

10 Jan 2021: UPSC Exam Comprehensive News Analysis

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A. GS 1 Related

Category: ART AND CULTURE

1. Kalaripayattu academy braces for action

What is in news?

• The Kerala state government has decided to establish an academy at Thiruvananthapuram.



- Kalaripayattu is a traditional martial art technique in Kerala.
- The martial art has survived for hundreds of years and is believed to have a legacy in excess of 3,000 years.

The academy.

- The Academy will be set up at the Vellar Crafts Village under the Department of Tourism.
- The academy is expected to have children and adults as students.



<u>Kalaripayattu</u>

- Considered one of the most ancient martial arts in the world.
- The fighting form indigenous to the Gods Own Country is popularly known as the mother of martial arts.
- The term Kalaripayattu is derived from two words "Kalari" meaning place of exercise or gymnasium and "payattu" meaning to fight or exercise.
- Traditionally, the Kalari centers are like a temple. The kalari is constructed four feet dug down the ground, the interiors of kalari are 42 feet in length and 21 feet width.
- Towards the south west corner, the poothara is placed and houses the guardian deity of Kalari. The seventier step resembling a pyramid symbolizes the seven qualities a kalari practitioner must possess.



B. GS 2 Related

Category: HEALTH

1. Vaccination drive to start on January 16

Context:

- The COVID-19 vaccination drive in India will commence on January 16, the vaccination drive will be along the lines of the vaccination policy announced by the government.
- The vaccination policy has identified certain sections of the population based on their vulnerability and exposure.

Details:

- To date India has had over 10 million COVID-19 cases and over 1.5 lakh deaths, this precarious situation has mandated a detailed vaccination plan.
- Drugs Controller General of India had granted Emergency Use Authorisation to two vaccines Covishield and Covaxin.
- India is aiming to vaccinate around 300 million people against COVID-19 during the course of 6-7 months.
- The vaccine drive will hope to diminish the pace at which the virus spreads as there is no conclusive cure available as of today.

The announcement

- There was a meeting chaired by the Prime Minister which dealt with reviewing of the status of COVID-19 in the country,
- The meeting also focused on the preparedness of the States and the Union Territories for the vaccination programme.
- The vaccination exercise will use the principles of people's participation (Jan Bhagidari), the experience of elections (booth strategy) and the Universal Immunisation Programme.
- There will be no compromise of existing healthcare services, especially national programmes and primary healthcare.

Co-WIN platform

- A new digital platform called 'Co-WIN' is being used for COVID-19 vaccination drive.
- This is a user-friendly mobile app for recording vaccine data is working as a beneficiary management platform having various modules.
- The platform would help assist the programme managers across all levels through automated session allocation for pre-registered beneficiaries, their verification and for generating a digital certificate upon successful completion of the vaccine schedule.



C. GS 3 Related

Category: SCIENCE & TECHNOLOGY

1. New challenges for COVID-19 vaccine trials in India

Context:

• The COVID-19 infections in India have been on a decline now, therefore there could be a possibility where the enrolment of volunteers could dwindle.

Details:

- Vaccine manufacturers may now have to explore other alternatives such as conducting phase-3 trials overseas and efficacy results from such trials would be accepted by the Indian regulator for giving nod to the vaccine.
- Serum Institute's Covishield vaccine was granted permission for restricted use under Emergency Use Authorization, following which Bharat Biotech's Covaxin also secured approval with certain other riders.
- The securing of approval from the Drug Control General of India has meant that the vaccines are ready to be rolled out under the vaccination programme.
- The government has chalked out a vaccination plan and also identified beneficiaries with four high-risk priority groups, beginning with frontline health-care workers.
- Another vaccine may be on the horizon, the Ahmedabad-based Zydus Cadilla recently got the green light to conduct the phase-3 trial and has to begin the recruitment.
- Biological E and Dr Reddy's Laboratory too have been expressed interest.

Challenges in recruiting

- The conduct of phase-3 trials is bound with challenges, recruiting volunteers appears to be on top of the list of challenges faced by pharmaceutical companies.
- The announcement of the vaccination drive has contributed to dwindling of enrolment of volunteers.

Effects of approval

- Many in the pharmaceutical industry reckon that the task of recruiting participants has become difficult with the two vaccines being granted approval for restricted use.
- The Department of Biotechnology is trying to tackle this issue by addressing a call for research proposals for enhancing capacity for the conduct of clinical trials for COVID-19 vaccine candidates.

Issues with slow spread

• Among the other challenges apart from declining volunteers is the slow spread, India has been witnessing a dip in the number of daily fresh cases since mid-September despite the winter and festival season, the spread of the virus appears have toned down.



- This appears to be a challenge of a different kind for the conduct of successful phase-3 trials where the efficacy of the vaccine is determined by comparing the number of COVID-19 cases and the kind of protection offered in participants in the vaccine arm vis-à-vis the placebo arm.
- A similar problem was encountered by China. China then had to rely upon other countries to carry out phase-3 trials of its vaccines as the virus spread in China had slowed considerably.
- A possible solution that has been suggested is the possibility of vaccine manufacturers conducting phase-3 trials outside India and efficacy results from such trials would be accepted by the Indian regulator for vaccine approval.
- It was also suggested to recruit participants based on an antibody test, and have two distinct groups of people to participate (both infected and susceptible) in trials to understand the efficacy in both groups. This will ensure reaching the sample size efficiently.

Testing younger people

- Among the most vulnerable segment of the population that is prone to the COVID-19 is the older people, thus it is no surprise that the government has listed them among the first list of beneficiaries in the vaccination programme.
- The availability of vaccines in the market would soon be a reality once the government completes the task of vaccinating the identified high-risk groups.
- The above exercise would take up a few months, thus questions marks are raised if pharma companies will be able to recruit young people.
- However, to expect a universal immunization of the older people is practically not possible, there will eventually be a certain portion of the elderly population that is going to be excluded, thus they can be enrolled.
- Conducting phase-3 trials by having a large proportion of younger people will mean that the vaccine will then only be tested largely in a young and generally healthy group, dissimilar to the population it would target when approved for administering.

Conclusion:

- The phase-3 trials is a very crucial stage in the vaccine development process, the rolling out of the vaccination programme by the government has meant that the participants of the programme have declined to put the phase-3 trials in jeopardy.
- Thus it is important that pharmaceutical companies find a way to ensure that they conduct phase-3 trials meeting the regulatory standards before submitting the vaccine for regulatory approval for use.

2. Decoding a meteorite that fell near Jaipur in 2017

Context:

- The year 2017 witnessed a rare event of the bright trail in the sky followed by a thunderous sound.
- Soon the people of Mukundpura village near Jaipur who had seen the event unfold on the sky spotted a burning object with a sulphur smell on the soft agricultural land.

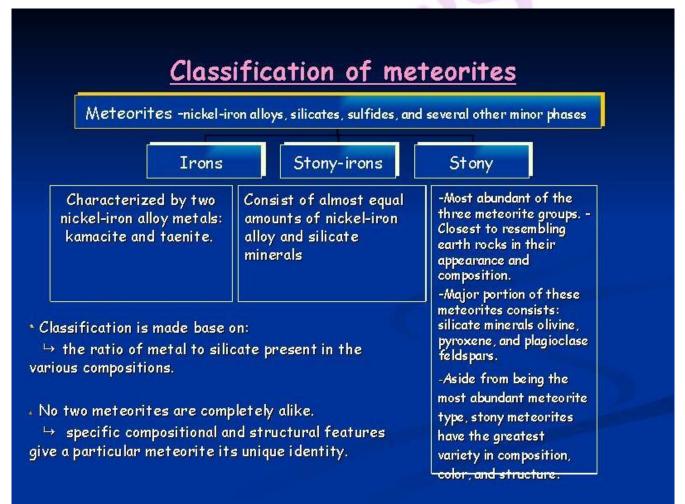


Details:

- The meteorite was dismembered into several pieces, the Geological Survey of India has been carrying out investigation on the remnants of the meteorite to discover vital information about the solar system.
- A meteorite is a term given to a piece of a comet or asteroid that falls into the earth's atmosphere and survives to hit the surface. These objects come in three easy-to-remember categories: stony, metallic and stony metallic

Meteorites classification

- Meteorites are broadly classified into three groups stony (silicate-rich), iron (Fe–Ni alloy), and stonyiron (mixed silicate–iron alloy).
- Chondrites are silicate-droplet-bearing meteorites, and this Mukundpura chondrite is the fifth carbonaceous meteorite known to fall in India.



Carbonaceous chondrite

• The meteorite was named Mukundpura CM2 and was classified to be a carbonaceous chondrite.



- The meteorite has been said to have belonged to a section of primitive, meteorites.
- The Mukundpura CM2 has a stony exterior and is believed to be a remnant of the first solid bodies to accrete in the solar system. The composition of carbonaceous chondrites is also similar to the Sun.
- He adds that.

Degrees of alteration

- The study has disclosed that Mukundpura CM2 had experienced varying degrees of alteration during the impact.
- Minerals such as forsterite and FeO olivine, calcium aluminium rich inclusion (CAI) minerals escaped alteration.
- Few magnetites, sulphides and calcites were also discovered, a detailed spectroscopic study revealed that the meteorite had very high (about 90%) phyllosilicate minerals comprising both magnesium and iron.
- X-ray studies have further gone on to confirm that it also possessed aluminium complexes.

Relevance to asteroids

- The studies concerning Mukundpura CM2 are relevant to the surface composition of near-Earth asteroids Ryugu and Bennu.
- NASA's OSIRIS-REx mission collected samples from Bennu during 2020 and is expected to reach planet earth by 2023.
- Another mission that deserves attention is Japan's Hayabusa-2 mission, which landed on Earth after collecting from Ryugu.
- Infrared spectroscopy results have indicated that the spectral properties of the surface of these asteroids are consistent with CM carbonaceous meteorites.
- Therefore, a better understanding of the nature and evolution of such meteorites that have been aqueously altered will help considerably in the interpretation of the results of these missions.

Early solar system

- Meteorites are representative of asteroids. Asteroids are the remnant debris of the inner solar system formation process and thus offer vital information about the building blocks of the planets.
- Undertaking studies of meteorites in the laboratory and asteroids by exploration and sample return mission will give a better sneak-peak into the formation of the solar system.
- Also, asteroids are often rich in volatiles and other minerals and thus will provide information that will be crucial for planning future planetary explorations.

3. Harnessing what Einstein called spooky 'action at a distance'

Context:

• The previous budget session saw the proposal to earmark ₹8,000 crores for the development of quantum science and technology.



- The proposal was soon followed by a detailed project report for a <u>National Mission on Quantum</u> <u>Technology and Applications (NM-QTA)</u>, and this report may in near future secure approval.
- The importance of quantum technology was recognized and the Department of Science and Technology of the Government of India had initiated a programme called QuEST to explore the possibilities and engage with the researchers.

Potential applications

- Quantum based products have been witnessing a surge in investments in the international arena, this investment is borne by both the state agencies and the private sector players.
- The range of potential applications are vast, ranging from secure communication, fast computers that established quantum supremacy, sensors and quantum-inspired devices.
- The interest and investment in the sector are largely accompanied by the urge to secure a first-mover advantage.

Quantum technology

- Quantum Technology is based on the principles of <u>Quantum mechanics</u> developed in the early 20th century to describe nature at the scale of atoms and elementary particles.
- Using quantum superposition, a set of unbreakable codes or super-speedy information processing, quantum computers are able to mimic several classical computers working in parallel
- Knowledge of quantum mechanics is a very important component of the rapidly evolving electronics industry. However, in the twenty-first century, the term 'quantum technology' refers to something even more disruptive and radical.
- It revolves around exploiting the properties of an individual, or a few fundamental particles, to achieve revolutionary changes in technology. One example is the property known as entanglement.
- Quantum entanglement is a quantum mechanical phenomenon in which the quantum states of two or more objects have to be described with reference to each other, even though the individual objects may be spatially separated. This leads to correlations between observable physical properties of the systems.
- When two objects, say two particles of light, also called photons, are in an entangled state, any changes made to the state of one, for example, its spin, are reflected in the other particle, however far they move from each other without breaking the entanglement. If developed, this property can be used to transmit a message at a very high level of secrecy from one point to another.
- China has recently demonstrated quantum communication technology using the satellite Micius, by conducting a secret conference between two ground stations about 1,120 km apart.
- They used the satellite not to transmit the entire communication, but to simultaneously send a pair of secret keys to the two ground stations. Each secret key is one of two strings of entangled photons.

Good progress

• India has been witnessing progress in the development of quantum technology, quantum communication, particularly in free space as well as in fibre. Prototypes have been developed and protocols are in place.



- The availability of satellite-based transponders would make way for a demonstration of free-space communication.
- The fibre front, stretching beyond 150 km is being worked out. This includes the development of repeaters so that signals could be boosted at every 150 km so that the desired communication can go for long distances.

Conclusion:

- The NM-QTA is an inter-ministerial mission, and the Department of Science and Technology is the nodal department.
- The several areas in which this technology can be applied include quantum communication, quantum encryption and quantum metrology.
- The potential applications that can be derived from the development of quantum technology are manifold, the communication sector will witness a landscape changes with quantum technology development and deployment.

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: HEALTH

1. The threat posed by avian influenza

Context:

• The states of Kerala, Rajasthan, Madhya Pradesh, Himachal Pradesh, Haryana, Gujarat and Uttar Pradesh have in recent weeks reported the outbreak of Avian influenza.

Details:

- Avian influenza is popularly referred to as bird flu.
- The reports of unusual deaths of a large number of birds, including wild ones, started coming in from many States, indicating that the virus is being actively transmitted among various bird groups.
- The reports have suggested that two virus types are responsible for the outbreaks H5N1 and H5N8.

The spread of the outbreak.

- The spread of the disease in a variety of birds in several geographical regions and the seasonal movement of migratory birds has made the situation precarious.
- The Central Government has resorted to issuing an alert to States to adhere to the National Action Plan for Prevention, Control and Containment of Avian Influenza 2021.
- The outbreak has not been limited to India, but has been seen internationally, the World Animal Health Information System in December 2020 identified outbreaks of HPAI in Taiwan, Iran, Israel, Japan, South



Korea and Vietnam, a dozen European Union countries, Ukraine, Russia and the U.K., leading to a loss of over 4.8 million birds by the end of December 2020

- H5N1 and H5N8 are categorized as Highly Pathogenic Avian Influenza (HPAI), which is of major concern to those keeping birds because it often results in disease and death of fowl and causes economic havoc.
- Humans are not immune from H5N1, the threat for humans is real.

Influenza Type A Viruses	Subtypes - Hemagglutinin (HA) - Neuraminidase (NA) (Viruses are divided into subtypes on the basis of two proteins on the surface of the virus)	
	 18 known HA subtypes 	11 known NA subtypes
	Different combinations of HA and NA proteins are possible • An H7N2 virus designates an influenza A virus subtype that has an HA7 protein and an NA2 protein • H5N1 virus has an HA5 protein and an NA1 protein	All known subtypes of Influenza A viruses can infect birds, except subtypes H17N10 and H18N11, which have only been found in bats
Influenza A H5 - There are nine known subtypes of H5 viruses - H5N1, H5N2, H5N3, H5N4, H5N5, H5N6, H5N7, H5N8, H5N9		

How serious is avian flu for bird health?

- Avian Influenza (AI) is a highly contagious viral disease, affecting a large variety of birds, including those known for human consumption such as chickens, ducks, turkeys, quails, as well as pet birds and wild birds.
- The World Organization for Animal Health, which collaborates with the <u>World Health Organization</u> (WHO) and the <u>Food and Agriculture Organization (FAO)</u> is of the view that HPAI virus strains H5N1, H5N2, H5N8, H7N8 have been identified in outbreaks, indicating active circulation. Infection histories point to H5N1 and H7N9 viruses posing a threat to human health as well.
- According to FAO, wild birds act as a natural reservoir of AI viruses. Their migratory movement could enable transmission of pathogens to poultry, waterfowl and other domestic birds through contact.



- HPAI produces severe clinical signs of disease in birds, causing a high degree of mortality and economic loss.
- The response to an outbreak is a containment strategy, which is primarily centred around removing the diseased birds through culling. Such mass destruction causes a severe impact on farmers.
- In the latest viral spread, in just one instance, Kerala has already identified over 69,000 birds, mostly ducks, stricken with H5N8, to be culled at four infection sites in the Kuttanad area of Alappuzha.

What is the economic impact of bird flu?

- As per the rough estimates of Ministry of Agriculture and Farmers Welfare, India's poultry sector is worth ₹80,000 crores, with the organised sector representing 80%, and the rest is distributed among unorganised sectors, including backyard poultry-keeping which is crucial for income and nutritional security.
- Exports, mainly focused on West Asia, neighbouring countries and East Asia, were valued at ₹532 crores in 2017, with an emphasis on processed products such as egg powder, yolk powder, pharma ingredients, and chicken products. Avian flu is seen as a threat to the further growth of the sector as a whole.
- By the government's estimates, there are 30 million farmers who keep backyard birds, while small and medium farmers who contribute to aggregators are crucial players in the larger ecosystem.
- India has a base of over 729 million poultry birds, of which 30% are layers and 40% are broilers, according to the National Action Plan for Egg and Poultry 2022. This large base shows that a serious outbreak of HPAI, as was witnessed during 2005-06 in some States, can be catastrophic. During that year, official data put the number of culled birds at over one million.
- In later years, bird flu surfaced in several States, such as Manipur, Assam, West Bengal, Tripura, Bihar, and Kerala, leading to the destruction of millions of birds.
- Where culling of birds is undertaken to combat bird flu, the National Action Plan prescribes compensation to be given to farmers at fixed rates. This, once again, underscores the value of prevention to protect captive birds.

Does bird flu pose a threat to human beings?

- The WHO studies do not categorically rule out human infection of virus subtypes H5N1, H7N9 and H9N2.
- There is recent evidence of a one-year-old of being tested positive for H5N1 in Lao PDR, believed to have been acquired from backyard birds kept by the family.
- Human cases of H5N1 avian influenza occur occasionally, but it is difficult to transmit the infection from person to person. When people do become infected, the mortality rate is approximated to 60%.
- The WHO records since 2003 reveal that there have been 862 laboratory-confirmed cases of human infection with H5N1, and 455 deaths have been reported from 17 countries.
- On the H5N8 strain, the consensus is that human infection cannot be ruled out, although the percentage of infection is low.
- However, H5N6 infection, of a related clade (a descendant type) has occurred among humans, the WHO says.



- One case of the H9N2 strain, in a three-year old girl, was reported last October from Guangdong, China. It was mildly symptomatic and was detected during routine surveillance for Influenza-like illness.
- AI viruses in poultry have a public health dimension because they cause severe disease in humans and possess the ability to mutate to increase transmissibility among humans.
- This calls for pandemic preparedness. Human-to-human transmission is believed to have taken place in some instances as a result of close or prolonged contact, but "there has been no sustained human-to-human transmission identified".

Why does bird flu recur? Did the major outbreaks not help form strategies?

- The eradication of the Avian Influenza is virtually impossible as the viruses seek refuge in a number of aquatic birds.
- The local bird-keeping conditions have been cited as the reason behind repeated outbreaks.
- The magnitude of the 2006 outbreak in Asia brought in much needed focus on the bird flu as a public health hazard.
- An international conference was organized with participation from health professionals, biotechnology experts, animal rights activists.
- The conference was held in New Delhi, under the auspices of WHO. It was felt that continuous growth in poultry farming under poor sanitary conditions was sustaining the virus, with multiple susceptible species living in the same area.
- The Delhi Declaration passed at the summit resolved on a common framework for countries to build local strategies, but it does miss the plot by not laying adequate emphasis on preserving the natural environment, which would be pivotal in helping wild birds move safely in an unspoilt habitat and stop transmission of viruses to domestic fowl, which threatens humans with infections and a potential pandemic due to mutating viruses.

What steps can be taken to minimise risk to domestic birds?

- Governments have issued biosecurity measures to keep domestic birds safe from transmission by wild or migratory birds and prevent local spread.
- The protocol emphasizes on active surveillance of bird areas to identify emerging outbreaks.
- However, the FAO advisory is not without issues and loopholes as it calls for the elimination of wild birds near human settlements through hunting, poisoning, and habitat destruction.
- The above-mentioned advisory can be counterproductive, as it will only lead to pushing the wild birds and the viruses into new frontiers.
- Moreover, hunting of wild birds and the absence of biosecurity measures bring the viruses directly to domestic fowl.
- In the wake of an outbreak in 2020, the Government of U.K. issued advice, making it legally necessary for bird-keepers in that country to house them in such a manner that they do not come into contact with wild birds.
- The measures have application worldwide include



- 1. housing or netting all captive birds,
- 2. cleansing and disinfecting clothing, footwear and vehicles,
- reduction of people's movement in the farm bird areas to reduce contamination,
- 1. eliminating or reducing contact between captive and wild birds, particularly through feed and water storage, and cleansing and disinfecting production areas.

Conclusion:

- The UK Government advisory gives a method that can be replicated in India, this can be an effective tool in preventing bird flu.
- In India, the Central government requires veterinary staff to conduct inspections periodically under the Prevention and Control of Infectious and Contagious Diseases in Animals Act, 2009, to catch any signs of disease among birds and other animals early.
- This mechanism serves as a good early warning system, however, incidences like the recent outbreak highlights the inadequacies of the process.
- The aquatic wild birds are often found in close proximity to domestic ones in many locations in India, near lakes, dams and reservoirs, making it difficult to achieve segregation. The waterways of Kerala are a good example of this phenomenon.
- Prevention and mitigation of bird flu will help reduce the cost of the Indian economy and public health.

Category: INTERNATIONAL RELATIONS

1. Ousting Trump

Context:

• The unsavoury incident of supporters of the outgoing US President Donald Trump mobbing the Capitol has led to calls for the removal of U.S. President Donald Trump before the swearing-in ceremony of Joe Biden.

Details:

- Democrats have renewed their efforts to oust Mr Trump from office, following the recent mob incident.
- Two possible scenarios have been suggested for getting Mr Trump removed, the exercise of the 25th Amendment of the Constitution or impeachment.

What does the Amendment say?

- The 25th Amendment lays out the provisions for a transfer of power from a US president who dies, resigns, is removed from office or for other reasons is unable to fulfil his or her duties.
- The first three sections deal with when a president resigns, dies or becomes ill or temporarily incapacitated.



- The fourth section provides a multistep process for the vice president and a majority of the officials who lead executive agencies commonly thought of as the cabinet to declare that the president is "unable to discharge the powers and duties of his office." That process ultimately requires a two-thirds vote of both houses of Congress.
- However, in the present scenario, Vice-President Mike Pence does not look interested in taking the 25th amendment route.

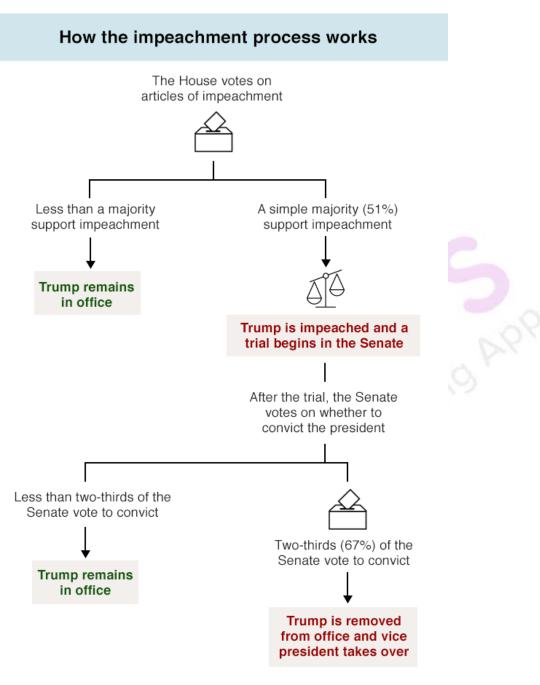
Operation of the amendment

- Invoking the 25th amendment would require Congress to set up a special commission to determine that the President is unable to discharge his duties.
- Since such a step is unprecedented, Congress will not be in favour of committing to such a step.
- The Congress will also have the responsibility to decide the composition of the special commission, and along with it, it will also have to lay down the modalities for making such a determination.
- In addition, it will be difficult to convene the Senate to take up the issue of this special commission.
- Further, even if the Cabinet decides on the competency of Mr Trump, he can resume his powers and duties by mere transmission to the two Houses his written declaration that no inability exists.
- He also has the power to dismiss the principal officers who supported the initial declaration.
- The majority of the Cabinet, as it stands, or the special committee can again transmit to the house another fresh declaration that the President is unable to discharge his powers and duties, for the Vice-President to again assume the powers and duties of the President.
- For him to continue, however, it would have to be supported by a two-thirds majority of both the Houses.
- Taking into consideration all the legal procedure, the prospect of the removal of Mr Trump from the presidency through the 25th Amendment before January 20 is highly improbable, if not impossible.

What about impeachment?

- The House of Representatives can set up the articles of impeachment and pass it without any difficulty.
- However, the impeachment trial would have to take place in the Senate, it will not be able to act on the articles of impeachment received from the House without agreement from all the 100 senators before January 19.
- Therefore, no substantive action can be taken to remove Mr Trump from office before January 20, on which day the President-elect will be sworn in.
- The charges which Mr Trump will likely to face is "inciting violence against the government of the United States" in an attempt to overturn his election loss to Mr Biden.





Conclusion:

- The US constitution provides for Mr Trump to be impeached after he vacates his office, thus time available is not a constraint.
- Most constitutional lawyers agree that an ex-President can be impeached, which would have the effect of preventing him from running for the presidency again



• However, it is widely believed that impeaching President Donald Trump with only a few days remaining in his presidency would not yield rich dividends and can possibly divide the country further, what is the need of the hour is peaceful transition of power.

F. Tidbits

Nothing here for today!!!

G. Prelims Facts

Nothing here for today!!!

H. UPSC Prelims Practice Questions

Q1. Consider the following martial arts in the country,

- 1. Silambam: Karnataka
- 2. Kalariyapattu: Kerala
- 3. Sarit Sarak: Mizoram
- 4. Gatka: Punjab

Which of the following is correctly matched?

- a. I and II only
- b. II and IV only
- c. III only
- d. All of the above

Answer: b

Explanation:

Sarit Sarak originated in Manipur and Silambam is popular in the state of Tamil Nadu

Q2. Consider the following statements

- 1. Hayabusa- 2 is a mission to moon by the Japanese space agency.
- 2. OSIRIS Rex is an asteroid sampling mission by NASA

Which of the following statements are true?

- a. I only
- b. II only
- c. Both I and II.
- d. Neither I and II.



Answer: b

Explanation

Hayabusa-2

- Hayabusa2 is an asteroid sample-return mission operated by the Japanese state space agency JAXA.
- It is a successor to the Hayabusa mission, which returned asteroid samples for the first time in June 2010.
- Hayabusa2 was launched in 2014 and rendezvoused in space with near-Earth asteroid 162173 Ryugu in 2018.

OSIRIS Rex

- OSIRIS-REx is a NASA asteroid-study and sample-return mission.
- The mission's primary goal is to obtain a sample of at least 60 g from 101955 Bennu, a carbonaceous near-Earth asteroid, and return the sample to Earth for a detailed analysis.

Q3. Pangti village was recently in news for

- a. Only known habitat of Apatani tribes.
- b. Arogyapacha plant was discovered.
- c. Conservation of Amur Falcon
- d. Breakout of Avian influenza.

Answer: c

Explanation:

• Pangti, a small village closest to the Doyang reservoir in Wokha district of Nagaland, which took the lead in conserving the Amur falcons. Doyang reservoir probably hosts the single largest congregation of Amur falcons recorded anywhere in the world.

Q4. Ex EKUVERIN is a bilateral exercise of India with which of the following countries.

- a. Oman
- b. Indonesia
- c. Myanmar
- d. Maldives

Answer: d

Explanation:

• India-Maldives joint military exercise.



I. UPSC Mains Practice Questions

- 1. What is Avian influenza? What are the steps that can be taken as preventive measures? (10 marks, 150 words; GS-2 Health)
- "Orderly transition of power is a sine qua non for a stable political setup", discuss. (10 marks, 150 words; GS-2 Polity)



