

22 May 2020: UPSC Exam Comprehensive News Analysis

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B. GS 2 Related

Category: INTERNATIONAL RELATIONS

1. ‘PLA blocking Indian patrols in Ladakh, Sikkim’

Context:

New Delhi has rejected Beijing’s claim that Indian troops trespassed into Chinese territory, and accused the People’s Liberation Army (PLA) of hindering patrols by Indian soldiers.

Details:

- In the first such statement after weeks of stand-off between Indian and Chinese soldiers at four points along the boundary in Sikkim and Ladakh, the Ministry of External Affairs (MEA) also told China that peace and tranquillity in border areas is an essential prerequisite to developing bilateral relations.

This issue has been covered in 21st May 2020 Comprehensive News Analysis. [Click here](#) to read.

Category: POLITY AND GOVERNANCE**1. Congress launches Kisan Nyay Scheme****Context:**

The Chhattisgarh State Government launched the Rajiv Gandhi Kisan Nyay Yojana on the 19th death anniversary of the former Prime Minister.

This topic has been covered in 21st May 2020 Comprehensive News Analysis. [Click here](#) to read.

C. GS 3 Related**Category: ECONOMY****1. Odisha adopts contract farming system****Context:**

The Odisha Government has promulgated an ordinance allowing investors and farmers to enter into agreement for contract farming, in view of the continuing uncertainties due to the pandemic.

Details:

- The ordinance is aimed at facilitating both farmers and sponsors to develop mutually beneficial and efficient contract farming system.
- It argued the new system will improve production and marketing of agricultural produce and livestock while promoting farmers' interest.
- The State has, however, made it clear that no title, rights, ownership or possession of land or other such property will be transferred or alienated or vest in the sponsor or its successor or agent.

Contract Farming:

- Contract farming involves agricultural production being carried out on the basis of an agreement between the buyer and farm producers.
- Sometimes it involves the buyer specifying the quality required and the price, with the farmer agreeing to deliver at a future date.
- Contract farming is allowed in most states like Gujarat, Maharashtra, Karnataka, Tamil Nadu, Haryana, Uttarakhand, Madhya Pradesh and West Bengal under the amended APMC Act, and companies and agencies have to seek permission or license in each state separately.

Advantages of Contract Farming:

- It will help increase income for farmers, particularly the small and marginal ones, as they will get better access to good quality inputs and better farm practices.
- A deeper engagement between the farmers and food processors or retailers helps in guiding the farmers align the crop varieties, quality, farm management practices, etc. with what the market wants.
- It will reduce the marketing risk for farmers due to pre-agreed prices and market assurance.

Way forward:

- The government should focus on providing a successful model for farmers through well-defined legal provisions for Contract farming.
- The government should ensure the security of the growers, which requires buyers and the farmers to sign long term contracts so productivity and the crop quality are maintained through proper investments.
- Monopsony has to be avoided in contract farming since one company entering into an agreement with a large number of farmers puts the growers at a disadvantage.

2. Rating agencies can bypass curing period

Context:

Taking into account the practical issues faced by companies due to the COVID-19 pandemic, the [Securities and Exchange Board of India \(SEBI\)](#) has allowed credit rating agencies (CRAs) to bypass the 90-day curing period to revise ratings from default to non-investment grade.

Issue:

- While current norms bar CRAs from revising the ratings before 90 days, few companies were able to meet their payment obligations a few days after the due date due to [COVID-19](#)-related delays.
- The rating agencies were, however, not able to revise the ratings due to the regulatory framework.
- The rating could not be upgraded and continued to be under sub-investment grade due to the extant provisions on post-default curing period of:
 - 90 days for the rating to move from default to speculative grade.
 - Generally, 365 days for default to investment grade.

SEBI has said that CRAs can deviate from the said period of 90 days on a case-to-case basis, subject to the agencies framing a detailed policy in this regard.

Credit Rating:

- Credit Rating is an assessment of the borrower (be it an individual, group or company) that determines whether the borrower will be able to pay the loan back on time, as per the loan agreement.
- A good credit rating depicts a good history of paying loans on time in the past.
- This credit rating influences the bank's decision of approving an applicant's loan application at a considerate rate of interest.

How does credit rating work?

- Every credit rating agency has their algorithm to evaluate the credit rating.

- Major factors considered are credit history, credit type and duration, credit utilization, credit exposure, etc. Every month, these credit rating agencies collect credit information from partner banks and other financial institutions.
- Once the request for credit rating has been made, these agencies dig out the information and prepare a report based on such factors. Based on that report, they grade every individual or company and give them a credit rating.

Credit Rating Agencies in India:

- **CRISIL:** Credit Rating Information Services of India Limited is the first credit rating agency of the country which was established in 1987.
- It offers 8 types of credit rating which are as follows:
 - AAA, AA, A – Good Credit Rating
 - BBB, BB – Average Credit Rating
 - B, C, D – Low Credit Rating
- **ICRA:** Investment Information and Credit Rating Agency of India was formed in 1991. It offers comprehensive ratings to corporates via a transparent rating system.
- **CARE:** Credit Analysis and Research Limited (CARE) offers a range of credit rating services in areas like debt, bank loan, corporate governance, recovery, financial sector and more. Its rating scale includes two categories – long term debt instruments and short term debt ratings.
- **ONICRA:** Onida Individual Credit Rating Agency of India, established in 1993, offers credit assessment and credit scoring services to both individuals and businesses.
- **SMERA:** Small Medium Enterprises Rating Agency of India Limited has two divisions – SME Ratings and Bond Ratings. It was established in 2011 and is a hub of financial professionals.

Also read: [Credit Rating Agencies in India - An Overview](#)

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: POLITY

1. A violation of right found, but no remedy given

Context

- The Supreme Court refrained from passing any orders on the restoration of 4G internet services in Jammu and Kashmir.
- The court instead has asked the Centre to constitute a ‘special committee’ to examine the contentions raised by the petitioners.
 - The special committee would be headed by the Union Home Secretary and comprising the Secretary of Department of Communications, Government of India and the Chief Secretary of the Union Territory (UT) of Jammu and Kashmir (J&K) to examine the prevailing circumstances in the UT and determine whether the restrictions on internet services should continue.
- The Court said it has to “ensure national security and human rights are balanced”.

Foundation for Media Professionals v. Union Territory of J&K

- The current petition was filed by Foundation for Media Professionals, a **not for profit comprising journalists** to uphold media freedom and promote quality journalism.
- In its petition, the Foundation prayed for the restoration of 4G services in J&K with immediate effect. Apart from raising the challenge on the ground of [right to freedom of speech and expression](#) [Article 19(1) (a) of the Constitution], the petition also contended a violation of Articles 19(1)(g), 21 and 21A of the Constitution.

Arguments put forward by petitioners

- According to the petitioners, the restriction on 4G internet in the times of COVID-19 restricts the right to business, education, health, and speech and expression of the people of J&K.
- The restriction makes it impossible for individuals in J&K to access information, government advisories, and orders relating to COVID-19.
 - It makes it impossible for doctors to have video consultations and prevents the doctors in the UT from gaining access to the latest studies and treatments of COVID-19.
 - This violates the right to healthcare of the people and is a violation of [Article 21](#).
- The right to access to justice of the people in J&K is also restricted (since most courts are only functioning through video conferencing and filing is also taking place online), thereby violating Article 21.
- These restrictions also prevent a large number of people in J&K from complying with work from home orders of the government and violates the right to trade under Article 19(1) (g) and right to livelihood under Article 21.
- A significant argument of the petitioner was also that given the situation arising due to the spread of COVID-19 and the unprecedented times we are in, the restriction on 4G services is disproportionate since it applies to the entire J&K.

Views of the Government

- The government, on the other hand, argued that because of the prevailing security situation in J&K and the use of the internet by insurgents and terrorists to spread violence, it is not possible to provide 4G services in the region.
- It also contended that there is no restriction over broadband and fixed line internet, and that the government is taking alternate measures to provide information relating to COVID-19 and for the education of students in the region.

Issues with the ruling

- The court has relegated the decision-making to a newly formed committee comprising officials from the executive. In doing so, it effectively reversed the age-old principle that no person shall act as a judge in his own cause.
 - The executive will decide whether the executive violated [fundamental rights](#).
- Its decision to send the question of restoring 4G connectivity in Jammu and Kashmir for a review to the very authorities who imposed the restriction in the first place, is a clear abdication of responsibility. The mandate that the Court enjoys under Article 32 of the Constitution — to enforce fundamental rights — cannot be transferred to the executive.
- The Court acknowledges that it might be better and convenient to have better Internet facilities during a global pandemic and a national lockdown. It also notes that the entire Union Territory has been put under curbs that allow only 2G speed.
 - However, it takes into account two claims by the government:
 - One, that there ought to be limits on data speed to prevent terrorists misusing it to disturb peace and tranquillity;

- Two, that there has been a spike in incidents of terrorism — 108 incidents.
 - The Court also considered recent incidents including the encounter at Handwara.
 - A question that it failed to ask was how these incidents could be linked to Internet speed when all of them took place while severe restrictions were in place.
- The Court has not even pursued the attempt it made in the Anuradha Bhasin case, to lay down a set of rules by which authorities seeking to impose restrictions on fundamental rights must adhere to; the doctrine of proportionality.

Anuradha Bhasin and Guidelines for Internet Shutdown

- In Anuradha Bhasin case, the Court laid down various guidelines/safeguards which the government needs to follow before ordering an internet shutdown.
- It held that the shutdown order should specify the **exact duration of a shutdown** and it cannot be indefinite. It directed the Review Committee formed under the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017, to review the shutdown orders every seven days.
- Additionally, the Court stated that these orders must **pass the test of proportionality**. It held that the government must identify the exact stage of public emergency before shutting down the internet, since that will assist the committee in determining the proportionality of the measure.
- However, despite laying down all the principles, the **Court did not decide the validity of the shutdown orders and passed on this job to the review committee.**

Conclusion

In our country where we are witnessing frequent internet shutdowns, these incremental steps by the highest court of the country may not be enough.

- The Court should have found the current J&K Order for restricting 4G services illegal and struck it down for not complying with the guidelines under the Telecom Suspension Rules and Safeguards laid down in the Bhasin case.
- To balance it with the security concerns in J&K – the Court could have additionally provided the J&K administration a few days to come up with a new order (if they so desired), which complies with the guidelines.
- This SC judgment unfortunately leaves the Indian population in the hands of the bureaucrats – who may not be the best suited to make these decisions on proportionality.

Category: INTERNATIONAL RELATIONS

1. Keeping the peace: On India-China border tension

Context

- Incidents of face-off occurred between Indian and Chinese troops, resulting in injuries to several soldiers on both sides.

What are the various sectors on the India-China border?

India-China border is divided into three sectors:

- The Line of Actual Control (LAC) in the western sector falls in the union territory of Ladakh and is 1597 km long,
- The middle sector of 545 km length falls in Uttarakhand and Himachal Pradesh, and
- The eastern sector falls in the states of Sikkim and Arunachal Pradesh. It is 1346 km long.
- The middle sector is the least disputed sector, while the western sector witnesses the highest transgressions between the two sides.

What exactly is a Chinese transgression?

- A Chinese transgression across the border is recorded once the Indian border guarding forces in an area – either the Army or the ITBP – are “reasonably certain” that Chinese soldiers had crossed over to the Indian side of the LAC.
- A Chinese transgression – in air, land or the waters of Pangong Tso lake – can be recorded, officials said, if it is visually observed by border posts, through use of surveillance equipment, in face-offs by patrols, indicated reliably by locals, or based on evidence left by the Chinese in the form of wrappers, biscuit packets, etc. to show their presence in an unmanned area.

Key Stats

- Nearly three-quarters of the transgressions, data since 2015 show, have taken place in the **western sector** of the LAC, which falls in Ladakh.
- The **eastern sector**, which falls in Arunachal Pradesh and Sikkim, witnessed almost one-fifth of the Chinese transgressions.
- The highest number of aerial transgressions by China, according to official data, also took place in 2019 — there were 108 instances, up from 78 in 2018 and 47 in 2017.
- Overall, there were 663 recorded Chinese transgressions in 2019, up from 404 in 2018. This included a 75 per cent spike in the western sector and a 55 per cent rise in the eastern sector.

Do the higher number of Chinese transgressions matter?

- A higher number indicates that the Chinese soldiers are coming to the Indian side more often, and their movements are being observed and recorded by the Indian soldiers.
- This can be seen as an indicator of increased Chinese assertiveness, but as long as there are no major incidents, it means that the established border mechanisms between the two sides are working.

Why Face-off?

- Both countries have differing perceptions owing to the undemarcated boundary, which lead to transgressions and face-offs as each side patrols up to the areas they claim along the 3,448-km Line of Actual Control (LAC).
- The stand-off in Ladakh appears to have been triggered by China moving in troops to obstruct road construction activity by India.

India upgrades the infrastructure

- At Muguthang, the road on the Chinese side is motorable, and on the Indian side, it is a remote area. Due to this, they can bring in a large number of troops if needed.
- But in 2019, India completed the Darbuk-Shyok-Daulet Beg Oldi (DSDBO) road which connects Leh to the Karakoram Pass. India also maintains a key landing strip at DBO at 16,000 feet.
- The broader context for the tensions is the changing dynamic along the LAC. India has been upgrading its roads as it plays catch-up with China, already enjoying an advantage in both terrain and infrastructure. China now seems to be telling India it has no right to carry out the kind of activity that Beijing has already done.

- India is well within its rights to carry out construction work. Delhi needs to remind Beijing that a fundamental principle that underpins all previous agreements is recognising the right to mutual and equal security of the two sides.

Location of the stand-off

- The Galwan River Valley is located in north-eastern Ladakh, east of the Aksai Chin plateau illegally occupied by China.

Basic Framework for dealing with such issues

- “Agreement on the Maintenance of Peace and Tranquility along the Line of Actual Control in the India-China Border Areas” was initiated in 1993.
- The two sides agreed to “peaceful and friendly consultations” to resolve the boundary dispute and disclaimed the threat of force as a legitimate bargaining tool.
- Further, until such an agreement could be reached, the sanctity of the LAC was to be maintained.
- Any “contingencies or other problems arising in the areas” were to be dealt with “through meetings and friendly consultations between border personnel of the two countries.”
- An informal summit took place in Wuhan between Prime Minister Narendra Modi and Chinese President Xi Jinping in 2018, the year after the Doklam stand-off. Both countries declared they “respect each other’s sensitivities, concerns and aspirations” and reiterated their commitment to the terms of the 1993 Agreement.

Way Forward

- The immediate priority is for both sides to use existing channels and step back. Flag meetings between brigade commanders have so far been unable to break the stalemate. The incidents have underlined how the new LAC situation is placing existing mechanisms under renewed stress.
 - Focus should also be on military-to-military communication, which would “allow the two sides to immediately clarify any relevant issues at a more senior directive level.”
- India and China should grasp the current situation as an opportunity to revive the stalled process of clarifying the LAC. China has resisted this as a distraction to the boundary negotiations. But rather than agree on a line, both can instead simply seek to better understand the claims of the other and reach a common understanding to regulate activity in these areas.
- Clarifying the LAC may even provide a fresh impetus to the stalled boundary talks between the Special Representatives. Beyond the posturing, both sides know a final settlement will ultimately have to use the LAC as a basis, with only minor adjustments.

Conclusion

- Only a settlement will end the shadow boxing on the LAC. With both countries in the midst of an unprecedented global pandemic, the time to push for a settlement to a distracting, protracted dispute is now.

Operation Juniper

- In 2017, the Indian Army executed “Operation Juniper” and positioned armed troops in the Doklam area of Bhutan.
- This mobilization was intended to deter a team of Chinese People’s Liberation Army (PLA) soldiers from constructing a road that would have given the Chinese access to Indian Territory.
- The road would have circumvented Indian posts in Dokala, and provided the Chinese access to Jampheri Ridge and a clear line of sight to the narrow Siliguri Corridor.

Commitment Problem

In terms of their border dispute, India and China are struggling with what game theorists refer to as a “commitment problem.”

Meaning

- A commitment problem arises when two states, who **would be better off in the present if** they consented to a mutually beneficial agreement, are unable to resolve their disputes due to different expectations of future strengths, and a consequent inability to commit to future bargaining power or a division of benefits.

In Simple terms

- If “rising” India assumes **that its material power and leverage vis-à-vis China is likely to improve over time**, it has no incentive to accept China’s “benign hegemony” and to accept a negotiated settlement at a time when it cannot realize the advantages of this increased leverage.
- This is also true in China’s case, as it too expects to increase its material strength and cement its superpower status in the coming decades. This could create a reasonable expectation of being able to exact greater concessions from India in the future.
- **A status quo agreement thus**, that seeks to formalize the existing LAC becomes difficult to accept.

Category: DISASTER MANAGEMENT

1. Amphan Cyclone (A double disaster: On a cyclone amid the coronavirus)

- Amphan is a **Super Tropical Cyclone** originated from the Bay of Bengal.
 - It is considered the first super cyclonic storm in the Bay of Bengal since the 1999 Odisha cyclone.
- It made landfall between Digha, some 180 km south of Kolkata in West Bengal, and Hatiya islands in Bangladesh on May 20.
- Amphan intensified from a maximum wind speed of around 140 kilometre per hour to more than 200 kmph.
 - This meant it witnessed ‘rapid intensification’.
 - The main reason behind this was the high sea surface temperatures of 32-34 degrees celsius in the Bay of Bengal. General long-term warming of the Bay of Bengal was the leading cause of rapid intensification.

Naming

- The name Amphan, which is pronounced as 'Um-pun', means sky and was given by Thailand in 2004.
- India, Bangladesh, Myanmar, Pakistan, Maldives, Oman, Sri Lanka and Thailand decide names of cyclones in the region.
- The countries submit a list of cyclone names from time to time to choose the names from the pool.
- While selecting names for cyclones, countries first analyse them to see if the word is easily understood by people in the region, hence the names are generally familiar words.

How devastating was the first super cyclone in Bay of Bengal in 1999?

- In 1999, Odisha was ravaged by a super cyclone that left around 10,000 people dead along its trail of destruction.
- One of the powerful cyclones of the 20th century, the 1999 super cyclone had also damaged lakhs of houses, killed about two lakh livestock and affected about 2.5 to 3 million people, leaving large tracts of agricultural land unfit for cultivation for a long time due to salinity.

Tropical cyclones

- Cyclones are low-pressure systems that form over warm tropical waters, with gale force winds near the centre. The winds can extend hundreds of kilometres (miles) from the eye of the storm.
- Sucking up vast quantities of water, they often produce torrential rains and flooding resulting in major loss of life and property damage.

Tropical cyclones in the Bay of Bengal are graded according to maximum wind speeds at their centre.

- At the **lower end** are depressions that generate wind speeds of 30 to 60 km per hour followed by,
- Cyclonic Storms (61 To 88 kph),
- Severe Cyclonic Storms (89 to 117 kph) and
- Very Severe Cyclonic Storms (118 to 166 kph).
- At the **top** are
 - Extremely Severe Cyclonic Storms (167 to 221 kph) and
 - **Super Cyclones** (222 kph or higher).

Storm surges

- The term "storm surge" refers to rising seas whipped up by a storm, creating a wall of water several metres higher than the normal tide level.
- The surge can extend for dozens of kilometres inland, overwhelming homes and making roads impassable.
- A storm surge is shaped by a number of different factors, including storm intensity, forward speed, the size of a storm and the angle of approach to the coast.
- The underlying features of the land at the coast, including bays and estuaries, are also at play.

Bay of Bengal

- The tropical cyclone season in the Bay of Bengal and neighbouring Arabian Sea has two peaks around May and November, according to the World Meteorological Organisation.
- The cyclones can form in the western Pacific Ocean and travel in a northwest direction before arriving in the Bay of Bengal. Some reach the southeastern coast of India but others divert northeast and move up to West Bengal and Odisha states.
- The Bay of Bengal has conditions favourable to the development of cyclones, including high sea surface temperatures.

Steps taken by the Govt.

- Evacuations, arranging for backup power, warning people to stay far from the coasts, designating strong buildings as cyclone shelters, and providing for at least a week's supply of cooked food besides bolstering medical supplies.
- Fishermen are advised not to venture into North Bay of Bengal along and off North Odisha, West Bengal and adjoining Bangladesh coasts.

What all damage is expected in Odisha and Bengal?

- Extensive damage is expected to all types of kutchha houses and some damage to old badly managed pucca structures.
- Also, there is a potential threat from flying objects.
- Extensive uprooting of communication and power poles is also likely along with disruption of rail/road at several places.
- Aside from these, extensive damage to standing crops, plantations, orchards and blowing down of palm and coconut trees, uprooting of large bushy trees are expected.
- The storm surge may have also led to the ingress of saline water into the fields and homes in the Sundarbans. This will hit soil quality and impact productivity, and force people to migrate in search of livelihood.

Challenge of COVID-19

- There is an additional challenge, as thousands of people have been moved to crowded shelters where the COVID-19 pandemic poses a continuing threat.
- Adhering to hygienic practices, monitoring those requiring medical assistance and testing for the virus is a high priority.

Ocean warming

- Cyclone Amphan is also a reminder that oceans are warming due to rising emissions, and warm ocean water is a key ingredient for the formation of tropical cyclones.
- The number of cyclones in the Arabian Sea and the Bay of Bengal has increased by 32% in the last five years, says IMD data.
- However, the solutions — tackling the sources of global warming, and investing in and upgrading climate resilience and adaptation techniques — are complex processes and expensive.
- It also needs tremendous political will and people's support and participation to ensure that development is sustainable. But it has to be done; otherwise, the costs, as Cyclone Amphan has shown, will be massive and recurring.

Conclusion

- The states now need to carry out a detailed assessment of what Amphan has done.
- They have to start rebuilding infrastructure and reaching out to people with food, clean water and medical help.

Category: DEFENCE

1. Sonic Boom

Background

- - Sound travels in the form of waves which are emitted outwards from its source. In air, the **speed of these waves depends on a number of factors**, such as the temperature of the air and altitude.
 - From a **stationary source**, such as a television set, sound waves travel outwards in concentric spheres of growing radii.

- When the **source of sound is moving** – e.g, a truck– the successive waves in front of the truck get closer together, and the ones behind it spread out.
 - This is also the cause of the **Doppler Effect**– in which bunched waves at the front appear at a higher frequency to a stationary observer, and spread out waves that are behind are observed at a lower frequency.
- As long as the **source of the sound keeps moving slower than the speed of sound itself**, this source– say a truck or a plane – remains nested within the sound waves that are travelling in all directions.

Meaning of sonic boom

- A sonic boom is said to occur when an object travels through the air faster than the speed of sound and creates shock waves.
- This can lead to a huge emission in energy, usually in the form of sound, which can be similar to an explosion of thunderclap.
- According to NASA, a sonic boom is a thunder-like noise a person on the ground hears when an aircraft or other type of aerospace vehicle flies overhead faster than the speed of sound, or “supersonic.”
 - Air reacts like fluid to supersonic objects. As those objects travel through the air, molecules are pushed aside with great force and this forms a shock wave, much like a boat creates a wake in water. The bigger and heavier the aircraft, the more air it displaces.

General Factors Associated with Sonic Booms

- There are several factors that can influence sonic booms -- weight, size, and shape of the aircraft or vehicle, plus its altitude, attitude, and flight path, and weather or atmospheric conditions.
- A larger and heavier aircraft must displace more air and create more lift to sustain flight, compared with small, light aircraft. Therefore, they will create sonic booms stronger and louder than those of smaller, lighter aircraft. The larger and heavier the aircraft, the stronger the shock waves will be.

Aircraft and Sound

- The sonic boom is a continuous sound which is emitted by the aircraft all the while it is travelling at a supersonic speed.
- If the **aircraft is flying at a low altitude**, the sonic boom may also lead to tremors similar to earthquakes and shattering of glass.

Examples of sonic boom

- A sonic boom can be produced while cracking a **whip through air**. This happens because the whip travels at a supersonic speed and breaks the sound barrier.
 - Since the whip is a small and manageable object, the boom is not loud enough to cause alarm and structural damage.
- The loud noise produced when a **bullet is fired from a gun** is also a sonic boom, as the bullet travels at supersonic speed.
 - Not all guns fire bullets at supersonic speeds as **people prefer silent guns** which don't make too much noise. Sometimes people also use **silencers** for their guns, which makes the bullet travel at a subsonic speed.
- A sonic boom is most **commonly heard when an aircraft is travelling at a low altitude**, which leads to a very loud boom and tremors in the ground.

Context

- ‘Loud Sound’ heard in Bengaluru.

Details

- The sonic boom was probably heard while the aircraft was decelerating from supersonic to subsonic speed between 36,000 and 40,000 feet altitude.
- According to the Ministry of Defence, the sound of a sonic boom can be heard and felt by an observer even when the aircraft is flying as far away as 65 to 80 kilometres away from the person.

F. Prelims Facts

1. Fluid catalytic cracking

- **Fluid catalytic cracking (FCC)** is one of the most important conversion processes used in petroleum refineries.
- It is widely used to convert the high-boiling, high-molecular weight hydrocarbon fractions of petroleum crude oils into more valuable gasoline, olefinic gases, and other products.
- Cracking of petroleum hydrocarbons was originally done by thermal cracking, which has been almost completely replaced by catalytic cracking because it produces more gasoline with a higher octane rating. It also produces byproduct gases that have more carbon-carbon double bonds (i.e. more olefins), and hence has more economic value, than those produced by thermal cracking.
- Also known as a **Cat Cracker**, the Fluid Catalytic Cracking Unit (FCCU) is a piece of refining equipment used to convert the heavy portion of crude oil feedstock into lighter petroleum products, including liquified petroleum gas and gasoline.

2. Private Airlines to join Vande Bharat Mission

What's in News?

IndiGo has announced that it will join hands with the government in bringing back Indians stranded overseas and operate 97 flights between Kerala and destinations in West Asia like Saudi Arabia, Doha, Kuwait and Muscat.

Vande Bharat Mission:

- In an effort to bring back its stranded citizens abroad due to the spread of the novel coronavirus and the resulting lockdown thereof, India has rolled out massive evacuation plans called 'Vande Bharat Mission'.

For more on this topic read [8th May 2020 Comprehensive News Analysis](#).

3. Pidawa, an unheralded success

What's in News?

Rajasthan town - Pidawa sets example in COVID-19 battle.

- Pidawa is a small town in the middle of the sliver of Rajasthan that thrusts into Madhya Pradesh.

- Like many of the habitations in this part of the country, Pidawa also benefitted over the last couple of centuries from a **'black gold' rush**.
 - 'Black gold' is **extracted from a plant, Papaver somniferum, and is then processed to make opium and its many derivatives.**
- These badlands hosted a part of the production facilities that provided the fuel which ignited the Anglo-Chinese Opium Wars of 1839-42 and 1856-60.
- What is now grown is largely legal, although a portion does slip through the system to reach consumers on the western side of Rajasthan.
- The Central Bureau of Narcotics (CBN) issues statutory licences to cultivate opium under strict laws.
- Only CBN can procure it from cultivators for a price, ranging from Rs 1,000 to Rs 7,000 a kg, depending on the quality.
- The sale in the open market is a punishable offence.
- The poppy husk, a leftover from the main crop, sells for around Rs 250 to Rs 2,500 per kg, depending on the quality.
- Since the central government banned the consumption of poppy husk in 2016 and followed it up by a ban on the possession of husk under the Narcotic Drugs and Psychotropic Substances Act, the main income of opium farmers has fallen. As per the new rule, the leftovers have to be burnt or destroyed in the presence of an officer.

4. Trump suggests holding in-person G7 summit

What's in News?

U.S. President Donald Trump said that he is considering hosting world leaders for the annual G7 summit at his Camp David retreat despite the ongoing coronavirus crisis.

G7:

- The G7 or the Group of 7 is a group of the seven most advanced economies as per the International Monetary Fund (IMF).
- The seven countries are Canada, USA, UK, France, Germany, Japan and Italy.
- G7 countries take turns organizing the annual gathering.

Read more about G7. [Click here.](#)

G. Tidbits

1. U.S – China relations

U.S. Bill to bar China firms from bourses

- The U.S. Senate has passed a legislation that could prevent some Chinese companies from listing their shares on U.S. exchanges unless they follow standards for U.S. audits and regulations.
- The measure was passed by unanimous consent.
- However, the legislation must be passed by the House of Representatives also and be signed by President Donald Trump to become a law.

Advanced torpedoes to Taiwanese Military

- The U.S State Department announced that it had approved the sale of advanced torpedoes to the Taiwanese military.
- China regards Taiwan as a renegade province.
- The department said it had informed Congress of the \$180 million sale of heavy-weight torpedoes, which would help improve the security of (Taiwan) and assist in maintaining political stability, military balance, and economic progress in the region.

White House report blasts Chinese ‘malign activities’

- The White House has also issued a broad-scale attack on Beijing’s predatory economic policies, military buildup, disinformation campaigns and human rights violations.

2. Second round of airport privatisation awaits nod

What’s in News?

Minister for Civil Aviation has said that the bidding for the second batch of six airports to be privatised will be done quickly and the Union Cabinet is expected to take a decision on it soon.

Details:

- The Ministry of Civil Aviation has approved the proposal for privatisation of another six airports, which include Amritsar, Varanasi, Bhubaneswar, Indore, Raipur and Tiruchi.
- In another significant move, the Empowered Group of Secretaries has taken a decision on awarding three airports — Jaipur, Thiruvananthapuram and Guwahati.
 - These three airports were part of the first round of privatisation of airports last year when a total of six airports were auctioned out.

Read more about [Airports Authority of India](#).

H. UPSC Prelims Practice Questions

Q1. Consider the following statements:

1. India is the largest producer of coffee in the world.
2. India exports both Robusta and Arabica varieties of coffee.
3. India is the only country in the world where the entire coffee cultivation is grown under shade, hand-picked and sun dried.

Which of the given statement/s is/are correct?

- a. 2 and 3 only
- b. 3 only
- c. 1, 2 and 3 only
- d. 1 and 3 only

Answer: a

Explanation:

India is the sixth largest producer of coffee in the world, accounting for about 5% of world coffee production. Brazil is the world's largest coffee producer. India exports both robusta and Arabica varieties of coffee. India is the only country in the world where the entire coffee cultivation is grown under shade, hand-picked and sun dried.

Q2. "Operation Juniper" refers to:

- a. Operation launched to repatriate Indian citizens stranded in Maldives in the backdrop of the COVID-19 pandemic.
- b. Operation launched by Indian Navy to help cyclone-hit Madagascar.
- c. Operation launched by Indian Army to stop Chinese from constructing a road in Doklam that would have given them access to Indian Territory.
- d. Operation launched by India to assist the victims of the 2018 Sulawesi earthquake and tsunami in Indonesia.

Answer: c

Explanation:

- In 2017, Indian Army executed "Operation Juniper" and positioned armed troops in the Doklam area of Bhutan.
- This mobilization was intended to deter a team of Chinese People's Liberation Army (PLA) soldiers from constructing a road that would have given the Chinese access to Indian Territory.
- The road would have circumvented Indian posts in Dokala, and provided the Chinese access to Jampheri Ridge and a clear line of sight to the narrow Siliguri Corridor.
- It was called 'Operation Juniper' as junipers are trees found in Eastern Tibet.

Q3. Consider the following statements:

1. Sonic boom is a continuous sound which is emitted by the aircraft all the while it is travelling at a supersonic speed.
2. A sonic boom is said to occur when an object travels through the air faster than the speed of sound and creates shock waves.

Which of the given statement/s is/are incorrect?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer: d

Explanation:

Both the statements are correct.

Q4. Consider the following statements:

1. Central Bureau of Narcotics (CBN) issues statutory licences to cultivate opium.
2. India is the only country which legally produces opium gum.
3. India is a signatory to the UN Convention on Narcotic Drugs 1961.

Which of the given statement/s is/are correct?

- a. 1 and 2 only
- b. 1 and 3 only
- c. 1, 2 and 3
- d. 2 and 3 only

Answer: c

Explanation:

- Licit opium poppy cultivation is permitted by the Government of India.
- The cultivation is carried out in India in selected tracts notified by the Central Government annually in the States of Madhya Pradesh, Rajasthan and Uttar Pradesh.
- Licences are issued by the Central Bureau of Narcotics (CBN) to eligible cultivators.
- India is one of the few countries that legally grow opium poppy and the only country which legally produces opium gum.
- As a signatory to the United Nations Single Convention on Narcotic Drugs, 1961 and as a licit producer of opium, India is required to adhere to the regulations under the said convention.

I. UPSC Mains Practice Questions

1. Discuss in detail the key areas of dispute between India and China. What are the existing mechanisms to control the face-off? How should the Asian powers amicably settle the border dispute? (15 Marks, 250 Words)
2. What is a Tropical Cyclone? Explain how it is formed and the favourable conditions required. Discuss the strategies to mitigate the effects of tropical cyclones. (15 Marks, 250 Words)