

Related Facts:-

- On 15 December 2020; Andhra Pradesh Chief Minister YS Jagan Mohan Reddy launched 'YSR Free Crop Insurance' scheme for the farmers of the state.
- Under the provisions of this scheme Rs 1,252 crore credited directly into the bank accounts of 9.48 lakh farmers, who have lost their crops during Kharif 2019.



- Mr. Jagan informed that his government has taken the responsibility of supporting the farmers in the hard times.
- He said that the State government thus brought in the free crop insurance scheme, without putting any burden of premium on them.
- During the previous government, for availing the insurance scheme, the farmers have to pay their share, while both State and Central governments used to pay their share.
- It has been found that neither the State nor the Centre used to pursue the insurance claims, resulting in farmers either receiving the insurance amount after a very long time or ending up losing the insurance.
- In order to resolve this, the Andhra government has taken up the issue to benefit farmers and processed the claims in a fast-track mode besides paying the entire premium on behalf of the farmers.
- In the previous government, farmers were reluctant to pay heavy premiums.
- in three years during 2016-19, , the previous government had spent an average Rs 393 crore per annum towards insurance premium, while the farmers paid about Rs 290 crore per annum.
- CM said that only about 20 lakh farmers were enrolled for the insurance scheme during the previous TDP regime,
- Reddy said that in our government about 49.80 lakh farmers have been brought under the insurance cover.
- It has also been informed by the Andhra CM that the State Government also took the responsibility of paying Rs 971 crore towards premium during 2019-20.
- According to CM in 2016-17, only 17.79 lakh farmers had insurance cover and during 2017-18, it became 18.22 lakh farmers and in 2018-19, 24.83 lakh.
- He said in our government, during 2019-20, about 49.80 lakh farmers were brought under insurance coverage.

Links:-

<https://www.thehindubusinessline.com/economy/agri-business/andhra-pradesh-rolls-out-free-crop-insurance-scheme/article33338726.ece>

Tamil Nadu government signed MoUs for 24 projects

Question: The company, First Solar, which is a manufacturer of solar panels, and a provider of utility-scale PV power plants, is based in which of the following country?

a) UK b) USA c) China d) Japan

Answer: (b)

Related Facts:-

- On 14 December 2020; the Tamil Nadu government signed memorandums of understanding (MoUs) for 24 projects worth ₹24,248 crore.
- The State government said that the foundation stone of all the projects has laid and inaugurations have been done.
- Tamil Nadu Government now hopeful that these projects are likely to create 54,218 jobs for the various job seekers in the state.

- The 18 MoUs were signed by the State government signed at a function, with different companies in the presence of Chief Minister Edappadi K Palaniswami.
- It has been planned an investment of ₹19,955 crore, which will create 26,509 jobs. In another step further, foundation stones were laid and inauguration done of projects that would bring in an investment of ₹4,503 crore.
- This will also come up with employment generation potential of 27,709 persons.
- A MoU was also signed with Foxconn for a mega industrial housing project at Sipcot Vallam Vadagal.
- Some of the other MoUs signed in Tamil Nadu on 14 December 2020 include-
- First Solar of the US setting up a solar module manufacturing facility at an investment of ₹4,185 crore;
- Voltas to set up a manufacturing plant at Vedal village, Kanchipuram, at an investment of ₹1,001 crore (2,000 jobs), and
- Ola Electric Mobility to set up an electric two-wheeler manufacturing unit in Hosur at an investment of ₹2,354 crore (2,182 jobs).
- Crown Group will establish an Aerospace Cluster Park, in Salem district, for manufacturing of flight components, sub-systems and drones at an investment of ₹2,500 crore (5,000 jobs);
- US-based Mylan Laboratories will establish an injection manufacturing project in Krishnagiri District at an investment of ₹350 crore.
- Gurit India Pvt Ltd will establish a project for manufacture of wind blade components at Sriperumbudur at an investment of ₹320 crore (300 jobs).



Links:-

<https://www.thehindubusinessline.com/news/national/tn-signs-mous-for-24-projects-worth-24248-cr/article33326348.ece>

Shri Ram Janmabhoomi Mandir Nidhi Samarpan Abhiyan

Question: consider the following statement:

- Shri Ram Janmabhoomi Mandir Nidhi Samarpan Abhiyan will be held from 15th January to 27th February 2021.
- Shri Ram Janmabhoomi Teerth Kshetra trust is constituted by GOI in 2020 for the construction of Shri Ram Temple in Ayodhya.
- Mahant Nrityagopal Das ji is chairman of 15 member trust.

Which of the above is correct?

- a) I b) ii and iii c) all of above d) none of above

Answer: c)

Context

- Champat Rai, Vice-President of Vishva Hindu Parishad (VHP) and Secretary-General of Shri Ram Janmabhoomi Teerth Kshetra Trust, said that the 'Shri

Ram Mandir Nidhi Samarpan' drive will run next year from January 15 to February 27.

Facts

- In the proposed drive Karyakartas of VHP will go around the country with saints and engage with common people teaching them about the construction of temple work.

Shri Ram Janmabhoomi Teerth Kshetra (SRJBTK trust)

- SRJBTK trust is set up by Government of India for the construction and management of Shri Ram temple in Ayodhya .
- It was created as per the verdict of the Supreme Court on the M Siddiq(D) Thrs Lrs v/s Mahant Suresh Das & Ors case.
- The trust have 15 members, of which 9 are permanent and 6 are nominated members with each member must be a practicing Hindu.
- On 19 February 2020, the first meeting of trust held at the residence of Parasaran, elected Ram Janmabhoomi Nyas' chief, Mahant Nrityagopal Das Ji Maharaj as the Chairman and VHP vice-president, Champat Rai as the General Secretary.



Link:

<http://www.businessworld.in/article/-Shri-Ram-Mandir-Nidhi-Samarpan-drive-to-start-from-Jan-15/17-12-2020-354607/>

West Bengal : Expansion of Swasthya Sathi scheme

Question : All of Bengal to be under Swasthya Sathi scheme. On which date this announcement was made by CM Mamata Banerjee ?

- (a) 26 November 2020 (b) 29 November 2020 (c) 2 December 2020
(d) 4 December 2020

Answer (a)

Related facts

- All of Bengal to be under Swasthya Sathi scheme. This announcement was made by CM Mamata Banerjee on 26th November 2020.



Significance

- It is notable that West Bengal is battling an outbreak of COVID-19 infections.
- Hence it is a significant step in a background of such conditions.

Scheme & Expansion

- West Bengal government planned to extend the cashless scheme where rupee 5 lakh insurance is provided to every family.
- Under the scheme a smart card is being issued in the name of a female member of family.

Link:

<https://www.thehindu.com/news/national/other-states/all-of-bengal-to-be-under-swasthya-sathi-scheme/article33188529.ece>

Government notifies Viability Gap Funding (VGF) Scheme for infrastructure projects

Question: In relation with recently announced VGF scheme for infrastructure, which of the following statements are correct?

i) Scheme has been announced for public private partnership (PPP) mode of infrastructure projects.

ii) As per the VGF scheme notified by the Finance Ministry, the Empowered Committee (EC) headed by the finance secretary will sanction the funding.

iii) Scheme covers both commercial economical sector as well as social sector project.

a) only I b) i and iii c) ii and iii d) i, ii ,iii

Answer: b)

Context

- Modi government has notified VGF scheme, to boost India's infrastructure project.
- VGF scheme will be known as the Scheme for Financial Support to PPPs in the infrastructure sector.



Facts

- The Viability Gap Funding (VGF) scheme has been notified by the Finance Ministry under which infrastructure projects would be selected for financial support.
- Infrastructure projects will be selected for only PPP mode projects.

Who will sanction the fund?

- Empowered Committee (EC) headed by the economic affairs secretary will sanction funding up to an amount of Rs 200 crore.
- For projects requiring amount above 200 crore , it would be approved by the Empowered Committee with Finance Minister's approval.

Empowered Committee composition

- Headed by the economic affairs secretary. Shri Tarun Bajaj is current economic affairs secretary.
- The other members of the Empowered Committee would be CEO of NITI Aayog, expenditure secretary, line ministry's secretary dealing with the subject as well as joint secretary in the Department of Economic Affairs as member secretary.
- VGF amount for social sector scheme like water, sanitation, waste management, education etc will be 30% of project's total cost.
- For the other eligible scheme amount will be 20% of project's total cost.

Eligibility of a project

- It will be implemented by a private sector company.
- The selection of the private sector company will be done by the government or a statutory entity through an open competitive bidding process.

Viability Gap Funding

- Viability Gap Finance means a grant to support projects that are economically justified but not financially viable.
- Such a grant under VGF is provided as a capital subsidy to attract the private sector players to participate in PPP projects that are otherwise financially unviable.
- Funds for VGF will be provided from the government's budgetary allocation. Sometimes it is also provided by the statutory authority who owns the project asset.

Link:

<https://www.financialexpress.com/infrastructure/modi-government-notifies-vgf-scheme-to-boost-indias-infrastructure-projects-check-details/2148084/>

UPPDNR Project : ADB approved 430 million dollar

Question : The Asian Development Bank has recently approved a \$430 million multitranche financing facility for UPPDNR project. What is the full form of UPPDNR ?

- (a) Uttar Pradesh Power Distribution Network Rehabilitation
- (b) Uttar Pradesh Power Distribution New Rectification
- (c) Uttar Pradesh Powerloom Development Network & Rehabilitation
- (d) None of the above

Answer (a)

Related facts

- The Asian Development Bank has recently(December 2020) approved a \$430 million multitranche financing facility(MFF) for UPPDNR project.

- UPPDNR stands for — Uttar Pradesh Power Distribution Network Rehabilitation.
- Project will improve the efficiency and sustainability of power supply in Uttar Pradesh.

Benefits of project are as follows —

- 1) Conversion of distribution lines — The project will finance the conversion of 65,000 kilometers (km) of rural low-voltage distribution lines from bare conductors to aerial bundle conductors to benefit an estimated 70 million people in 46,000 rural villages.
 - 2) Separation of the distribution — It will also finance the construction of a parallel network of 11-kilovolt feeders with a total length of 17,000 km to separate the distribution of electricity between residential consumers and agriculture consumers.
 - 3) Facilitation of the use of solar energy to meet the agriculture demand — Project will facilitate the use of solar energy to meet the agriculture demand, increase in electricity supply duration to rural residential consumers, and energy and water conservation. In addition, the project will improve the gender inclusivity, corporate governance, and financial management capacity of Uttar Pradesh Power Corporation Limited (UPPCL).
- The MFF is complemented by a \$2 million technical assistance (TA) grant from ADB's TA Special Fund and the Japan Fund for Poverty Reduction to strengthen the gender inclusivity and institutional capacity building of Uttar Pradesh power sector.



Link:

<https://www.adb.org/news/adb-approves-430-million-help-rehabilitate-power-distribution-networks-uttar-pradesh-india>

Announcement of new schemes in West Bengal

Question : In the backdrop of West Bengal elections which scheme has recently announced by the Chief Minister Mamata Banerjee ?

- (a) Duare Duare Paschim Banga Sarkar (b) Bangla Manush Sarkar
(c) Duare Duare Proja Sarkar (d) None of the above

Answer (a)
Related facts

- In the backdrop of West Bengal elections, Mamata Banerjee has recently(November 2020) announced schemes for redressing grievances of people at the block level.

Schemes

- Two schemes have been announced which are as follows —

Scheme	Details
Duare Duare Paschim Banga Sarkar(West Bengal government at every doorstep)	The administration will set up camps in all the blocks of the state from which officials will redress grievances of people.
	In these camps, representatives all departments will look into the requirements of people and try to fulfil them, if possible, immediately.
	‘Duare Duare Paschimbanga Sarkar’ camps will start from December, 2020.
Karmai Dharma(Work is worship)	This initiative will enable the youth to do door to door selling through motorbike.
	Two lakh youth will be given one motorcycle each.(With assistance from cooperative banks)
	There will be boxes on the back of the bikes (for carrying items to be sold). Youths will be able to sell sarees, or clothes or any other articles.

West Bengal elections,2021

- The Assembly election in the state for 294 seats is due in April-May 2021.
- In the previous elections in 2016, the Mamata Banerjee’s party (AITC) retained its majority in the Legislative Assembly.

- However, in the 2019 general elections the BJP won 18 of the 42 Lok Sabha seats, comparable to AITC's 22 seats.

Link:

<https://economictimes.indiatimes.com/news/politics-and-nation/mamata-announces-schemes-ahead-of-assembly-polls/articleshow/79374779.cms?from=mdr>

Treaty & Agreements

UK – EU Trade Deal

Question: The UK-EU Trade and Cooperation Agreement (TCA), is a planned free trade agreement between the United Kingdom and the European Union, it will be applied from-

a) 01 January 2021 b) 01 January 2022 c) 01 October 2021 d) 01 July 2021

Answer: (a)

Related Facts:-

- On 24 December 2020, terms for a free trade agreement between the U.K. and the European Union were finally agreed.
- It took 8 months for reaching out finally upon such kind of agreement between the two after intense and difficult negotiations.
- The UK-EU Trade and Cooperation Agreement (TCA), is a planned free trade agreement between the United Kingdom and the European Union.
- Although TCA still has been not signed, but is to be operated provisionally from 01 January 2021 after the transitional period ends in December 2020.
- The TCA awaits ratification by the UK and EU Parliaments and the Council of the European Union before it formally comes into effect.
- The UK parliament is expected to do so before the end of 2020 and the European Parliament will consider the draft in early 2021.
- Brexit
- The negotiations for the agreement are a result of the United Kingdom's exit, popularly known as Brexit, from the European Union which took place on 31 January 2020.
- From that date until 31 December 2020, a transition period applies in which the UK is considered (for most matters) to be part of the EU.
- Ever since the UK left the EU on 31 January 2020, both sides have been talking about what the new rules should be
- The negotiations went to the wire, as the current arrangement ends on 31 December 2020.
- Contents of New deal of TCA:-
- The deal contains new rules for how the UK and EU will live, work and trade together.
- No taxes on each other's goods when they cross borders (known as tariffs)



- No limits on the amount of things which can be traded (known as quotas)
- European Commission president Ursula Von der Leyen said competition rules – designed to prevent one side gaining an unfair advantage will be fair and remain so.
- She said that the UK and EU would continue co-operating in all areas of mutual interest, including things like climate change, energy, security and transport.
- The EU is the UK's nearest and biggest trading partner, The UK government says the deal covers trade that was worth £668bn in 2019.
- While the UK was in the EU, companies could buy and sell goods across EU borders without paying tariffs.
- It was also a matter of concern that with the deal, businesses would have had to start paying these taxes, which would have added to their costs.
- No deal would have also meant even more border checks, which could have caused delays for Lorries transporting products.
- It should be known that Even though the deal has been agreed, it still needs to be made law.
- For that to happen it must be looked at and approved by both the UK and European parliaments.
- As it's been left so late, the European Parliament won't have time to sign it off before the end of the year.
- Both the parties agreed upon that, it shouldn't stop the deal coming into force on 1 January 2020.
- The UK government says it will summon MPs back on 30 December to vote on the deal.
- The European Union (EU)
- The EU is made up of 27 European countries.
- EU citizens are free to live and work in other EU countries, and firms in those countries can buy and sell each other's goods without checks or extra taxes at borders.
- The UK was the first country to leave the EU and this was known as Brexit or British exit.
- Brexit happened because a public vote – or referendum – was held in June 2016, to decide whether the UK should be in the EU.
- WTO rules:
- If countries don't have free trade agreements, they must trade according to rules set by a global body called the World Trade Organization (WTO), which can mean taxes on goods.

Links:-

<https://www.bbc.com/news/uk-politics-32810887>

Digital payment sector : Central Bank of India & NPCI partnership

Question : What thing Central Bank of India has launched in association with NPCI?

- (a) Contactless 'RuPay Select' debit card (b) 'RuPaySelect' creditcard
(c) A new PoS machine (d) None of the above

Answer- (a)

Related facts

- Central Bank of India(CBI) has recently (21 December2020) e-launchedcontactless 'RuPay Select' debit card in association withNPCI.
- It is notable that above mentioned date is the 110th foundation day of CBI. Hence this date witnessed the launch of two customer utility products.

1) RuPaySelectDebitCard

- Users of Central Bank RuPay Select Debit Card can avail complementary membership and concessional access to golf courses, gyms, spas and restaurants.
- Additionally, they would be entitled for discounted health check-ups with this National Common Mobility Debit Card (NMC).
- The card will also offer airport lounge access to over 20 domestic and more than 500 international lounges along with accidental and permanent disability insurance cover up to Rs 10 lakh.



2) FASTag

- FASTag is other product launched in association with 'Osta' app.

NPCI

- National Payments Corporation of India (NPCI), enabling digital payments and settlement systems in India, is an initiative of RBI and IBA.

Link:

<https://m.economictimes.com/industry/banking/finance/banking/central-bank-of-india-launches-contactless-debit-card-in-association-with-npci/articleshow/79861822.cms>

Partnership between Assam government and SIDBI

Question : For which purpose Assam government and SIDBI has signed a MoU ?

- (a) For development of MSME ecosystem (b) For setting up a incubation centre
(c) For setting up a skill development centre (d) For financial inclusion

Answer (a)

Related facts

- Assam government and SIDBI has recently(December 2020) signed a MoU.
- The pact is done for setting up a MSME ecosystem in Assam.

Role of SIDBI(Small Industries Development Bank of India)

- Under the pact a Project Management Unit (PMU) will be deployed by SIDBI with Government of Assam.
- The PMU will support the State Government in making necessary interventions for enhancing efficacy of MSMEs in the state.
- Through this MoU, SIDBI in association with Industries and Commerce Department aims to develop the MSME ecosystem in the state.



Significance

- This collaboration with SIDBI will bring all the MSMEs of the state to the formal, organized sector.

Link:

<https://economictimes.indiatimes.com/news/politics-and-nation/how-assam-plans-to-develop-its-msme-ecosystem/articleshow/79816204.cms?from=mdr>

Indian Navy has signed MoU for Sharing Ocean Services Data

Question: Indian National Centre for Ocean Information Services (INCOIS) an autonomous organization of the Government of India , is located at-

- a) Mumbai
- b) Kolkata
- c) Hyderabad
- d) Kochi

Answer: (c)

Related Facts:-



- On 18 December 2020; Indian Navy has signed a Memorandum of Understanding (MoU) for sharing ocean services data.
- This MoU is signed with Indian National Centre for Ocean Information Services (INCOIS) an expertise in operational oceanography.
- This MoU is focused on sharing of ocean services, data, and expertise in the field of operational oceanography.
- According to a statement the agreement will benefit both Indian Navy and INCOIS in furthering meaningful interactions and professional exchanges in future.
- INCOIS is a unit under the administrative control of the Union Ministry of Earth Sciences.
- It deals with the multifaceted and specialised aspects of Oceanography and Meteorology.
- It provides information and advisory services to society, industry, government agencies and the scientific community.
- INCOIS also provide all services mentioned above to the Indian Navy in support of naval operations in all its three dimensions.

- Dr. T. Srinivasa Kumar, Director INCOIS and Commodore A Abhyankar, who heads Indian Navy's Oceanology and Meteorology Directorate, signed the MoU.
- In view of ongoing Covif-9 pandemic, the MoU was signed virtually.

Links:-

https://incois.gov.in/documents/MoU_with_Indian_Navy_2020.pdf

Maharashtra Government – Cornell University tie-up

Question : For which purpose Maharashtra government has signed a memorandum of understanding(MoU) with the Cornell University ?

- (a) To set up a world-class incubation centre
- (b) To set up a administrative training center
- (c) To set up a medical research center
- (d) To set up a nuclear fusion center

Answer (a)

Relative facts

- Maharashtra government has recently(10 December 2020) tied-up with the Cornell University to set up a world-class incubation centre.
- Cornell is an American University, founded on April 27, 1865. This pact done through an online event.



About the pact

- This is the first time that a state in India is setting up an incubation centre through an memorandum of understanding with an international university.
- According to the Maharashtra government sources, 60 entrepreneurs will receive training, guidance and financial and administrative support every year at the incubation centre from the university.
- Only Maharashtrian entrepreneurs will be able to take part in the programme.
- Those participating will get a certificate from Cornell University.

Location

- The location of the proposed incubation centre is Navi Mumbai(Reliance Corporate Park in Ghansoli MIDC).
- Cost of the programme & eligibility criteria
- The scheme will be implemented on a pilot basis for the first three academic years and is estimated to cost around Rs 7 crore per year. The incubation centre will provide training to the entrepreneurs from the open category, SC/ST category and women entrepreneurs.

Link:

<https://indianexpress.com/article/education/govt-signs-mou-with-cornell-university-to-train-entrepreneurs-7100254/>

SBI General Insurance and IntrCity RailYatri partnership

Question : SBI General Insurance and IntrCity RailYatri has recently partnered to provide domestic travel insurance to customers opting to travel/commute through IntrCity RailYatri. How much complementary travel cover involve in this partnership ?

- (a) Rs. 5 Lacs along with the travel ticket
- (b) Rs. 4 Lacs along with the travel ticket
- (c) Rs. 3 Lacs along with the travel ticket
- (d) Rs. 2 Lacs along with the travel ticket

Answer (a)

Related facts



- SBI General Insurance has recently (December 2020) partnered with IntrCity RailYatri to provide domestic travel insurance to customers opting to travel/commute through IntrCity RailYatri.
- IntrCity RailYatri is a multi-modal intercity mobility platform.
- This partnership will enable the domestic bus travelers to avail complementary travel cover worth Rs. 5 Lacs along with the travel ticket.

Coverage/Benefits

- These main coverages will be provided by SBI General Insurance — accidental death, permanent total disability, and medical evacuation.
- This partnership will also help increase the insurance penetration in India and ensure a safe travel experience for customers.
- Both parties (SBI General Insurance + IntrCity RailYatri) have waived off travel premium charges to the traveler, which means every IntrCity SmartBus traveler gets complementary travel insurance cover with the bus ticket.

Link:

https://www.indiainfoline.com/article/news-sector-insurance/sbi-general-insurance-partners-with-intrcity-railyatri-to-provide-domestic-travel-insurance-to-bus-travelers-120121500372_1.html

Auto sector : FADA, ASDC join hands with Google India

Question: ASDC and FADA (Federation of Automobile Dealers Associations) in partnership with Google India aim to prepare over 20,000 auto dealerships to engage with customers in the ongoing and post-pandemic era. What is the full form of ASDC ?

- (a) Automotive Skills Development Council
- (b) Automotive Skills Development Corporation
- (c) Automotive Skills Development Confederation
- (d) None of the above

Answer- a

Related facts

- FADA(Federation of Automobile Dealers Associations) along with ASDC has recently (December 2020) tied up with Google India.
- ASDC and FADA in partner ship Google India aim to prepare over 20,000 auto dealer ships to engage with customers in the on going and post-pandemicera.
- ASDC stands for — Automotive Skills Development Council.

Background of partnership

- Today, geo-location targeting, hyperlocal marketing and other sharply defined digital marketing techniques have revolutionized the advertising industry.
- To aid business recovery, auto players are encouraged to take their dealerships to customers, online.
- Existing skills will require a lot of redefinition and skilling will play a major role when the sector re-enters the new world.
- In the backdrop of above mentioned reason tri parties are come together to bridge the digital skills gap in the country's auto dealerships and build their capacity in this critical growth driver.
- Both ASDC and FADA, with the help of Google, are helping the dealerships become as active as original equipment manufacturers (OEMs) on digital platforms.
- It is notable that average number of visits to dealerships in India fell by 50 per cent over the last three years from 2016 to 2019.
- Now with COVID-19 making consumers further reluctant to visit car dealerships, and as a result, walk-ins are even fewer.



Link:

<https://m.economictimes.com/industry/auto/auto-news/fada-asdc-join-hands-with-google-india-to-bridge-digital-skills-gap-in-auto-dealerships/articleshow/79756347.cms>

MoU with Southern state for historic Land Survey

Question: Recently with which of the following southern state of India Survey of India signed a MoU for historic land survey?

a) Kerala b) Telangana c) Andhra Pradesh d) Tamil Nadu

Answer: (c)

Related Facts:-

- On 9 December, 2020; Andhra Pradesh government and Survey of India (Sol) signed a MoU for a land survey project in the state.
- The Andhra Government has followed this step for taking up the land resurvey named as 'YSR Jagananna Saswath Bhoo Hakku-Bhoo Raksha Pathakam',

- Andhra Pradesh Chief Minister YS Jagan Mohan Reddy was present on the occasion of signing of MoU.
- The programme will be launched on December 21.
- It is to be noted that this type of comprehensive and such a large scale survey is being conducted for the first time in the country after almost 100 years,
- The Chief Minister on this occasion said that all the measurements will be highly accurate, with a minimum error rate of 2 cm.
- Besides this, state-of-the-art facilities such as CARS technology, drones, and rovers will be used for the survey.
- The Chief Minister instructed the officials to take up awareness campaigns on the initiative among people and directed the district collectors to make necessary arrangements for the survey.
- The Chief Minister said the comprehensive land survey would benefit the people.
- The survey is long due as sub-divisions and distributions were not registered at field level in the last 100 years.
- A land titling card, would be given after the survey which consists of a unique identification number.
- This card will also have records of measurements of the property, name of the owner along with the photo, and the total area.
- Digitised Cadastral Maps would be prepared after the survey. All details of the lands in the villages will be on the maps.
- Survey stones would be installed once the marking of land is completed.
- Digitised property register and title register and a register for complaints would be made available at Village Secretariats.
- The Chief Minister informed that the survey will be done across the State — be it a house site or agricultural land or any real estate layout.
- After giving title, it will be displayed in the respective village secretariat for two years to raise objections, if any.
- A permanent land title will be provided after two years upon finalisation.
- If there are any objections after this process, the government will take responsibility and compensate accordingly.
- Lieutenant General Girish Kumar, Surveyor General of India, said that he was honoured to be part of the first-of-its-kind survey in the country.
- Terming it a role model for other States, he said that the records of the surveyed lands will be ready within five minutes, with utmost accuracy.
- He stated that the comprehensive survey is a visionary programme that uses the latest technology in the world.



Link:-

<https://www.newindianexpress.com/states/andhra-pradesh/2020/dec/10/andhra-pradesh-signs-mou-with-survey-of-india-for-historic-land-survey-2234212.html>

MoRTH signs MoU with Austria on Technology Cooperation in Road Infrastructure Sector

Question: consider the following statements:

- i) Ministry of Road Transport and Highway (MoRTH),GOI has signed a Memorandum of Understanding (MoU) with Federal Ministry of Climate Action, Environment, Energy ,Mobility, Innovation and Technology of the Republic of Austria.**
- ii) MoU has been signed on Technology Cooperation in the Road Infrastructure Sector.**
- iii) Austria witnessed just 489 deaths in road accident, for India number of death in road accident is above 1.5 lakhs in both 2018 and 2019.**
- iv) Total number of road accidents in India declined 3.86 per cent in 2019 from 2018.**

Which of the following above are correct?

- a) i,ii,iii b)ii,iii c) i,ii,iii,iv d) none of above

Answer: (c)
context



- The Ministry of Road Transport and Highways signed a Memorandum of Understanding (MoU) with the Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology of the Republic of Austria on Technology Cooperation in the Road Infrastructure Sector on 9th December 2020.

Facts

- The MOU was signed by the Additional Secretary, MoRTH Shri K.C. Gupta and the Ambassador of Austria Brigitte Öppinger-Walchshofer.
- MoU aims to develop effective framework for bilateral cooperation in the field of Road Transportation, Road/Highways infrastructure development, management and administration, Road safety and Intelligent Transport Systems between two countries.

Reason for this MoU

- Austria has state of the art technologies for roads and highways, such as electronic toll systems, intelligent transportation systems, traffic management systems, tunnel monitoring system, geo-mapping and landslide protection measures.
- Austria also has very good record in terms of road safety. In 2018 Austria witnessed just 489 deaths in road accident.
- India's record in road safety has always been abysmal. 'Road Accidents in India' report by the Ministry of Road Transport and Highway has said that although total number of road accidents in India declined 3.86 per cent in

2019, but India still ranked first in the world for the total number of road accident deaths.

- A total 449,002 accidents occurred in India in 2019, causing 151,113 deaths and 451,361 injuries.
- This MoU will be beneficial for both countries from the perspective of enhanced road safety as well as attractive financing possibilities for the sector.

India Austria diplomatic relations

- Diplomatic relations between India and Austria were established in 1949. Traditionally India Austria relations have been warm and friendly.
- The main institutional mechanism at governmental level between India and Austria are the Foreign Office Consultations (FOC) and the Joint Economic Commission (JEC).
- India's exports to Austria in Jan-Dec 2018 were Euro 945.92 mn (y-o-y growth of 14.55%) and India's imports from Austria during Jan-Dec 2018 amounted to Euro 923.54 mn (y-o-y growth of 22.32%).
- Key India export to Austria include Apparels, Textile, Footwear, Rubber articles, Vehicles & Railways parts, Electrical machinery and Mechanical appliances while key import includes Machinery, Mechanical appliances, Railway parts, Iron and Steel etc.
- There are an estimated over 31,000 Indians (majority from Kerala and Punjab) living in Austria – working primarily in the Health Care business and self-employed sectors.

Link:

<https://www.pib.nic.in/PressReleasePage.aspx?PRID=1679441>

Partnership between Consulting firm HexGn and AFC(Agricultural Finance Corporation) India

Question : How many agri-tech start-ups will be promoted under the partnership between HexGn and AFC (Agricultural Finance Corporation) India?

- (a) 1000 agri-tech startups
- (b) 1200 agri-tech startups
- (c) 1400 agri-tech startups
- (d) 1600 agri-tech startups

Answer (a)

Related facts

- Consulting firm HexGn has recently(November 2020) partnered with AFC(Agricultural Finance Corporation) India.
- Objective
- Partnership aims to promote 1,000 agri-tech start-ups in India till November 2025.
- Hosting of different programmes and initiatives



- HexGn will host a series of programmes and initiatives to increase the capabilities and skills of first-generation technology entrepreneurs in the agri-tech domain.
- About AFC & HexGn
- AFC India Ltd is a wholly-owned by commercial banks, NABARD and EXIM Bank.
- According to the HexGn Agritech Startup funding report 2019, the total funding in 2019 by Indian agri-tech organisation was at about USD 28 million.

Link:

https://in.finance.yahoo.com/news/hexgn-afc-india-join-hands-135918709.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xILmNvbS8&guce_referrer_sig=AQAAAKSEIzTz3Q2bJTJbSe4wcFz00qW49n8sCP0FVhbzRGNKJaktJxpTndk7lloIU8PV0da0th9FM5UQiA2PdRKM8byo20lxkWJwsmUvTjSSG4OH6vnop8JjfvRKwFvgCIL1nne-jV_Lv6TjBwfjzmal08ai0XEtoUhFf1JN3G2ycnS

Space Start-up Pixxel and NSIL have Signed an Agreement

Question: Recently Space start-up Pixxel has signed an agreement with state-run New Space India Limited (NSIL) for-

- a) Making Supersonic Missile b) UAV c) Launching remote-sensing satellite
- d) Sending rover to the moon

Answer: (c)

Related Facts:-

- Space start-up Pixxel has signed an agreement with state-run New Space India Limited (NSIL).
- This agreement has been signed to launch the country's first private remote-sensing satellite on an ISRO PSLV rocket in early 2021.
- The agreement is one of its kind after the establishment of IN-SPACe.
- It should be known that IN-SPACe (Indian National Space Promotion and Authorization Center) is an independent nodal agency under Department of Space.
- IN-SPACe has been created for enabling private players to undertake space activities in India.
- The Department of Space is happy to have one of India's leading private space start-ups, Pixxel, onboard with this mission.
- Pixxel shifting from an earlier plan to use a Russian rocket, will be launching its first satellite on an Indian rocket.
- Department of Space Secretary K Sivan said that we are looking forward to a positive outcome from this launch.
- He said, Pixxel's earth imaging satellites have the potential to solve some pressing issues of our time.



- Sivan also said that with the establishment of IN-SPACe, we will also be partnering with other private players that can help India achieve more milestones in the future.
- Pixxel has announced plans to make and launch a constellation of 30 satellites between December 2022 to June 2023.
- The company has also signed an agreement with Momentus Inc for launching its second satellite in 2021, with an option to fly again in 2022.
- Momentus Inc is in-space satellite transportation and Infrastructure Company.
- Pixxel CEO Awais Ahmed said that the company is very excited to initiate this ambitious journey in association with NSIL/ISRO.
- We are elated with the fact that India's first commercial private satellite will now launch on an Indian rocket.

This is not only a proud moment for us as an organisation but also as citizens to work with our nation's capabilities.

- The Department of Space and Pixxel will work in collaboration to enhance utilization and maximize the benefits of space assets for India.
- This first-of-a-kind private earth-observation mission will help provide solutions to many pressing environmental and agricultural issues.
- Pixxel is building a constellation of earth imaging small satellites that will provide global coverage every 24 hours once fully deployed.
- The satellites will collect high-throughput information-rich data that will be analysed using AI and ML models.
- It will help to make organisations more efficient in a plethora of sectors ranging from agriculture to urban monitoring among others.

Links:-

<https://www.deccanherald.com/business/business-news/pixxel-signs-pact-with-nsil-to-launch-indias-first-private-remote-sensing-satellite-923460.html>

Partnership between IPPB (India Post Payments Bank) and PNB MetLife

Question : For which purpose IPPB(India Post Payments Bank) has joined hands with PNB MetLife India Insurance Company Limited ?

- (a) For launching of PMJJBY
- (b) For launching of Pradhan Mantri Jan Dhan Yojana
- (c) For launching of Atal Pension Yojana
- (d) For launching of Atal Pension Yojana

Answer (a)

Related facts

- IPPB(India Post Payments Bank) has recently(joined hands with PNB MetLife India Insurance Company Limited.
- The partnership aims to launch PMJJBY(Pradhan Mantri Jeevan Jyoti Bima Yojana).



PMJJBY

- It is a Government sponsored socially oriented insurance scheme.
Key features of PMJJBY are :—

Availability	Optional for all persons who have savings account with IPPB
Primary KYC	Aadhaar will be the primary KYC
Entry age	Min – 18 yrs (on the date of enrollment), Max- 50 yrs(Age near Birthday)
Maximum maturity age	Completion of 55 years (Age near Birthday)
Coverage terms	1 year (renewable) – June 1 to May 31 each year
Sum assured	Maximum coverage of Rs. 2,00,000 per life irrespective of multiple accounts/multiple certificate of insurance held under the PMJJBY scheme. The cover of Rs 2 lakh comes at less than one rupee per day.
Premium	Rs. 330
Premium payment mode	Annual. However, 1st year premium depends on the quarter in which scheme is opted.

Link:

<https://www.livemint.com/>

Non-Disclosure Agreement (NDA) between DOS and Agnikul Cosmos

Question: Agnikul Cosmos Pvt Ltd which is a private satellite launch vehicle manufacturing company is based in-

a) Russia b) France c) India d) Australia

Answer: (c)

Related Facts:-



- On 3 December 2020; a Non-Disclosure Agreement (NDA) was signed between (DOS) and a Chennai- based start-up Agnikul Cosmos.
- This agreement will allow the company to access facilities and technical expertise available in ISRO centres to proceed with their launch vehicle development programme.
- The agreement is the first one of its kind, the Department has signed after the establishment of IN-SPACe.
- It should be known that IN-SPACe is the authorisation and regulatory body under DOS for enabling private players to undertake space activities in India.
- Agnikul Cosmos Pvt. Ltd, is a startup, building private small satellite launch vehicles in India.
- The company is located in the National Centre for combustion R&D, IIT-M, Chennai,.
- The NDA was signed in the presence of Secretary, DOS and Chairman ISRO Dr K Sivan and Director IIT Madras Prof. Bhaskar RamamurthiScientific Secretary, ISRO.
- R Umamaheswaran was the signatory on behalf of the Department of Space with Agnikul Cosmos Pvt Ltd.
- CEO Srinath Ravichandran signed it on behalf of the company.
- Dr K Sivan along with ISRO Centre Directors have assured all support to Agnikul for testing and qualifying their launch vehicles.

Link:

<https://www.outlookindia.com/newsscroll/dos-signs-nondisclosure-agreement-with-chennai-startup-giving-it-access-to-isro-facilities/1987217>

Conference

India-Japan Samvad Conference

Question: consider the following statements:

- i) 6th India-Japan Samvad conference was held virtually recently.
- ii) The first conference, Samvad-I, was held in New Delhi in 2015, at Bodh Gaya.

Wich of above are correct ?

a) I b)ii c) i and ii d) none

Answer: c)
Context

- Prime Minister Narendra Modi on 21 December , addressed the 6th India-Japan Samvad Conference through video conferencing.

Facts

- Prime Minister Modi proposed to create a library of traditional Buddhist literature and scriptures.
- Library will collect digital copies of Buddhist literature from different countries. It will aim to translate them, and make them freely available for all monks and scholars of Buddhism.



About Samvad Conference

- The first conference, Samvad-I, was held in New Delhi in 2015, at Bodh Gaya. During Samvad I, leading scholars, religious leaders, academics, and political personalities had exchanged views on conflict avoidance and environmental consciousness.
- The main objective of the Sixth India-Japan Samvad Conference was to discuss the need to build future Asia based on the traditions of non-violence and democracy in Asia.

Link:

<https://indianexpress.com/article/india/pm-narendra-modi-india-japan-samvad-conference-7113094/>

Year, Day & Week

National Consumer Rights Day

Question: When is the National Consumer Rights Day observed?

(a) 25 December (b) 27 December (c) 24 December (d) 14 December

Answer: (c)

Related facts:

- National Consumer Rights Day is observed every year on December 24.
- The day aware consumers of their rights and responsibilities so that to safeguard them from exploitation and unfair trade practices.
- On this day the Consumer Protection Act 1986 came into force after receiving the presidential assent.
- 2020 theme of the day is New features of Consumer Protection Act, 2019.



- Section 10 of the Consumer Protection Act, 2019 provides for the establishment of Central Consumer Protection Authority (CCPA) to promote, protect and enforce the rights of consumers.

Links:

<https://www.firstpost.com/india/national-consumer-rights-day-2020-all-you-need-to-know-about-theme-significance-of-jago-grahak-jago-campaign-9142301.html#:~:text=National%20Consumer%20Rights%20Day%20is,of%20their%20rights%20and%20responsibilities.>

Good Governance Day

Question: When is the Good Governance Day observed?

(a) 25 December (b) 27 December (c) 24 December (d) 14 December

Answer: (a)

Related facts:

- Good Governance Day is observed every year on 25 December.
- The day marks the birth anniversary of former Prime Minister Atal Bihari Vajpayee.
- Good Governance Day was established in 2014 to promote a responsive administration and foster awareness among the Indian people of accountability in government.
- On December 23, 2014, Atal Bihari Vajpayee and Pandit Madan Mohan Malaviya (posthumously) were announced as recipients of India's highest civilian award, Bharat Ratna.



Links:

<https://www.indiatoday.in/information/story/good-governance-day-2020-date-significance-and-quotes-1752864-2020-12-25>

International Migrants Day 2020

Question: International Migrant Day is celebrated on which day every year?

a) 10 December b) 11 November c) 18 December d) None of the above

Answer: c)

Context

- International Migrants Day is celebrated every year on December 18.



Facts

- It is celebrated every year by United Nations and several other international organizations. This year, the International Migrants Day is celebrated under the theme Reimagining Human Mobility.

Background

- The resolution to celebrate International Migrants Day was adopted by United Nations General Assembly on 18 December, 1990 during the International Convention on the Protection of the Rights of All Migrant Workers and Members of their families.

Migration in India

- According to Census 2011, there were 45.6 crores of migrants. This is roughly 38% of the country's population. In 2001, the migrant population was 31.5 crores. The migrant population between 2001 and 2011 has increased by 18%.

Migration during COVID

- Although during the past months, migrants have been at the forefront of the fight against COVID-19; their work in health, transportation and food services made our lives under lockdown more bearable yet this year, they lost jobs, faced evictions and discrimination.
- Millions of migrants are stranded, often without income or shelter, unable to return home due to COVID-19 mobility restrictions, and they also face increased risks of trafficking and exploitation.
- The pandemic cannot be used as an excuse to rollback commitments to promote and protect the rights of migrants regardless of their legal status.

According to the UN migration agency, a person who is moving or has moved across an international border or within a state away from his/her habitual place of residence is a migrant.

Link:

<https://timesofindia.indiatimes.com/videos/news/international-migrants-day-2020-a-humanitarian-crisis-that-needs-to-be-addressed/videoshow/79785044.cms>

International Day of Neutrality 2020

Question: which of the following statements are correct?

- i) International day of neutrality is celebrated on 12 December every year since 2017.
- ii) It is a United Nations initiative.
- iii) Resolution to declare 12 December as International Day of Neutrality was introduced by Turkmenistan in UN in 2017.

a) I b) ii c) iii d) all of the above

Answer: d)
Facts

- International Day of Neutrality is a United Nations recognized day held on December 12 each year to raise public awareness about the value of neutrality in international relations.
- It was officially declared by a UN General Assembly resolution adopted in February 2017 and first observed on December 12, 2017.



Historical Background

- On 2 February 2017, the UN General Assembly adopted without a vote resolution 71/275 — introduced by Turkmenistan, recognized by the UN as a permanently neutral state since 12 December 1995 — which noted the link between the preservation of peace and the 2030 Agenda for Sustainable Development, and declared 12 December as the International Day of Neutrality.

What is neutrality?

- Neutrality — defined as the legal status arising from the abstention of a state from all participation in a war between other states, the maintenance of an attitude of impartiality toward the warring nations, and the recognition by the warring nations of this abstention and impartiality.
- Neutrality is critically important for the United Nations to gain and maintain the confidence and cooperation of all in order to operate independently and effectively, especially in situations that are politically charged.

Link:

<https://www.un.org/en/observances/neutrality-day#:~:text=On%202%20February%202017%2C%20the,Development%2C%20and%20declared%2012%20December>

Indian Navy Day

Question: When is the Indian Navy Day observed?

(a) 4 December (b) 2 December (c) 30 November (d) 5 December

Answer:(a)
Related facts:

- Every year Indian Navy Day is celebrated on December 4.
- The day traces back to the launch of Operation Trident by Indian Navy on 4 December 1971 during the Indo-Pakistan 1971 War.
- On that day Indian Navy sank four Pakistani vessels in its offensive mission that caused Pakistan a loss of over 500 navy personnel. Meanwhile, Indian navy suffered no loss.
- 2020 Theme for the Indian Navy Day is “Indian Navy Combat Ready, Credible and Cohesive”.



Links:

<https://www.ndtv.com/india-news/indian-navy-day-2020-proud-of-your-commitment-president-kovind-greets-navy-personnel-2334080#:~:text=The%20theme%20of%20Navy%20Day,Ready%2C%20Credible%20and%20Cohesive%22.&text=Navy%20Day%20is%20celebrated%20every,India%2DPakistan%20war%20in%201971.>

International Day of Persons with Disabilities

Question: When is the International Day of Persons with Disabilities observed?

(a) 3 December (b) 2 December (c) 5 December (d) 10 December

Answer: (a)

Related facts:

- Every year the International Day of Persons with Disabilities is observed on December 3.
- The day promotes the rights and well-being of persons with disabilities in all spheres of society.
- Its annual observance was proclaimed by United Nations General Assembly in 1992.



Links:

<https://www.un.org/en/observances/day-of-persons-with-disabilities>

World AIDS Day

Question: What is the theme of World AIDS Day 2020?

- (a) Global solidarity, resilient HIV services
(b) Communities make the difference
(c) Know Your Status (d) Close the gap

Answer: (a)

Related facts:

- World AIDS Day is observed globally on 1st December every year.
- The day raises awareness about Acquired Immuno Deficiency Syndrome (AIDS).
- AIDS is a pandemic disease caused by Human Immunodeficiency Virus (HIV) which damages human immune system.



- It was founded in 1988 by the World Health Organization (WHO) and was the first ever global health day.
- 2020 Theme for the day is “Global solidarity, resilient HIV services.”

Links:

<https://www.who.int/news-room/events/detail/2020/12/01/default-calendar/world-aids-day-2020#:~:text=On%20World%20AIDS%20Day%202020,World%20AIDS%20Day%20this%20year.>

BSF 56th Raising day

Question: Consider the following statements:

(a) Border Security Force celebrated its 56th Raising day on December 1, 2020.

(b) Border Security Force guards international border along India-Pakistan and India-Bangladesh.



Of the above correct statement/s is/are:

- (a) Only 1
- (b) Only 2
- (c) Both 1&2
- (d) None of the above

Answer: (c)

Related facts:

- On 1st December 2020, Border Security Force celebrated its 56th Raising day.
- It was raised in accordance with an Act of the Parliament on 1st December, 1965, soon after the India-Pakistan War of 1965.
- BSF is the First Line of Defence of Indian Territories. Its motto is ‘Jeevan Paryant Kartavya’.
- It is entrusted with the task of guarding international border along India-Pakistan and India-Bangladesh.

- Constituted with 25 battalions, it has operational strength of 192 battalions today.
- Rakesh Asthana is currently the Director General of Border Security Force.

Links:

<http://newsonair.com/Main-News-Details.aspx?id=405312>

National Milk Day

Question: When is the National Milk Day observed in India?

- (a) 21 November (b) 22 November
(c) 26 November (d) 18 November

Answer: (c)

Related facts:

- National Milk Day is observed on 26 November.
- The day is observed to commemorate the birth anniversary of father of India's White Revolution, Dr. Verghese Kurien.
- The Indian Dairy Association (IDA) celebrated first National Milk Day in 2014.
- In 1970, India's National Dairy Development Board (NDDB) launched the world's largest dairy development program known as Operation Flood.
- It transformed India from a milk-deficient nation into the world's largest milk producer.
- Verghese Kurien was the then Chairman of NDDB who gave management skills and necessary thrust to the cooperative sector.



Links:

<https://www.nddb.coop/about/genesis/flood>

Constitution Day

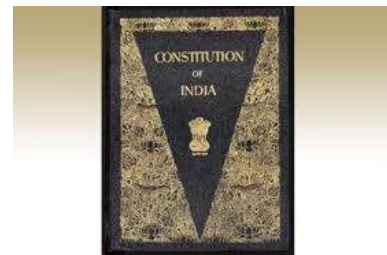
Question: When is the Constitution Day observed in India?

- (a) November 24 (b) November 26 (c) November 21
(d) November 22

Answer: (b)

Related facts:

- In India, Constitution Day is observed on 26th November.
- The day marks the adoption of Indian Constitution by Constituent Assembly in 1949.
- The Constitution of India came into force on 26th January 1950.



- Constitution Day was first celebrated in 2015 to mark the day as a tribute to Dr B R Ambedkar.
- He was the Chairman of the Drafting Committee.
- The constituent assembly took two years, eleven months and seventeen days to draft the historic document.
- It is also the longest written constitution of any sovereign country in the world.

Links:

<https://www.firstpost.com/india/constitution-day-of-india-what-is-samvidhan-diwas-and-why-is-it-celebrated-on-26-november-9050911.html>

Miscellaneous

China has launched five satellites successfully

Question: On 22 December 2020, China launched five satellites using its new rocket in its Long March series, named as-

a) Long March-3 b) Long March-5 c) Long March-8 d) Long March-7

Answer: (c)

Related Facts:-

- On 22 December 2020; China has launched five satellites successfully into planned orbit.
- It used the first Long March 8 rocket , kicking off a line of boosters that will eventually be reusable and make upright landings.
- These boosters being developed by the China are similar to SpaceX's Falcon 9 or Falcon Heavy.
- It wasn't clear if this first rocket was reusable, according to Reuters, but China has disclosed plans to reuse Long March 8 boosters in the coming years.
- The rocket blasted off from the Wenchang Spacecraft Launch Site in south China's Hainan province.
- The rocket successfully flew five test satellites into orbit, and used environmentally friendly liquid hydrogen and liquid oxygen fuels for the launch.
- The five experimental satellites will carry out the in-orbit verification of microwave imaging and other technologies.
- They will conduct experiments in space science, remote sensing and communication technologies, official media reported.
- The Long March 8 rocket is designed for the international commercial space launch market.
- Long March 8 is expected to fill a gap in launch capabilities for low- and medium-orbit satellites.
- It has been informed that with a recyclable design a future variant of Long March 8 can be reusable and thereby significantly reduce costs.
- According to a report this kind of reusable boosters will shorten the launch cycle and hope is to turn around a booster for another launch within 10 days.



- The new two-stage rocket uses two side boosters, with its main stages based on the designs of other Chinese rockets.
- The first stage is based on the Long March 7 and the second stage is based on the Long March 3.
- The Long March 8, however, fills a gap in Chinese capabilities by sending satellites either to geosynchronous orbits or to sun-synchronous orbits, depending on the mission needs.
- It should be known that geosynchronous satellite allows for gazing consistently at one area of Earth and the Sun Synchronous satellite allows for consistent lighting conditions for imaging.

Links:-

<https://www.space.com/china-launches-long-march-8-rocket-maiden-flight>

UNESCO recognition for Hawker Culture

Question: Recently Hawker Culture of which of the following island nation has been included in the UNESCO Representative List of the Intangible Cultural Heritage of Humanity?

a) Maldives b) Sri Lanka c) Fiji d) Singapore

Answer: (d)

Related Facts:-



- On 16 December 2020; UNESCO has announced that it has recognised Hawker centres at Singapore for its cultural significance.
- Singapore's tradition of communal dining at hawker centres, open air food courts are very much popularised by celebrity chefs around the world.
- The United Nations' cultural agency announced that it had added the city-state's "hawker culture" to its Representative List of the Intangible Cultural Heritage of Humanity.
- It should be known that this recognition of hawker culture of Singapore has come nearly two years after Singapore submitted a bid to be included in the list.
- Singapore's hawker centres were set up to house former street vendors, or hawkers, in an effort to clean up the island in the 1970s.
- They serve a variety of cheap, no-frills dishes to locals as well as providing a social setting.
- According to UNESCO, these centres serve as 'community dining rooms' where people from diverse backgrounds gather and share the experience of dining over breakfast, lunch and dinner.
- Celebrity chefs including Anthony Bourdain and Gordon Ramsay have effused over favourite hawker centre dishes such as chicken rice.
- The 2018 film Crazy Rich Asians showed its stars tucking into heaped plates at a famous night market.
- Some stalls even gained Michelin stars for meals costing only a few dollars.
- However, Singapore's hawker culture does face its challenges.
- The median age of hawkers in the city-state is 60, and younger Singaporeans are increasingly shunning cramped, sweaty kitchens for office jobs.

- The COVID-19 pandemic also dealt a blow, halting the usual train of tourists to the centres.
- Even local peoples were prevented from dining out for a few months during a lockdown earlier this year.
- Singapore must submit a report every six years to UNESCO, showing the efforts made to safeguarding and promoting its hawker culture.

Links:-

<https://indianexpress.com/article/world/singapore-street-hawker-food-unesco-recognition-7108347/>

Expansion of CKYCR to legal entities

Question : RBI has recently announced that all regulated entities will upload 'Know Your Customer' data pertaining to accounts of legal entities opened on or after April 1, 2021, onto the CKYCR. What is the CKYCR ?

- (a) Central KYC Registry
- (b) Council of KYC Registry
- (c) Central KYC Regulatory
- (d) None of the above

Answer (a)

Related facts

- RBI has recently(December 2020) announced that all regulated entities will upload 'Know Your Customer' data pertaining to accounts of legal entities opened on or after April 1, 2021, onto the CKYCR.
- CKYCR stands for — Central KYC Registry.



Background

- It is notable that regulated entities (REs) have already been uploading the KYC data pertaining to all individual accounts opened on or after January 1, 2017, onto CKYCR in terms of the provisions of the Prevention of Money Laundering (Maintenance of Records) Rules, 2005.
- As the CKYCR is now fully operational for individual customers, it has been decided to extend the CKYCR to legal entities (LEs).
- CKYCR has been developed to avoid multiplicity of registration and data upkeep.
- The CKYCR was announced by the Government of India in the Union Budget 2012-13.

Link:

<https://economictimes.indiatimes.com/news/economy/policy/rbi-extends-ckycr-to-legal-entities/articleshow/79800316.cms?from=mdr>

Extention in restrictions on PMC Bank

Question : RBI has recently extended the restrictions placed on the scam-hit Punjab and Maharashtra Co-operative Bank by three months till —

- (a) March 31,2021
- (b) June 30,2021
- (c) March 31,2022
- (d) September 30,2021

Answer (a)

Related facts

- The scam-hit Punjab and Maharashtra Co-operative Bank has received expressions of interest (Eols) from four suitors, RBI said on December 18, 2020.
- The proposal(Eols) will gone through an examination in favour of depositors.
- Above mentioned proposals are come in the backdrop of a recent statement of RBI governor in which reconstruction of bank looks positive.
- Last month, the administrator of fraud-hit PMC Bank had invited Eol from potential investors for investment or equity participation in the bank for its reconstruction.
- It is notable that Reserve Bank of India has also extended the restrictions placed on the Bank by three months till March 31,2021.



Link:

<https://www.financialexpress.com/industry/banking-finance/pmc-bank-gets-4-eois-rbi-extends-limits-till-march/2152804/>

Development of high-performance hybrid supercapacitors

Question : In collaboration with which institute ARCI scientists have developed low cost supercapacitor device ?

- (a) Indian Insitute of Technology, Kharagpur
- (b) Indian Insitute of Technology, Hyderabad
- (c) Indian Insitute of Technology, Madras
- (d) Indian Insitute of Technology, Delhi

Answer (b)

Related facts

- Scientists at ARCI in collaboration with IIT Hyderabad have recently(December 2020) developed a low cost supercapacitor device.
- This development can pave the way for the next generation high power-high energy storage devices.



About the supercapacitors

- Supercapacitors have gained considerable attention due to their high power density, long cycle life, and excellent capacity retention compared to their battery counterparts.

- Supercapacitors with high capacitance and excellent capacitive retention developed from low-cost fabrication techniques are the need of the hour, considering their potential utility in the commercial market.

About the development

- This is actually a development of a facile, scalable, and cost-effective electrochemical route to synthesize electrodes made of Nickel cobaltite (NiCo_2O_4) containing nanosheet structures with incorporated oxygen vacancies as an active material, for hybrid supercapacitors.
- These electrodes have been found to have excellent electrochemical performance.
- Such hybrid supercapacitors combine the features of both conventional double layer supercapacitors and batteries and act as high power-high energy storage devices.
- However, it remains challenging to design pseudocapacitor devices with redox metal oxide (MO) materials with high porosity, which exhibit high capacitance and good cycle life. It is desirable to amend the intrinsic properties of the synthesized MO to enhance its conductivity, stability, and electrochemical activity.

Challenges

- Scientists at ARCI and IIT-H addressed these challenges and were successful in synthesizing NiCo_2O_4 nanostructured electrodes by a novel electrodeposition route.
- They also introduced an optimum number of oxygen vacancies by an environmentally benign chemical reduction process to make up for an active, positive electrode material for hybrid supercapacitor, as reported in their recent publication in the journal "Batteries & Supercaps".
- This could be an effective alternative to the existing carbon-based electrodes for supercapacitors to achieve high energy density.
- An asymmetric supercapacitor device further fabricated by the research team, using porous carbon and NiCo_2O_4 electrodes exhibited excellent capacity retention and stability. The device could power an LED lamp and a DC fan.

Link:

<https://pib.gov.in/PressReleaseDetail.aspx?PRID=1681337>

India mulls E20 fuel to cut vehicular emissions

Question: what is E20 Fuel?

- a) A new variety of crude oil recently discovered.
- b) New treaty on fuel refining.
- c) Fuel developed by mixing 20% ethanol with petrol.
- d) None of the above

Answer: c)

Context

- Ministry of Road Transport and Highways has published a draft notification and invited comments from the public for adoption of E20 fuel as an automobile fuel.

Facts

- E20 is a blend of 20% ethanol with gasoline (petrol) and can be used as an alternative to the fuels currently available.
- Currently, only 10% of ethanol blend is permissible in India. However, in 2019, it only reached 5.6%.
- Ethanol is a common by-product that comes from agricultural feedstock like corn, hemp, potato, etc. Ethanol is hence greener than gasoline because the corn and crop plantations absorb carbon dioxide from the atmosphere as they grow. Hence a ethanol mix petrol after burning will produce a smaller carbon footprint in comparison to just petrol.
- However, ethanol is less efficient as a fuel. It has lower energy content than energy-rich gasoline and diesel. The fuel delivers less power when burned, which in return results in more fuel consumption and lower mileage.
- Also, a fuel mix with more than 15% ethanol (E15) is highly corrosive to older vehicle.



Link:

<https://www.financialexpress.com/auto/industry/indian-government-mulls-e20-ethanol-mixed-petrol-to-curb-vehicle-emissions-pros-and-cons-explained-bio-fuel-biofuel-for-cars-in-india-alcohol-ethanol-powered-cars-in-india-flexi-fuel-cars/2153563/>

Regulatory sandbox: RBI invited more applications

Question: The Reserve Bank on Wednesday announced the second cohort under the Regulatory Sandbox (RS) with the theme of —

- (a) Cross Border Payments (b) retail payments
(c) bulk payments (d) none of the above

Answer- (a)

Related facts

- RBI has recently(December 2020) announced the second cohort under the Regulatory Sandbox (RS) with the theme of 'Cross Border Payments'.
- RBI has also reduced net-worth requirement for entities interested in participating second cohort.
- The Cohort is expected to spur innovations capable of recasting the cross-border payments landscape by leveraging new technologies to meet the needs of a low cost, secure, convenient and transparent system in a faster manner.
- The target applicants for entry to the RS (Regulatory sandbox) are fintech companies, including startups, banks, financial institutions, any other company,



Limited Liability Partnership (LLP) and partnership firms partnering with or providing support to financial services businesses.

Regulatory sandbox

- It refers to live testing of new products or services in a controlled/test regulatory environment for which regulators may permit certain relaxations for the limited purpose of the testing.

First cohort

- First cohort was announced by RBI related to the theme of retail payments.

Next/Third cohort

- RBI has also decided on 'MSME Lending' as the theme for the third cohort.

Link:

<https://www.moneycontrol.com/news/business/rbi-announces-2nd-cohort-under-regulatory-sandbox-with-theme-of-cross-border-payments-6236231.html>

RBI : Draft guidelines for distribution of dividend by NBFCs

Question : On which date a set of draft guidelines has been issued for distribution of dividend by NBFCs ?

- (a) 9th December 2020 (b) 7th December 2020
(c) 5th December 2020 (d) 3rd December 2020

Answer : (a)

Related facts

- RBI has recently(9th December 2020) issued a set of draft guidelines.
These guidelines are related to distribution of dividend by NBFCs.



Eligibility criteria for distribution of dividend (Criteria related to capital adequacy and non performing assets)

- In order to be able to declare dividend, deposit taking NBFCs (NBFC-D) and systemically important non-deposit taking NBFCs (NBFC-ND-SI) should have a capital to risk-weighted assets ratio (CRAR) of at least 15% for the last three years, including the accounting year for which it proposes to declare dividend.
- Non-systemically important non-deposit taking NBFCs (NBFC-ND) should have a leverage ratio of less than 7 for the last three years, including the accounting year for which it proposes to declare dividend.
- Core investment companies (CICs) should have an adjusted net worth (ANW) of at least 30% of its aggregate risk weighted assets on balance sheet and risk adjusted value of off -balance sheet items for the last three years, including the accounting year for which it proposes to declare dividend.

- The net NPA ratio should be less than 6% in each of the last three years, including the accounting year for which the company proposes to declare dividend.

Link:

<https://www.financialexpress.com/industry/banking-finance/rbi-sets-capital-npa-caps-for-nbfcs-to-distribute-dividends-in-draft-policy/2146803/>

China's Chang'e-5 mission has returned to Earth

Question: recently china's chang'e-5 Mission return to the Earth after collecting samples from where?

a) Mars b) Venus c) Moon d) Asteroid

Answer: (c)

Related Facts:

- On 17 December 2020 China's Chang'e-5 mission has returned to Earth with the moon samples.
- A capsule carrying the materials landed in Inner Mongolia at 01:59 local time.
- It's more than 40 years since the American Apollo and Soviet Luna missions brought their samples from the earth's only satellite.
- The new specimens should provide fresh insight on the geology and early history of Earth's satellite.
- For China, the successful completion of the Chang'e-5 venture will also be seen as another demonstration of the nation's increasing capability in space.
- The Chang'e-5 venture was launched at the end of November 2020.
- A probe comprising several elements was sent into orbit around the Moon.
- These elements then separated, with one half going down to the lunar surface.
- The Lander system used a scoop and a drill to dig up samples. It's not clear how much, but possibly in the range of 2-4kg.
- An ascent vehicle subsequently carried the materials back into lunar orbit where they were transferred to an Earth-return module.
- This was shepherded home by a fourth element and released just before it had to make the fiery descent through Earth's atmosphere.



Links:

<https://www.bbc.com/news/science-environment-55323176>

CO2 Emission from Building sector has registered a Record High

Question: According to recently published 2020 Global Status Report for Buildings and Construction by how much percentage, Building & Construction sector have caused increase in CO2 emission out of its global emission?

a) 20% b) 25% c) 28% d) 38%

Answer: (d)

Related Facts:-

- On 16 December 2020 –The 2020 Global Status Report for Buildings and Construction was released.
- This report was released by the Global Alliance for Buildings and Construction (GlobalABC).
- GlobalABC is an international alliance, formed in 2015 during UN Climate Change Conference held in Paris.
- It has been found that while global building energy consumption remained steady year-on-year, energy-related CO2 emissions increased to 9.95 GtCO2 in 2019.
- The report said that this increase was due to a shift away from the direct use of coal, oil and traditional biomass towards electricity.
- It has been explained in the status report that electricity had higher carbon content, as the high proportion of fossil fuels used in generation.
- The report claimed that emissions from the operation of buildings hit their highest-ever level in 2019.
- This enhanced CO2 emission moved this sector further away from fulfilling its huge potential to slow climate change.
- New report in this way is not optimistic that the Buildings and Construction Sector's could be able to provide significant contribution in the goals of the Paris Agreement.
- The report stated that CO2 emissions increased to 9.95 GtCO2 (Giga tonnes of Carbon dioxide) in 2019.
- The sector accounts for 38% of all energy-related CO2 emissions when adding building construction industry emissions.
- **Target:-**
- The report stated that direct building CO2 emissions need to halve by 2030 to get on track for net zero carbon building stock by 2050.
- Governments must prioritize low-carbon buildings in pandemic stimulus packages and updated climate pledges.
- It should be a clear priority for all governments to move onto a low-carbon pathway, which will slow climate change and deliver strong economic recovery benefits.



Links:-

<https://www.unep.org/news-and-stories/press-release/building-sector-emissions-hit-record-high-low-carbon-pandemic>

China: The Second Country in the world to plant its flag upon the Moon

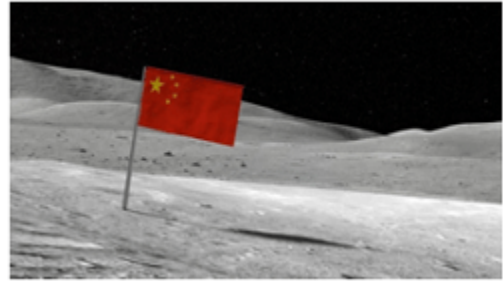
Question: Which of the following spacecraft to the moon, recently launched by the China, planted its national flag upon the surface of the moon?

a) Chang'e 4 b) Chang'e 5 c) Chang-2A d) Tianwen-1

Answer: (b)

Related Facts:-

- On 03 December 2020; China's Chang'e-5 Probe sent to the moon, planted the national flag upon the surface of the moon.
- China now has become the second country in the world to unfurl its national flag on the moon surface.
- Earlier this feat was achieved only by the USA 50 years ago, when it planted its flag on the Moon during the Apollo mission in 1969.
- It should be known that the China had launched the Chang'e 5 mission to collect the surface samples from the Moon on 24 November 2020.
- The plan was to collect 2 kg (4.4 pounds) of samples.
- Chang'e 5 landed upon the moon surface on 01 December 2020 and took off from the moon on 03 December 2020.
- During this period the spacecraft not only collected dust sample from the surface of the moon but also planting the China's national flag there.
- China will be the third nation to roll back rocks from the moon after the United States and Russia.
- However, the rocks brought back by the US and Russia are around 3.2 billion years old.
- The Chinese lunar mission is also testing techniques that will be required for future missions to the moon as well as Mars.
- According to ABC Science, the technology used for tasks such as navigation, landing, docking in space, and re-entering Earth will also help with future crew missions.
- China said that it plans to send humans to the moon and would have a permanent base by the end of the decade (2030).
- The country is planning to do something similar on Mars. China has sent a spacecraft flying on the red planet with the aim of touching down in May 2021.



Links:-

<https://www.indiatoday.in/science/story/china-second-nation-flag-moon-chang-e-5-mission-1746904-2020-12-05>

Maharashtra: Amendment of caste-based names of settlements

Question : On which date Maharashtra cabinet cleared proposal to rename all residential colonies having caste-based names ?

- (a)30 November 2020 (b)1 December 2020 (c)28 November 2020
(d)2 December 2020

Answer (d)

Related facts

- Maharashtra cabinet on 2nd December 2020 cleared proposal to rename all residential colonies having caste-based names.

- It will help create social harmony and increase national unity among all caste and creed.
- The person who brought this proposal is Dhananjay Munde (Social Justice Minister of Maharashtra)

Amendment

- In Maharashtra, colonies are often named after castes of majority residents such as Maharwada (Dalit), Boudhwada (Dalit), Mangwada (lower strata of Dalit community), Dhorvasti (Dalit community that carries carcasses outside the village), Brahmanwada (Brahmins), and Mali Galli (gardener).
- These caste-based colonies will now be given names like Samata Nagar, Bhim Nagar, Jyoti Nagar, Shahu Nagar, Kranti Nagar etc.



Presidential order

- As per a presidential order, instead of the word 'Dalit', 'Scheduled Caste & Nav Bouddha' in Marathi and 'Scheduled Caste and Neo Buddhism' in English should be used.

Link:

<https://www.newindianexpress.com/nation/2020/dec/02/caste-based-names-of-maharashtra-localities-to-be-changed-2231015.html>

CBIC : New mandatory rules of HSN code in tax invoice of chemical based products

Question : The government has recently made it mandatory to mention 8-digit HSN or tariff code for 49 chemical based products while issuing Goods and Services Tax (GST) invoice. HSN stands for —

- (a) Harmonised System of Nomenclature
- (b) Harmonised System of Numbers
- (c) Harmonised Style Nomenclature
- (d) None of the above

Answer (a)

Related facts

- The government has recently(December 2020) made it mandatory to mention 8-digit HSN or tariff code for 49 chemical based products while issuing Goods and Services Tax (GST) invoice.
- Currently, a registered person mention up to 2 digit/4-digit tariff code(depending upon turnover) while issuing invoices.
- Change in rules are aimed at curbing tax evasion.



- The Central Board of Indirect Taxes and Customs(CBIC) has notified every supplier of specified chemicals to mention 8 digits of HSN Code in every tax invoice issued by him for the said goods from December 1, 2020.

HSN or tariff code

- HSN(Harmonised System of Nomenclature) code helps in systematic classification of goods across the globe.

Link:

<https://economictimes.indiatimes.com/news/economy/policy/government-makes-it-mandatory-to-mention-8-digit-hsn-code-in-tax-invoice-for-49-chemical-based-products/articleshow/79530402.cms>

UN prediction : Pandemic will make 32 million people very poor

Question : Pandemic pushed 32 million people into extreme poverty. Which institution has made this prediction?

- (a) ADB
- (b) UNCTAD
- (c) World Bank
- (d) IMF

Answer (b)

Related facts



- UNCTAD is the part of the United Nations Secretariat dealing with trade, investment, and development issues.
- It has recently predict that — Pandemic pushed 32 million people into extreme poverty.

Key points of the prediction

- This prediction is related to LDCs.
- LDCs stands for — least developed countries.
- The pandemic is likely to cause the worst economic crisis in decades among LDCs.
- Per capita GDP (Gross Domestic Product) for the group(LDCs) expected to fall by 2.6 per cent this year.
- Absolute poverty indices will be expand by 32 million, and extreme poverty rates in these countries will rise from 32.5 percent to 35.7 percent in the current year.
- An estimated 1.06 billion people live in the 47 LDCs, which account for less than 1.3 percent of global economic turnover, or GDP.
- Extreme poverty is defined as having an income lower than 1.90 dollar per day.
- In 2019, average earnings per capita in these countries – which are mainly in Africa – was 1,088 dollar compared with the world average of 11,371 dollar.

Link:

<https://news.un.org/en/story/2020/12/1079162>

Increase in NPCI shareholding base

Question : How much equity shares of NPCI have been completed private placement ?

(a) 4.63 percent (b) 8.72 percent (c) 6.50 percent (d) 3.20 percent

Answer (a)

Related facts

- National Payments Corporation of India (NPCI) has recently (November 2020) announced the completion of private placement of 4.63% of its equity shares worth ₹81.64 crores.
- This broad basing exercise was done to further diversify and distribute the NPCI shareholding to a larger set of the RBI regulated entities and categories of payment industry participants.
- NPCI made an offer for the private placement to 131 RBI regulated entities, out of which 19 evinced interest and were allotted shares in NPCI.



Shareholder entities

- With this shareholding expansion, NPCI gets on-board some of the leading banks, new categories of banks and the RBI authorised non-bank entities.
- The total shareholder entities for NPCI now stands at 67.

NPCI

- NPCI, a not-for-profit organisation, is an initiative of the RBI and Indian Banks' Association (IBA).
- The company is focused on bringing innovations in the retail payment systems through the use of technology for achieving greater efficiency in operations and widening the reach of digital payment systems.

Link:

<https://www.npci.org.in/>

The Malayan Giant Squirrel in on the Verge of Extinction

Question: According to a recent first-of-its-kind study by the Zoological Survey of India (ZSI) the Malayan Giant Squirrel in on the verge of Extinction and its number could decline by 90% in India by the year-

a) 2030 b) 2025 c) 2050 d) 2040

Answer: (c)

Related Facts:

- In a recently conducted study by Zoological Survey of India (ZSI) it has been found that Malayan Giant Squirrel (*Ratufa bicolor*) is on the verge of extinction.

- ZSI has informed that its study speculated that Malayan Giant Squirrel (Ratufa bicolor) could decline by 90 per cent in India by 2050.
- ZSI survey indicated that if urgent steps are not taken, then this species could be extinct in the country in subsequent decades.
- The study said that a large tree squirrel of this kind, which is considered to be a forest health indicator species, is disappearing.
- In the report says, this giant squirrel, may by the middle of this century may no longer be found in the forests of India's Northeast to which it is native.
- The Malayan Giant Squirrel, one of the world's largest squirrel species that has a dark upper body, pale under parts, and a long, bushy tail.
- it is currently found in parts of West Bengal, Sikkim, Assam, Arunachal Pradesh, Meghalaya, and Nagaland.
- According to the ZSI destruction of its habitat could restrict the squirrel to only southern Sikkim and North Bengal by 2050.
- Only 43.38 per cent of the squirrel's original habitat in India is now favorable to it, says the study.
- According to report, by 2050, the favorable zone for this squirrel could shrink to 2.94 per cent of the area the species was meant to inhabit.
- India is home to three giant squirrel species; the other two – Indian Giant Squirrel and Grizzled Giant Squirrel – are found in peninsular India.



Links:-

<https://indianexpress.com/article/india/first-ever-study-has-grim-prognosis-native-squirrel-could-vanish-from-ne-after-2050-7089169/>

Acquisition of BOI AXA Investment Managers

Question : Bank of India will acquire 49% stake in BOI AXA Investment Managers Pvt Ltd(BAIM).This acquisition will be done through a SPA.What is a SPA?

- (a) Share Purchase Agreement (b) Share Protection Agreement
(c)Share Plus Addition (d)None of the above

Answer : (a)

Related facts

- Bank of India has recently(December 2020) announced the acquisition plan of BAIM.
- This acquisition will be done through a SPA (Share Purchase Agreement).
Bank of India will acquire 49% stake in BOI AXA Investment Managers Pvt Ltd(BAIM).
- Following the transaction, BAIM will become Bank of India's fully owned subsidiary.
- Currently, Bank of India holds 51% equity shares in BAIM.



Link:

<https://www.thehindu.com/business/Industry/bank-of-india-to-acquire-49-stake-each-in-boi-axa-investment-managers-boi-axa-trustee-services/article33239455.ece>

Quantum computers

Question: which country has claimed to make fastest, first light based quantum computer in the world?

i) China ii) India iii) USA iv) Japan

Answer: (i)

Facts

- Chinese scientists claim to have created the world's first light-based quantum computer named Jiuzhang.
- This computer can solve problems far faster than a classical supercomputer.
- It can perform an extremely complex and specialised calculation, called Gaussian boson sampling, in 200 seconds. The same task would take the world's fastest classical supercomputer Fugaku around 600 million years
- Last year Google declared its 53-qubit quantum computer had achieved such a breakthrough.



India in quantum race

- India currently does not have any major quantum computing capability at present.
- India in its union budget of 2020-21 has allotted 8000 cr for period of five year.
- Tata Institute of Fundamental Research is only organization currently in India working in the field of quantum computing.

Link:

<https://tech.hindustantimes.com/tech/news/chinese-scientists-make-world-s-first-light-based-quantum-computer-report-71607273730657.html>

Havana Syndrome

Question: Which of the statements are correct?

i) Havana syndrome is associated with a illness found in people of Havana , Cuba.

ii) It is because of exposure to microwave radiations.

a) I b) ii c) both i) and ii) d) none

Answer: (b)

Context

- Recently a report by the National Academies of Sciences (NAS), USA has found “directed” microwave radiation to be “plausible” cause of sickness experienced by its diplomats stationed in Havana, Cuba, four years ago.

Facts

- Havana syndrome is name given to sickness experienced by USA diplomats in 2016 at Havana, Cuba.
- The symptoms of the neurological illness included nausea, severe headaches, fatigue, dizziness, sleep problems, and hearing loss.
- Directed pulsed RF energy appears to be the most plausible mechanism in explaining these cases among those that the committee considered.
- Interestingly, neither the State Department nor the FBI have publicly pointed to “microwave weapons” as being the cause of the “syndrome”.



Link:

<https://indianexpress.com/article/explained/what-is-havana-syndrome-us-report-russia-7095390/>

UN body Removed Cannabis from the Most Dangerous Drug Category

Question : Which of the following UN body removed cannabis from the most dangerous drug category?

a) FAO b) UNESCO c) UNCND d) UNDP

Answer: (c)

Related Facts:-

- On 2 December 2020; The UN Commission on Narcotic Drugs (CND) removed the cannabis from the most dangerous drug category.
- UN in this regard took a number of decisions, leading to changes in the way cannabis is internationally regulated.
- These decisions included reclassification of cannabis out of the most dangerous category of drugs.
- It has been done by the CND as it was reviewing a series of World Health Organization (WHO) recommendations on marijuana and its derivatives.
- The UN CND zeroed-in on the decision to remove cannabis from Schedule IV of the 1961 Single Convention on Narcotic Drugs — where it was listed alongside deadly, addictive opioids, including heroin.
- The CND's 53 Member States voted to remove cannabis – where it had been placed for 59 years.
- Cannabis now came out of the strictest control schedules, that even discouraged its use for medical purposes.
- The CND has opened the door to recognizing the medicinal and therapeutic potential of the cannabis commonly-used but still largely illegal recreational drug.
- In an historic vote of 27 in favour, 25 against, this recreational drug now became free from its stigma.



- Moreover, according to news reports, the decision could also drive additional scientific research into the plant's long-heralded medicinal properties.
- The new decision now acts as catalyst for countries to legalize the drug for medicinal use, and reconsider laws on its recreational use.

Background:

- In January 2019, WHO unveiled six WHO recommendations surrounding the scheduling of cannabis in UN drug control treaties.
- The proposals regarding this were originally set to be voted on during the CND's March 2019 session.
- Many countries then, had requested more time to study the endorsements and define their positions, according to news reports.
- Among WHO's many points, it clarified that cannabidiol (CBD) – a non-intoxicating compound – is not subject to international controls.
- CBD has taken on a prominent role in wellness therapies in recent years, and sparked a billion-dollar industry.
- Currently, more than 50 countries have adopted medicinal cannabis programmes.
- Canada, Uruguay and 15 US states have legalized its recreational use, with Mexico and Luxembourg close to becoming the third and fourth countries to do so.

Links:-

<https://news.un.org/en/story/2020/12/1079132>

India Mobile congress

Question: consider the following statements :

i) India mobile congress (IMC 2020) will be organised in the month of December 2020.

ii) It will be organised in virtual mode.

Which of the above statements are correct

a) I b)ii c)both i and ii d) none

Answer: (c)

Context

- Prime Minister Narendra Modi will deliver the inaugural address at the virtual India Mobile Congress (IMC) 2020 on 8th of December 2020.



Facts

- IMC 2020 is being organised by the Department of Telecommunications, Government of India, and the Cellular Operators Association of India (COAI).
- It will be held from December 8-10, 2020.
- The theme for IMC 2020 is “Inclusive Innovation – Smart, Secure, Sustainable” .

- It aims to align to the prime minister's vision to promote "Atmanirbhar Bharat", "digital inclusivity", and "sustainable development, entrepreneurship and innovation".
- It also aims to drive foreign and local investments, encourage Research and Development in the telecom and emerging technology sectors.
- The conference which is one of the largest tech conference in the south asian region will see the participation from various ministries, telecom CEOs, global CEOs, and domain experts in 5G, Artificial Intelligence (AI), Internet of Things (IoT), Data Analytics, Cloud and Edge computing, Blockchain, Cyber-security, Smart Cities and Automation.

Link:

<https://www.ndtv.com/india-news/pm-narendra-modi-to-address-india-mobile-congress-tomorrow-2335451>

China has switched on artificial sun

Question: Which country has created 'artificial sun' recently?

- a) China
- b) USA
- c) Japan
- d) Korea

Answer: (a)

Related Fact:

- China has successfully powered up its "artificial sun" nuclear fusion reactor for the first time, showing great advances achieved by the country in its nuclear power research capabilities.
- It uses a powerful magnetic field to fuse hot plasma and can reach temperatures of over 150 million degrees Celsius.
- It is located in Sichuan province and often called as 'artificial sun' because of the enormous amount of energy it releases.



Nuclear Fusion

Nuclear fusion, process by which nuclear reactions between light elements form heavier elements (up to iron). In cases where the interacting nuclei belong to elements with low atomic numbers (e.g., hydrogen [atomic number 1] or its isotopes deuterium and tritium), substantial amount of energy is released. The vast energy potential of nuclear fusion was first exploited in thermonuclear weapons, or hydrogen bombs, which were developed in the decade immediately following World War II.

Link : <https://economictimes.indiatimes.com/news/international/world-news/china-turns-on-nuclear-powered-artificial-sun/articleshow/79566285.cms>

China will build a major hydropower project on Brahmaputra River in Tibet

Question: Brahmaputra River in Tibet is known by the name-

a) Xi River b) Yellow River c) Huai River d) Yarlung Zangbo River

Answer: (d)

Related Facts:-



- On 29 November 2020; Chinese official media announced that China will build a major hydropower project on Brahmaputra River in Tibet.
- China planning to build a super hydropower station in Medog County, where the Yarlung Zangbo Grand Canyon is located.
- It has been stated that China will implement hydropower exploitation in the downstream of the Yarlung Zangbo River” (the Tibetan name for Brahmaputra).
- A proposal for this has been clearly put forward in the 14th Five-Year Plan to be implemented from 2021.
- This official media also informed that the head of a Chinese company tasked to build the dam.
- Chinese authorities expressed that the project could serve to maintain water resources and domestic security.
- Authentic sources informed that the project was clearly put forward in the proposals for formulating the country’s 14th Five-Year Plan (2021-25) and its long-term goals through 2035 .
- Details of the plan were expected to be released after the formal ratification by National People’s Congress (NPC) early next year.
- China has already operationalised the USD 1.5 billion Zam Hydropower Station, the largest in Tibet in 2015.

China’s Hopes about this project:-

- China is of the view that the hydropower exploitation of the Yarlung Zangbo River downstream is more than a hydropower project for the country.
- They think that it is also meaningful for the environment, national security, living standards, energy and international cooperation.
- According to the report, the mainstream of the Yarlung Zangbo River has the richest water resources in Tibet Autonomous Region.
- The Brahmaputra River ie Yarlung Zangbo River is the largest source of water resources in Tibet Autonomous Region of China.
- Yarlung Zangbo is the Grand Canyon in an area of 50 km in Tibet.
- Here the water falls below 2000 meters and therefore electricity can be produced at the rate of 70 million kilowatt hour.

- This amount is equivalent to the electricity produced by China's Three Gorges Dam, which is the world's largest capacity hydroelectric power station in Hubei province.
- Experts estimated, even if 60 million kW of hydropower exploited at the downstream of the Yarlung Zangbo River, it could provide 300 billion kW of clean, renewable and zero-carbon electricity annually.
- It has been expected that the project will play a significant role in realizing China's goal of reaching a carbon emissions peak before 2030 and carbon neutrality in 2060.
- China is quite optimistic that the hydropower station could generate income of 20 billion Yuan (USD three billion) annually for the Tibet Autonomous Region.
- Indian context:-
- Proposals for dams on the Brahmaputra have evoked concerns in India and Bangladesh, the riparian states.
- China has downplayed such anxieties saying it would keep their interests in mind.
- As a lower riparian State with considerable established user rights to the waters of the trans-border rivers, the Indian government has consistently conveyed its views and concerns to the Chinese authorities.
- India has urged them to ensure that the interests of downstream States are not harmed by any activities in upstream areas.
- India and China established Expert Level Mechanism (ELM) in 2006 to discuss various issues related to trans-border rivers.
- Under existing bilateral Memorandums of Understanding, China provides hydrological information of Brahmaputra River and Sutlej River to India during the flood seasons
- Under the arrangement, China provides flood season data of the Brahmaputra River between May 15 and October 15 every year.

Links:-

<https://economictimes.indiatimes.com/news/international/world-news/china-to-build-a-major-dam-on-brahmaputra-river-official/articleshow/79479127.cms>

World's first monetary authority with a million Twitter followers

Question : Which country's Central Bank became the first bank in the world to have one million Twitter followers ?

(a)India (b)France (c)USA (d)Finland

Answer (a)

Related facts

- RBI has recently(November 2020) become the first bank in the world to have one million Twitter followers.
- Performance of other country's Central Bank on Twitter(Top ten) :-



Rank	Bank	Country/Territory	Number of followers on official Twitter handle(as on 22 November 2020) (in lakh)
1.	RBI	India	10.00513
2.	Banco de Mexico	Mexico	7.74
3.	Bank of Indonesia	Indonesia	7.57
4.	Federal Reserve	USA	6.77
5.	European Central Bank	Eurozone	5.91
6.	Central Bank of Brazil	Brazil	3.82
7.	Bank of England	UK	3.17
8.	Bank of Canada	Canada	1.80
9.	State Bank of Pakistan	Pakistan	1.16
10.	Reserve Bank of Australia	Australia	0.49

Other resources of RBI to reach out to the common-man

- Besides the main twitter handle, the RBI also has another Twitter account called 'RBI Says'.
- RBI has also started a Facebook page with the same name('RBI Says') in April,2020.
- It has also launched a customer awareness campaign to prevent gullible account-holders from being duped by fraudsters.
- The RBI governor, who took over two years ago, has a different handle on Twitter with 1.35 lakh followers.
- RBI's official Twitter handle & followers statistics
- '@RBI' is the official Twitter handle of Reserve Bank of India.(Created in January, 2012)
- In comparison with many other country's central banks RBI was a latecomer to this microblogging site.
- Increasing number of followers in an ascending order are as follows —

Duration/Time period	Number of followers
March, 2019	3.42 lakh
March, 2020	7.50 lakh
May 13, 2020	9.00 lakh
September 27, 2020	9.66 lakh
November 22, 2020	10.00513 lakh

Link:

<https://www.thehindu.com/business/Economy/rbi-becomes-worlds-first-monetary-authority-with-a-million-twitter-followers/article33154625.ece>

Nation's first 100 Octane Petrol launched

Question: Which of the following oil company has recently launched india's first 100 octane petrol?

- a) Bharat Petroleum b) Indian Oil Corporation (IOC) c) Hindustan Petroleum
d) Reliance

Answer: (b)

Related Facts:

- On 01 December 2020; Indian Oil Corporation (IOC) launched the nation's first 100 Octane petrol in the country.
- IOC said that it will help India in joining a select league of nations globally that have such superior quality fuel.
- Launching the fuel, Oil Minister Dharmendra Pradhan said XP100 premium petrol will initially be available at select outlet of IOC in 10 cities.
- These 10 cities are Delhi, Gurgaon, Noida, Agra, Jaipur, Chandigarh, Ludhiana, Mumbai, Pune and Ahmedabad.
- The minister informed that the fuel is manufactured at IOC's Mathura refinery in Uttar Pradesh and supplied at select petrol pumps.



Facts related to Octane Ratings:

- Octane ratings are measures of fuel stability. It is a measure of a fuel's ability to avoid knock.
- Knock occurs when fuel is prematurely ignited in the engine's cylinder, which degrades efficiency and can be damaging to the engine.
- The higher the octane number, the more resistant the petrol mixture is to knock.

World situation regarding 100 Octane Petrol:

- Worldwide, 100 Octane petrol has a niche market for luxury vehicles that demand high performance.
- At present 100 Octane petrol is available only in six countries of USA, Germany, Greece, Indonesia, Malaysia and Israel.

In India:

- At most retail stations, three octane grade are offered, 87 (regular), 89 (mid-grade) and 91-94 (premium).
- Pradhan said Hindustan Petroleum Corporation Ltd (HPCL) had recently launched Octane 99 and now IOC has come to the market with XP100.

Links:-

<https://auto.hindustantimes.com/auto/news/indian-oil-launches-country-s-first-100-octane-premium-petrol-41606827844095.html>

Cambridge 2020 Word of the Year

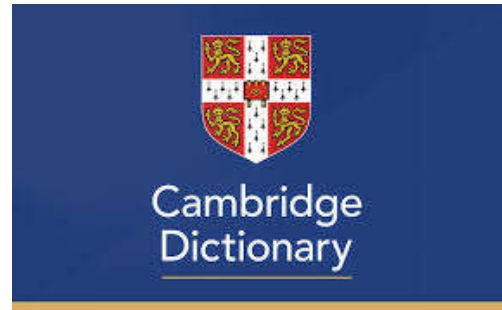
Question: Which is the Cambridge 2020 Word of the Year?

(a) Quarantine (b) Lockdown (c) Coronavirus (d) Pandemic

Answer: (a)

Related facts:

- Cambridge Dictionary has named 'quarantine' as Word of the Year 2020.
- It was the most highly searched word on the Cambridge Dictionary this year.
- Also, Lockdown and Pandemic were ranked on the dictionary's most popular list for 2020.
- The word stands for "a specific period of time in which a person or animal that has a disease, or may have one, must stay or be kept away from others in order to prevent the spread of the disease."



Links:

<https://indianexpress.com/article/lifestyle/art-and-culture/cambridge-dictionary-word-of-the-year-2020-revealed-7063394/>