

CURRENT AFFAIRS: MAY 2022

REFORM IN SEVENTH SCHEDULE

Recently, many experts advocated revisiting the seventh schedule of the Indian constitution.

About Seventh Schedule

- Seventh Schedule under **Article 246** provides distribution of powers and responsibilities between the state and central governments.
 - o It specifies the role and responsibilities into three lists namely, Union List, State List and Concurrent List.
- The Union list details the subjects on which Parliament may make laws while the state list details those under the purview of state legislatures.
 - o The concurrent list has subjects in which both Parliament and state legislatures have jurisdiction.
 - o However, the Constitution provides federal supremacy to Parliament on concurrent list items in case of a conflict.
- Article 248 confers residuary powers on the Parliament.
 - o Residuary powers refer to the power of jurisdiction upon subjects that are not mentioned in the state or concurrent list.
 - As per **Sarkaria Commission**, concurrent list subjects are neither exclusively of national concern nor of local concern and hence occupy a constitutional 'grey' area.



★ List I or the Union List over which the Parliament has exclusive competence

> (E.g. defence, foreign affairs, railways, banking, etc)

★ Union List - 100 numbered items (originally 97)



★ List II or the State
List over which the
State Legislatures
have
exclusive competence

(E.g. Public order. police, public health and sanitation, betting and gambling etc)

★ State List-61 numbered items (originally 66)



* List III or the
Concurrent List over
which both the
Parliament and the
State Legislatures
have competence

(Education, population control and family planning, criminal law, protection of wildlife and animals, forests etc)

 Concurrent List -52 numbered items (originally 47)

Amending the Seventh schedule

- · Procedure for amending Seventh schedule
 - It can be amended as provided under Article 368 in Part XX of Constitution.
 - O It requires special majority of the Parliament (majority of the total membership of the House and by a majority of not less than two-thirds of the members of the House present and voting) and also the consent of half of the state legislatures by a simple majority.
- Other provisions that can be amended in such manner are
 - Election of President and its manner.
 - Extent of the executive power of the Union and the states.
 - Supreme Court and high courts.



• Doctrine of pith and substance

- o Pith means 'true nature' or 'essence of something' and Substance means 'the most important or essential part of something'.
- o It says that where the question arises of determining whether a particular law relates to a particular subject (mentioned in one List or another), the court looks to the substance of the matter.
- ✓ Thus, if the substance falls within Union List, then the incidental encroachment by the law on the State List does not make it invalid.
 - o Supreme Court in various cases like Calcutta Gas Company case (1962), India Cement Ltd Vs. State of Tamil Nadu (1990), Jilubhai Nanbhai Khachar case (1994) referred to the principle of Pith and Substance.
 - o It is essential to ascertain the true nature and character of a legislation for the purpose of determining the List under which it falls.

• Doctrine of Colourable Legislation

- o It is based on the maxim that what cannot be done directly cannot also be done indirectly.
- o It depicts the notion that legislation cannot be used under 'colour' or 'guise' of power which was conferred for one purpose and use it for some other purpose which is otherwise not valid.
- o It is built upon the founding stones of the Doctrine of Separation of Power.
- o It is a tool devised and applied by the Supreme Court to interpret Constitutional provisions to avoid any unjust or fraudulent use of Indian laws.
- ✓ In "Balaji v. State of Mysore" case, SC held that the order reserving 68% of the seats for students belonging to backward classes was violative of Article 14 in disguise of making a provision under Article 15(4).



DEATH PENALTY (CAPITAL PUNISHMENT)

Recently, the Supreme Court had Suo moto opened a review of the process by which courts award the death penalty.

About Death Penalty

- Death penalty, also known as capital punishment, can be defined as 'a practice sanctioned by law whereby a person is put to death by the state as a punishment for a crime after a proper legal trial'.
- Used as a mode of punishment since time immemorial, the moral acceptability of Death Penalty, i.e., state power to execute people and its circumstances is a matter of debate globally.

Death Penalty in India and its Framework

- India is among the few countries that retains capital punishment under different laws for serious offences- beyond the Law Commission recommendations.
- By end of 2021, 488 prisoners were on death row in India under serious offences with introduction/ proposal of more laws with Death Penalty such as:
 - o Punjab and Madhya Pradesh introduced death penalty for causing deaths by spurious liquor.
- In 1980, in **Bachan Singh v State of Punjab**, the Supreme Court Judges upheld the constitutional validity of death penalty due to built-in reasonable procedural safeguards and its procedure which is neither arbitrary nor gives excessive discretion to judges.
 - O However, it gave a framework for future sentencing judges when deciding between life imprisonment and the death sentence.
- Even after 40 years of the judgment, the framework remains subjective, and is often misrepresented.

LEGAL EVOLUTION OF DEATH PENALTY



Bachan Singh v. State of Punjab, 1980: Consider aggravating and mitigating factors of crime and the accused. Use Death Penalty only in 'rarest of rare cases'.



Machhi Singh v. State of Punjab, 1983: Identify the manner in which the crime was committed, motive, the anti-social nature of the crime, the magnitude of the crime, and the personality of the victim.



Shatrughan Chauhan v. Union of India, 2014: Undue, inordinate and unreasonable delay in death penalty execution amounts to torture and a ground for commutation of sentence







DEATH SENTENCES AND EXECUTIONS-2020

108: Countries have abolished Death Penalty

08: Countries have abolished Death Penalty for Ordinary Crimes

28: Countries have abolished Death Penalty in Practice (No Execution for

at least 10 years)

55: Countries retained Death Penalty

Data source: Amnesty International

International Convention

Being of **irreversible nature**, Death Penalty is opposed by UN and its agencies such as:

- Second Optional Protocol to the International Covenant on Civil and Political Rights (ICCPR),
- Convention on the Rights of the Child (CRC),
- Four UN General Assembly resolutions since 2007 for moratorium on the use of Death Penalty

Death Penalty in India

Article 21: No person shall be deprived of his life or personal liberty except according to procedure established by law. Also, under the Seventh Schedule- Criminal law and Criminal Procedure are under Concurrent List leading to various laws dealing with Death Penalty such as:

- INDIAN PENAL CODE, 1860;
- Narcotic Drugs and Psychotropic Substances (NDPS) Act. 1988
- ARMY ACT, 1950; AIR FORCE ACT, 1950 and NAVY ACT, 1956;
- COMMISSION OF SATI (Prevention) ACT, 1987
- SC/ST (Prevention of Atrocities) ACT, 1989

Article 72/161: Mercy (Pardon) Power of President/Governor





Mercy Plea (Clemency Petition)

For a person convicted by courts, mercy plea is the last constitutional resort.

- Under <u>Article 72</u> of the Constitution, the President is empowered to grant pardons, etc., and to suspend, remit or commute sentences in certain cases.
 - o It extends to cases of Court-martial, death sentence or matters to which executive powers of the Union extends. S/he is bound to act on the aid and advice of the Council of Ministers.
- Similarly, under <u>Article 161</u>, the Governor is empowered to grant pardons, etc., and to suspend, remit or commute sentences in certain cases.
 - o It extends to persons convicted of any offence against any law relating to the matter to which the executive power of the State extends. S/he is bound to act on the aid and advice of the State Government.





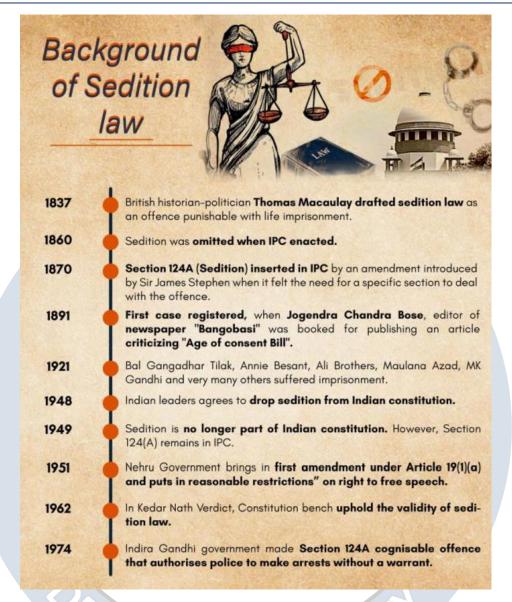
SEDITION

Recently, Supreme Court has ordered that the 152-year-old sedition law under Section 124A of IPC should be effectively kept in abeyance till the Union Government reconsiders the provision.

About Sedition

- Indian Penal Code (IPC) defines sedition (<u>Section 124A</u>) as an offence committed when any person by words or otherwise brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards the government established by law in India by
 - o words, either spoken or written
 - o signs
 - o visible representation, or otherwise
- Three explanations added to the provision prescribe that while "disaffection" shall include disloyalty and all feelings of enmity, comments without exciting or attempting to excite hatred, contempt or disaffection, will not constitute an offence.
- Sedition is a cognisable, non-bailable and non-compoundable offence under the law, entailing life imprisonment as maximum punishment, with or without a fine.
- A person charged under this law is barred from a government job. They have to live without their passport and must produce themselves in the court at all times as and when required.
- In 2018, Law Commission of India (LCI) published a consultation paper recommending that it is time to rethink or repeal the Section 124A of the IPC that deals with sedition.





Supreme Court (SC) stand on Sedition law

- **Kedar Nath Vs State of Bihar**, **1962**: SC held that "a citizen has a right to say or write whatever he likes about the government, or its measures, by way of criticism or comment, long as he does not incite people to violence"
- P. Alavi vs State of Kerala, 1982: SC held that sloganeering, criticising of Parliament or Judicial setup did not amount to sedition.



SUPREME COURT TO HAVE FULL STRENGTH OF 34 JUDGES

- Supreme Court of India will have all sanctioned seats filled i.e. 34 after more than two years.
 - o At present, SC has strength of 32 judges as against a sanctioned strength of 34 judges.
 - o As per Article 124(1) of the Constitution of India, Parliament by law prescribes the strength of the SC.

Appointment of Judges:

- o Chief Justice of India (CJI)and Judges of SC are appointed by President under <u>Article 124</u> (2) of the Constitution with the help of the collegium system.
- The collegium system has evolved with the three judges' case:
 - o **First Judges Case, 1981 or S P Gupta Case**: SC ruled that recommendation made by CJI to President can be refused for "cogent reasons", thereby giving greater say to executive.
 - o **Second Judges Case, 1993** (Supreme Court Advocates on Record Association (SCARA) vs Union of India): CJI only need to consult two senior-most judges over judicial appointments and transfers.
 - o **Third Judges Case, 1998**: CJIs should consult with four senior-most SC judges to form his opinion on judicial appointments and transfers.
- Collegium is a system where a committee of CJI, four senior judges of SC and three members of a HC (in case of appointments in HCs) take decisions related to appointments and transfer of judges in SC and HCs.

PRESIDENTIAL POLL 2022

• Value of the vote of Member of Parliament (MP) is likely to go down to 700 from 708 in presidential polls due to the absence of a legislative assembly in Jammu and Kashmir.



- o Value of vote of an MP in a presidential election is based on the number of elected members in legislative assemblies of states and union territories, including Delhi, Puducherry and Jammu and Kashmir.
- o Value of vote of has been fixed at 708 since the 1997 presidential election.
- For first Presidential election in 1952, it was 494.
 - o It increased marginally to 496 in 1957 presidential election, followed by 493 (1962), 576 (1967 and 1969).

INTER-STATE COUNCIL (ISC)

- Centre government has reconstituted ISC.
- President (under Article 263) can establish such a council and also authorized to define the nature of duties to be performed by such a council.
 - o In pursuance of the recommendations of Sarkaria Commission, ISC was constituted in 1990.
 - o ISC is a recommendatory body on issues relating to inter-state, Centre-state and Centre-union territories relations.
- Compositions
 - o Prime Minister will be the chairman and Chief Ministers (CM) of all States and six Union ministers as members.
- ✓ CM of UTs having legislative assemblies and Administrators of UTs not having legislative assemblies are also its members.
 - o Union Home Minister will be the chairman of standing committee.

JAMMU AND KASHMIR DELIMITATION EXERCISE CONCLUDES

• The Delimitation Commission (DC) was set up on March 6, 2020 to redraw the boundaries of assembly and parliamentary constituencies in Jammu and Kashmir.



- o The panel, formed by the Centre in March 2020, is headed by former Supreme Court judge Ranjana Prakash Desai.
- o The commission has proposed increasing the number of seats in the UT from 83 to 90. Besides, there are 24 seats in Pakistan-occupied Kashmir (PoK) that continue to remain vacant.
- Delimitation is the act of redrawing boundaries of Lok Sabha and Assembly seats to represent changes in population.
 - o Objective is to provide equal representation for equal population segments, and fair division of geographical areas, so that no political party has an advantage.
- Under **Article 82**, Parliament enacts a Delimitation Act after every Census which establishes a DC.
 - o In India, such DCs have been constituted in 1952, 1963, 1973 and 2002.
 - o In 2002, 84th Constitutional Amendment was used to freeze the process of delimitation for Lok Sabha and State assemblies till at least 2026.
- Under **Article 170**, States also get divided into territorial constituencies as per Delimitation Act after every Census.
 - o Article 170 deals with the Composition of the Legislative Assemblies.
- Delimitation Commission is appointed by President of India and works in collaboration with Election Commission of India.
- Its orders have the force of law and cannot be called in question before any court.

WORLD PRESS FREEDOM INDEX (WPFI), 2022

- Released by: Reporters Without Borders (RSF), non-profit organisation.
- Index highlights degree of freedom that journalists, news organisations and netizens have in each country, and government's efforts to respect such freedom.
 - o Rankings are based on score ranging from 0 to 100, with 100 being the best possible score (highest possible level of press freedom) and 0 the worst.



• India recently slipped 8 places to 150 in 2022 WPFI from last year's 142nd rank out of 180 countries.

GST COUNCIL

Recently, the Supreme Court, in Union of India vs Mohit Minerals Pvt Ltd, held that the recommendations of the GST Council are not binding on either the Centre or the States.

About Goods and Services Tax (GST)

- GST is a comprehensive, multi-stage, destination based single domestic tax on the consumption of goods and services introduced in the country w.e.f. 1st July 2017.
- It was introduced through the Constitution (One Hundred and First (101st) Amendment) Act, 2016 for one tax rate across the country.
- It subsumed several indirect taxes like excise duty, VAT, service tax, luxury tax etc. on goods and services with few items left out such aso Excise Duty on Alcohol, Property Tax & Stamp Duty, Petroleum crude, Diesel, Petrol, Aviation Turbine Fuel, Natural Gas, Electricity Duty, Basic Custom Duty, etc.
- Under <u>Article 246A (1)</u>, it gave the Parliament and Legislature of every State power to make laws with respect to goods and services tax imposed by the Union or by such State.
 - o For inter-State trade or commerce (Article 246A (2)), the Parliament has exclusive power.

GST Council

- It is a constitutional body established under Article 279A (1), introduced through the 101st Constitutional Amendment Act.
- Under Article 279A (4), the GST rates to the Union and States are recommended by the GST Council.
- Decision-making of GST Council: The GST rates are decided mutually by States and Center at the GST Council Meeting.



o The GST Council has a quorum requirement of onehalf of total members for meeting.

o Its decisions are based on a majority of not less than three-fourths of the weighted votes of the members present and voting.

o The weightage of central government vote is one-third of the total votes cast while that of all states taken together is remaining two-thirds of the total votes cast.

Composition of GST Council (Article 279A (2))

It brings together the Centre and the States for nationwide rollout of GST. Its members are as follows:

- Union Finance Minister

 Chairperson.
- The Union Minister of State, in-charge of Revenue or finance— Member.
- The Minister In-charge of finance or taxation or any other Minister nominated by each State Government – Members.
- The Vice-Chairperson is selected by members of the Council from one amongst themselves [Article 279A (3)].
- GST Council Office is in New Delhi with Revenue Secretary as the Ex-officio Secretary to the GST.

Supreme Court (SC) judgment on GST framework

According to latest judgment, both the Parliament and the State legislatures possess simultaneous power to legislate on GST as:

- Recommendations of the GST Council are only persuasive (not binding). Article 279A doesn't specifically mention that all GST Council decisions are binding on the parties.
- Article 246A empowers Parliament as well as State legislatures to make laws relating to GST, i.e., GST Council decisions are
 not enforceable, and the Centre or State can reject the GST Council decisions and set different rates for goods and services
 in their jurisdiction.

US BECOMES INDIA'S TOP TRADING PARTNER

• As per the latest data from Ministry of Commerce, US was India's top trading partner in 2021-22, surpassing China.



o UAE was the third largest trading partner of India followed by Saudi Arabia, Iraq and Singapore.

• Bilateral trade between US and India stood at \$119.42 billion as against \$80.51 billion in 2020-21. India had a trade surplus with US.

SPECIAL DRAWING RIGHTS (SDR)

- International Monetary Fund (IMF) has increased the weighting of USD and Chinese Yuan in its review of the currencies that make up the valuation of its SDR.
- SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves.
- Its value is based on a basket of five currencies: US dollar (highest weightage), Euro, Chinese Yuan, Japanese yen, and British Pound Sterling (lowest weightage).
- It is allocated to IMF member countries in proportion to their relative share in the IMF.

BIHAR GOVERNMENT ALLOWS EXPLORATION OF 'COUNTRY'S LARGEST' GOLD RESERVE

- As per a GSI survey, around 222.88 million tonnes of gold reserve are present in Jamui.
 - o As per National Mineral Inventory data, total reserves of gold ore (primary) have been estimated at 501.83 million tonnes.
- States with largest gold resources: Bihar (44%), Rajasthan (25%), Karnataka (21%), West Bengal (3%), Andhra Pradesh (3%), Jharkhand (2%).

LEGAL METROLOGY ACT 2009

- Ministry of Consumer Affairs, Food & Public Distribution emphasised on decriminalise the Legal Metrology Law, 2009.
 - o This will reduce the compliance burden for businesses and consumers.



• About the Legal Metrology Law, 2009

- o It is administered by Department of Consumer Affairs, Ministry of Consumer Affairs, Food and Public Distribution.
- o It enforces standards related to weights and measures.
- o It prescribes imprisonment, in addition to fine, for some offences.

EXERCISES IN NEWS

- **CORPAT exercise**: Recently, 4th edition of IndiaBangladesh Navy Bilateral CORPAT exercisecommenced in Northern Bay of Bengal.
- **EX Bongosagar**: 3rd edition of Indian Navy –Bangladesh Navy Bilateral Exercise 'Bongosagar' commenced at Port Mongla in Bangladesh.

PANGONG TSO

- The Ministry of External Affairs has confirmed the building of a second bridge on the Pangong Tso lake close to 2020 border standoff.
- Pangong Tso, meaning high grassland lake in Tibetan, is the world's highest saltwater lake situated at a height of 4,350 m situated in the Himalayan range on IndiaChina Border.
- It is an endorheic lake (having no outflow to an external body of water such as a river or ocean, and only losing water through evaporation or seepage into the ground) and out of its total length of around 160 km, one-third lies in India (Ladakh region) while the remaining twothirds lie in China.
- It is known to change colors, appearing blue, green and red at different times.





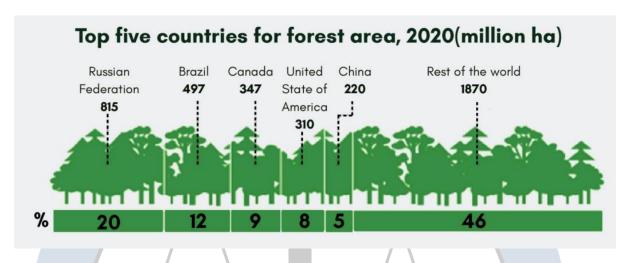
RAJASTHAN EMERGES AS SOLAR HUB WITH 10 GW CAPACITY

- Rajasthan became the first state to surpass 10 GW of cumulative large-scale solar installations.
 - o State has a total of 32.5 GW of installed power capacity.
 - o Renewables contributes 55%, followed by thermal energy (43%), and nuclear energy (2%).
- Rajasthan's favourable conditions
 - o Highest solar irradiation levels in the country
 - o Land availability and minimal power curtailment issues.



STATE OF THE WORLD'S FORESTS 2022

State of the World's Forests 2022 (SOFO 2022) was released by the United Nations Food and Agriculture Organization (FAO) during World Forestry Congress.



RAMGARH VISHDHARI TIGER RESERVE

- Rajasthan Government has notified the Ramgarh Vishdhari Wildlife Sanctuary as a tiger reserve.
 - O Tiger reserves are notified by the State Government as per provisions of Wildlife (Protection) Act, 1972 on advice of the National Tiger Conservation Authority (NTCA).
- It is the 4th Tiger Reserve of Rajasthan after Ranthambore, Sariska and Mukundra; and 52nd tiger reserve of India.
- Ramgarh Vishdhari: It serves as a tiger corridor between Ranthambore Tiger Reserve and Mukundra Hills Tiger Reserve.

PEOPLE'S BIODIVERSITY REGISTER (PBR)

• Kolkata became first major metropolitan city to prepare a detailed register of biodiversity i.e. PBR.



- o PBR contains comprehensive information on locally available Bio-resources including landscape and demography of a particular area or village.
- Biological Diversity Act (BDA), 2002 has made it mandatory for every local self-governing institution in rural and urban areas to constitute Biodiversity Management Committee (BMC) within their area of jurisdiction.
 - o Once constituted, BMC must prepare PBR in consultation with local people.

INDIA FINALISES DEALS FOR CHEETAHS FROM SOUTH AFRICA AND NAMIBIA

- By end of 2022, India is set to receive cheetahs from South Africa and Namibia at Kuno Palpur in Sheopur district of Madhya Pradesh.
 - o Project to translocate cheetahs is being implemented by Ministry of Environment with the help of Wildlife Institute of India (WII).
 - o Kuno Palpur wildlife sanctuary is suitable location due to favorable habitat, prey abundance etc.
- ✓ It is only wildlife sanctuary in world to host all four major cat species—lion, tiger, cheetah and leopard.
- Cheetah is a keystone species of dry forests, scrub forests, and savannahs.
 - o It was declared extinct in India in 1952 due to over-hunting and loss of habitat.
 - o It is also the world's fastest land mammal, and doesn't need much water.
- o Part of Appendix 1 of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

INDIA'S FIRST GREENFIELD GRAIN-BASED ETHANOL PLANT

• It is the first one developed since the Centre gave a go-ahead to Bihar's ethanol production and promotion policy-2021. Ethanol production will help reduce the cost of petrol and generate employment.



o The ethanol plant has been built using the latest technology and will not discharge any waste, making it a zero-liquid discharge plant that is completely environment friendly.

MARITAL RAPE

Recently, a two-judge Bench of the Delhi High Court delivered a split verdict in a batch of petitions challenging the exception provided to marital rape in the Section 375 of Indian Penal Code (IPC).

- Section 375 of IPC defines rape and lists several notions of consent that, if vitiated, would constitute the offence of rape by a man. However, the provision lays down two exceptions.
 - o Exception 2 of the Section 375 of IPC decriminalizes marital rape. It says sexual intercourse between a man and his wife (not under 15) is not rape.
 - o Medical procedures or interventions shall not constitute rape.
- The petitions challenging the exception 2 of Section 375 of the Indian Penal Code (IPC) were filed by NGO RIT Foundation, All India Democratic Women's Association (AIDWA) and a marital rape victim.
 - o In 2015, the first petitions to criminalize marital rape were filed in Delhi HC.

Marital rape and its status in India

- Marital rape or spousal rape is the act of sexual intercourse with one's spouse without their consent.
 - o The act can be carried out by force or physical violence.
 - o Although, it is now widely seen as a form of sexual violence, historically, sexual intercourse within marriage was regarded as a spouse's right.
- In India, there are no legal provisions that define "marital rape".



- Status of marital rape in India:
 - o According to National Family Health Survey (NFHS-5) 2019-2021, nearly 1 in 3 Indian women age 18-49 have suffered some form of spousal abuse.
 - o Percentage was higher in Karnataka, followed by Bihar, West Bengal, and Assam.

Centre and Judicial stand on criminalisation of marital rape

Centre

 In 2017, Union government has opposed the pleas submitting that marital rape cannot be made a criminal offence as it could become a phenomenon that "may destabilise the institution of marriage" and become a potential tool for harassing husbands.

Judiciar

- Independent Thought vs Union of India (2017): Supreme Court increased the age limit from 15 to 18 years. This exception ensures that there will not be rape charges filed against a husband who has sexual relations with his wife who is over 18 years of age without her consent.
- Nimeshbhai Bharatbhai Desai vs State of Gujarat, 2017: A husband cannot violate his wife's dignity by coercing her to engage in a sexual act without her full and free consent.
- In 2021, Kerala High Court observed that Marital rape is a good ground to claim divorce.

SUPREME COURT (SC) RECOGNIZES SEX WORK AS PROFESSION

- SC has issued directions under Article 142 (discretionary power to the SC to do complete justice in any cause or matter pending before it) to make conditions conducive for sex workers to live with dignity as per Article 21.
- Directions from SC
 - o No police interference or criminal action against adult and consenting sex workers,
 - o No separation of child from mother merely on the ground that she is in sex trade,
 - o Media should not publish their pictures or reveal their identity while reporting rescue operations.
 - o Centre and States must involve sex workers or their representatives to reform laws.
 - o UIDAI to provide Aadhaar cards to sex workers even if they are unable to furnish residence proof.
- ✓ It is issued by the National AIDS Control Organization (NACO) or the State Health Department.



• Legal Position of Sex Work in India: Under IPC, Voluntary sex work or prostitution is not considered illegal but pimping, owning and running a brothel is unlawful under the Immoral Traffic (Prevention) Act, 1956.

FIFTH GENERATION (5G)

Recently, the Prime Minister of India inaugurated the country's first 5G testbed.

- The 5G test-bed has been developed as a multiinstitute collaborative project by eight institutes led by IIT Madras.
- It is Country's first 5G testbed to enable startups and industry players to test and validate their products locally and reduce dependence on foreign facilities.
- India is also targeting the rollout of a 6G telecom network to provide ultra-high-speed internet connectivity, by the end of the decade.

About 5G technologies

- 5G (the fifth generation of cellular networks) is designed to improve network connections by addressing the legacy issues of speed, latency and utility, which the earlier/ current generation of mobile networks could not address.
- 5G operates at higher frequencies to offer a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices.
- It will also have an enhanced throughput to handle more simultaneous connections at a time than currentgeneration networks.



3G vs 4G vs 5G vs 6G					
		3G	4G	5G	6G
000	Deployment	2004-06	2006-10	2020	2028-2030
Mile	Bandwidth	2 mbps	200 mbps	>1 gbps	1 tbps
	Latency	100-150 millisecond	20-30 millisecond	<10 millisecond	<1 microsecond
Ö	Average Speed	144 kbps	25 mbps	200-400 mbps	About 50 times faster than 5G

VIRTUAL PRIVATE NETWORK (VPN)

Recently, Central government has asked virtual private network (VPN) companies to keep a record of their logs of customer information as directed by Indian Computer Emergency Response Team (CERT-In).

About CERT-In guidelines & it analysis

- New directives by CERT-In under Information Technology Act, 2000 states that:
 - o All cloud service providers and VPN providers will be required to maintain a series of extensive customer information for at least five years. Even after any cancellation or withdrawal of the registration.
 - o Data centre companies and crypto-currency exchanges, too, are asked to collect and store user data by CERT-In.
 - o VPN companies will have to regularly report the cases around the 20 cyber security vulnerabilities listed by CERT-In.
- CERT-In is a functional organisation of Ministry of Electronics and Information Technology with objective of securing Indian cyber space. It provides incident prevention, response services and security quality management services.



About Virtual Private Network (VPN)

- VPN is an encrypted connection over the Internet from a device to a network in real time.
- Traffic on the virtual network is sent securely by establishing an encrypted connection across the Internet known as a tunnel.
- The encrypted connection helps ensure that sensitive data is safely transmitted and traffic remains private as it travels.
- This prevents unauthorized people from eavesdropping on the traffic and allows the user to conduct work remotely.

BLACK HOLES

The black hole at the centre of Milky Way was photographed for the first time.

- The first photograph of Sagittarius A*, a supermassive black hole about 26,000 light years from Earth and situated at the centre of the Milky Way, was revealed by astronomers of the Event Horizon Telescope (EHT).
- o EHT is an international collaboration (of observatories) capturing images of black holes using a virtual Earth-sized telescope.

About Black Holes

- A black hole is a place in space where gravity pulls so much that even light cannot get out. The gravity is so strong because matter has been squeezed into a tiny space.
- This can happen when a star is dying (our sun will never turn into a black hole as it is not big enough to make a black hole).
- Because no light can get out, people can't see black holes. They are invisible.
- Black holes do not go around in space eating stars, moons, and planets. Earth will not fall into a black hole because no black hole is close enough to the solar system for Earth to do that.



MONKEYPOX

- Nigeria recorded first death due to Monkeypox and Word Health Organisation said that Monkeypox would not turn into pandemic.
- Monkeypox is zoonotic disease caused by the virus belonging to the Orthopoxvirus genus.
 - o The Orthopoxvirus genus also includes variola virus (which causes smallpox), vaccinia virus (used in the smallpox vaccine), and cowpox virus.
- It was first discovered in 1958, largely occurring close to tropical rainforests of Central and West Africa.
- Animal-to-human transmission can occur from direct contact with the blood, bodily fluids, or cutaneous or mucosal lesions of infected animals.

PARAM PORUL

- PARAM PORUL is a state-of the art Supercomputer at NIT Tiruchirappalli under Phase 2 of National Supercomputing Mission (NSM).
- Majority of the components used to build PARAM PORUL have been manufactured and assembled within the country.
- It is based on Direct Contact Liquid Cooling technology to obtain a high power usage effectiveness and thereby reducing the operational cost.
- Under NSM, till date 15 supercomputers have been installed across the nation with a computing capacity of 24 petaflops.

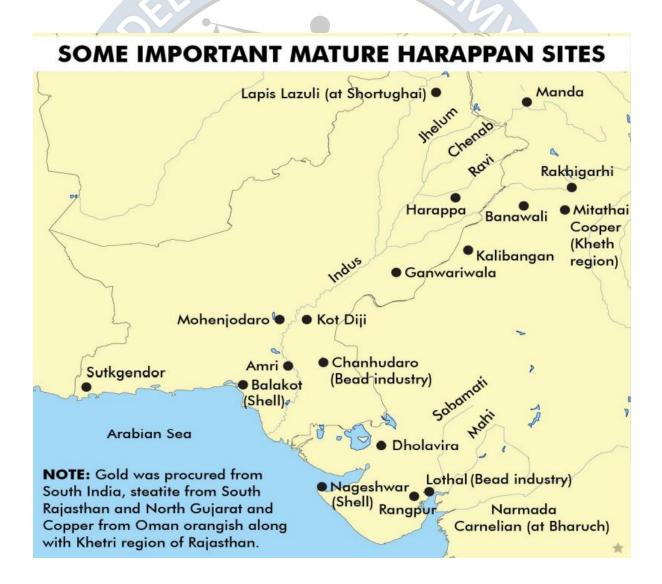
RAKHIGARHI

• The latest round of excavations at the Harappan site of Rakhigarhi in Haryana's Hisar has revealed the structure of some houses, lanes and a drainage system.



About Rakhigarhi

- The site of Rakhigarhi is one of the five known biggest townships of Harappan civilization on Indian sub-continent. Other four are Harappa, Mohenjodaro and Ganveriwala in Pakistan and Dholavira (Gujarat).
- It represents the mature Harappan phase as it had planned township having mud-brick as well as burnt-brick houses with proper drainage system.
- Animal sacrificial pit lined with mud brickand triangular and circular fire alters on the mud floor have also been excavated.





About Harappan/Indus Valley Civilisation (IVC)

- The IVC was the earliest civilisations in South Asia.
- It is also known as the Bronze Age civilization, a term that refers to communities using bronze as a material to make their major tools, but more importantly implies urban societies.
 - o Several early Bronze Age societies in the Old World are known, which include Mesopotamia, Egypt and China, other than the Harappan.
 - o It is also commonly referred to as the Indus-Sarasvati Civilization (Sarasvati River mentioned in Vedic sources) and the Harrapan Civilization as Harappa was the first one to be discovered.
- The span of the Harappan Civilisation is subdivided into three periods:

o Early: 3300 BC to 2600 BC.

o Mature: 2600 BC to 1900 BC.

o Late: 1900 BC to 1700 BC.

- Mature Harappan phase is the urban phase and is characterized by certain distinctive material traits, such as long chert blades, steatite seals, chert weights, red pottery with black designs, bronze tools of certain types, beads of specific designs and shapes, as well as bricks used for construction made in a particular ratio.
- The most unique feature of this civilisation was the development of urban centres.
- Enigmatic script: Harappan seals usually have a line of writing, probably containing the name and title of the owner.

Most inscriptions are short, the longest containing about 26 signs. Although the script remains undeciphered to date, it was evidently not alphabetical and was written from right to left. The script is yet to be deciphered.



RAJA RAM MOHAN ROY: 'THE FATHER OF INDIAN RENAISSANCE'

Recently, India celebrated the 250th birth anniversary of Raja Ram Mohan Roy.

One of the most influential social and religious reformers of the 19th century, Raja Ram Mohan Roy was born into a prosperous upper-caste Brahmin family, and grew up within the framework of orthodox caste practices of his time: child-marriage, polygamy and dowry, etc.

Raja Ram Mohan Roy: The pioneer of modern Indian Renaissance.

Some of his important contributions are as follows-

- Bengal Sati Regulation, 1829: This regulation, passed under the Governor General William Bentinck, banned the practice of Sati. It was passed due to the relentless advocacy against sati by Roy alongside Ishwar Chandra Vidyasagar.
- Equal rights to women: He had also vehemently opposed child marriage and polygamy, while demanding equal inheritance rights for women.
- Educational Reforms: He campaigned for the modernisation of education, in particular the introduction of a Western curriculum. In this spirit, he opposed establishment of the Sanskrit College. Important educational institutions established by him include:
 - o **Hindu College** in 1817 in collaboration with Scottish philanthropist David Hare. Later on, this came to be known as Presidency University.
 - o Anglo-Vedic School in 1822.
 - o Vedanta College in 1826.
 - o The General Assembly's Institution in 1830 in collaboration with Alexander Duff. Later on, this came to be known as Scottish Church College.
- Religious Contributions: Roy had a three-fold mission:
 - o Hindu reformer: As a Hindu Reformer, he gave a Unitarian reaction to the Hindu Shastras from the Vedanta and the Mahaniryana Tantra. He established:
- ✓ Atmiya Sabha (Society of Friends), 1814: It was established to nurture philosophical discussions on the idea of monotheism in Vedanta and to campaign against idolatry, casteism, child marriage and other social ills.



- ✓ Brahmo Sabha, 1828: It was setup with Debendranath Tagore, Rabindranath Tagore's father. It is also known as Brahmo Samaj.
- Freedom of the press: He petitioned the British for freedom of the press in 1829 and 1830. He published
 - o 'Sambad Kaumudi' (the Moon of Intelligence): Founded in the year 1821, this Bengali weekly was the first newspaper in an Indian language.
 - o 'Miratul- Akhbar' (the Mirror of News): Founded in the year 1822, it was India's first Persian newspaper. Roy was also the first editor of this newspaper.
- Economic reforms:
 - o Exposed British for economic exploitation of India: He was the first one to figure out that The East India Company was flowing approximately three million pounds a year from India to England.

INTERNATIONAL BOOKER PRIZE

- Renowned Hindi author **Geetanjali Shree** became the first Indian to win this awardfor 2022 for her book 'Tomb of Sand (Ret Samadhi)'. Her book is also the first Indian-language book to be recognised by the award.
- International Booker Prize
 - o It was constituted in 2005 to complement the Man Booker Prize which is for English novels and has been won by Indians in the past.
 - o It is awarded annually for a book that is translated into English and published in the UK or Ireland.

YUVA TOURISM CLUBS

- CBSE along with Ministry of Tourism has asked its affiliated schools to form YUVA Tourism Clubs.
- Objective is to develop young ambassadors for Indian tourism, make them aware of tourism possibilities in India and appreciate our rich cultural heritage.



• Initiative will also lead to development of soft skills like teamwork, management, leadership and encourage adoption of ecological tourism.

EVENTS OF NATIONAL IMPORTANCE

- Ministry of Information and Broadcasting has notified a fresh list of sporting events of national importance.
- These are notified under Sports Broadcasting Signals (Mandatory Sharing with Prasar Bharati) Act.
 - o Act mandates the broadcasting rights holders of these sporting events to share live feed with public broadcaster Prasar Bharati.
- Following events are declared as events of national importance: all Olympics Games, Commonwealth Games and Asian Games, various sports events like cricket, tennis, hockey, football, badminton, Kabaddi, etc.

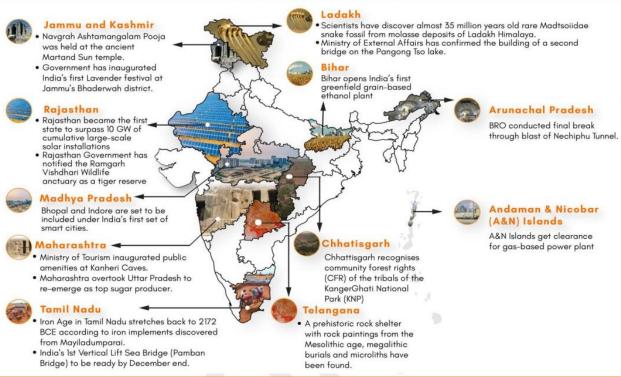
THOMAS CUP

- India won its maiden Thomas Cup title beating Indonesia 3-0 in the final.
- Thomas Cup is an international badminton competition (started in 1948). The 16 teams that compete are representing member nations of the Badminton World Federation (BWF).
- The three teams with the most titles are Indonesia (14), China (10), and Malaysia (5).
 - o Denmark was the first non-Asian country to win the Thomas Cup.

GLOBAL TRAVEL AND TOURISM DEVELOPMENT INDEX

- Released by: World Economic Forum.
- Index assesses 117 economies biennially, identifying key factors in enabling the sustainable and resilient growth of travel and tourism economies.
- India ranked at 54th position out of 117 assessed countries while Japan ranked 1st in the index.

Places in News: India







Places in News: World

