

OFFICERS' Pulse

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Coverage.

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At a Glance & In Depth.

Polity and Social Issues
Economy
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CURRENT AFFAIRS
WEEKLY
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YOUR FINGER TIPS.

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News @ a glance

POLITY

1) Appointment of Chief Justice of High Courts

Provision of Appointment of Judges in Constitution:

- Judges of the Supreme Court and High Courts are appointed by the President under Articles 124(2) and 217 of the Constitution. The President is required to hold consultations with such judges of the Supreme Court and of the High Courts as he may deem necessary.

- **Article 124(2)** says: "Every Judge of the Supreme Court shall be appointed by the President by warrant under his hand and seal after consultation with such of the Judges of the Supreme Court and of the High Courts in the States as the President may deem necessary for the purpose and shall hold office until he attains the age of sixty-five years. Provided that in the case of appointment of a Judge other than the Chief Justice, the Chief Justice of India shall always be consulted."
- **Article 217:** "Every Judge of a High Court shall be appointed by the President by warrant under his hand and seal after consultation with the Chief Justice of India, the Governor of the State, and, in the case of appointment of a Judge other than the Chief Justice, the Chief Justice of the High Court."

Why in News?

- The Supreme Court Collegium had recommended Justice Datta, originally from Calcutta, to the post of the Chief Justice of the Bombay High Court.

What is the Collegium System?

- The Collegium System is a system under which appointments/transfers of judges of High Courts are decided by a forum of the Chief Justice of India and the four senior-most judges of the Supreme Court.'

There is no mention of the Collegium either in the original Constitution of India or in successive amendments.

Background:

- The collegium system has its genesis in a series of judgments called "Judges Cases". The collegium came into being through interpretations of pertinent constitutional provisions by the Supreme Court in the Judges Cases.

- The '**First Judges Case**' (1981) ruled that the "consultation" with the CJI in the matter of appointments must be full and effective. However, it rejected the idea that the CJI's opinion, albeit carrying great weight, should have primacy.
- The **Second Judges Case (1993)** introduced the Collegium system, holding that "consultation" really meant "concurrence". It added that it was not the CJI's individual opinion, but an institutional opinion formed in consultation with the two senior-most judges in the Supreme Court.
- On a Presidential Reference for its opinion, the Supreme Court, in the **Third Judges Case (1998)** expanded the Collegium to a five-member body, comprising the CJI and four of his senior-most colleagues.

Procedure followed by the Collegium:

- The President of India appoints the CJI and the other SC judges. For other judges of the top court, the proposal is initiated by the CJI.
- The CJI consults the rest of the Collegium members, as well as the senior-most judge of the court hailing from the High Court to which the recommended person belongs.
- The consultees must record their opinions in writing and it should form part of the file.
- The Collegium sends the recommendation to the Law Minister, who forwards it to

the Prime Minister to advise the President.

- The Chief Justice of High Courts is appointed as per the policy of having Chief Justices from outside the respective States.
- The Collegium takes the call on the elevation.

Appointment of CJI for High Courts:

- High Court judges are recommended by a Collegium comprising the CJI and two senior-most judges.
- The proposal, however, is initiated by the Chief Justice of the High Court concerned in consultation with two senior-most colleagues.
- The recommendation is sent to the Chief Minister, who advises the Governor to send the proposal to the Union Law Minister.

Collegium in recommendation of transfers

- The Collegium also recommends the transfer of Chief Justices and other judges.

- **Article 222** of the Constitution provides for the transfer of a judge from one High Court to another.

- When a CJ is transferred, a replacement must also be simultaneously found for the High Court concerned. There can be an acting CJ in a High Court for not more than a month. In matters of transfers, the opinion of the CJI “is determinative”, and the consent of the judge concerned is not required. However, the CJI should take into account the views of the CJ of the High Court concerned and the views of one or more SC judges who are in a position to do so. All transfers must be made in the public interest, that is, “for the betterment of the administration of justice”.

Criticisms against the collegium

- Unconstitutional and autocratic
- Undemocratic
- Non-transparency and opaque
- Promotes nepotism
- Inefficient

Way Forward:

- A transparent and participatory procedure, preferably by an independent broad-based constitutional body

guaranteeing judicial primacy but not judicial exclusivity.

- It should ensure independence, reflect diversity, demonstrate professional competence and integrity.

2) Panchayati Raj

History of Panchayati Raj:

- The Constitution (73rd Amendment) Act, 1992 that came into force with effect from 24th April 1993 has vested constitutional status on Panchayati Raj institutions.
- The first National Panchayati Raj Day was celebrated in 2010. Since then, the National Panchayati Raj Day is celebrated on April 24 every year in India.
- Panchayat raj is the oldest system of local government. The word ‘Panchayat’ is an amalgamation of two words where ‘Panch’ means ‘five’ and ‘Ayat’ means ‘assembly’ and ‘Raj’ means ‘rule’.

Why in News?

- PM interacted with Sarpanchs of Gram Panchayats throughout the country today through Video Conferencing, on the occasion of National Panchayati Raj Day 2020. He launched a unified **e-GramSwaraj Portal** and **Swamitva Scheme**.

About the e-GramSwaraj Portal:

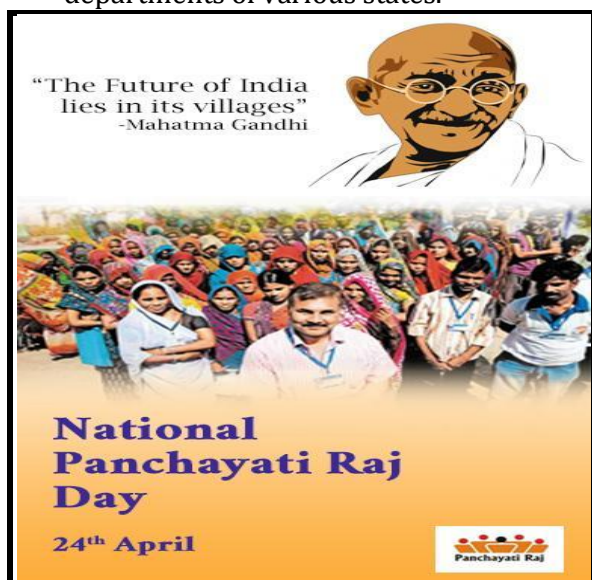
- The e-Gram Swaraj portal helps in preparing and executing Gram Panchayat Development Plans.
- The portal will ensure real-time monitoring and accountability.
- The portal is a major step towards complete digitization of villages and rural areas.

About the Swamitva Scheme:

- The scheme is launched in pilot mode in 6 states, it helps in mapping rural inhabited lands using drones and latest survey methods.
- It will ensure streamlined planning, revenue collection and provide clarity over property rights in rural areas and further this will open up avenues for applying for loans from Financial Institutions by the owners.
- Disputes related to the property would also be settled through the title deeds allotted through this Scheme as a property card for every property in the village will be prepared by states using

accurate measurements delivered by drone-mapping.

- The scheme will be carried out in close coordination with the Central Panchayati Raj ministry, Survey of India, Panchayati Raj departments and Revenue departments of various states.



73rd and 74th Constitutional Amendments-

- The 73rd and 74th Constitutional Amendments Acts came into force as the Constitution on June 1, 1993.
- These amendments added two new parts to the Constitution, namely, **73rd Amendment** added **Part IX titled "The Panchayats"** and **74th Amendment** added **Part IXA** titled **"The Municipalities"**.

Salient Features of the 73rd and 74th Constitution Amendment Acts-

- Basic units of democratic system-Gram Sabhas (villages) and Ward Committees (Municipalities) comprising all the adult members registered as voters.
- The three-tier system of panchayats at the village, intermediate block/taluk/Mandal and district levels except in States with the population are below 20 lakhs (Article 243B).
- Seats at all levels to be filled by direct elections [Article 243C (2)].
- Seats reserved for Scheduled Castes (SCs) and Scheduled Tribes (STs) and chairpersons of the Panchayats at all levels also shall be reserved for SCs and STs in proportion to their population.

- One-third of the total number of seats to be reserved for women. One-third of the seats reserved for SCs and STs are reserved for women. One-third offices of chairpersons at all levels reserved for women (Article 243D).
- Uniform five-year term and elections to constitute new bodies to be completed before the expiry of the term. In the event of dissolution, elections compulsorily within six months (Article 243E).
- Independent Election Commission in each State for superintendence, direction and control of the electoral rolls (Article 243K).
- Panchayats to prepare plans for economic development and social justice in respect of subjects as devolved by law to the various levels of Panchayats including the subjects as illustrated in Eleventh Schedule (Article 243G).
- 74th Amendment provides for a District Planning Committee to consolidate the plans prepared by Panchayats and Municipalities (Article 243ZD).
- Budgetary allocation from State Governments, the share of revenue of certain taxes, collection and retention of the revenue it raises, Central Government programmes and grants, Union Finance Commission grants (Article 243H).
- Establish a Finance Commission in each State to determine the principles on the basis of which adequate financial resources would be ensured for panchayats and municipalities (Article 243I).

3) Centre, State can fix sugarcane price

Why in News?

- A Constitution bench of the Supreme Court held that both the Central and State governments have the power to fix the price of sugarcane under the concurrent list of the Constitution.
- A plea filed by Western Uttar Pradesh Sugar Mills Association questioned the power of the State Government to fix a minimum price for sugarcane when the Centre had already set a price for the same.

News in Detail:

- The constitutional bench observed in its judgment that the price which is fixed by the Central Government is the “minimum price” and the price which is fixed by the State Government is the “advised price” which is always higher than the “minimum price” fixed by the Central Government.
- The advised or remunerative price shall always be higher than the minimum price in accordance with the provisions of the Sugarcane (Control) Order, 1966, issued under Section 16 of the Uttar Pradesh Sugarcane (Regulation of Supply and Purchase) Act, 1953.
- The Sugarcane (Control) Order of 1966 confers power upon the State government to fix the remunerative/advised price at which sugarcane can be bought or sold, which shall always be higher than the minimum price fixed by the Central government.
- It is only when the advised price fixed by the State government is lower than the minimum price fixed by the Central government, the minimum price fixed by the Central government will prevail.
- So long as the advised price fixed by the State government is higher than the minimum price fixed by the Central government, the same cannot be said to be void under Article 254 of the Constitution.

4) Parliamentary Committee on Industrial Relations Code, 2019

Why in News?

- The Parliamentary Committee on Labour in its report on the Industrial Relations Code, 2019, has recommended that in case of natural calamities, payment of wages to the workers until the re-

establishment of the industry may be unjustifiable.

Recommendations by the Parliamentary Committee:

- The Industrial Code makes it compulsory for the employer to pay 50% wages to the workers/employees who are laid off due to shortage of power, coal, raw material etc for 45 days.
- The Committee has expressed reservations for payment of the prescribed percentage of wages to the workers in the event of closure of an establishment due to Natural Calamity
- In case of Natural Calamities like earthquake, flood, super cyclone etc. which often results in closure of the establishments for a considerably longer period without the employer’s fault, payment of wages to the workers until the re-establishment of the industry may be unjustifiable.
- The Committee has suggested that clarity be brought in so that employers will not be responsible for closure or lay off.

Rationale behind the recommendations:

- The basic idea about recommendations is that the industry should also not be forced when the situation is beyond their control. The law has to be reasonable. It is for the government to step in and extend a helping hand for the industries.

Industrial Relations Code, 2019:

- The Industrial Relations Code 2019 is an amalgamation of three laws — Industrial Disputes Act, 1947, Trade Unions Act, 1926, and Industrial Employment (Standing Orders) Act, 1946. to improve ease of doing business.
- The Code provides for the recognition of trade unions, notice periods for strikes and lock-outs, standing orders, and resolution of industrial disputes.

ENVIRONMENT

1) Dehing Patkai Elephant Reserve

Why in the news?

- The National Board for Wildlife has given permission for coal mining in Dehing Patkai Elephant Reserve.

About Dehing Patkai Elephant Reserve

- It is a part of Dehing Patkai Wildlife Sanctuary.
- It is located in the districts of Dibrugarh and Tinsukia of Assam.
- Dehing is the name of the river that flows through this forest and Patkai is the hill at the foot of which the sanctuary lies.
- The climate of the region is mostly tropical with an annual rainfall of more than 4,000 mm. The forests are wet tropical evergreen Assam valley forests. The forest is often referred to as "The Amazon of the east" owing to its large area and thick forests.
- The Dehing Patkai Forest is one of the most important forests of Assam in terms of orchid diversity. So far, 101 species of orchids within 45 genera have been recorded there.



National Board for Wildlife

- National Board for Wildlife is a statutory Board constituted officially in 2003 under the Wild Life (Protection) Act, 1972.
- The NBWL is under the Ministry of Environment, Forest and Climate Change (MoEFCC).
- The NBWL is chaired by the Prime Minister and is responsible for promotion

of conservation and development of wildlife and forests.

- The board is 'advisory' in nature and can only advise the Government on policy making for conservation of wildlife.
- The standing committee of NBWL is chaired by the Minister of Environment, Forest and Climate Change.
- The standing committee approves all the projects falling within protected wildlife areas or within 10 km of them.

2) Earth Day

Why in the news?

- The 50th anniversary of Earth day was celebrated on April 22.
- **Earth Challenge 2020**, a mobile phone app was released which allows users to take photos and upload them to provide local data on key environmental issues, from air quality to plastic pollution.

About

- Earth Day is celebrated on April 22 to raise public awareness about the environment and inspire people to save and protect it.
- Growing out of the first Earth Day in 1970, it is globally coordinated by the Earth Day Network in more than 193 countries.
- Earth Day Network is the world's largest recruiter to the environmental movement, working with more than 75,000 partners in over 190 countries to drive positive action for our planet.

3) Yamuna water quality improves during lockdown: gov. Report

Why in the news?

- The quality of water in the Yamuna has improved along the Delhi stretch during the nationwide lockdown, compared to April last year, according to a report by the Delhi Pollution Control Committee (DPCC).
- The pollution has reduced by 21% at ITO Bridge, 20% at Nizamuddin Bridge, and 18% at Okhla Barrage.

- The pollution has reduced in five out of the six major drains, which flow into the Yamuna, that the DPCC measured.
- Most of them have shown reduction in BOD and increase in Dissolved Oxygen (DO).

What is BOD and DO?

- BOD is the amount of oxygen needed by microorganisms to decompose organic matter (waste or pollutants) under

aerobic reaction (in the presence of oxygen).

- Dissolved oxygen is the amount of dissolved oxygen present in the water which is needed for aquatic life to survive. The quality of water increases with an increase in DO levels.

ECONOMY

1) Operation Twist

What is it?

- Operation Twist is an initiative of the RBI that aims to **control long-term bond yields and bring down interest rates on long-term borrowing**.
- It is a monetary policy intervention by the central bank, conducted through **Open Market Operations (OMOs)**, where the central bank is **buying long term government securities and at the same time selling short term government securities**.
- Buying long term securities and selling short term securities will reduce the yield of long term securities compared to that of the short term ones. This yield impact is the objective of Operation Twist.
- *Yield is the return an investor gets on his bond.*

Rationale behind Operation Twist

- Whenever there is a long-term investment deficit in the country and the investors are hesitant to make long-term investments in the economy, the government or the central bank jumps in to revive growth by lowering the interest rate for long-term investment ventures.
- As the central bank buys long-term securities (bonds), their demand rises which in turn pushes up their prices.
- However, the bond yield comes down with an increase in prices, because there is an **inverse relationship between the bond prices and their yields**.

How will it affect the economy?

- The interest rate in an economy is determined by yield. Thus, lower longer-term yields reduces long-term interest rates, which means people can avail long-term loans (such as buying houses, cars or financing projects) at lower rates.
- This also results in a dip in the expected returns from long-term savings which tilts the balance from saving towards spending.
- Hence, cheaper retail loans can help **encourage consumption spending** which is the largest GDP component in the economy.

Why in News?

- The RBI has announced to restart Operation Twist to soften long-term yields.
- The central bank will purchase long-dated securities with tenor between 6-10 years aggregating Rs 10,000 crore, while it will sell short-dated securities maturing June 2020, October 2020 and April 2021.
- Operation Twist was used by the RBI in December last year for the first time.

What are Open Market Operations (OMOs)?

- Open Market Operations are conducted by the RBI which involves sale or purchase of **G-Secs** to or from the market. The objective is to control the **money supply conditions**.
- If there is excess money supply (i.e. excess liquidity) in the market, the RBI resorts to sale of securities which reduces the volume of money. Similarly, when the liquidity conditions are tight, it buys securities from the market, thereby releasing money into the market.

What are Government Securities (G-Secs)?

- G-Secs are tradable instruments like bonds issued by the Central Government or the State Governments with a promise of repayment upon maturity.
- The Central Government can issue both treasury bills and bonds while the State Governments can issue **only bonds**, which are called the State Development Loans (SDLs).
- These securities are considered low-risk, since they involve the government and hence, are called **risk-free gilt-edged instruments**.

2) FRBM Act

About the Act

- In 2017, the **FRBM (Fiscal Responsibility and Budget Management) Act review committee** headed by NK Singh recommended the Central government to bring down the fiscal deficit to 3% of the GDP by 2020.
- The committee also recommended that states should keep their **fiscal deficit under 3%** of their respective gross state domestic product (GSDP).
- The committee also allowed an **escape clause** under the FRBM Act that provides

for a deviation from the estimated fiscal deficit on some exception cases such as:

- Overriding considerations of national security, acts of war, and calamities of national proportion and collapse of agriculture severely affecting farm output and incomes
- Far-reaching structural reforms in the economy with unanticipated fiscal implications
- A sharp decline in real output growth of at least 3 percentage points below the average for the previous four quarters.
- The deviation from the stipulated fiscal deficit target **must not exceed 0.5 percentage points** in a year.
- Escape clauses provide flexibility to governments to overshoot fiscal deficit targets in times of need, enabling them to respond to economic shocks.
- During the Union Budget 2020-21, the Union government pegged the fiscal deficit as a percentage of the GDP for FY20 and FY21 at 3.8 per cent and 3.5 per cent, respectively, **invoking the escape clause** in the FRBM Act.

Why in News?

- Chairman of the 15th Finance Commission N.K. Singh said that despite the strain on government finances due to the COVID-19 pandemic, there is no proposal to amend the FRBM Act to relax fiscal deficit norms.
- The State governments have been demanding that their own 3% fiscal deficit targets be relaxed to 4% or even 5%, to give them elbow room in dealing with the impact of the lockdown.
- Dr. Singh suggested that a more expeditious method would be for the States to first trigger their own escape clauses.

3) IBC Relief

Insolvency and Bankruptcy Code (IBC)

- The Code creates time-bound processes for insolvency resolution of companies and individuals. These processes will be completed within **180 days** (unless extended by a one time extendable period of **90 days**). If insolvency cannot be resolved, the assets of the borrower may be sold to repay creditors (known as *liquidation*).

- The resolution processes are conducted by licensed insolvency professionals (IPs). These IPs are members of insolvency professional agencies (IPAs).
- **Information utilities** (IUs) are established to collect, collate and disseminate financial information to facilitate insolvency resolution.
- The **National Company Law Tribunal** (NCLT) adjudicates insolvency resolution for companies. The **Debt Recovery Tribunal** (DRT) adjudicates insolvency resolution for individuals.
- The **Insolvency and Bankruptcy Board of India** (IBBI) regulates the functioning of IPs, IPAs and IUs.
- The code was amended in 2019 which mandates a deadline for the completion of the resolution process **within 330 days, including all litigation and judicial processes.**

Why in News?

- In a major relief for corporate borrowers hit hard by the coronavirus pandemic, the government has decided to amend the IBC act to suspend provisions that trigger insolvency proceedings against defaulters.
- As per existing norms, if a payment default exceeds 90 days then the lender concerned has to refer the account for resolution under IBC or any other mechanism permitted by the RBI.
- The amendments would also pave the way for banks to restructure loans.
- Currently, RBI norms prohibit restructuring of loans and resolution has to be done under IBC.

4) Remittances to fall

What's in the news?

- The World Bank has predicted that global remittances are projected to plunge by about 20% in 2020 due to the economic crisis induced by the novel coronavirus and shutdown across countries.
- The economic slowdown is likely to directly affect remittance outflows from the US, the UK, and EU countries to South Asia. Falling oil prices will also affect remittance outflows from Gulf countries.
- Remittances to South Asia are projected to fall by 22% to \$109 billion this year, after a 6.1% growth in 2019.

- India, China, Philippines, Pakistan and Mexico are among the major recipients of remittances in the South Asian region.

Remittances & India

- India is the **world's top recipient of remittances** due to its big diaspora and migrant workforce.
- According to the RBI, 52% of remittances to India come from the Gulf and West Asia. Among Indian states, Kerala, Maharashtra and Karnataka are among the major recipients of remittances.
- Remittances accounted for 2.9% of India's GDP in 2018.

5) Centre cuts non-urea fertilizer subsidy

Background

- In India, **urea** (a nitrogen based fertiliser) is the most commonly used fertiliser because it is highly subsidised.
- The excessive use of nitrogenous fertilisers has led to a **distortion in the soil nutrient ratio**. Against the ideal NPK (Nitrogen-Phosphorus-Potassium) consumption ratio of **4:2:1**, the actual ratio in 2017-18 was **6.10:2.46:1**.
- Indiscriminate use of nitrogenous fertilizers is detrimental to the soil and the crop.
- It also pollutes the groundwater. The nitrogen from fertilizers, which is converted to nitrate by the bacteria in the soil, leaches into the groundwater and washes out of the soil surface, entering streams and rivers.

Nutrient based Subsidy scheme

- In order to promote balanced fertilization of soil the **Ministry of Chemicals and Fertilizer** launched the Nutrient based Subsidy (NBS) scheme in 2010.
- Under the scheme, a fixed amount of subsidy decided on an annual basis, is provided on each grade of subsidised **Phosphatic & Potassic (P&K) fertilizers** depending on its nutrient content.

Why in the News?

- The Centre has cut the subsidy for non-urea fertilizers (P&K fertilisers) this year to Rs 22,186 crore under the nutrient-based subsidy scheme.
- That is about 3% lower than the Rs 22,875 crore which was the estimated expenditure on the nutrient based

subsidies in 2019-20. It will reduce the burden on the exchequer in this fiscal amid the COVID-19 outbreak.

- The government also approved the inclusion of a complex fertiliser namely **ammonium phosphate** (NP 14:28:0:0) under the NBS scheme.

Fertiliser subsidy in India

- In India, the fertiliser subsidy accounts for the **second largest subsidy** after food.
- Currently, **Urea** is the only controlled fertilizer and the government fixes the maximum retail price (MRP). The difference between the production cost and the MRP is reimbursed to manufacturers.
- Retail prices of non-urea fertilisers such as Di-ammonium Phosphate (DAP), Muriate of Potash (MoP) and NPK are **decontrolled** and are **determined by manufacturers**, while the Centre gives a fixed subsidy each year.

6) FDI rules tightened

FDI Routes in India

- The entry of Foreign Direct Investment (FDI) by non residents into India is regulated through two routes –**automatic route and government route**.
- Under the Automatic Route, the foreign investor does not require any approval from the Reserve Bank or Government of India for the investment.
- Under the approval route or government route, the foreign investor should obtain prior approval of the Government of India agencies or bodies specified.
- India has opened up most of the sectors for FDI investments through automatic route, but has kept certain sectors like defence, space and atomic energy restricted or prohibited.

Why in News?

- India recently revised its FDI policy with the objective of preventing “opportunistic takeovers” of firms hit by the lockdown induced by the COVID-19 outbreak.

What was the amendment?

- The government has announced that an entity of a country that **shares a land border** with India can now invest in Indian firms **only under the Government route**.

- Previously, only investments from Pakistan and Bangladesh faced such restrictions.
- The new changes also apply to **“beneficial” owners** — even if the investing company is not located in a neighbouring country, it would still be subject to these conditions if its owner is a citizen or resident of such a country.
- India shares land borders with Pakistan, Afghanistan, China, Nepal, Bhutan, Bangladesh and Myanmar.

Rationale of the changes

- While the recent changes did not name any country, analysts see the amendments as aimed at possible Chinese investments.
- With many Indian businesses coming to a halt due to the lockdown imposed to contain the COVID-19 pandemic and valuations plummeting, a number of domestic firms may be vulnerable to opportunistic takeovers or acquisitions from foreign players.
- China’s FDI has grown five-fold since 2014 and, as of December 2019, its cumulative investment in India exceeded \$8 billion — far more than investments by other countries that share borders with India.
- The fear is partly due to the concerns arising from other countries where Chinese investments in the time of COVID-19 are seen as an attempt to take over national assets at a time of crisis.

What was China’s response?

- China alleged that the additional barriers set by Indian side for investors from

specific countries violate WTO’s **principle of non-discrimination**, and go against the general trend of liberalization and facilitation of trade and investment.

- India has denied China's criticism saying that the new rules are not denial of permission but only a change in the approval route for investments.

WTO Non-discrimination rules

- Non-discrimination is a key concept in WTO law. The principle of non-discrimination rests on two pillars:
 1. the most-favored nation (MFN) treatment obligation and
 2. The national treatment obligation.
- A **most-favored-nation (MFN)** clause requires a country to provide any concessions, privileges, or immunities granted to one nation in a trade agreement to all other WTO member countries. Although its name implies favoritism toward another nation, it denotes the equal treatment of all countries.
- **National treatment** clause prohibits discrimination between imported and domestically produced goods with respect to internal taxation or other government regulation.
- For example, if Country A provides special tax breaks for its pharmaceutical industry, all pharmaceutical companies that have operations in Country A will be entitled to the tax breaks, regardless of whether the company is domestic or foreign.

HEALTH

1) Reverse vaccinology

What is reverse vaccinology?

- Reverse vaccinology is described as **examination of the genome of an organism in order to identify novel antigens and epitopes** that might constitute vaccine candidates.

- Antigen is a harmful substance which enters the body which causes the body to make antibodies as a response to fight off disease.**
- An epitope (also known as the antigenic determinant) is that part of the antigen to which antibodies bind. While the antigen evokes the antibody response in the host, the antibody doesn't bind to the entire protein, but only to that segment called the epitope.**

- The **use of bioinformatics for the preparation of vaccines without having to culture the microorganisms** in the laboratory is reverse vaccinology.

Key points:

- Working with the viral genome sequence using bioinformatics, a **synthetic polypeptide** which can bind the viral genome is identified.
- In the next stage, this polypeptide is to be tested on tissue cell lines after obtaining certain approval from regulatory agencies.
- With unwrapping the entire genomic sequence, the molecules that make the genomic sequence can be identified.

Why reverse vaccinology?

- Viral culture in the laboratory to develop a vaccine was **time-consuming** since it takes time to find out the protein in the virus.

Is this new?

- The 'reverse vaccinology' technique has been available for the last **10 to 15 years**.
- Using 'reverse vaccinology', vaccinations were developed for **meningococcal and staphylococcal infections** all through the world.

2) Humans to blame for pandemic

Zoonoses:

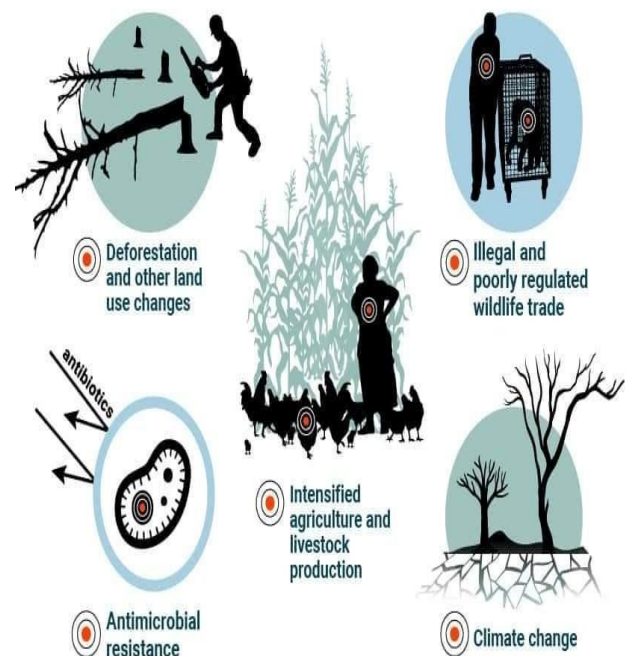
- WHO defines zoonoses as **diseases and infections that are naturally transmitted between vertebrate animals and humans.**
- A zoonotic agent may be a **bacterium, a virus, a fungus** or other communicable disease agent.
- Examples of Zoonotic diseases include **tuberculosis, rabies, toxoplasmosis, malaria, Ebola and the recent corona virus outbreak.**

Facts about Zoonoses:

- According to the UN Environment Programme (UNEP), **60% of human infectious diseases originate from animals.** This figure climbs to 75% for "emerging" diseases such as Ebola, HIV, avian flu, Zika, or SARS, another type of coronavirus.

Causes of zoonotic diseases:

What factors are increasing zoonosis emergence?
(Diseases transmitted from animals to humans)



#COVID19

UN
environment
programme

- Environmental changes or ecological disturbances**, such as agricultural

intensification and human settlement, or encroachments into forests and other habitats

- **Deforestation** to make way for agriculture and intensive livestock farming.
- Domesticated animals are often a “bridge” between pathogens from the wild and humans. The **widespread use of antibiotics in the livestock industry** has also led to bacterial pathogens building up immunity to front-line drugs.
- **Urbanisation and habitat fragmentation** are also highly disruptive of the balance between species, while global warming can push disease-carrying animals into new territory.
-

- Increased trends in **land use change, combined with increased trends in trade, and global travels**, are expected to increase the frequency of pandemics in future

Way forward:

- **Transformative change** is needed in order to find a solution to this global tragedy.
- The 2016 UNEP report, which noted that “ecosystem integrity underlines human health and development”, said effective strategies already exist to control most neglected zoonoses.
- However **investment to implement** the effective strategies is need of the hour.

INTERNATIONAL RELATIONS

1) Asylum to Rohingya

Who are Rohingya?

- Rohingya are an ethnic group, largely comprising Muslims, who predominantly live in the Western Myanmar province of Rakhine. They speak a dialect of Bengali, as opposed to the commonly spoken Burmese language.
- Though they have been living in the country for generations, Myanmar considers them as persons who migrated to their land during the Colonial rule. So, it has not granted Rohingyas full citizenship.
- Since they are not citizens, their movements are restricted within the Rakhine state.

2017 attack

- In 2017, the Arakan Rohingya Salvation Army (ARSA), a Rohingya insurgent group, attacked police posts and an army base in Rakhine state.
- The response by the Myanmar security forces has sent over 7,00,000 Rohingyas fleeing into Bangladesh and other neighbouring countries including India. Reports of villages being torched and civilian deaths have followed the militant attack. The UN has termed the Rohingya's situation as the "world's fastest growing refugee crisis".

India's stand

- According to the Ministry of Home Affairs, there are approximately 40,000 Rohingyas living in India. They have reached India from Bangladesh through the land route over the years.
- The government had previously informed that all the Rohingyas in India were "illegal immigrants" and they will be deported soon.
- *A foreigner is considered to be an illegal immigrant under two circumstances. One, if they come into India without valid travel documents, or two, having come in legally, they stay beyond the time period permitted to them under their travel documents. Illegal migrants may be imprisoned or deported.*

Legal provisions

- India doesn't have a specific law regarding refugees.
- India has also not been a signatory of the **1951 UN Convention or the 1967 Protocol** – both relating to the Status of Refugees and included in the United Nations High Commissioner for Refugees (UNHCR) statute.
- However, UNHCR had earlier stated that the **principle of non-refoulement** is considered part of customary international law and therefore binding on all states whether they have signed the Refugee Convention or not.
- *Non-refoulement is a principle in international law that stops a country from returning a person to a place where they would be at risk of persecution.*
- In addition, India is party to major international human rights instruments such as the International Covenant on Civil and Political Rights, Convention on the Elimination of All Forms of Discrimination against Women and Convention on the Rights of the Child.

Why in News?

- The **U.N. refugee agency UNHCR** voiced concern over a grave immediate risk to Rohingya refugees stranded in boats in the Bay of Bengal and Andaman Sea, urging Southeast Asian nations not to close avenues to asylum.
- Activists are fearful that large numbers of Rohingya may be trapped on boats and unable to reach other countries. Recently, Rohingya were denied entry into Malaysia and Thailand.

About UNHCR

- United Nations High Commissioner for Refugees (UNHCR) is the UN's Refugee Agency and a global organization dedicated to saving lives, protecting the rights and building a better future for refugees, forcibly displaced communities and stateless people.
- Created in 1950, it is headquartered at Geneva, Switzerland.

2) SAARC

About SAARC

- The South Asian Association for Regional Cooperation (SAARC) was established in 1985 with 7 founding members.
- SAARC now comprises **eight Member States**: Afghanistan (joined in 2007), Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.
- There are nine observer countries namely Australia, China, European Union, Iran, Japan, Mauritius, Myanmar, South Korea, and the United States.
- The Secretariat of the Association is located in **Kathmandu, Nepal**.

Why in News?

- Sri Lanka's former Prime Minister Ranil Wickremesinghe suggested that the SAARC Secretariat should play an active role in the region's response to COVID-19.

3) Organisation of Islamic Cooperation

About OIC

- The Organisation of Islamic Cooperation (OIC), established in 1969, is the second largest inter-governmental organisation in the world after the UN, with a membership of 57 states in four continents.
- The OIC describes itself as the collective voice of the Muslim world, and its stated objective is to safeguard and protect the interests of the Muslim world in the spirit of promoting international peace and harmony among various people of the world.
- The majority of its member states are **Muslim-majority countries**, while others have significant Muslim populations, including several African and South American countries.
- It also has five observer members, including Russia and Thailand.
- **India is neither a member nor an observer of the OIC.**

Why in News?

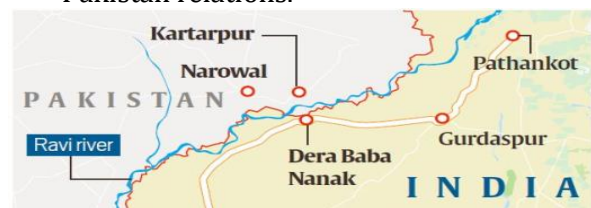
- Organisation of Islamic Cooperation expressed concerns on discrimination and violence on a certain minority group in India amidst the COVID-19 crisis.

3) Kartarpur Sahib corridor

-

Kartarpur Sahib corridor

- The corridor facilitates travel of Indian Sikh pilgrims from Dera Baba Sahib in Gurdaspur, India to Gurdwara Darbar Sahib in Kartarpur, Pakistan.
- Kartarpur marks the most significant and constructive phase in the life of Guru Nanak Dev. It was here on the banks of the **River Ravi** that he laid the foundations of a new faith in a commune he set up.
- It is in Kartarpur Sahib that Guru Nanak Dev had spent the last 18 years of his life. The gurdwara is built where Guru Nanak is said to have died.
- Kartarpur Sahib is in the midst of year-long festivities associated with the 550th birth anniversary of Guru Nanak.
- The corridor was opened in November 2019, marking a new beginning in India-Pakistan relations.



Guru Nanak

- Guru Nanak was the founder of Sikhism and became the first Sikh Guru. His spiritual teachings laid the foundation on which Sikhism was formed.
- He advocated the existence of **one God** and taught his followers that every human being can reach out to God through meditation and other pious practices. Guru Nanak **did not support monasticism** and asked his followers to lead the life of an honest householder.
- His teachings were immortalized in the form of 974 hymns, which came to be known as '**Guru Granth Sahib**,' the holy text of Sikhism. With more than 20 million followers, Sikhism is one of the important religions in India.

Why in News?

- The Indian government has asked Pakistan to urgently repair the domes of Gurdwara Darbar Sahib at Kartarpur that were damaged in a recent storm.

SCIENCE AND TECHNOLOGY

1) Will convalescent plasma help COVID-19 patients?

Why in News?

- The Indian Council of Medical Research has approved Delhi and Kerala to undertake clinical trials.

What are antibodies?

- Antibody, also called **immunoglobulin**, is a **protective protein** produced by the immune system in response to the presence of a foreign substance, called an **antigen**.
- Antibodies recognize and latch onto antigens in order to remove them from the body.
- A wide range of substances are regarded by the body as antigens, including disease-causing organisms and toxic materials such as insect venom.

What is convalescent plasma?

- People **who have recovered** from COVID-19 have **antibodies** to the disease in their blood. Doctors call this convalescent plasma.
- Researchers hope that convalescent plasma can be given to people with severe COVID-19 to boost their ability to fight the virus.
- Everyone who has suffered from a disease possibly carries what are called **neutralising antibodies** that when extracted via plasma and transfused on to others with the infection can **help their immune system** fight it off.

What are the challenges?

- For all these studies to get off the ground, researchers would need enough donors who have recovered fully and can be tested for other pathogens as well.
- People should be willing to donate plasma, and good tests should emerge to estimate how many antibodies they have.
- While studies are required to show the timing and dosage, there is broad consensus that **early administration** will be ideal.

Why is timing crucial?

- Early on in the disease, there is a lot of virus in the system and the antibodies will bind with the virus eliminating it.

- If this is not done at this stage, then the virus sets off a cascade of inflammation in the body.
- If the patient has reached that stage, the plasma may not be helpful.

Need for blood donation

- Since it rests on blood donation, people from the more common blood groups, for instance, O+ve, will have easier access to plasma.
- Naturally, the pool for rare blood groups is going to be smaller.
- However, experts have been laying emphasis on the need for people who have recovered to voluntarily come forward and donate plasma to help with research and other patients.

2) Earth BioGenome Project (EBP)

About EBP

- The Earth BioGenome Project (EBP) is a confederated network of partner organizations and affiliated projects that have a common goal of **sequencing and annotating the genomes** of all 1.5 million known species of **eukaryotes** on the planet in 10 years.
- It was officially launched in 2018.
- The EBP aims to create a digital backbone of sequences from the tree of life that will serve as critical infrastructure for biology, conservation, agriculture, medicine, and the growing global bioeconomy.

Why in News?

- The **Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI)** has been selected as one of the Biological Knowledge and Resource Centres of the **Indian Initiative on Earth BioGenome Sequencing (IIEBS)**.

About IIEBS

- The whole genome sequencing of 1,000 species of plants and animals will be taken up in the initial phase of IIEBS to be completed over a period of five years at an estimated cost of ₹440 crore.
- The **National Institute of Plant Genome Research**, New Delhi is the coordinating centre for the nationwide project involving a total of 24 institutes.

- The project was **part of the Earth BioGenome Project**, an international initiative to catalogue life on the planet.

Benefits

- The digital repository of genome sequences is expected to provide the critical infrastructure for better understanding of ecosystems and conservation of biodiversity as well as the development of new treatments for infectious and inherited diseases, agricultural products, biomaterials and biological fuels.
- India's participation in the EBP would provide a **boost for the field of genomics and bioinformatics** within the country.
- The project will enable collection and **preservation of endangered and economically important species**.
- The decoded genetic information will also be a useful tool **to prevent biopiracy**.

3) ISRO invites technology proposals for human space flight missions

Why in News?

- The Directorate of Human Space Programme of the ISRO has invited proposals to develop indigenous technologies for its future human space flight missions.

News in Detail

- The announcement of opportunity (AO) issued suggests 17 potential areas of work for national research and academic agencies.
- The concepts can range from food and medicine eaten by astronauts during low-earth space trips; to anti-radiation and thermal protection technologies for the spacecraft, life support systems for astronauts, and inflatable habitats to robotic interfaces during more complex missions.
- The AO said there was a need to develop affordable local technologies that could support human survival in low-earth orbits initially, and in bigger explorations later.
- This opportunity will enable national research/academic institutions to harness their expertise and capabilities towards

development of technologies for space exploration.

- In the long term, the country's emerging human space programme will need to establish research facilities and develop human resources.

About Gaganyaan

- In August 2018, ISRO announced its first human space trip slated for around **2022**, the ₹10,000-crore Gaganyaan.
- It plans to send three astronauts to a distance of 400 km in space in a special spacecraft.
- They will circle earth over three to seven days.
- Four pilots of the Indian Air Force are currently training in Moscow to be the first set of potential candidates for Gaganyaan.
- For more details about the Gaganyaan Mission, please refer to the *Officers' Pulse Issue No. 30*.

4) Sepsivac

Why in News?

- Sepsivac, a drug jointly developed by the Ahmedabad-based Cadilla Pharmaceuticals and the **Council for Scientific and Industrial Research (CSIR)**, will be tested in 50 COVID-19 patients.

More in News

- Sepsivac was originally developed for treating **sepsis** by a class of pathogens called gram negative bacteria that are known to cause life-threatening infections.
- Given the similarities in the immune-system response in critically ill COVID-19 patients, it is theorised, the therapy could stimulate a benign response.
- A large quantity of **cytokines**, chemicals signalling the presence of an infection, is produced in the early stages of the body's response against an infection to stimulate the production of antibodies.
- However, cytokines also cause inflammation of organs and can be counter-productive in protecting the body.
- Keeping them in check is the goal of so-called immuno-modulators, or medicines like Sepsivac.

- The drug uses the **Mycobacterium w** (formally known as mycobacterium indicus pranii) as it produces a different immune-system response.

5) No assured immunity from second COVID-19 infection

Immune response

- The immune system protects the body from possibly harmful substances by recognizing and **responding to antigens**.
- Antigens are substances (usually proteins) on the surface of cells, viruses, fungi, or bacteria.
- Non-Living substances such as toxins, chemicals, drugs, and foreign particles (such as a splinter) can also be antigens.
- The immune system recognizes and destroys, or tries to destroy, substances that contain antigens.

Innate Immunity

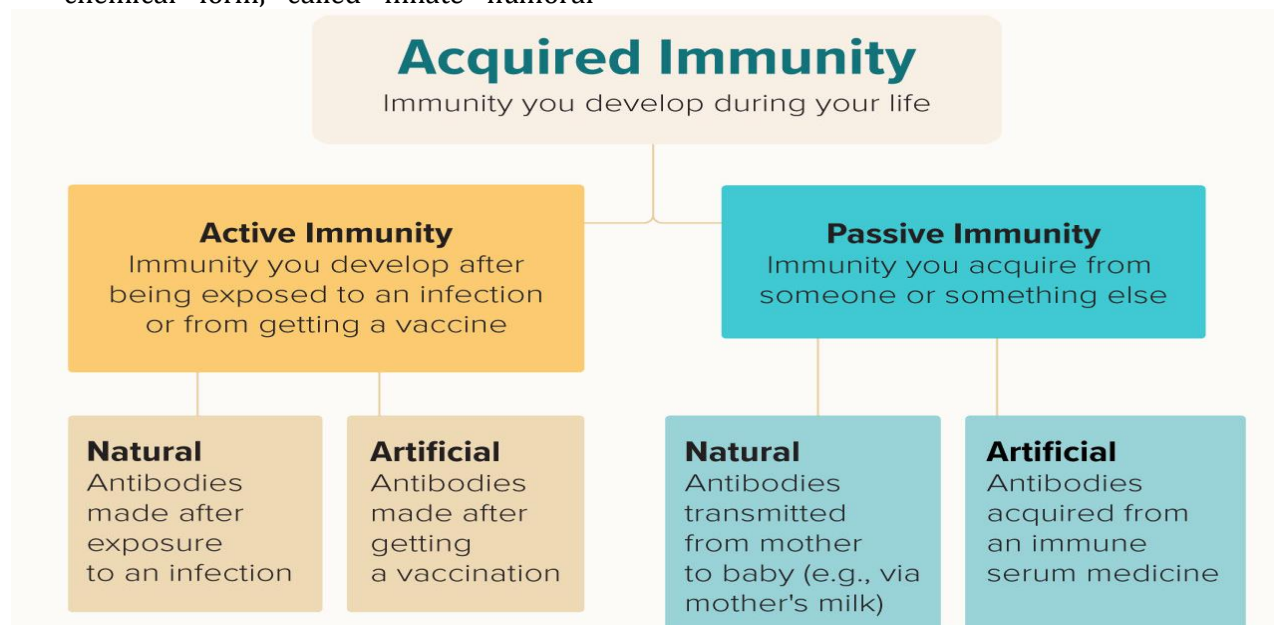
- Innate, or nonspecific, immunity is the defense system that is **present at birth**.
- Innate immunity involves barriers that keep harmful materials from entering your body.
- Innate immunity also comes in a protein chemical form, called innate humoral

immunity. Examples: **interferon** and **interleukin-1** (which causes fever).

- If an antigen gets past these barriers, it is attacked and destroyed by other parts of the immune system.
- Examples of innate immunity include: Cough reflex, Enzymes in tears and skin oils, Mucus, Skin and Stomach acid.

Acquired immunity

- Acquired immunity is immunity that **develops with exposure** to various antigens during the lifetime.
- The immune system builds a defense against that **specific antigen**.
- Immunity may be acquired by **infection or vaccination** (active immunity) or by the **transfer of antibody or lymphocytes** from an immune donor (passive immunity).
- **Active immunity** is due to the production of **antibodies by the organism itself** after the body's defence mechanisms are stimulated by antigens
- **Passive immunity** results from the acquisition of **antibodies from another organism** in which active immunity has been stimulated



Why in News?

- The World Health Organization is warning that people who have had Covid-19 are not necessarily immune by the presence of antibodies from getting the virus again.

- There is no evidence yet that people who have had Covid-19 will not get a second infection.
- It cautioned against governments that are considering issuing so-called "**immunity passports**" to people who have had

Covid-19, assuming they are safe to resume normal life.

6) COVID-19 snippets

World Wide Help (WWH)

- IIT Bombay members have developed some interesting software solutions to handle Covid-19 crisis.
- One involves a platform named World Wide Help (WWH) which can be used to **connect people seeking medical help with helpers**, such as doctors.
- The other is a system to generate **e-tokens** that can be deployed by local markets and small vendors to ensure physical distancing.
- The e-token is a number that informs the users of their places in the queue.
- By checking a link provided in the email, the user can check the status of their token – if it is close to their turn, they can move to the market and pick up what they want.

Substantial coronavirus spread seen before symptoms show up

- In a study published recently, researchers found that people infected with SARS-CoV-2 virus start shedding the virus and therefore transmitting it to others before symptoms show up.
- The infectiousness begins at least two days before the person exhibits symptoms.
- The study says that a substantial proportion of transmission probably occurs even before first symptoms appear in the infected person.
- The study suggests that efforts to track down contacts of people with coronavirus infection should include people who have come in contact with the infected person not just after symptoms show up but at

least two-three days before the person exhibited symptoms.

Mobile Virology Research and Diagnostics Laboratory (MVRDL)

- Defence Minister Rajnath Singh inaugurated through videoconference a mobile virology research and diagnostics laboratory (MVRDL).
- It has been developed by the **Defence Research and Development Organisation (DRDO)**, together with ESIC Hospital, Hyderabad, and the private industry.
- The mobile lab will be helpful in carrying out diagnosis of COVID-19 and in virus-culturing for drug screening, convalescent plasma-derived therapy, comprehensive immune profiling of patients towards vaccine development and early clinical trials specific to Indian population.

Sodium hypochlorite (NaOCl)

- It is a compound that can be effectively used for **water purification**.
- It is used on a large scale for surface purification, bleaching, odor removal and water disinfection.
- In the section on 'cleaning practices' which was part of a technical brief on 'water, sanitation hygiene and waste management for the COVID-19 virus issued by the **World Health Organization** on March 3, it had recommended the usage of sodium hypochlorite at 0.5% (equivalent to 5,000 ppm) for disinfecting surfaces, and 70% ethyl alcohol to disinfect small areas between uses, such as reusable dedicated equipment like thermometers.

PIB ANALYSIS

1) Carbon Nitride Quantum Dots (g-CNQDs)

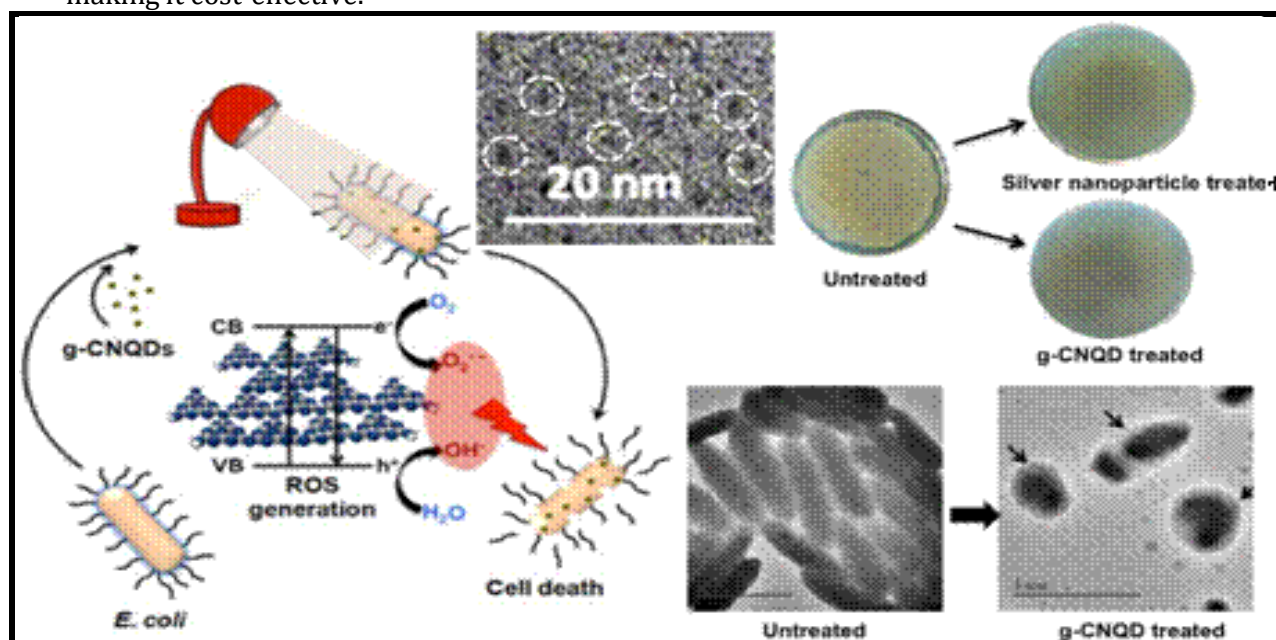
Why in News?

- Scientists at the Institute of Nano Science and Technology (INST), an autonomous institute under the DST has found a low-cost metal-free nanomaterial for visible light microbial disinfection which can be an alternative to silver and other metal-based materials.

About:

- Carbon Nitride Quantum Dots (g-CNQDs) are found to be a viable anti-bacterial alternative to metal/non-metal semiconductors and expensive silver, thus making it cost-effective.

- These nano-materials possess enhanced biocidal activity attributed to larger surface area of g-CNQDs having more reactive sites and optical absorption both in the ultraviolet and visible region. The g-CNQDs have the ability to generate reactive oxygen species (ROS).
- The ROS rapidly interact and damage the immediately available biological macromolecules such as lipids present on the cell membrane or envelope and proteins present on the cellular surface, towards inactivation of the microorganism.



- The dependence on visible light is also advantageous over regular ultraviolet mediated disinfection, which requires cautious handling of the UV light-emitting devices.
- This technology will also be simultaneously explored for antiviral efficiency considering its relevance to the current scenario.

2) Permanent Kasowal bridge on the river Ravi

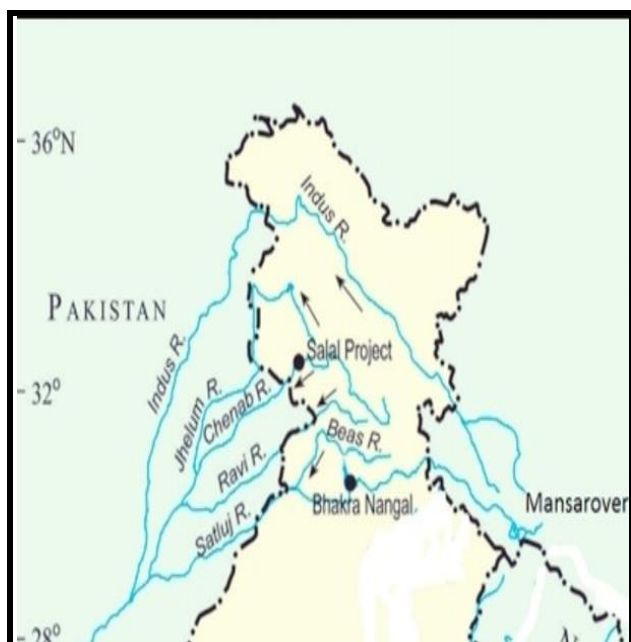
Why in News?

- The Border Roads Organisation (BRO) has constructed a permanent bridge on the Ravi river connecting **Kasowal enclave** in Punjab to the rest of the country.

- It has been built by 141 Drain Maintenance Coy of 49 Border Roads Task Force (BRTF) under Project Chetak of BRO.

News in Detail:

- The **Project Chetak of the BRO** was raised in June 1962 at Dehradun for construction of Joshimath-Malari-Rinkin road.
- In 1980, the project was re-raised for expanding and improving the road networks and ditch-cum-bunds.



About River Ravi

- It is one of the five tributaries of the Indus River that give the Punjab (meaning “Five Rivers”) its name. Other tributaries are: Jhelum, Chenab, Beas and Sutlej.
- It rises in the Himalayas in Himachal Pradesh (India) and flows to the Pakistani border and along it for more than 80 km before entering Pakistan’s Punjab province.

About BRO

- The Border Roads Organisation (BRO) develops and maintains road networks in India’s border areas and friendly neighbouring countries.
- It is staffed by officers and troops drawn from the Indian Army’s Corps of Engineers, Electrical and Mechanical Engineers, Army Service Corps, Military Police and army personnel on extra regimental employment. The Border Roads Organisation works under the Ministry of Defence.

Role of the BRO

In Peace

- Develop & Maintain the Operational Road Infrastructure of General Staff in the Border Areas.
- Contribute to the Socio-Economic Development of the Border States.

In War

- To Develop & Maintain Roads to Keep Line of Control through in Original Sectors and Re-Deployed Sectors.

- To Execute Addl Tasks as laid down by the Govt Contributing to the War Effort.

3) VidyaDaan 2.0

Why in News?

- Union HRD Minister launches national program VidyaDaan 2.0 for inviting e-learning content contributions.

News in Detail:

- VidyaDaan is a common national programme to develop and contribute e-learning content and a chance to be recognized nationally.
- The content will be used on DIKSHA app to help millions of children across the country to continue their learning anytime and anywhere.
- VidyaDaan has a content contribution tool that provides a structured interface for the contributors to register and contribute different types of content (such as, explanation videos, presentations, competency-based items, quizzes, etc.), for any grade (from grade 1 to 12), for any subject as specified by the states/UTs.
- The contributions can be made by educationists, subject experts, schools, colleges, universities, institutes, government and non-government organisations, individuals, etc.

4) Van Dhan Samajik Doori Jagrookta Abhiyaan:

About:

- This scheme is intended to educate the tribals through the almost 15000 SHGs under the Pradhan Mantri Van Dhan Yojana spread across 28 States/UTs.
- TRIFED teamed up with UNICEF and WHO for launching a digital campaign spreading awareness about the importance of social distancing amid the coronavirus crisis in India.
- UNICEF is providing the necessary IEC materials (posters, flyers, leaflets, brochures, booklets, messages for health education sessions, radio broadcast or TV spots, etc.) for the campaign christened as “ Van Dhan Samajik Doori Jagrookta Abhiyaan OR Van Dhan Social Distancing Awareness Movement”.
- Extensive outreach through Train of Trainer Programs and Webinars focused on basic orientation on COVID-19

response, key preventive behaviour, social media campaigns on social distancing, home quarantine has been initiated.

Why in News?

- The current situation due to COVID-19 has dealt a serious blow to the livelihoods of the poor and marginalized communities including the tribal artisans and gatherers, being the most vulnerable people in the country.

- This is the peak season for harvesting and gathering of forest produce in many regions, which will lead to engagement of tribal gatherers and endanger their safety.
- TRIFED, under the Ministry of Tribal Affairs, is addressing the situation by:
 - 1) Publicity and Awareness Generation
 - 2) Personal Protective Healthcare
 - 3) NTFP (Non-timber forest products) Procurement

News in Depth

AIR NEWS

1) Ventilator Intervention Technology Accessible Locally (VITAL)

Why in News?

- NASA engineers have developed a new, easy-to-build high-pressure ventilator tailored specifically to treat COVID-19 patients.

About:

- The device, called VITAL (Ventilator Intervention Technology Accessible Locally), is designed to treat patients with milder symptoms, thereby keeping country's limited supply of traditional

ventilators available for patients with more severe COVID-19 symptoms.

- NASA is now seeking FDA approval for the device via an emergency use authorization, a fast-track approval process developed for crisis situations that takes just days rather than years.
- VITAL can be built faster and maintained more easily than a traditional ventilator, and is composed of far fewer parts, many of which are currently available to potential manufacturers through existing supply chains.

THE HINDU EDITORIALS

1) To ride out great lockdown, India needs an emergency basic income

Key relief measures taken by India in response to COVID-19

As part of relief packages

₹1.7 trillion (0.8% of GDP)

- In-kind (food, cooking gas) and cash transfers to lower-income households
- Insurance coverage for workers in the healthcare sector
- Wage support to low-wage workers (including easing the criteria for receiving benefits in the event of job loss)

₹150 billion (0.1% of GDP)

- Additional spending on health infrastructure, including for testing facilities for COVID-19, personal protective equipment, isolation beds, ICU

Approx ₹400 billion (0.2% of GDP)*

- Measures taken by state governments in the form of direct transfers (free food rations and cash transfers)

Other relief measures for consumers and businesses

- Relief to both borrowers and lenders, including a three-month moratorium on loan repayments and relaxation of norms related to debt default
- Measures to ease the tax compliance burden across a range of sectors, including postponing tax-filing and other compliance deadlines

Why in News?

- The governments across the world have imposed measures like lockdown and social distancing in order to deal with the Covid-19 pandemic but these measures have caused collateral damage to almost every sector of the economy, so much so that the IMF held the current economic crisis could be the worst ever since the Great depression 1929.

What are the proposed components?

- Paul Krugman - the Nobel Prize winning economist has argued that the economic response should have two components.
- An immediate disaster relief component that ensures survival of both firms and workers who have been rendered idle should be the first of it.

- The second one should be a stimulus component that aims to repair and restart production lines during the exit phase of the lockdown.
- The emergency basic income (EBI) which is a kind of Universal Basic Income provided during a crisis like the Covid-19 can be thought of by the Government to fulfill the first component.

What is Universal Basic Income?

- The concept of UBI has been advocated by the Economic Survey of India 2016-17 as an alternative to the various social welfare schemes in an effort to reduce poverty.
- Every person should have a right to a basic income to cover his needs, just by virtue of

being a citizen is very much the idea behind Universal Basic Income.

- The UBI has three components under it:
 - i. **Universality:** It is universal in nature.
 - ii. **Unconditionality:** There are no precautions attached with the cash transferred to the beneficiary.
 - iii. **Agency:** Respecting the poor persons' decision making ability and not having a paternalistic attitude towards them.

What are the favouring arguments?

- Millions may lose their incomes facing difficulties in making their ends meet due to lockdown.
- Social unrest can occur due to economic crunches.
- To arrest such unrest and also to ensure there is continued aggregate demand the EBI can be favored.
- Though enhancement of rations has been announced under the Food Security Act it might have its own challenges.
- EBI can help individuals meet their own demands and drag people out of the poverty trap.
- With welfare schemes riddled with misallocations, leakages and implementation issues the EBI can be of great help.

What are the issues involved?

- Lack of Aadhaar by the most vulnerable section of the society who are in dearth of EBI.
- Though the Union Government has announced to provide Rs 500 per month to women in a household during the lockdown the amount is quite low to meet their ends and problems.
- EBI adds to an already burdened government with numerous welfare schemes.

What is the way forward?

- To inspire the confidence of citizens the EBI should be made fixed and transparent.
- It should include an in-kind transfer component.
- The ratio of cash to in-kind transfers is something that is best left for states to decide.

Conclusion

- There is a need for a functional JAM trinity as it will ensure that the cash transfer directly into the account of a beneficiary and the government can channelize the savings from the global crude oil price fall to fund EBI without compromising the macroeconomic fundamentals.

2) Resetting Balance



- Why in News? India has revised its FDI rules amid the Covid-19 pandemic which closes the

automatic route to investors from India's land neighbours, with special reference to China on the fear that China

may take advantage of the rock-bottom valuations of the firms of national importance in the backdrop of the lockdown.

What is the Background?

- The foreign capital remains crucial to a country's economic success and probably is doubly important to India which is trying to revive its economy.
- Balancing economic needs and combating neo-imperialist tendencies of China is crucial for India at this hour.

What are the examples of neo-imperialist trade practices of China?

- Controlling infrastructural, industrial and technological assets by China in developing and developed countries taking the strategic advantage through economic interdependence.
- Exacerbating trade imbalances and undermining global competition like cheap imports backed by China's state capitalism have undermined India's manufacturing sector and led to a massive trade deficit.
- Indian companies in pharmaceuticals, dairy products and IT services have been blocked market access by China.
- One of the main reasons for India walking out of the RCEP negotiations is China's unfavorable balance of trade.
- To enhance digital connectivity abroad, extend its influence, and further China's ascendance as a technological superpower has been tried through the Digital Silk Road which is a subset of the Belt and Road Initiative.
- China's aim to monopolize strategic industrial technology through the 'Made in China 2025' initiative like an example of 5G Technology.
- Chinese investors have had big stakes in 18 of India's 23 unicorns like Ola, PayTM, Byju's etc in the past few years which will

hamper the prospect of Indian unicorns becoming global giants.

What is the significance of Chinese investments in India?

- China has been the fastest-growing source of foreign investment in the last five years and FDI is a welcome especially during economic slowdown in countries like India.
- Without a more robust trade and investment relationship with China it may be a difficult task for India to make its way to a 5 trillion dollar economy by 2025.
- The growing disadvantage against trade deficit with China will be mitigated by the FDI from China.

What is the way forward?

- Working out a clear process and precise regulations to decide what is an acceptable investment by the Department of Promotion of Industry and Internal Trade.
- To enhance the country's productive capacity India should welcome investment regardless of where it comes from, except, of course, in sectors where control of that production capacity has a bearing on national security.
- Developing new legal and institutional tools such as data protection laws or revised mergers and acquisitions rules, and institutional bodies.
- Devising a scheme of preferential or special shares which a unicorn can issue to foreign investor to protect India's unicorn.

Conclusion

- India needs to expand its overseas economic engagements, even while remaining sensitive to its overall economic sustainability needs at this crucial juncture of economics.

RSTV BIG-PICTURE

1) Way forward for manufacturing sector



Why in News?

- The government has taken steps to ease conditions for the manufacturing sector to resume operations.
- The steps include allowing industries outside limits of municipalities and municipal corporations to start operations, freeing up transportation of goods and setting guidelines for the movement and stay of labour.
- This could help companies to restart operations.
- Companies, who had cut production, can now plan to bring back operations to normal levels.

What is the impact of Covid-19 on manufacturing in India?

- With sudden lockdown the sector has been facing a lot of difficulties.
- MSMEs are less organised and are facing a major share of problems.
- Transportation of the products, having finished products ready- normal day to day functioning of the sector has been affected entirely.
- Difficulties have multiplied due to problems with cash flow due to liquidity crunch.
- Difficult for businesses to bear the salaries of the employees as there are no payments coming.

What is the way forward?

- Following a holistic approach like Japan which is helping companies to set up manufacturing units.
- With automation SMEs can become competitive.

- Govt should bring down taxation, remove doubtfulness, compliance should be lessened.
- Smooth working capital flow for more liquidity.
- Use goodwill earned as leverage and forbearance is important.
- Support from lower-income groups.
- Infrastructure projects are long term measures which of course government should work on but in the short term, government also should put money in the people's hands in order to push demand in the economy.
- Promoting the growth of Wood, paper products and textile industries as a short-term solution can ensure the absorption of the growing unskilled workers.
- MSMEs must be improved to reap the benefit of the globalisation that provides new opportunities and access to supply chains across the world.
- Increasing the accessibility to credit for the MSME sector by categorising it under the priority sector can also promote its growth.
- Reforming of the existing labour laws must be prioritised to make them simplified and flexible.
- They must be reformed in a way that will promote investment and ease of doing business within the sector.
- India's labour productivity, though increased in the last decade, is lower than that of China. This should be addressed to compete in the global market.
- According to a report by NITI Aayog, for energy-intensive manufacturing units, coal cess, RPO and PAT lead to a carbon tax of \$9.7 per tonne of carbon dioxide emissions.
- The government should give greater emphasis on industrial application-oriented R&D and greater collaboration with the private players.
- Incentives must be provided for private companies to indulge in innovative research through increased access to credit and tax incentives.

Conclusion

- India's manufacturing sector needs up-gradation and reforms for becoming globally competitive.
- Absence of effective, flexible and targeted policy support along with supportive measures like the development of infrastructure and education would mean the stagnation of the sector.
- The government needs to address the core problems for the landmark initiatives like Make in India and Skill India to work and the manufacturing sector to grow.

2) India's COVID Diplomacy



Why in News?

- India's Covid diplomacy at one of worst global crises of recent decades is enabling Delhi to emerge as a responsible and reliable international power at a time when many established international actors have floundered.
- While neighboring countries are getting shipments of paracetamol and hydroxychloroquine, the government has also removed exports of Covid-19 drugs to countries such as the US, Spain, Brazil, Bahrain, Germany and the United Kingdom under commercial agreements signed with Indian pharmaceutical companies.

What is the Beginning?

- India has begun sending dispatches of rescue medicines as gifts to neighboring countries to help them fight the coronavirus pandemic.
- The government was sending drugs to Bhutan, Bangladesh, Afghanistan, Nepal, Myanmar, Seychelles, Mauritius and some African countries.
- One of the early shipments, a 10 tonne Air India aircraft, was sent to Sri Lanka.

- Supplies are being made to the Gulf in the backdrop of growing strategic partnership.
- Simultaneously Russia may place orders for HCQ to treat arthritis and lupus.

What are the efforts done?

- Praises were heaped on Indian PM by Presidents of USA and Brazil paving way for stronger partnerships in future.
- Besides, PM's efforts to address livelihood of economically backward sections of society through DBTs was lauded by the World Health Organisation.
- In comparison, a leading power kept citizens in line to get doles.
- Exports from special economic zones are allowed after steps have been taken to secure the supplies India may need if the worst case of Covid-19 occurs.
- India undertook a scenario building exercise and decided to allow exports of drugs like HCQ on a case by case basis taking into account the worst case scenario in the country even before the US President had threatened to retaliate if Delhi did not allow consignments.
- The decision to allow export of HCQ on a case by case basis was taken before Trump's statement threatening retaliation.
- A scenario building exercise was held and it was noted that the country will have adequate quantities of HCQ even in a worst case situation.
- The country has sufficient quantities of the drug.

What is the HCQ Diplomacy?

- HCQ, the drug at the centre of this diplomacy, is derived from chloroquine, a traditional malaria treatment compound, though it has also been used for the last two decades to alleviate symptoms of long-drawn auto-immune ailments like arthritis and lupus.
- An article Lancet claimed that China has found the drug could inhibit Sudden Acute Respiratory Syndrome (SARS) in vitro.
- A small study in France also showed some positive results.
- In Rajasthan doctors had successfully used HCQ, along with a combination of other medicines and mechanical aid, to some patients affected by COVID-19.

Conclusion

- From the SAARC region to G-20 India has taken lead in addressing the crisis. India's diplomacy has played a major role in managing the crisis, be it evacuating the distressed people or following the pandemic minute by minute or settling immediate and complicated issues including facilitating evacuation of stranded foreign nationals in India.

3) Sports - Challenges and way forward



Why in News?

- The 2019–20 coronavirus pandemic has caused the most significant disruption to the worldwide sporting calendar since World War II.
- Across the world and to varying degrees, sports events have been cancelled or postponed.
- Spectators have no games to watch and players no games to play.
- In response, players are being encouraged to "play for lives" rather than for points

When did it begin?

- Dozens of international sport events have been cancelled or postponed around the world amid an outbreak of a new type of coronavirus.
- The pathogen's effect has been felt across a range of sports - from athletics, rugby and golf to football, tennis and motorsports.
- The epidemic, which began in China in late December, has plunged the global sporting calendar into disarray and cast a shadow over preparations for the 2020 Tokyo Olympic Games.
- Qualifiers for the Summer Games in Japan are among a growing list of competitions

either pushed back or relocated because of the virus.

What is the impact?

- The Chinese gymnastics team was forced to pull out of the World Cup in Melbourne last month because of an Australian ban on foreign nationals travelling from China and despite none of the delegation showing symptoms.
- The World Athletics Indoor Championships, a key warm-up event for track and field Olympic athletes, was due to be held in the Chinese city of Nanjing from March 13-15 but has been postponed to next year.
- In South Korea, which has the highest number of reported cases outside of China, some athletes are being forced to train in isolation.
- The country has 5,328 cases and at least 28 deaths.
- The virus has also plagued European football.
- Several games in Italy's Serie A have been postponed after hundreds of cases were detected in the country, while some English clubs have banned players from shaking hands at their training grounds.
- Switzerland's top league has also been put on hold until at least March 23, after clubs rejected the possibility of playing behind closed doors.

What are the transformational trends?

- The increase in media consumption caused by coronavirus does not align with traditional broadcast television, which structures its main programming around an evening prime time window. This is likely to accelerate adoption of D2C services to distribute sports content.
- This in turn will reduce broadcasters' advertising income and their power to purchase sports rights. For the sports industry, the likely knock-on effect is that leagues will increasingly look to their in-house services to sell content, as well as potentially making more, smaller deals with other digital players.
- The reliance of sports leagues on broadcasters and of broadcasters on advertising revenue is laid bare by the coronavirus crises. It underscores the imperative to explore more diverse income streams. These could include live

monetization models, such as gamified viewership (e.g. live payments for digital items, new camera angles, fan commentary and statistical analysis) and gambling.

- The absence of “real” sport presents an opportunity for virtual technologies to grow. Already, sports leagues across the world are using esports to maintain interest and a sense of competition during shutdowns.
- Esports have grown massively in recent years and present a new way to engage fans and bring in revenue. Furthermore, immersive technologies could enable fans to experience games live, without having to be physically present – an idea that once may have been counterintuitive but now seems logical.

Conclusion

- In these difficult times, the ability of sports to bring people together is missed more than ever. The industry itself may be in new territory, but with the right strategies can emerge from the crisis stronger and more popular than ever.

4) Aviation: Challenges and next course of action



Why in News?

- The coronavirus pandemic has caused probably the most significant impact to the aviation sector. With the world going into a lockdown and airlines being grounded internationally, the sector has come to a standstill.

What is the Background?

- The Aviation Industry, like several other sectors, is facing a crisis in the wake of the COVID-19 pandemic.
- Issues faced by the aviation industry due to COVID-19: Travel restrictions,

grounded fleets, benched staff, schedule uncertainties, ticket liabilities and cash burn. It's not a question of only restrictions, visas not being allowed, travel not being allowed, airlines not being allowed.

- Even after upliftment of restrictions there will be Apprehensions.

What are the impacts?

- Loss incurred by aviation industry: As per The International Air Transport Association (IATA) severe travel restrictions may cut the industry's revenue by \$252 billion in 2020.
- In terms of the bottom line, this is expected to translate into a \$39 billion net loss in the second quarter.
- The industry will also burn about \$61 billion in money in the second quarter.
- In India, for example, out of the 650 planes with all the airlines, 50% of them have been taken on lease. So even while they're on the ground the lease rentals are being paid.
- If apprehensions and restrictions last much longer, the revenue loss will be higher and, subsequently, the losses will be higher.
- Loss of livelihood: As per IATA 25 million people will lose their jobs. Both men and machines are taking a heavy toll on the aviation industry.
- Traffic will not grow for a year or more: for instance, Changi Airport shutting down one complete terminal for a year and Singapore airlines announced the grounding of 96% of their fleet.
- With respect to India it will take more than a couple of years to come back to at least 50% of what the industry was earlier.
- No clue for future: The crisis confronting the aviation industry is not only unprecedented but also there is no clue on how to put industry back on track. For instance after the 9/11 terrorist attack it took a long time for the aviation industry to come back.

What are the implications?

- Social distancing in airlines: the recent statements of the DGCA [Directorate General of Civil Aviation], even when the flights are put back into operation, the

concept of social distancing will be imposed on the airlines.

- If airlines are only going to be flying one-third of your capacity, the kind of fares that an airline will have to charge to sustain its operations will be very high.
- Family travel will be seriously impacted by this.
- India is a price-sensitive market: So we will go back to the era of the 1940s and the 1950s where only the elite could afford to travel.
- Limited finances: It is difficult that the government pump in money to push up an elite industry at the cost of others.
- To expect large-scale aid to put the airline industry back on track is an impossibility.
- Slowdown in Manufacturing of aircrafts: Manufacturers are going to face a big problem for the next 10 years.
- It's 10 years because of finances to build up, for airlines to place the order the industry is not going to start reviving before five years.

What is the way forward?

- It needs professionals with a clear mind, not bureaucrats who know very less about aviation.
- A clear Plan on how to mitigate the suffering is the need of the hour.
- Aviation research agency CAPA predicts that airlines will need three stages of relief.
- CAPA has also said that 250 aircraft will be surplus to needs.
- As per estimates India will not need even 50% of the 650 planes that all airlines currently have.
- Radical changes in Business models: The business model that Indian carriers followed is garner market share at the expense of profitability, which in other words was no business model at all.
- There is really no low-cost airline: The first thing the government can do is to put the Aviation Turbine Fuel, or ATF, in GST.
- Rebuild aviation: Move slowly, understand where the flights are essential and move away from fixing the schedules based on a Delhi-centric focus and politicians.

Conclusion

- 'Crisis is an opportunity in disguise.' Since airlines are the connecting sector these

days of dark can be seen as coming light in the near future if tackled strategically.

5) Online Predators putting children at risk



Why in News?

- Millions of children around the world are at increased risk of online sexual exploitation, violence and cyberbullying as they spend more time on virtual platforms due to the closing of schools amid COVID-19 lockdowns.
- More than 1.5 billion children and young people have been affected by the closing of schools worldwide.
- Spending more time on virtual platforms can leave children vulnerable to online sexual exploitation and grooming, as predators look to exploit the COVID-19 pandemic.

What is the background?

- Spending more time on virtual platforms can leave children vulnerable to online sexual exploitation and grooming, as predators look to exploit the COVID-19 pandemic.
- A lack of face-to-face contact with friends and partners may lead to heightened risk-taking such as sending sexualised images, while increased and unstructured time online may expose children to potentially harmful and violent content as well as greater risk of cyber bullying.

What are the issues?

- School closures and strict containment measures mean more and more families are relying on technology and digital solutions to keep children learning, entertained and connected to the outside world, but not all children have the necessary knowledge, skills and resources to keep themselves safe online.

- Self-isolation has driven more and more children to move online during the COVID-19 pandemic, leading to an unprecedented rise in screen time and raising safety risks for millions of young people.
- Lack of face-to-face contact with friends and partners may lead to heightened risk-taking, such as sending sexualized images.
- At the same time, increased and unstructured time online may also expose children to potentially harmful content as well as a greater risk of cyber bullying.

What are the steps taken?

- The agencies are asking governments to keep child protection services open and active during the pandemic and to train health, education and social service workers on the impacts that COVID-19 may have on their well-being, including increased online risks.
- Moreover, they are requested to step up awareness raising and educational initiatives on cyber safety and to provide local helplines and hotlines.
- Meanwhile, the information technology industry, including social networking platforms, is requested to enhance online platforms with more safety measures, especially while using virtual learning tools.
- They are also invited to promote and facilitate child safety referral services and helplines as well as help connect disadvantaged children in low-income households.
- Schools are asked to update current safeguarding policies to reflect the new realities for children learning from home and ensure that they have continued access to school-based counselling services.

Conclusion

- Parents are charged with making sure that their children's devices have the latest software updates and antivirus programmes. They are also encouraged to speak to their children on how and with whom they are communicating online and to set new internet rules.

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