Permanent Normal Trade Relations

For Prelims: Permanent Normal Trade Relations, Group of Seven (G7), Most Favored Nation (MFN), General Agreement on Tariffs and Trade (GATT), 1994, World Trade Organization (WTO).

For Mains: Russia-Ukraine War, International Treaties & Agreements, Effect of Policies & Politics of Countries on India's Interests.

Why in News?

US and other members of the **Group of Seven (G7)** will **revoke Russia's "Permanent Normal Trade Relations (Pntr)"** status to punish **Russia for war over Ukraine.**

- The move would pave the way for the **US to impose tariffs** on a wide range of Russian goods, heightening pressure on an economy on the **brink of deep** recession**.**
  - A recession is a period of **declining economic performance across an entire economy** that lasts for several months.
- The G7 is the group of developed western countries **(UK, Canada, France, Germany, Italy, Japan and the US)** established in 1975.

PYQ

A present group of nations known as G-8 started first as G-7. Which one among the following was not one of them? (2009)

(a) Canada
(b) Italy
(c) Japan
(d) Russia

Ans (d)

What is PNTR?

- The status of **Permanent Normal Trade Relations (PNTR)** is a **legal designation in the United States for free trade with a foreign nation.**
- In the United States, the name was changed from **Most Favored Nation (MFN)** to **PNTR in 1998.**

What is MFN Status?

- **World Trade Organization (WTO)** members **commit to treating other members equally** so they can all benefit from each other's lowest tariffs, highest import quotas and fewest trade barriers for goods and services.

- This principle of non-discrimination is known as **Most Favoured Nation (MFN) treatment.**
- This is **one of the measures which ensures trade without discrimination**. Another one is 'National Treatment '.
  - Article 1 of the **General Agreement on Tariffs and Trade (GATT), 1994**, requires every WTO member country to accord MFN status to all other member countries.
  - There are **some exceptions**, such as when members strike bilateral trade agreements or when members offer **developing countries special access to their markets.**
  - For countries outside the WTO, such as **Iran, North Korea, Syria or Belarus,** WTO members can **impose whatever trade measures they wish without flouting global trading** rules.
  - In international trade, MFN status (or treatment) is **awarded by one nation to another.**
    - For example, India accorded MFN status to all WTO member countries, including Pakistan, from the date of entry into force of the so called Marrakesh Agreement, establishing the WTO.
    - A nation with MFN status will not be discriminated against and **will not be treated worse than any other nation with MFN status.**
      - Grant someone a special favour (such as a lower customs duty rate for one of their products) and you have to do the same for all other WTO members.
  - There is **no formal procedure for suspending MFN treatment** and it is not clear whether members are obliged to inform the WTO if they do so.
    - **India suspended Pakistan's MFN status in 2019** after a suicide attack by a Pakistan-based Islamist group killed 40 police. Pakistan never applied MFN status to India.

What is National treatment?

- It means **treating foreigners and locals equally.**
- Imported and locally-produced goods should be treated equally — **at least after the foreign goods have entered the market.**
- The same should **apply to foreign and domestic services**, and to foreign and local trademarks, copyrights and patents.
- This principle of **"national treatment"** is also found in all the three main WTO agreements **(Article 3 of GATT, Article 17 of GATS and Article 3 of** TRIPS**).**
- National treatment only applies once a product, service or item of intellectual property has entered the market.
  - Therefore, charging customs duty on an import is not a violation of national treatment even if locally-produced products are not charged an equivalent tax.

PYQ

In the context of which of the following do you sometimes find the terms 'amber box, blue box and green box' in the news? (2016)

(a) WTO affairs
(b) SAARC affairs
(c) UNFCCC affairs
(d) India-EU negotiations on FTA

Ans: (a)

What does losing MFN status mean?

- Revoking Russia's MFN status sends a strong signal that the United States and its Western

allies **do not consider Russia a economic partner in any way,** but it does not in itself change conditions for trade.

- It does formally allow the Western allies to **increase import tariffs or impose quotas on Russian goods**, or even ban them, and to restrict services out of the country.
  - They **could also overlook Russian** intellectual property rights.
- Ahead of MFN status removal, the United States had already announced **a ban on imports of Russian oil and gas.**
- Further, the **European Union** has already **banned about 70% of all imports**, such as tobacco, potash and products made of wood or steel, from non-WTO member Belarus (Russia's ally in war with Ukraine).

PYQ

India enacted the Geographical Indications of Goods (Registration and Protection) Act, 1999 in order to comply with the obligations to (2018)

(a) ILO
(b) IMF
(c) UNCTAD
(d) WTO

Ans: (d)

Source: TH

Russia withdrawing Support from International Space Station

For Prelims: International Space Station (ISS), SpaceX's dragon module, Boeing's Starliner.

For Mains: Russia-Ukraine War, Effect of Policies & Politics of Countries on India's Interests.

Why in News?

Recently, after **Russia invaded Ukraine,** the **US imposed sanctions on Russia** including a ban on transfer of **technology and on Russian banks.**

- Following this, the **Russian space agency Roscosmos** held that the State Corporation will not cooperate with Germany on joint experiments in the Russian segment of the **International Space Station (ISS).**

What is Russia's role in maintaining the ISS?

- The ISS is built with the cooperation of scientists from **five international space agencies — NASA of the US, Roscosmos of Russia, JAXA of Japan, Canadian Space Agency and the European Space Agency.**
- **Each agency has a role to play and a share in the upkeep of the ISS.** Both in terms of expense and effort, it is not a feat that a single country can support.
- Russia's part in the collaboration is the **module responsible for making course corrections to**

the orbit of the ISS.
- Further, the Russian segment ensures that the **space station's orbit is corrected to keep it away from space debris, roughly 11 times a year.**
- It also ferry astronauts to the ISS from the Earth and back.

PYQ

"The experiment will employ a trio of spacecraft flying in formation in the shape of an equilateral triangle that has sides one million kilometres long, with lasers shining between the craft."

The experiment in question refers to (2020)

(a) Voyager-2
(b) New Horizons
(c) LISA Pathfinder
(d) Evolved LISA

Ans: (d)

What could be the impact of Russia's Withdrawal?

- Due to its enormous weight and the ensuing drag, the ISS **tends to sink from its orbit at a height of about 250 miles above the Earth.**
  - It has to be **pushed up to its original line of motion every now and then.**
- Russia's withdrawing from its segment of the ISS cooperation spacecraft **could affect correcting the orbit of the ISS.**
  - This meant the ISS could fall into the sea or on the land.
- ISS would likely **crash down on some country, but most probably not Russia itself.** The orbit of the ISS does not fly over Russian territory mostly.
- However, dropping of ISS poses a **greater risk to regions that are closer to the equator.** But this is only a probability, as it can move or disintegrate.
  - In case of this eventuality, people in the ISS will be brought back, modules can be detached thereby making it much smaller which will ensure that it disintegrates before touching the earth.

What is the International Space Station (ISS)?

- The ISS is the most **complex international scientific and engineering project** in history and the largest structure humans have ever put into space.
- This **high-flying satellite** is a laboratory for new technologies and an **observation platform for astronomical, environmental and geological research.**
- As a permanently **occupied outpost in outer space**, it serves as a stepping stone for further space exploration.
- The space station flies at an **average altitude of 400 kilometers above Earth.** It circles the globe every 90 min. at a speed of about 28,000 kph.
- In one day, the **station travels about the distance it would take to go from Earth to the moon and back.**
- The space station can rival the **brilliant planet Venus in brightness** and appears as a **bright moving light across the night sky.**
- It can be seen from Earth without the use of a telescope by night sky observers who know when and where to look.
- Five different space agencies representing 15 countries built the **USD 100-billion International Space Station and continue to operate it today.**
- The International Space Station was taken into space piece-by-piece and gradually built in orbit.
  - It consists of modules and connecting nodes that contain living **quarters and laboratories, as well as exterior trusses that provide structural support, and**

solar panels that provide power.
- The first module, **Russia's Zarya module**, launched in 1998.
  - The first space station crews were three-person teams, though after the **tragic Columbia shuttle disaster** the crew size temporarily dropped to two-person teams.
  - The space station reached its full six-person crew size in 2009 as new modules, laboratories and facilities were brought online.
  - Current plans call for the space station to be operated through at least 2020. NASA has **requested an extension until 2024.**

Are there any substitutes for Russia?

- There are right now two possibilities. [SpaceX's dragon module](#) **and** [Boeing's Starliner](#) can dock with the ISS.
- Until SpaceX's dragon spacecraft came into the picture the Russian spacecrafts were the only way of reaching the ISS and returning.

PYQ

What is the purpose of 'evolved Laser Interferometer Space Antenna (eLISA)' project? (2017)

(a) To detect neutrinos
(b) To detect gravitational waves
(c) To detect the effectiveness of missile defence system
(d) To study the effect of solar flares on our communication systems

Ans: (b)

[Source: TH](#)

New Guidelines on Abortion Care by WHO

For Prelims: Abortion, World Health Organization, Telemedicine.

For Mains: Issues Related to Women, Health, Human Resource, Important International Institutions, Guidlines of WHO on Abortion, Abortion related policies in India.

Why in News?

Recently, the **[World Health Organization (WHO)](#)** presented new guidelines on abortion care. These, it claimed, would **prevent more than 25 million unsafe abortions annually.**
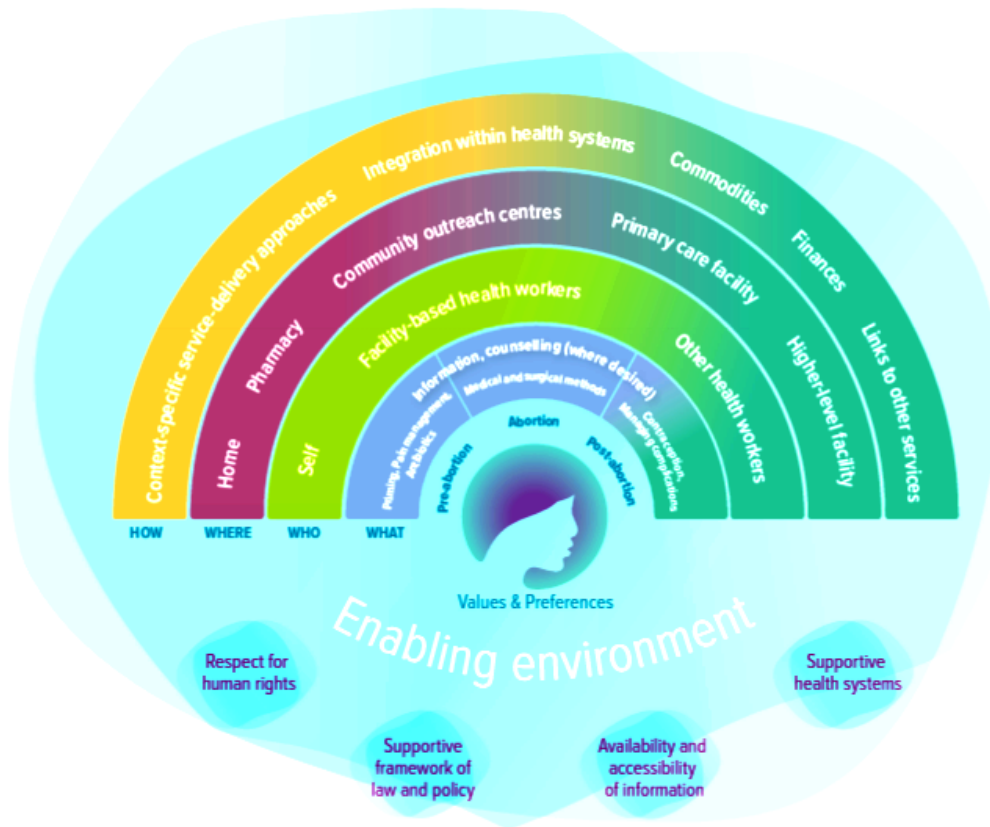
- The new guidelines include recommendations on **many simple interventions at the primary care level** that improve the quality of abortion care provided to women and girls.
- The new guidelines will **support interested countries to implement and strengthen national policies and programmes related to contraception, family planning and abortion** services, helping them to provide the highest standard of care for women and girls.

What is the Global Status of Abortions?

- Globally, between **13,865 and 38,940 lives are lost yearly due to the failure to provide safe abortion.**
    - Developing countries bear the burden of 97% of unsafe abortions.
- The **proportion of abortions that are unsafe is also significantly higher in countries with highly restrictive abortion laws** than in those with less restrictive laws.
- **Over half (53.8%) of all unsafe abortions occur in Asia**, the majority of those in south and central Asia. A quarter **(24.8%) occur in Africa**, mainly in eastern and western Africa and a fifth **(19.5%) in Latin America and the Caribbean.**
- Abortion rates were **highest in low-income countries with the most legal restrictions to abortion care.**
- There was also an **increase of 12% in the number of abortions in countries with legal restrictions on the procedure,** while it declined slightly in countries where abortion is broadly legal.

What are the New Guidelines by the WHO?

- **Task Sharing:**
    - These include **task sharing by a wider range of health workers; ensuring access to medical abortion pills,** which mean more women can obtain safe abortion services and making sure that accurate information on care is available to all those who need it.
- **Telemedicine:**
    - It also includes the recommendations for the **use of** telemedicine**,** which helped support access to abortion and family planning services during the **Covid-19 pandemic.**
- **Removing Political Barriers:**
    - It also recommend **removing medically unnecessary political barriers to safe abortion,** such as criminalisation, mandatory waiting periods before receiving a requested abortion, third-party authorisation for abortion, restrictions on which health workers can provide abortion services.
    - Such **barriers can lead to critical delays** in accessing treatment and put women and girls at greater risk of unsafe abortion, stigma and health complications, while increasing barriers to education and their ability to work.
        - **Restricting access to abortions does not reduce the number of abortions that take place**. In fact, restrictions are more likely to push women and girls into unsafe practices.
- **Providing Enabling Environment:**
    - A person's environment plays a crucial role in shaping their access to care and influencing their health outcomes.
    - An **enabling environment is the foundation of quality comprehensive abortion care.**
    - The three **cornerstones** of an enabling environment for abortion care are:
        - Respect for human rights including a supportive framework of law and policy.
        - Availability and accessibility of information.
        - A supportive, universally accessible, affordable and well functioning health system.

//

What are the Steps Taken by the Indian Government for Safe Abortions?

- The Government provides safe and **Comprehensive Abortion Care (CAC)** services to women in health facilities under **RMNCH+A** (Reproductive, Maternal, Newborn, Child and Adolescent Health) program of **National Health Mission.**
- **Capacity Building of Medical officers** in Safe Abortion Techniques and of Auxiliary Nurse Midwife workers, **Accredited Social Health Activist (ASHA)** and other functionaries to provide confidential counseling for safe abortion and promote post-abortion care.
- **Certification to private and** Non-governmental Organizations (NGOs) sector facilities to provide quality Comprehensive Abortion Care services.
- Supply of **Nischay Pregnancy detection kits** to sub-centers for early detection of pregnancy.
- **Medical Termination of Pregnancy (MTP) Amendment Act, 2021** expands the access to safe and legal abortion services on therapeutic, eugenic, humanitarian and social grounds to ensure universal access to comprehensive care.

Way Forward

- Access to legal and safe abortion is an integral dimension of sexual and reproductive equality, a public health issue, and **must be seen as a crucial element in the contemporary debates on democracy** that seeks to provide the just society that abhors all sort of discrimination.
- The silence around unsafe abortion leads to deaths of women and hides important problems that lie at the intersection of these concerns, such as the formidable barriers for adolescent girls to access reproductive health services, including abortion services.
- The **right to safe abortion is an important facet of women's right to bodily integrity, right to life and equality and needs to be protected.**

Source: DTE

Bahini Scheme

Why in News?

The Sikkim government is **set to announce a scheme (Bahini) to install vending machines to provide free sanitary pads.**

- This is the **first time that a state government** has taken a decision to cover all girls studying in Classes 9-12.

What is the Purpose of the Scheme?

- It aims at providing **"100% access to free and safe sanitary pads to secondary and senior secondary school going girls".**
- It is also aimed to **curb dropout of girls from schools** and raise awareness about menstrual hygiene.
- The scheme is based on an **experiment the state government initiated in 2018**, in collaboration with **Sulabh International**, where vending machines were installed in some schools.
  - Sulabh International is an **India-based social service organization** that works to **promote human rights, environmental sanitation, non-conventional sources** of energy, waste management and social reforms through education.

What is the State of Menstrual Health in India?

- **Data:**
  - According to the **National Family Health Survey (NFHS-4) 2015-16**, India has over 355 million menstruating women.
    - However, **only 36% of women were reported** as using sanitary napkins, locally or commercially produced.
  - The percentage of women using **menstrual products did improve significantly across the country,** especially in Daman and Diu and Dadra and Nagar Haveli, West Bengal and Bihar, as estimated in the **first phase of the recently released** NFHS-5.
    - Despite this, menstrual health **remains a low-priority issue in India** marred with taboos, shame, misinformation, and poor access to sanitation facilities and menstrual products.
- **Issues:**
  - **Societal restrictions:**
    - Societal restrictions during menstruation violate women's right to health, equality and privacy.
      - Several anecdotes reveal that **women and girls are kept in isolation**, not allowed to enter religious places or kitchens, play outside or even go to schools during menstruation.
  - **School Drop out:**
    - A survey conducted under the **Integrated Child Development Services (ICDS)** scheme by the Ministry of Women and Child Development (MoWCD) in 2018-19 reported that **more than one-fourth of total girls enrolled in class VI-VIII drop out** of school as soon as they hit puberty.
  - **Inconsistent Access to Education:**

- - The experience of menstruation for young girls is even more difficult due to inconsistent access to education on menstrual health and puberty.
  - **Reduced Participation in the Workforce:**
    - Many employers see **menstruating women as a problem** as they associate periods with **inefficiency in work and reduced participation in the workforce.**
      - There are anecdotal examples of corporate workplaces showing insensitivity towards menstruating women fearing loss of productivity.
- **Related Initiatives:**
  - **Central Government:**
    - In 2015, the central government introduced the **national guidelines on menstrual hygiene management.**
    - **Menstrual Hygiene Scheme (2011) and the Rashtriya Kishor Swasthya Karyakram (in 2014),** have been launched to promote menstrual hygiene amongst adolescent girls in the age group of 10 to 19.
    - Through the **Suvidha initiative,** the government distributed more than 5 crore brand sanitary pads at Re 1 from 6,000 Jan Aushadhi Kendras.
  - **State Government:**
    - Apart from central government schemes, state governments have also implemented programmes to distribute sanitary pads in schools in Rajasthan, Uttar Pradesh, Odisha, Maharashtra, Chhattisgarh, Andhra Pradesh, and Kerala.
    - The Bihar government provides Rs 300 under the **Kishori Swasthya Yojana** to adolescent girls to buy sanitary pads.

Menstrual Hygiene Scheme

- The major objectives of the Menstrual Hygiene Scheme is:
  - To increase awareness among adolescent girls on Menstrual Hygiene
  - To increase access to and use of high quality sanitary napkins to adolescent girls in rural areas.
  - To ensure safe disposal of Sanitary Napkins in an environmentally friendly manner.

Rashtriya Kishor Swasthya Karyakram

- The major objectives objective of RKSK is:
  - Improve Sexual and Reproductive Health
  - Enhance Mental Health
  - Prevent Injuries and violence
  - Prevent substance misuse

Way Forward

- The need of the hour is to **focus on a strategy that converges key departments** in the government — health, education, women and child development and rural development among others — and **improves accountability towards issues** related to menstrual health management.
- The way forward lies in a **community-based approach** in which local influencers and decision-makers are **sensitised to champion the issue and behavioural change campaigns** targeted at both men and women are deployed to dispel myths and misconceptions.
- There is also a **huge opportunity to create public-private collaborations** to drive such campaigns and increase access to affordable menstrual hygiene products for rural and semi-urban regions.
  - This could be done through the **installation of sanitary pad vending machines** at key public places, workplaces, schools, and colleges, as well as Anganwadi centres or childcare centres for rural areas.
- It is crucial to acknowledge that **menstrual health is not just a women's issue, but a matter**

of human rights.

Blockchain Gaming in India

For Prelims: Blockchain Technology, Blockchain Gaming , cryptocurrency, Non-Fungible Tokens (NFTs), CyrptoKitties, Difference between Games of skill and Games of chance.

For Mains: Application of block chain technology, Budget 2022-2023.

Why in News?

The vast scope and potential of blockchain technology has attracted the gaming industry over the past few years. In India too, gaming industries are exploring this option.

- **Blockchain** is a decentralised database that stores information. It relies on **technology that allows for the storage of identical copies** of this information on **multiple computers in a network.**

What is Blockchain Gaming?

- Blockchain games are online **video games that are developed integrating blockchain technology into them.**
    - It includes elements that use cryptography-based blockchain technologies like Cryptocurrency **or** Non-Fungible Tokens (NFTs).
- **These elements are used by** players to buy, sell, or trade with other players, with the game publisher taking a fee from each transaction as a form of monetization.
- E**xample of Blockchain Game:** In 2017, **Dapper Labs'** had developed the first ever blockchain game called **CyrptoKitties.**
    - In the game, people can virtually experience the joy of adopting and breeding a cat (CryptoKittie), without taking up the responsibility of bringing one home.
    - Each CryptoKittie is a Non-Fungible Token ("NFT").

What are elements of Blockchain Games?

- **NFTs:** NFTs represent **in-game virtual assets** that can be owned by players, such as maps, armor or land.
    - These NFTs act as **asset tags,** identifying ownership of the in-game assets, and are stored on the blockchain.
    - Being on the blockchain allows the player to have a **secure record of ownership of the in-game assets** and also gives the assets the ability to outlive the game itself.
    - Based on the manner in which the games are designed, it also allows for the **in-game assets to be transferred from one game to another.**
    - It **also creates transparency**, since ownership records can independently be verified by any third party as well.
    - In doing so, it **makes in-game assets marketable** and creates a decentralized market, where they can be bought and sold by people.
- **Cryptocurrency:**
    - Cryptocurrency, such as tokens based on the **Ethereum blockchain**, may be used for the

purchase of in-game assets.
- These in-game purchases usually enable gamers **to buy items like extra lives, coins and so on directly from the game.**

Consider the following pairs: (2018)

| Terms sometimes seen in news | Context/Topic |

1. Belle II experiment — Artificial Intelligence
2. Blockchain technology — Digital/Cryptocurrency
3. CRISPR – Cas9 — Particle Physics

Which of the pairs given above is/are correctly matched?

(a) 1 and 3 only
(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)

What is legality of Games in India?

- **Legal Jurisdiction**: The state legislators are, vide **Entry No. 34 of List II (State List) of the Seventh Schedule of the Constitution of India,** given **exclusive power to make** laws relating to betting and gambling.
- **Types Games in India**: Most Indian states regulate gaming on the basis of a distinction in law between **'games of skill' and 'games of chance'.**
- **Test of Type of Game:** As such, a **'dominant element' test** is to be utilized to determine whether chance or skill is the dominating element in determining the result of the game.
  - This 'dominant element' may be determined by examining whether factors such as **superior knowledge, training, experience**, expertise or attention of a player have a material impact on the outcome of the game.
- **Status of Type of Games Allowed:** Staking money or property on the outcome of a **'game of chance' is prohibited** and **subjects the guilty parties to criminal sanctions.**
  - However, placing any stakes on the outcome of a **'game of skill' is not illegal per se and may be permissible.**
  - It is important to note that the Supreme Court recognized that **no game is purely a 'game of skill'** and almost all games have an element of chance.
- **Common Gaming House:**
  - Another concept common to the gaming law in most states is the idea of a 'common gaming house'.
  - Owning, keeping, or having charge of a common gaming house or being present for the purpose of gaming in any such common gaming house is ordinarily prohibited in terms of these state gaming laws.
  - Common gaming house is defined as any house, walled enclosure, room or place in which instruments of gaming are kept or used for the profit or gain.
  - Pertinently, courts have clarified in the past that the mere charging of an extra fee to facilitate playing the game and / or to maintain the facilities may not necessarily be seen as making a profit or gain.

What is the difference between Games of skill and Games of chance?

- **Game of Skill:**
    - A "game of skill" is based mainly on the **mental or physical level of expertise of a player, rather than a chance.**
    - One of the most significant benefits of a game of skill is that it provides freedom to the players to explore their capabilities in the sport.
    - These games invigorate the players to get accustomed to a certain set of rules while looking for ways to improve and implement different strategies through consistent practice.
    - It is false that the game of skill does not have a chance component, in fact to a certain extent they do. However, it is the individual skills that determine the success rate.
    - Example: **Chess, Carrom, Rummy,** and Fantasy Sports are said to be games of Skill.
- **Game of Chance:**
    - A "game of chance" is determined mainly by a **random factor of any type.**
    - In games of chance, the usage of skill is present but a higher level of chance determines success.
    - Games like playing cards, roulette, rolling a dice, or even picking a numbered ball are reflected upon as chance-based games.
    - It is pertinent to note that players here do not have control over the outcome of the result. Example: **Blackjack, Roulette.**

Where does blockchain gaming lie within this framework?

- Since blockchain is merely the underlying technology, **there is no express regulation of it in India.**
- It is important to note that most of the **gaming laws were brought into effect prior to the internet era and,** therefore, only contemplate regulation of gaming activities taking place in physical premises.
- However, as the law currently stands, **each blockchain game must first pass muster as a 'game of skill', as against a 'game of chance',** to legally be made available in most Indian states.
- It is also relevant to note that in the past, the **Supreme Court has rejected the notion of video games being 'games of skill'.**
    - It held that the outcomes of these games could be manipulated by tampering with the machines used to play.
    - Therefore, the element of skill of players could not be a dominant factor of the game.
- Since developers and publishers of blockchain games are likely to **earn revenue / charge fee for offering such games**, it does raise questions over whether they may be seen as playing a **role analogous to that played by common gaming houses under Indian law.**
- Further, the legality of blockchain games relies on the legality of cryptocurrency.
    - **Budget 2022-23**, announced that the income from the transfer of any 'virtual digital assets' (which include cryptocurrency and non-fungible tokens) would be subject to income tax at the rate of 30%.
    - Policy pronouncements of this nature would need to be carefully considered by publishers of blockchain games while designing their pricing models.

What intellectual property protections may be available to blockchain games?

- **Patent:** In terms of **Section 3(k) of the** Patent Act, 1970**,** computer programs are per se not inventions and hence, cannot be patented.
    - However, judicial pronouncements in the past have clarified that if an invention has a **technical contribution** or a technical effect and is not merely a computer program per se, **then it would be patentable.**
    - Thus, a patent for a blockchain game may be sought if it meets the requirements of novelty, involving an inventive step, and industrial application.
- **Trademarks:** A trademark is used as an **identifying mark to determine the source of a particular good or service**, and is obtained to protect the goodwill and reputation of the brand.
    - Any distinguishing mark in a blockchain game or NFT that would allow consumers to

identify the source of that particular game or NFT may be trademarked.
- **Copyrights**: In India, artistic work, musical work, cinematographic films, dramatic works, sound recordings and computer software are capable of being protected under copyright law.
  - Although there is no specific provision in the **Copyright Act** that deals with video games, copyright protection of video games may be sought under the category of 'multimedia products'.

Way Forward

- The use of blockchain technology for online games is likely to be beneficial for game developers, publishers, and players.
  - However, key to their growth is regulation which ensures that it is permissible to offer such games in the Indian territory and also offers protection in the form of intellectual property rights.
- Other concerns, such as privacy and cyber security, along with how financial regulations would apply to blockchain games, would also need to be addressed.

PYQ

With reference to "Blockchain Technology", consider the following statements: (2020)

1. It is a public ledger that everyone can inspect, but which no single user controls.
2. The structure and design of blockchain is such that all the data in it are about cryptocurrency only.
3. Applications that depend on basic features of blockchain can be developed without anybody's permission.

Which of the statements given above is/are correct?

(a) 1 only
(b) 1 and 2 only
(c) 2 only
(d) 1 and 3 only

Ans: (d)

Source: IE

Draft National Medical Devices Policy 2022

For Prelims: NIMERs, CDSCO, PLI Scheme, Quality Council of India.

For Mains: Challenges and Issues with respect to the medical device industry of India.

Why in News?

- Recently, the **Department of Pharmaceuticals (DoP), Ministry of Chemicals and Fertilizers** has released an Approach Paper for the **Draft National Policy for the Medical Devices, 2022.**

What are the Salient Features of the Draft Policy?

- **Regulatory streamlining** in order to optimize regulatory processes and multiplicity of agencies for enhanced **ease of doing business,** along with **harmonization with global standards** to ensure standardization (ensuring **safety of devices**).
- **Building Competitiveness** through fiscal and financial support for stimulating the development of the local manufacturing ecosystem with private sector investments.
- **Infrastructure Development** to provide best-in-class physical foundation, including **medical devices parks** with common facilities such as testing centres, to improve cost competitiveness and enhance attraction of domestic manufacturers.
- **Facilitating R&D and Innovation** with a focus on enhanced collaboration in innovation and R&D projects, global partnerships, and joint ventures among key stakeholders to bridge the gap between academic curriculum and industry requirements.
- **Human Resource Development** to ensure relevant curriculum at higher education level, skilling of various stakeholders, creation of future-ready HR with required skill sets across the innovation value chain.
- **Awareness Creation and Brand Positioning** in creating awareness and positioning India as a hub for manufacturing of medical devices as part of the **"Make in India, Make for the World" initiative.**

What is the Objective of the Policy?

- This policy **addresses the core objectives of accessibility, affordability, safety and quality** and **focuses on self-sustainability and innovation.**
- This Policy **envisions that by 2047**, India

    - Will be having few **National Institutes of Medical Devices Education and Research (NIMERs)** on the lines of National Institute of Pharmaceutical Education & Research (NIPERs).
    - Will be home & originator to 25 high-end futuristic technologies in MedTech (Medical Technology).
    - Will have a MedTech Industry of USD100-300 Bn size with 10-12% of Global Market Share.

What is the State of the Medical Device Industry in India?

- **About:**

    - The medical devices sector in India is an **essential and integral constituent of the Indian healthcare sector,** particularly for the prevention, diagnosis, treatment and management of all medical conditions, diseases, illnesses, and disabilities.
    - It is a **multi-product sector**, with the following broad classifications: (a) Electronics Equipment, (b) Implants, (c) Consumables and Disposables, (d) In Vitro Diagnostics (IVDs) reagents, and (e) Surgical Instruments.
    - The Sector has remained largely **unregulated till 2017** when **Medical Device Rules, 2017** were framed by the **Central Drugs Standard Control Organisation (CDSCO).**

        - The rules were framed for **comprehensive regulation of MDs** in a phased manner, especially on the quality, safety, and efficacy aspects, under the **Drugs and Cosmetic Act, 1940.**
- **Scope of the Sector:**

    - The **Indian medical device market** has a **significant presence of multinational companies** with about 80% of the sales by value generated from imported medical devices.

        - The Indian medical devices sector's contribution has become even more prominent as India supported the global battle against **Covid-19 pandemic** through the production of medical devices & diagnostic kits, e.g., Ventilators, **RT-PCR kits**,

Infrared thermometers, Personal Protective Equipment (PPE) Kits **& N-95 masks.**

- The **Medical Devices industry in India** is valued at **USD 5.2 billion**, contributing about 4-5% to the USD 96.7 billion Indian healthcare Industry.
- Medical devices sector in India is very small in size as compared to the rest of the manufacturing industry, though India is one of the top twenty markets for medical devices in the world and is the **4th largest market in Asia after Japan, China, and South Korea.**
- **India currently imports 80-90%** of medical devices of the USD15 billion market.

  - The **US, Germany, China, Japan, and Singapore** constitute the **five largest exporters of high technology medical equipment to India.**

- **Initiatives taken for the Sector:**

  - The **Production Linked Incentive (PLI) scheme** for promoting domestic manufacturing of Medical Devices.
  - **Promotion of Medical Devices Parks intends** to encourage the domestic manufacturing of Medical Devices.
  - Medical devices has been recognised as a **sunrise sector** under the **'Make in India' campaign** in 2014.
  - In June 2021, the **Quality Council of India (QCI)** and the **Association of Indian Manufacturers of Medical Devices (AiMeD)** launched the **Indian Certification of Medical Devices (ICMED) 13485 Plus scheme** to undertake verification of the quality, safety and efficacy of medical devices.

What are the issues with the Medical Devices Sector of India?

- The key challenges in manufacturing medical devices in India include **lack of adequate infrastructure and logistics, concentrated supply chains and high cost of finance.**

  - While the government is trying to **simplify regulations and paperwork**, the landscape is still complex, marked by the presence of many high-level government bodies at the state and central levels.

- Also, **India's per capita expenditure on health (1.35%)** is among the lowest in the world.

Way Forward

- The sector requires **special coordination and communication among Industry and Stakeholders** because of its diversified nature, continuous innovation & variation.
- Medical device companies **should develop India as a manufacturing hub for domestic and international markets**, undertake India-based innovation in combination with indigenous manufacturing, collaborate across the Make in India and Innovate in India schemes, and produce Low to Medium technology products to cater to the underpenetrated domestic markets.
- The focus should be on **enhancing competency of the Indian medical devices sector** through skilling, upskilling and reskilling, in alignment with the medical and technological advancements.
- The target should also be to **expand access and opportunities through collaborative policy support** for both demand and supply side of the medical devices industry.

Source: PIB

37th Foundation of National Crime Records Bureau

For Prelims: NCRB and its functions, E-Prison, E-Forensic, E-Prosecution, E-Court, Artificial Intelligence,

Why in News?

Recently the **37th Foundation Day of National Crime Records Bureau (NCRB)** was celebrated (11th March 1986) .

What is the National Crime Records Bureau (NCRB)?

- **About:**
  - NCRB, headquartered in New Delhi, was set-up in 1986 under the **Ministry of Home Affairs** to function as a repository of information on crime and criminals so as to assist the investigators in linking crime to the perpetrators.
  - It was set up based **on the recommendations of the National Police Commission (1977-1981)** and the **MHA's Task Force (1985).**
- **Functions:**
  - The Bureau has been entrusted to maintain **National Database of Sexual Offenders (NDSO)** and share it with the **States/UTs on regular basis.**
  - NCRB has also been **designated as the Central Nodal Agency** to manage technical and operational functions of the **'Online Cyber-Crime Reporting Portal'** through which any citizen can lodge a complaint or upload a video clip as an evidence of crime related to child pornography, rape/gang rape.
  - The responsibility of implementation of the **Inter-operable Criminal Justice System (ICJS)** has also been given to the NCRB.
    - ICJS is a **national platform for enabling** integration of the main IT system used for delivery of Criminal Justice in the country.
    - It seeks to integrate the **five pillars of the system** viz Police (through Crime and **Criminal Tracking and Network Systems**), e-Forensics for Forensic Labs, **e-Courts** for Courts, e-Prosecution for Public Prosecutors and **e-Prisons** for Prisons.
    - The Government of India has set a target of the second phase of ICJS (Inter-operable Criminal Justice System) by 2026 with an expenditure of about Rs. 3,500 crore.
- **Major Publications:**
  - **Crimes in India**
  - **Accidental Deaths and Suicides**
  - **Prison Statistics**
  - **Reports on Missing Women and children in India**

What is the State of Crime in India?

- According to the **Crime in India Report 2020:**
  - **Communal riots** registered an **increase of 96% in 2020** over the previous year.
  - The number of cases registered for **crimes against women**, **children and senior citizens**, theft, burglary, robbery and dacoity, among others, **dropped by about 2 lakh.**
  - Cases under the **'environment-related offences' category increased by 78.1%** in the country in 2020.
  - The rate of **cyber crime** (incidents per lakh population) also increased from 3.3% in 2019 to 3.7% in 2020.

How can the Functioning of the NCRB be Strengthened?

- States should **use NCRB's data in formulating their annual police strategy**, it should have a **multi-dimensional and multi-purposed use in crime control,** only then will this institution

become result-oriented.

- 16,390 police stations in the country have been connected on CCTNS, but **Central agencies** such as the **Central Bureau of Investigation (CBI)**, the **Narcotics Control Bureau (NCB)** and the **National Investigation Agency (NIA)** are still not connected with it.
    - All Agencies must join the CCTNS as soon as possible and make data 100 percent complete.
- After the completion of phase 2 of ICJS, it should be made increasingly useful by using Artificial Intelligence, Block Chain, analytical tools and **fingerprint system.**

Source: PIB

Dandi March 1930

For Prelims: Dandi March, Mahatma Gandhi, Civil Disobedience Movement, Indian National Congress, Sabarmati, Dharasana Salt, Sarojini Naidu.

For Mains: Indian National Movement, Important Personalities, Civil Disobedience Movement and its significance.

Why in News?

Recently, the Prime Minister paid tributes to **Mahatma Gandhi** and all the eminent persons who **Marched to Dandi (1930)** in order to protest injustice and protect our nation's self-esteem.

- Earlier in 2021, a **commemorative 'Dandi March'** was launched, which was undertaken by 81 marchers from **Sabarmati Ashram in Ahmedabad to Dandi in Navsari, a journey of 386 km.**

PYQ

Which one of the following began with the Dandi March? (2009)

(a) Home Rule Movement
(b) Non-Cooperation Movement
(c) Civil Disobedience Movement
(d) Quit India Movement

Ans: (c)

What was the Dandi March?

- The Dandi March, **also known as the Salt March and the Dandi Satyagraha** was an act of **nonviolent civil disobedience led by Mohandas Karamchand Gandhi.**
- The march lasted from **12th March, 1930 to 6th April, 1930** as a direct action campaign of tax resistance and nonviolent protest against the British salt monopoly.
- On 12th March, Gandhiji set out from **Sabarmati** with 78 followers on a **241-mile march** to the coastal town of Dandi on the Arabian Sea. There, Gandhi and his supporters were to defy British

- policy by making salt from seawater.
- At Dandi, thousands more followed his lead, and in the coastal cities of Bombay and Karachi, Indian nationalists led crowds of citizens in making salt.
- **Civil disobedience broke out all across India,** soon involving millions of Indians, and British authorities arrested more than 60,000 people. Gandhiji himself was arrested on 5th May, but the satyagraha continued without him.
- On 21st May, the poet **Sarojini Naidu led 2,500 marchers on the Dharasana Salt Works**, some 150 miles north of Bombay. The incident, recorded by American journalist Webb Miller, prompted an international outcry against British policy in India.
- In **January 1931, Gandhiji was released from prison.** He later met with Lord Irwin, the viceroy of India, and agreed to call off the satyagraha in exchange for an equal negotiating role at a London conference on India's future.
  - In August 1931, **Gandhiji traveled to the conference as the sole representative of the nationalist Indian National Congress.** The meeting was a disappointment, but British leaders had acknowledged him as a force they could not suppress or ignore.

PYQ

With reference to the British colonial rule in India, consider the following statements: (2019)

1. Mahatma Gandhi was instrumental in the abolition of the system of 'indentured labour'.
2. In Lord Chelmsford's 'War Conference', Mahatma Gandhi did not support the resolution on recruiting Indians for World War.
3. Consequent upon the breaking of Salt Law by Indian people, the Indian National Congress was declared illegal by the colonial rulers.

Which of the statements given above are correct?

(a) 1 and 2 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)

What was its Background?

- The Lahore Congress of 1929 had authorized the **Congress Working Committee (CWC)** to launch a programme of civil disobedience including non-payment of taxes.
- On **26th January 1930**, "Independence Day" was observed, with the national flag being hoisted in different venues, and patriotic songs being sung.
- In February 1930, **CWC meeting at Sabarmati Ashram, invested Gandhiji with full powers to launch the** Civil Disobedience Movement at a time and place of his choice.
- Gandhiji's ultimatum to Lord Irwin, the Viceroy of India (1926-31), stating the minimum demands had been ignored and there was only one way out-civil disobedience.

What was the Effect of the Movement?

- Civil Disobedience in different forms continued in different provinces. **Special stress was laid on the boycott of foreign goods.**
- In eastern India, payment of chowkidari tax was refused. **This no-tax campaign became very popular in Bihar.**
- In Bengal, J.N. Sengupta defied Government laws by reading openly the books banned by the government.
- Defiance of forest laws assumed a **mass character in Maharashtra.**
- The movement had taken a fire hold in the provinces of **U.P., Orissa. Tamil Nadu, Andhra**

Pradesh and Assam.

The 1929 Session of Indian National Congress is of significance in the history of the Freedom Movement because the (2014)

(a) attainment of Self-Government was declared as the objective of the Congress
(b) attainment of Poorna Swaraj was adopted as the goal of the Congress
(c) Non-Cooperation Movement was launched
(d) decision to participate in the Round Table Conference in London was taken

Ans: (b)

What is its Significance?

- **Imports from Britain had fallen considerably**. For example, imports of cloth from Britain had fallen by half.
- The movement was more **widespread than the previous one**. Mass participation including women, peasants, workers, students, urban elements like merchants, shopkeepers provided the Congress a new all-India status.
- The support that the movement had **garnered from the poor and the illiterate both in the town and countryside was remarkable.**
- For Indian women, **the movement was the most liberating experience** to date and can truly be said to have marked their entry into the public space.
- Although the **Congress withdrew the Civil Disobedience in 1934**, the movement received global attention and marked a critically important stage in the progress of the anti-imperialist struggle.

With which one of the following movements is the slogan "Do or Die" associated? (2009)

(a) Swadeshi Movement
(b) Non-Cooperation Movement
(c) Civil Disobedience Movement
(d) Quit India Movement

Ans: (d)

Source: PIB

Syllipsimopodi Bideni

Why in News?

Recently, **a fossil unearthed in central Montana (US) of a species named *Syllipsimopodi bideni***

represents the **oldest-known relative of today's octopuses and boasts 10 arms,** with two twice as long as the other eight.

- It has been **named after the US president, Joe Biden.**

What are the Characteristics of the Species?

- Syllipsimopodi, about 12 cm long, had a **torpedo-shaped body and squid-like appearance** though it was not **closely related to squids.**
- It also is the **oldest-known creature with suckers**, which enable the arms to better grasp prey and other objects.
- It represents the **only member of the octopus lineage with 10 arms, meaning two were lost in later evolution.**

  - There are numerous similar examples in the history of life on Earth – such as the reduction in the number of digits seen in meat-eating dinosaurs or horses.
- Syllipsimopodi **prowled the warm waters of a tropical bay – Montana** at the time was situated close to the equator. It may have been **a mid-level predator,** eating smaller invertebrates.
- It **drifted across oceans nearly 328m years ago.**
- Syllipsimopodi **pushes back by 82 million years** the origins of a group **called vampyropods** that includes today's octopuses.

  - Vampyropods are **soft-bodied cephalopods** typically characterized by eight arms and an internalized chitinous shell or fin supports.

    - Cephalopods are a group of marine invertebrates that include octopuses, squids and cuttlefish.
  - **Vampyropoda**, the clade combining octopods, vampyromorphs, and their relatives, is one of **three main groups of coleoid** (internally-shelled) cephalopods, the other two being **Decabrachia** (squids, cuttlefishes, bobtail squids, and Spirula) and the extinct **Belemnoidea.**

PYQ

Consider the following statements: (2019)

1. Some species of turtles are herbivores.
2. Some species of fish are herbivores.

3. Some species of marine mammals are herbivores.
4. Some species of snakes are viviparous.

Which of the statements given above are correct?

(a) 1 and 3 only
(b) 2, 3 and 4 only
(c) 2 and 4 only
(d) 1, 2, 3 and 4

Ans: (d)

What are Characteristics of the Octopuses?

- Octopuses are the **most intelligent invertebrates**, and among the **most intelligent animals overall.**
- Octopuses are ocean creatures that are most famous for having eight arms and bulbous heads.
- They have three hearts and blue blood; they squirt ink to deter predators; and being boneless, they can squeeze into (or out of) tight spaces.

PYQ

The word 'Denisovan' is sometimes mentioned in media in reference to (2019)

(a) fossils of a kind of dinosaurs
(b) an early human species
(c) a cave system found in North-East India
(d) a geological period in the history of Indian subcontinent

Ans: (b)

Source: TH

PDF Refernece URL: https://www.drishtiias.com/current-affairs-news-analysis-editorials/news-analysis/14-03-2022/print