

www.vishnuias.com



JULY

22.07.2021

CURRENT AFFAIRS

A MAGAZINE FOR CIVIL SERVICES PREPARATION

JOIN OUR TELEGRAM: <https://t.me/vishnuiasmentor>

**Articles of the day
THE HINDU & INDIAN EXPRESS**

UPSC

General Studies

Test Series

**Online &
Offline
classes**

**One-Stop
Solution**

**Free daily
materials**

GS 2 : Polity, Governance, International Relations

1. The OPEC deal will ease rising prices and balance domestic and global priorities

Context

The end to the UAE's weeks-long impasse with Saudi Arabia and Russia, a non-OPEC state, was brought about by Sunday's deal.

What was the deal about?

- United Arab Emirates (UAE), said to hold the world's largest untapped crude reserves, had **demand an increase in its oil output quotas**.
- The end to the UAE's weeks-long impasse with Saudi Arabia, one of the world's biggest crude exporters, and Russia, a non-OPEC state, was brought about by Sunday's deal.
- Under its terms, the UAE's demand for an **increase in its oil output quotas**, in recognition of its higher production capacity, has been conceded.
- The baselines have also been raised for Saudi Arabia, Russia, Iraq and Kuwait.
- The bloc will now **step up crude production by 400,000 barrels a day** starting in August.
- The output boost is in response **to rising oil prices** in the wake of the rebound in economic activity following the easing of lockdown restrictions and increased COVID-19 vaccinations in different parts of the world.
- The cartel had cut oil production by 9.7 million barrels a day (mbd) as **oil demand fell from 100 mbd to 91.1 mbd** and prices plummeted from \$70 in January 2020 to around \$20 in April.

Strain in Saudi Arabia-UAE relations

- The UAE has played hard ball during the bloc's attempts to deal with the pandemic-induced price volatility.
- Thus, while the internal rift has been resolved for now, the danger cannot be ruled out of an increasingly economically and politically assertive UAE flexing its muscle.

- Bilateral relations between the traditional allies, Saudi Arabia and the UAE, have been especially strained since the **UAE established diplomatic ties with Israel** last year and withdrew troops from the Saudi-spearheaded war in Yemen the year before.
- A more recent arena of tension is the **tariffs Riyadh has imposed** on imports from the six-nation **Gulf Cooperation Council**.
- Saudi Arabia will now exclude from the GCC tariff agreement goods made by companies with a workforce of less than 25% of locals and industrial products with less than 40% of added value after their transformation process.
- Home to a predominantly migrant population, **the move could hit the UAE especially hard**.

OPEC's concerns

- The OPEC, forecast in 2016 that a strict implementation of the Paris climate accord could see the demand for oil peak by 2030.
- There is an eagerness to maximise the returns on their substantial hydrocarbon resources, amid growing speculation of a peak in oil demand within sight.
- The International Energy Agency (IEA), which in 2016 forecast a continued rise in oil consumption until the 2040s, has more recently hinted at about 5% rise or fall relative to the demand before the pandemic within a decade.
- The OPEC's other concerns are the stabilisation of world oil prices without **jeopardising national expenditure programmes**, and the diversification of economies in anticipation of the unfolding global energy transition.

Conclusion

The latest OPEC compromise echoes growing recognition of the delicate balance between competing domestic and global priorities.

2. 'Open talks' with the Taliban is India's strategic necessity

Context

With over a third of Afghanistan's more than 400 districts under Taliban control, the talk-to-the-Taliban option is indeed the best of the many less than perfect options available to India.

India need a reset in its Afghanistan policy

- India has 'temporarily' closed its consulate in Kandahar.
- This follows the decision to suspend operations in the Indian consulates in Jalalabad and Herat.

- India's decision to partially "withdraw" from Afghanistan shows that **betting only on the government in Kabul** was a big mistake,
- It also shows that India realises the threat the Taliban poses to Indian assets and presence in Afghanistan.
- To safeguard its civilian assets there as well as to stay relevant in the unfolding 'great game' in and around Afghanistan, **India must fundamentally reset its Afghanistan policy.**
- India must, in its own national interest, begin 'open talks' with the Taliban before it is too late.
- Open dialogue with the Taliban should no longer be a taboo; it is a strategic necessity.

Reason for avoiding open talks with Taliban

- There are at least five possible reasons why India appears to want to keep the Taliban engagement slow and behind closed doors.
- First, if India chooses to engage the Taliban directly, it could make Afghanistan President Ashraf Ghani, **to look towards China and the Shanghai Cooperation Organisation (SCO)** for national security and personal political survival.
- Second, India is also faced with the dilemma of **who to talk to within the Taliban** given that it is hardly a monolith.
- Third, given the global opprobrium that Taliban faced in its earlier avatar and the lack of evidence about whether the outfit is a changed lot today, New Delhi might not want to court the Taliban so soon.
- Fourth, there is little clarity about **what the Taliban's real intentions are going forward** and what they would do after ascending to power in Kabul.
- Fifth, it would not be totally unreasonable to consider the possibility of **Pakistan acting out against India in Kashmir** if India were to establish deeper links with the Taliban.

Reasons India should engage with the Taliban openly

- **Wide international recognition:** Whether we like it or not, the Taliban, is going to be part of the political scheme of things in Afghanistan, and unlike in 1996, a **large number of players in the international community** are going to recognise/negotiate/do business with the Taliban.
- **Countering Pakistan:** The Taliban today is **looking for regional and global partners** for recognition and legitimacy especially in the neighbourhood.
- So the less proactive the Indian engagement with the Taliban, the stronger Pakistan-Taliban relations would become.
- A worldly-wise and internationally-exposed Taliban 2.0 would develop its own agency and sovereign claims including perhaps calling into question the

legitimacy of the Durand Line separating Pakistan and Afghanistan, something Pakistan was always concerned about. T

- The Taliban would want to hedge their bets on how far to listen to Pakistan.
- That is precisely when New Delhi should engage the Taliban.
- **Security of civilian assets:** India needs to court all parties in Afghanistan, including the Taliban if it wants to ensure its security of its civilian assets there.
- It makes neither strategic nor economic sense to withdraw from Afghanistan **after spending over \$3 billion**, something the Government seems to be prepared to do
- **Being a part of Afghanistan's future course:** If India is not proactive in Afghanistan at least now, late as it is, Russia, Iran, Pakistan and China will emerge as the shapers of Afghanistan's political and geopolitical destiny, which for sure will be detrimental to Indian interests there.
- **Continental grand strategy:** Backchannel talks with Pakistan and a consequent ceasefire on the Line of Control, political dialogue with the mainstream Kashmiri leadership, secret parleys with Taliban all indicate that India is opening up its congested north-western frontier.
- Except for the strategic foray into the Indo-Pacific, India today is **strategically boxed in the region** and it must break out of it. Afghanistan could provide, if not immediately, India with such a way out.

Conclusion

In the end, India's engagement with the Taliban may or may not achieve much, but non-engagement will definitely hurt Indian interests.

3. Speedy trial a fundamental right: HC

The Bombay High Court has said that speedy trial is a fundamental right highlighting the issue of people languishing in prisons waiting for the trial to begin.

Background

- The HC was hearing a petition seeking a judicial probe into the death of a tribal rights activist.
- The petitioner told the court that he was not looking for the cause of the death, but an inquiry into what happened in jail that ultimately led to his death.

Right to speedy trial

- It is a right under which it is asserted that a government prosecutor may not delay the trial of a criminal suspect arbitrarily and indefinitely.
- Otherwise, the power to impose such delays would effectively allow prosecutors to send anyone to jail for an arbitrary length of time without trial.
- Right to speedy trial is a concept gaining recognition and importance day by day.

Its constitutional status

- The right to speedy trial is **guaranteed under Article 21** of the Constitution of India.
- In the case *Kartar Singh v. State of Punjab* (1961) it was declared that right to speedy trial is an essential part of fundamental right to life and liberty.
- Article 21 declares that “no person shall be deprived of his life or personal liberty except according to the procedure laid by law.”

What causes delay?

- Major reasons for delay include:
- Delay in disposition of cases due to huge pendency
- Provision for adjournment
- Vacation of the court
- Investigative agencies generally delay

Why speedy trial is necessary?

- The right to a speedy trial serves several important purposes:
- First, requiring a speedy trial helps to ensure that a defendant does not have to spend an unreasonable amount of time in jail.
- It also helps to respect and protect the mental health of the defendant by making sure that the defendant is not kept in suspense or anxiety over pending criminal charges for months or years at a time.
- Courts recognize that this is neither healthy nor fair.
- Finally, the right to a speedy trial protects a defendant’s ability to gather evidence for his or her own defense.
- Over time, physical evidence can become harder and harder to locate, and witnesses may move, lose their memories of an event, or even pass away.

Alternative solutions

- The **Law Commission of India and the Malimath Committee** recommended that the system of plea bargaining should be introduced in Indian criminal justice system.
- **Plea bargaining** refers to a person charged with a criminal offence negotiating with the prosecution for a lesser punishment than what is provided in law by pleading guilty to a less serious offence.
- This will facilitate the speedy disposal of criminal cases and reduces the burden on the courts at least for some minor trials and not serious criminal offences.

4. SMILE Scheme for persons engaged in the act of begging

The Ministry of Social Justice and Empowerment has formulated a scheme “SMILE – Support for Marginalized Individuals for Livelihood and Enterprise”.

SMILE Scheme

- This scheme is sub-scheme under the ‘Central Sector Scheme for Comprehensive Rehabilitation of persons engaged in the act of Begging’.
- It covers several comprehensive measures including **welfare measures** for persons who are engaged in the act of begging.
- The focus of the scheme is extensively on rehabilitation, provision of **medical facilities**, counselling, basic documentation, education, **skill development**, economic linkages and so on.
- The scheme would be implemented with the support of State/UT Governments/Local Urban Bodies, Voluntary Organizations, Community Based Organizations (CBOs), institutions and others.
- Scheme provides for the use of the existing shelter homes available with the State/UT Governments and Urban local bodies for rehabilitation of the persons engaged in the act of Begging.
- In case of non-availability of existing shelter homes, new dedicated shelter homes are to be set up by the implementing agencies.

GS 3 : Economy, Science and Technology, Environment

5. New Initiatives in Building Energy Efficiency

Why in News

“Aiming for Sustainable Habitat: New Initiatives in Building Energy Efficiency 2021” was launched by the Bureau of Energy Efficiency (BEE).

- These initiatives seek to enhance energy efficiency in the building sector and were launched as part of 'Azadi Ka Amrut Mahotsav'.

Bureau of Energy Efficiency

- The BEE is a statutory body established through the Energy Conservation Act, 2001 under the Union Ministry of Power.
- It assists in developing policies and strategies with the primary objective of reducing the energy intensity of the Indian economy.
- BEE coordinates with designated consumers, designated agencies, and other organizations to identify and utilize the existing resources and infrastructure, in performing its functions.

Key Points

- **Initiatives Launched:**
 - **Eco Niwas Samhita 2021:**
 - It is an Energy Conservation Building Code for Residential Buildings (ECBC-R) to give a further fillip to India's energy conservation efforts.
 - It specifies code compliance approaches and minimum energy performance requirements for building services, and verification framework with Eco Niwas Samhita 2021.
 - **Hand Book for Learning:**
 - The web-based platform 'The Handbook of Replicable Designs for Energy Efficient Residential Buildings' as a learning tool, which can be used to create a pool of ready-to-use resources of replicable designs to construct energy-efficient homes in India.
 - **Online Directory of Building Materials:**
 - Creating an Online Directory of Building Materials that would envisage the process of establishing standards for energy efficient building materials.

- **NEERMAN Awards:**
 - **NEERMAN Awards**, (National Energy Efficiency Roadmap for Movement towards Affordable & Natural Habitat) were announced, with the **goal of encouraging exceptionally efficient building designs** complying with BEE's Energy Conservation Building Codes.
- **Online Star Rating Tool:**
 - It **provides performance analysis to help professionals** decide the best options to pick for energy-efficiency of their homes.
 - It was launched for **Energy Efficient Homes**, created to improve energy-efficiency and reduce energy consumption in individual homes.
- **Training:**
 - Training of over 15,000 Architects, Engineers and Government officials on **Energy Conservation Building Code (ECBC) 2017** and **Eco Niwas Samhita 2021**.
- **Significance:**
 - The **building sector is the second largest consumer of electricity** after industry but it is expected to become the **largest energy consuming sector by 2030**.
 - These initiatives will **help enhance the energy-efficiency levels in residential buildings across the country**, thereby leading to sustainable habitation.
 - The initiatives will go a long way to **make India more energy-efficient**.

Energy Efficiency in India

- **Energy Efficiency:**
 - Energy efficiency means **using less energy to perform the same task** – that is, **eliminating energy waste**.
 - Energy efficiency **brings a variety of benefits**: reducing **GreenHouse Gas (GHG)** emissions, reducing demand for energy imports, and lowering our costs on a household and economy-wide level.
- **Transition:**
 - India's energy sector is set for a transition with recent developmental ambitions of the government e.g. **175 GW of installed capacity of renewable energy by 2022**, **24X7 Power for all**, **Housing for all by 2022**, **100 smart cities mission**, promotion of e- mobility, electrification of railway sector, 100% electrification of households, Solarization of agricultural pump sets, and promotion of clean cooking.
- **Potential of Energy Efficiency:**

- Energy Efficiency has the **maximum GHG abatement potential** of around 51% followed by renewables (32%), biofuels (1%), nuclear (8%), carbon capture and storage (8%) as per the **World Energy Outlook (WEO 2010)**.
 - World Energy Outlook (WEO) is the flagship publication of the **International Energy Agency**.
- India can **avoid building 300 GW of new power generation up to 2040** with implementation of ambitious energy efficiency policies.
- **Positives:**
 - Successful implementation of Energy Efficiency Measures contributed to electricity **savings of 7.14% of total electricity consumption of the country** and **emission reduction of 108.28 million tonnes of CO₂ during 2017-18**.
- **Other initiatives to Promote Energy Conservation and Energy Efficiency:**
 - **PAT Scheme:**
 - **Perform Achieve and Trade Scheme (PAT)** is a market based mechanism to enhance the cost effectiveness in improving the Energy Efficiency in Energy Intensive industries through certification of energy saving which can be traded.
 - It is a part of the National Mission for Enhanced Energy Efficiency (NMEEE), which is one of the eight missions under the **National Action Plan on Climate Change (NAPCC)**.
 - **Standards and Labeling:**
 - The scheme was **launched in 2006** and is currently invoked for equipments/appliances Room Air Conditioner (Fixed/VariableSpeed), Ceiling Fan, Colour Television, Computer, Direct Cool Refrigerator, Distribution Transformer, Domestic Gas Stove, General Purpose Industrial Motor, LED Lamps, Agricultural Pumpset, etc.
 - **Energy Conservation Building Code (ECBC):**
 - It was developed for **new commercial buildings in 2007**.
 - It sets **minimum energy standards for new commercial buildings** having a connected load of 100kW (kilowatt) or contract demand of 120 KVA (kilovolt-ampere) and above.
 - **Demand Side Management:**
 - DSM is the **selection, planning, and implementation of measures** intended to have an influence on the demand or customer-side of **the electric meter**.

6. Polluted River Stretches

Why in News

The Central Pollution Control Board (CPCB) in 2018 identified 351 polluted river stretches in India.

- CPCB study reveals that **discharge of untreated wastewater is one of the main causes** of river pollution.
- The assessment of water quality for identification of polluted river stretches found that **31 states and Union territories (UT) had rivers and streams that did not meet the water quality criteria.**

Key Points

- **Findings of CPCB:**
 - **Concentration of Polluted River Stretches:** Almost 60% of polluted river stretches **exist in eight states:** Maharashtra, Assam, Madhya Pradesh, Kerala, Gujarat, Odisha, West Bengal and Karnataka.
 - Maharashtra has the maximum number of polluted river stretches in the country.
 - **Disproportionate Sewage Treatment:** The **National Green Tribunal (NGT)** in 2019 directed that 100% treatment of sewage needed to be ensured before 31st March, 2020.
 - However, these states have sewage treatment capacity disproportionate to the sewage generated.
 - According to the CPCB report National inventory of sewage treatment plants 2021, about 72,368 million litres per day (MLD) of sewage was generated against which operational treatment capacity was only 26,869 MLD in 2021.
 - **Increasing Biological Oxygen Demand:** This huge amount of sewage is left untreated/partially treated and discharged directly into rivers and **pollutes rivers by increasing the biological oxygen demand.**

Biological Oxygen Demand

- Biological Oxygen Demand is the **amount of dissolved oxygen needed by microorganisms to decompose organic matter** (waste or pollutants) under aerobic reaction (in the presence of oxygen).
- The **more organic matter there is** (e.g., in sewage and polluted bodies of water), the **greater is the BOD.**
- **Greater BOD, the lower the amount of dissolved oxygen available for higher animals** such as fishes.

- The BOD is therefore a **reliable gauge of the organic pollution of a water body.**
- **One of the main reasons for treating wastewater prior to its discharge into a water resource is to lower its BOD** i.e. to reduce its need of oxygen and thereby lessen its demand from the streams, lakes, rivers, or estuaries into which it is released.

Dissolved Oxygen

- It 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.**
- A DO level of 5 mg/l or above is the recommended level for bathing in a river.
- **Other Reasons for Polluted Rivers:**
 - **Urbanization:** Rapid urbanization in India during the recent decades has given rise to a number of environmental problems such as water supply, wastewater generation and its collection, treatment, and disposal.
 - Many towns and cities which came upon the banks of rivers have not given proper thought to the problem of wastewater, sewerage, etc.
 - **Industries:** Unrestricted flow of sewage and industrial effluents into the rivers has adversely affected their purity. All these industrial wastes are toxic to life forms that consume this water.
 - **Agricultural Runoff and Improper Agricultural Practices:** Traces of fertilizers and pesticides are washed into the nearest water-bodies at the onset of the monsoons or whenever there are heavy rains.
 - **Amount of Flow of Rivers:** Impact on river water quality resulting from discharges of treated or untreated wastewater into the river will depend on the dilution offered by the quantum of flows in the river.
 - **Religious and Social Practices:** Religious faith and social practices also add to the pollution of the rivers, especially Ganga.
 - Dead bodies are cremated on the river banks. Partially burnt bodies are also flung into the river.
 - Mass bathing in a river during religious festivals is another environmentally harmful practice.
- **Government Initiatives to Tackle Water Pollution:**
 - Recently, the National Green Tribunal (NGT) directed the Ministry of Jal Shakti to devise an appropriate **National River Rejuvenation Mechanism** for effective monitoring of steps to curb pollution and for rejuvenation of all polluted river stretches across the country.

- **National Water Policy (2012):** It aims to take cognizance of the existing situation, to propose a framework for creation of a system of laws and institutions and for a plan of action with a unified national perspective.
 - Started by the Ministry of Water Resources, it highlights the importance of water for human existence as well as for economic development related activities.
 - It suggests frameworks to conserve water resources through optimal, economical, sustainable and equitable means.
- **National Water Mission (2010):** It ensures integrated water resource management leading to water conservation, less wastage, equitable distribution forming better policies.
- **National Mission for Clean Ganga (NMCG):** It envisages a five-tier structure at national, state and district level to take measures for prevention, control, and abatement of environmental pollution in river Ganga.
 - It aims to ensure continuous adequate flow of water so as to rejuvenate the river Ganga.
- **Namami Gange Project:** It integrates the efforts to clean and protect the Ganga River in a comprehensive manner.

Way Forward

- **Maintaining Minimum Flow of the River:** To maintain and restore the wholesomeness of the river (Aquatic ecosystem), there is a need to maintain the minimum flow.
 - Minimum flow of the river is also important to discharge treated sewage.
- **Comprehensive Waste Management Policy:** There is a need for a comprehensive waste management policy that stresses the need for decentralised garbage disposal practices as this will incentivise private players to participate.
- **Bioremediation:** It is important that **Bioremediation** (i.e. use of microbes to clean up contaminated soil and water) is made compulsory for areas wherever they can be applied.
- **Behavioural Change:** To overhaul the waste management sector and induce the necessary behavioural change, citizen participation and engagement is the key.

7. New generation of Akash surface-to-air missile

In news A new generation of Akash surface-to-air missile was successfully flight-tested on by the DRDO from an integrated test range off the Odisha coast in a boost to air defence capabilities.

- The new variant of the Akash missile (Akash-NG) has a slightly better range compared to the original version that can strike targets at a distance of around 25 km.
- During the test, the missile demonstrated **high manoeuvrability required for neutralising fast and agile aerial threats.**

About Akash Missile System

- Akash is India's first indigenously produced **medium range Surface to Air missile** that can engage multiple targets from multiple directions.
- **Manufactured by:** Defence Research and Development Organisation (DRDO)
- **The all-weather missile** can engage targets at a speed 2.5 times more than the speed of sound and can detect and destroy targets flying at low, medium and high altitudes.
- The Akash missile system has been designed and developed as part of India's 30-year-old **Integrated guided-missile development programme (IGMDP)** which also includes other missiles like Nag, Agni, Trishul and Prithvi.
- The nuclear-capable missile can fly at a speed of up to Mach 2.5 (nearly 860 m/s) at a maximum height of 18 km.
- It can strike enemy aerial targets from a distance of 30 km.
- **Unique features of Akash:**
 - It can be **launched from mobile platforms** like battle tanks or wheeled trucks. It has nearly 90% kill probability.
 - The missile is supported by the **indigenously developed radar called 'Rajendra'** that can handle highly-maneuvring multiple targets from multiple directions in group or autonomous mode.
 - The missile is reportedly cheaper and more accurate than USA's Patriot missiles due to its **solid-fuel technology** and high-tech radars.

8. New Shephard rocket system

In news Amazon CEO Jeff Bezos came back to earth after a 10-min flight to space on Blue Origin's New Shepard spacecraft.

What is the Significance of the mission?

- The astronauts experienced three to four minutes of zero-gravity and travelled above the **Kármán Line, the internationally-recognised boundary of space.**

What is New Shephard, the rocket system?

- It is a rocket system meant to take tourists to space successfully.
- The system is built by Blue Origin, Private Space Company based out in USA.
- New Shephard has been named after astronaut Alan Shephard, the first American to go to space.
- It offers flights to space over 100 km above the Earth and accommodation for payloads.
- The system is a **fully reusable, vertical takeoff and vertical landing space vehicle**

Scientific objectives of the mission:

- It is a rocket system that has been designed to take astronauts and research payloads past the Karman line.
- The idea is to provide easier and more cost-effective access to space meant for purposes such as academic research, corporate technology development, entrepreneurial ventures and space tourism among others.

THE INDIAN EXPRESS

GS 2 : Polity, Governance, International Relations

1. New Vintage Vehicles Policy

Why in News

Recently, the **Ministry of Road Transport and Highways (MORTH)** has made amendments to the **Central Motor Vehicles Rules 1989.**

- It has **some special provisions for vintage vehicles** that are over 50 years old.

Key Points

- **Definition of Vintage Vehicles:**
 - All **two- and four-wheelers that are 50+ years old and have been maintained in their original form** and which have not undergone any substantial overhaul, shall be defined as Vintage Motor Vehicles.
- **Regulation:**
 - These **will not be driven for regular and commercial purposes** and will have to get a special registration.
 - Other than that, the owners **can use** their vintage cars in any way they wish - such as **an exhibition, or a ride from time to time**.
 - The new registration rules say **vehicles that are already registered can retain their original Registration Mark** and **fresh registrations will take place under a unique VA (Vintage) series**.
 - Registration information will be on the **Parivahan portal** of the MORTH.
 - The registration certificate **will be valid for 10 years**, renewable thereafter.
 - **Sale and purchase** of vehicles registered as vintage **is permissible**; the buyer and seller have to inform their respective State Transport Authorities.
 - Vintage vehicles **are insulated from the scrappage policy**. If a vehicle is more than 15 years old but within 50 years, the owner can continue to keep it by passing fitness tests every five years.
- **Significance:**
 - **No existing rules** for regulating the process of registration across different states for Vintage Vehicle.
 - The new rules **will provide a hassle-free process** for fresh registration.
 - This is aimed at **preserving and promoting the heritage of old vehicles** in India.

2. Extension to OBC Sub-Categorisation Commission

Why in News

Recently, the Union Cabinet has approved a **six-month extension** to the commission appointed to examine **sub-categorisation of Other Backward Classes (OBCs)**, up to 31st January 2022.

- This is the **eleventh extension for the commission**, which was initially due to submit its report in March 2018.

Key Points

- **About:**
 - It will enable the Commission to **submit a comprehensive report on the issue of sub-categorization of OBCs**, after consultation with various stakeholders.
 - Its **objectives** include working out a mechanism, criteria, norm and parameters through a scientific approach for sub-categorisation within the OBCs and identifying the respective castes or communities or sub-castes or synonyms in the Central List of OBCs and classifying them into their respective sub-categories.
- **Commission:**
 - Also called Rohini Commission, constituted under **Article 340 of the Constitution** with the approval of the President on 2nd October 2017.
 - It had been constituted **to complete the task of sub-categorising 5000-odd castes in the central OBC list** so as to ensure more equitable distribution of opportunities in central government jobs and educational institutions.
 - In 2015, the **National Commission for Backward Classes (NCBC)** had recommended that OBCs should be categorised into **extremely backward classes, more backward classes and backward classes**.
 - NCBC has the **authority to examine complaints and welfare measures** regarding socially and educationally backward classes.
- **Work Done:**
 - It has met **representatives of state governments**, state backward classes commissions, community associations etc. apart from **obtaining caste-wise data of OBCs** in higher educational institutions and recruits in central departments, public sector banks and financial institutions.
 - Earlier this year the commission **proposed to divide OBCs into four subcategories** numbered 1, 2, 3 and 4 and **split the 27% into 2, 6, 9 and 10%, respectively**.
 - It also recommended **complete digitisation of all OBC records** and a **standardised system of issuing OBC certificates**.
- **Possible Outcomes:**
 - The commission may make recommendations which will benefit the communities in the existing list of OBCs which have not been able to get any major benefit of the OBCs reservation scheme for appointment in central government posts and for admission in central government educational institutions.

Article 340 of the Indian Constitution

- The President may by order appoint a Commission consisting of such persons as he thinks **fit to investigate the conditions of socially and educationally backward classes** within the territory of India and the difficulties under which they labour and to make recommendations as to the steps that should be taken by the Union or any State to remove such difficulties.
- A Commission **so appointed shall investigate the matters referred to them** and present to the President a report setting out the facts as found by them and making **such recommendations** as they think proper.
- The President shall **cause a copy of the report** so presented together with a memorandum explaining the action taken thereon to be laid before each House of Parliament.

OBC Reservation

- The **Kalelkar Commission, set up in 1953**, was the **first to identify backward classes other than the Scheduled Castes (SCs) and Scheduled Tribes (STs)** at the national level.
- The **Mandal Commission Report, 1980** estimated the **OBC population at 52% and classified 1,257 communities** as backward.
 - It recommended increasing the existing quotas, which were only for SC/ST, from 22.5% to 49.5% to include the OBCs.
- **The central government reserved 27%** of seats in union civil posts and services for OBCs [Article 16(4)]. The quotas were subsequently enforced in central government educational institutions [Article 15 (4)].
 - In 2008, the **Supreme Court** directed the central government to **exclude the creamy layer (advanced sections) among the OBCs**.
- The **102nd Constitution Amendment Act, 2018** provided constitutional status to the National Commission for Backward Classes (NCBC), which was previously a statutory body under the Ministry of Social Justice and Empowerment.

GS 3 : Economy, Science and Technology, Environment

3. Akash-NG & MPATGM: DRDO

Why in News

Recently, the **Defence Research & Development Organisation (DRDO)** successfully flight-tested the **New Generation Akash Missile (Akash-NG)** and the **Man Portable Anti Tank Guided Missile (MPATGM)**.

- In **June 2021** a new generation nuclear capable ballistic missile **Agni-P (Prime)** was successfully test-fired by the DRDO.
- In **February 2021** India also successfully test-fired indigenously-developed anti-tank guided missile systems '**Helina**' and '**Dhruvastra**'.

Defence Research & Development Organisation

- It is the **Research & Development wing of the Ministry of Defence, Govt of India**, with a vision to **empower India with cutting-edge defence technologies**.
- It was **established in 1958** after combining the Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO).

Key Points

- **Akash Missile (Akash-NG):**
 - **About:**
 -
 - It is a **surface-to-air Missile**. It is a **new variant of the Akash missile** that can **strike targets at a distance of around 60 km** and fly at a **speed of up to Mach 2.5**.
 - Once deployed, the Akash-NG weapon system will **prove to be a force multiplier for the air defence capability of the Indian Air Force**.
 - **Development & Production:**
 - Developed by **Defence Research & Development Laboratory (DRDL)**, Hyderabad in collaboration with other **DRDO laboratories**.
 - It is being produced by **Bharat Electronics Limited (BEL)** and **Bharat Dynamics Limited (BDL)**.
 - **Akash Missile:**
 - Akash is **India's first indigenously produced medium range Surface to Air missile** that can engage multiple targets from multiple directions.
 - The missile is unique in the way that it can be **launched from mobile platforms** like battle tanks or wheeled trucks. It has nearly 90% kill probability.
 - The missile is supported by the **indigenously developed radar called 'Rajendra'**.
 - The missile is **reportedly cheaper and more accurate than US' Patriot missiles** due to its solid-fuel technology and high-tech radars.

- It can **engage targets at a speed 2.5 times more than the speed of sound** and can detect and destroy targets flying at low, medium and high altitudes.
- The Akash missile system has been **designed and developed as part of India's 30-year-old Integrated Guided-Missile Development Programme (IGMDP)**.

□ **Man Portable Anti Tank Guided Missile:**

- - It is an **indigenously-developed** anti-tank guided missile.
 - **Anti Tank guided missile** is a **medium or long-range missile** whose primary purpose is **to destroy tanks** and other armoured vehicles.
 - It is a **low weight, fire and forget** missile. It is incorporated with state-of-the-art **Miniaturized Infrared Imaging Seeker** along with **advanced avionics**.
 - It is launched using a tripod designed for a **maximum range of 2.5 km** with a launch **weight of less than 15 Kg**.
 - Its successful test marked a major boost for the government's **Atmanirbhar Bharat campaign** and would strengthen the Indian Army.

Integrated Guided-Missile Development Programme

- It was conceived by **Dr. A.P.J. Abdul Kalam** to enable India attain self-sufficiency in the field of missile technology. b
- The 5 missiles (**P-A-T-N-A**) developed under this program are:
 - **Prithvi**: Short range surface to surface ballistic missile.
 - **Agni**: Ballistic missiles with different ranges, i.e. Agni (1,2,3,4,5)
 - **Trishul**: Short range low level surface to air missile.
 - **Nag**: 3rd generation anti-tank missile.
 - **Akash**: Medium range surface to air missile.

4. Bird Flu: Avian Influenza

Why in News

Recently, the **first human death** was recorded **due to Bird Flu** in India this Year. This was caused by **H5N1 Avian Influenza Virus**.

- Earlier, **China** reported the **first human infection of H10N3 bird flu**.

Key Points

- **About:**
 - A disease caused by **avian influenza (AI) Type A viruses** found naturally in wild birds worldwide.
 - AI viruses are broadly classified as **low pathogenic AI (LPAI)** and **highly pathogenic AI (HPAI) viruses**, based on their **pathogenicity**. H5N1 strains come under HPAI viruses.
 - The virus **can infect domestic poultry** including chickens, ducks, turkeys and there have been reports of H5N1 infection among **pigs, cats, and even tigers** in Thailand zoos.
- **Impact:**
 - Outbreaks can lead to **devastating consequences for the country**, particularly the **poultry industry**.
 - Farmers might experience **a high level of mortality in their flocks**, with **rates often around 50%**.
- **Infection in Humans:**
 - The most common route of virus transmission is **direct contact with infected birds**, either dead or alive, or contact with contaminated surfaces or air near the infected poultry.
 - **Human-to-human transmission** of the H5N1 virus is **very rare**.
 - **Children and adults below 40** were seen to be the most affected and mortality was high in 10-19 years olds.
- **Symptoms in Humans:**
 - Range from **mild to severe influenza-like illnesses** such as fever, cough, sore throat, muscle aches, nausea, abdominal pain, diarrhea, vomiting.
 - People can also develop **severe respiratory illness** (e.g., difficulty breathing, **pneumonia, acute respiratory distress**, viral pneumonia) and altered mental status, seizures etc.
- **Prevention and Eradication:**
 - Strict **biosecurity measures and good hygiene** are essential in protecting against disease outbreaks.
 - If the infection is detected in animals, **a policy of culling infected and contact animals is normally used** in an effort to rapidly contain, control and eradicate the disease.
 - **WHO's global laboratory system, the Global Influenza Surveillance and Response System (GISRS)**, identifies and monitors strains of circulating influenza viruses, and provides advice to countries on their risk to human health and available treatment or control measures.
- **Status of Bird Flu in India:**

- Fresh cases of bird flu were reported in different states of India between **December 2020-January 2021** causing alarm across the country.
- Previously in **2019, India was declared free from Avian Influenza (H5N1)**, which had also been notified to the **World Organization for Animal Health (OIE)**.
 - The OIE is an intergovernmental organisation responsible for improving animal health worldwide. It is headquartered in Paris, France.

Types of Influenza Virus

- There are four types of influenza viruses: **influenza A, B, C, and D**
 - **Influenza A and B** are the two types of influenza that cause epidemic seasonal infections nearly every year.
 - **Influenza C mainly occurs in humans**, but has been known to also occur in dogs and pigs.
 - **Influenza D is found mainly in cattle**. It's not known to infect or cause illness in humans yet.

Avian influenza Type A viruses

- Type A viruses are classified based on two proteins on their surfaces - **Hemagglutinin (HA) and Neuraminidase (NA)**. There are about **18 HA subtypes and 11 NA subtypes**.
- Several combinations of these two proteins are possible e.g., **H5N1, H7N2, H9N6, H17N10, H18N11 etc.**
- All known subtypes of influenza A viruses **can infect birds**, except subtypes **H17N10 and H18N11**, which have only been found in **bats**.

Way Forward

- There is a need to enhance **monitoring of wild bird and animal disease** in our environment to act as **an early warning system** of change/arrival of potential diseases.
- There is a need for **a well-designed study to screen poultry and domestic waterfowl** for low pathogenic viruses.
- A study found that H5N1 outbreak occurrence was higher with greater proximity specifically to lakes, rivers, and coastal wetlands, by blocking the **mixed-use of surface water** by domestic poultry and wild waterfowl, cycling of Avian Influenza can be interrupted.
- The emphasis should be on monitoring multiple waterbird sites of local, national, and international importance.

5. Amendment in IBBI Regulations 2016

Why in News

Recently, the **Insolvency and Bankruptcy Board of India (IBBI)** has amended the **Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Persons) Regulations, 2016**.

- The amendments are aimed at **enhancing the discipline, transparency, and accountability** in corporate insolvency proceedings.
- In March 2021 a sub-committee of the **Insolvency Law Committee (ILC)** recommended a **pre-pack framework** within the basic structure of the **Insolvency and Bankruptcy Code (IBC), 2016**.

Key Points

- **Revealing Former Names & Address:**
 - The amendment **requires an Insolvency Professional (IP) conducting Corporate Insolvency Resolution Process (CIRP) to disclose all former names and registered office address(es)** so changed in the two years preceding the commencement of insolvency along with the current name and registered office address of the Corporate Debtor (CD), in all its communications and records.
 - **CIRP includes necessary steps to revive the company** such as raising fresh funds for operation, looking for a new buyer to sell the company as a going concern, etc.
 - **CD is any corporate organization** which owes a debt to any person.
 - A CD **may have changed its name or registered office** address prior to commencement of insolvency. Therefore the **stakeholders may find it difficult to relate to the new** name or registered office address and consequently fail to participate in the **CIRP**.
- **Appointment of Professionals:**
 - The amendment provides that the **Interim Resolution Professional (IRP)** or Resolution Professional (RP) **may appoint a professional, other than registered valuers**, if he is of the opinion that the services of such professional are required and such services are not available with the CD.
 - Such appointments shall be made on an **arm's length basis** following an objective and **transparent process**.
- **Avoidance of Transactions:**

- The RP is duty bound to find out if a CD has been subject to **avoidance transactions**, namely, preferential transactions, undervalued transactions, extortionate credit transactions, fraudulent trading and wrongful trading, **and file applications with the Adjudicating Authority seeking appropriate relief.**
- **Significance:**
 - It would **allow stakeholders to claw back lost value** and would **disincentive stakeholders** from entering into such transactions.

Note

- **Insolvency:** It is a situation where **individuals or companies are unable to repay their outstanding debt.**
- **Bankruptcy:** It is a situation whereby a **court of competent jurisdiction has declared a person or other entity insolvent**, having passed appropriate orders to resolve it and protect the rights of the creditors. It is a **legal declaration** of one's inability to pay off debts.

Insolvency and Bankruptcy Code

- **Enactment:**
 - The IBC was **enacted in 2016.**
- **Objective:**
 - To **streamline and speed up the resolution process** of failed businesses.
 - To **consolidate provisions of the existing legislative framework** to form a common forum for debtors and creditors of all classes to resolve insolvency.
 - To **stipulate that the resolution process** of a stressed company will **have to be completed in a maximum of 270 days.**
- **Institutions to Facilitate Resolution of Insolvency:**
 - **Insolvency Professionals:**
 - These professionals **administer the resolution process, manage the assets of the debtor, and provide information for creditors** to assist them in decision making.
 - **Insolvency Professional Agencies:**
 - The agencies **conduct examinations to certify the insolvency professionals and enforce a code of conduct** for their performance.
 - **Information Utilities:**
 - Creditors will report financial information of the debt owed to them by the debtor. Such information will include records of debt, liabilities and defaults.

- **Adjudicating Authorities:**
 - The proceedings of the resolution process are adjudicated by the **National Company Law Tribunal (NCLT)**, for companies; and the **Debt Recovery Tribunal (DRT)**, for individuals.
 - The **duties of the authorities** will include approval to initiate the resolution process, appoint the insolvency professional, and approve the final decision of creditors.
- **Insolvency and Bankruptcy Board:**
 - It is a **key pillar of the ecosystem** responsible for implementation of the Code.
 - It **regulates insolvency professionals**, insolvency professional **agencies** and **information utilities** set up under the Code.
 - The Board consists of representatives of the **Reserve Bank of India**, and the Ministries of Finance, Corporate Affairs and Law.
- **Insolvency Resolution Process**
 - It can be **initiated by any of the stakeholders** of the firm (debtors/creditors/employees). If the adjudicating authority accepts, an **IP is appointed**.
 - The power of the management and the board of the firm is transferred to the **Committee of Creditors (CoC)**. They act through the IP.
 - The **IP has to decide whether to revive the company** (insolvency resolution) or **liquidate it** (liquidation).
 - If they decide to revive, **they have to find someone willing to buy the firm**.
 - The creditors also have to accept a **significant reduction in debt**. The reduction is known as a haircut.
 - They **invite open bids** from the interested parties to buy the firm.
 - They **choose the party with the best resolution plan**, that is acceptable to the majority of the creditors (**75% in CoC**), to take over the management of the firm.

Prelims Practice Questions

1. Near-Earth Asteroid Scout mission is announced by which of the following space agencies?

- a. National Aeronautics and Space Administration (NASA)
- b. European Space Agency (ESA)
- c. Indian Space Research Organisation (ISRO)
- d. Japan Aerospace Exploration Agency (JAXA)

Answer : a

Near-Earth Asteroid Scout

- Near-Earth Asteroid Scout, or NEA Scout, is a small spacecraft, about the size of a big shoebox.
- Its main mission is to fly by and collect data from a near-Earth asteroid.
- It will be America's first interplanetary mission using a special solar sail propulsion.
- This type of propulsion is especially useful for small, lightweight spacecraft that cannot carry large amounts of conventional rocket propellant.

2. Consider the following statements regarding 103rd Constitutional Amendment Act:

1. It amended Article 15 and Article 16 of the Indian Constitution.
2. It enabled both the Centre and the States to provide reservation to the economically weaker section (EWS) of the society.

Which of the statements given above is/are correct?

- A 1 only
- B 2 only
- C Both 1 and 2
- D Neither 1 nor 2

Answer : C

Explanation

- Persons who are not covered under the existing scheme of reservations for SCs, STs and Socially and Educationally Backward Classes and whose gross annual family income is below Rs 8 lakh are to be identified as EWS for the benefit of reservation.
 - The income includes income from all sources i.e. salary, agriculture, business, profession etc. for the financial year prior to the year of application.
- The 103rd **Constitutional Amendment Act** introduced an economic reservation (10% quota) in jobs and admissions in education institutes for Economically Weaker Sections (EWS) by **amending Articles 15 and 16. Hence, statement 1 is correct.**
 - It inserted Article 15 (6) and Article 16 (6).
- It was enacted to promote the welfare of the poor not covered by the 50% reservation policy for SCs, STs and Socially and Educationally Backward Classes (SEBC).
 - It **enables both Centre and the states to provide reservation** to the EWS of society. **Hence, statement 2 is correct.**

3. Start-up India Showcase Platform is launched by which of the following ministries?

- a. Ministry of Skill Development and Entrepreneurship
- b. Ministry of Commerce and Industries
- c. Ministry of Corporate Affairs
- d. Ministry of Micro, Small and Medium Enterprises

Answer : b

Start-up India Showcase Platform

- It is an online discovery platform for start-ups of the country.
- It exhibits the finest start-ups of the country that have been handpicked through various DPIIT and Start-up India programs.
- It hosts most promising start-ups of the country chosen through various DPIIT and Start-up India programs exhibited in a form of virtual profiles.
- All DPIIT-recognized start-ups under Start-up India are eligible to apply for the Showcase.

4. Generation Equality Forum is a civil society convened by which of the following organizations?

- a. World Health Organization (WHO)
- b. UN-Women
- c. UN-Children's Emergency Fund (UNICEF)
- d. UN-Human Settlement Programme (UN-Habitat)

Answer : b

Generation Equality Forum

- The Generation Equality Forum is a civil society-centered, global gathering for gender equality, convened by UN Women.
- The Generation Equality Forum took place in Mexico City in March and in Paris from 30 June – 2 July 2021.
- The Forum launched a 5-year action journey to achieve irreversible progress towards gender equality, founded on a series of concrete, ambitious and transformative actions, including \$40 Billion in financial commitments.

5. Which of the following organization has published the Inequality report 2021?

- a. Food and Agriculture organization
- b. Amnesty International
- c. World Economic Forum
- d. Oxfam International

Answer : d

Inequality Report 2021

- Oxfam India's Inequality Report 202 reveals growing socio-economic inequalities in India are disproportionately affecting health outcomes of marginalised groups due to the absence of Universal Health Coverage (UHC).
- It provides a comprehensive analysis of the health outcomes across different socioeconomic groups to gauge the level of health inequality that persists in the country.
- The report shows the general category performs better than SCs and STs; Hindus perform better than Muslims.

6. Consider the following statements:

1. Solar PhotoVoltaic uses concentrated solar radiation as a high temperature energy source to produce electricity.
2. Solar Thermal Power systems convert solar radiation directly into electricity.

Which of the above statements is/are correct?

- A 1 only
- B 2 only
- C Both 1 and 2
- D Neither 1 and 2

Answer : D

Explanation

- **Solar PhotoVoltaic (SPV):** SPV cells convert solar radiation (sunlight) directly into electricity.
 - A SPV is a semi-conducting device made of silicon and/or other materials, which, when exposed to sunlight, generates electricity. **Hence, statement 1 is not correct.**
- **Solar Thermal:** Solar Thermal Power systems, also known as Concentrating Solar Power systems, use concentrated solar radiation as a high temperature energy source to produce electricity. **Hence, statement 2 is not correct.**

Mains Practice Questions

1Q. The private sector in healthcare can play a pivotal role in achieving the UN Sustainable Development Goals. Examine. (250 words)

Approach

- Briefly introduce SDGs related to health.
- Describe the need For Private sector in healthcare to bring out the importance of its participation.
- Describe the challenges involved in the involvement of the private sector in healthcare.
- Give a conclusion.

2Q. Do you see a shift in India's international ethics in light of its non-alignment policy? Give reasons in support of your answer. (150 words)

Approach

- Briefly explain the idea of Non-Alignment.
- Mention the foundational principles guiding India's international ethics.
- Give reasons showing shift in India's international ethics with examples.