

WEEKLY CURRENT AFFAIRS MAGAZINE for



U.P.S.C. - C.S.E.

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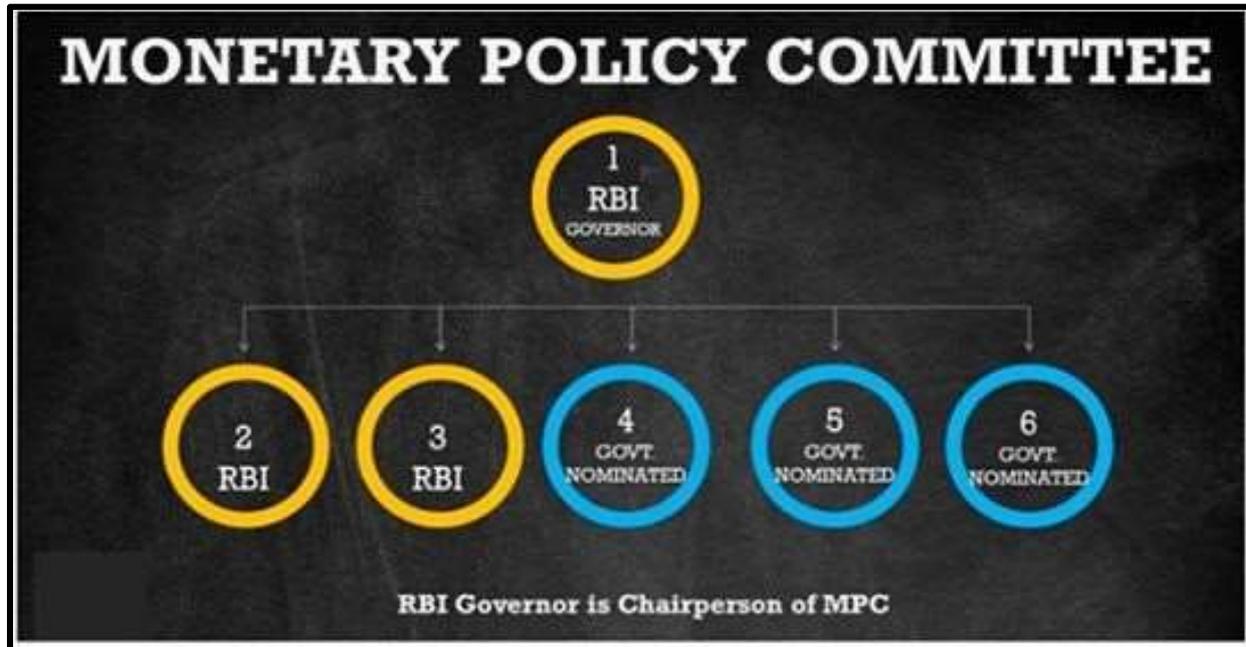
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Success is born of action...

Topic 1: MONETARY POLICY COMMITTEE

Importance for Prelims: Economics



Reserve Bank of India keeps the repo rate unchanged for the fifth consecutive financial policy committee.

- financial Policy Committee (MPC) The Monetary Policy Committee (MPC) could be a committee of the run batted in, that is entrusted with the task of fixing the benchmark policy rate (repo rate) to contain inflation at intervals the desired target level.
- The run batted in Act, 1934 was amended by Finance Act (India), 2016 to represent MPC to bring a lot of transparency and responsibleness in fixing India's financial Policy.
- The policy is revealed when each meeting with every member explaining his opinions.
- The committee is answerable to the govt. of India if the inflation exceeds the vary prescribed for 3 consecutive months. Suggestions for putting in a financial policy committee isn't new ANd goes back to 2002 once YV Reddy committee projected to ascertain an MPC, then Tarapore committee

in 2006, Percy Mistry committee in 2007, RaghuramRajan committee in 2009 so Urjit Patel Committee in 2013.

- Composition and dealing The committee includes six members – 3 officers of the run batted in and 3 external members appointed by the govt. of India.
- The conferences of the financial Policy Committee area unit control a minimum of four times a year and it publishes its selections when every such meeting.
- The Governor of run batted in is that the chairwoman ex officio of the committee.
- Decisions area unit taken by a majority with the Governor having the ballot just in case of a tie.
- They ought to observe a “silent period” seven days before and when the speed call for “utmost confidentiality”.
- Instruments of financial policy area unit of 2 types: Quantitative Instruments: General or indirect (Cash Reserve quantitative relation, Statutory Liquidity quantitative relation, Open Market Operations, Bank Rate, Repo Rate, Reverse Repo Rate, Marginal standing facility and Liquidity Adjustment Facility (LAF)) Qualitative Instruments: Selective or direct (change within the margin cash, protest, ethical suasion)

Topic 2: KAVU

Importance for Prelims: Environment



- Kavu is that the ancient name given for sacred groves across the Malabar Coast in Kerala, South Republic of India. Kavus area unit notable for Theyyam, the centuries-old ceremonial dance.
- A SarpaKavu (meaning Abode of Snakes) could be a ancient natural sacred house seen close to ancient homes in Kerala state of South Republic of India.
- The website is believed to be tenanted by snakes, and therefore the space sometimes contains a illustration of Naga Raja (King of the Snakes) and alternative Naga Devatas (snake deities), wherever offerings and rites area unit performed throughout special ceremonies
- advantages Sarpa Kavus even facilitate in soil and conservation besides conserving its made biological wealth.
- The ponds and streams abutting the groves area unit perennial water sources.
- These area unit the last resorts to several of the animals and birds for his or her water necessities, particularly throughout summer.

- Sacred groves conjointly enrich the soil through its made litter composition.
- The nutrients generated so aren't solely recycled inside the sacred grove scheme however conjointly realize their approach into the abutting agro eco systems.

Topic 3: G-SAP

Importance for Prelims: Economy

Why was G-SAP required

Estimates of Bank of America Merrill Lynch

Centre's fiscal deficit	7.5% of GDP
1. Borrowing (a+b) (in ₹ crore)	17,60,900
a. Center	11,34,400
b. States	6,26,500
2. Total demand (c+d) (in ₹ billion)	12,58,900
c. Bank demand (net)	6,45,700
d. Others	6,13,200
3. RBI liquidity needed to balance G-Sec mkt (1-2) (in ₹ billion)	5,02,000
RBI OMO (@₹73.25/USD for FY22)	2,52,000
G-SAP	2,50,000

Recently, the governor of RBI has declared a replacement programme known as Government Securities Acquisition Programme (G-SAP).

- Government Securities Acquisition Programme (G-SAP) under G-SAP, the RBI can purchase government securities price Rs one lakh within the half-month of FY22.
- It may be a structured purchase program which can positively calm investors' nerves and facilitate market participants to bid higher in regular auctions and cut back volatility in bond costs.
- Significance of G-SAP The G-SAP aims to produce a lot of comfort to the bond market within the scenery of the government's elevated borrowing for this year, that the RBI should guarantee goes through while not inflicting disruption.

- It can give certainty to the bond market participants with reference to RBI's commitment of support to the bond market in FY22. The market participants have perpetually wished to grasp the RBI's Open Market Operations (OMO) purchase calendar, and therefore the run batted in has currently on condition that to the market through G-SAP.
- It can facilitate cut back the unfold between the repo rate and therefore the 10-year bond certificate yield which can facilitate to cut back the combination value of borrowing for the Centre and states in FY22.

Topic 4: PERMANENT COURT OF ARBITRATION

Importance for Prelims: International Organisations



The government had explained to SC that India was certain by the award of the arbitral court fashioned below the global organization Convention on the Law of the ocean (UNCLOS) in Italian mariners case.

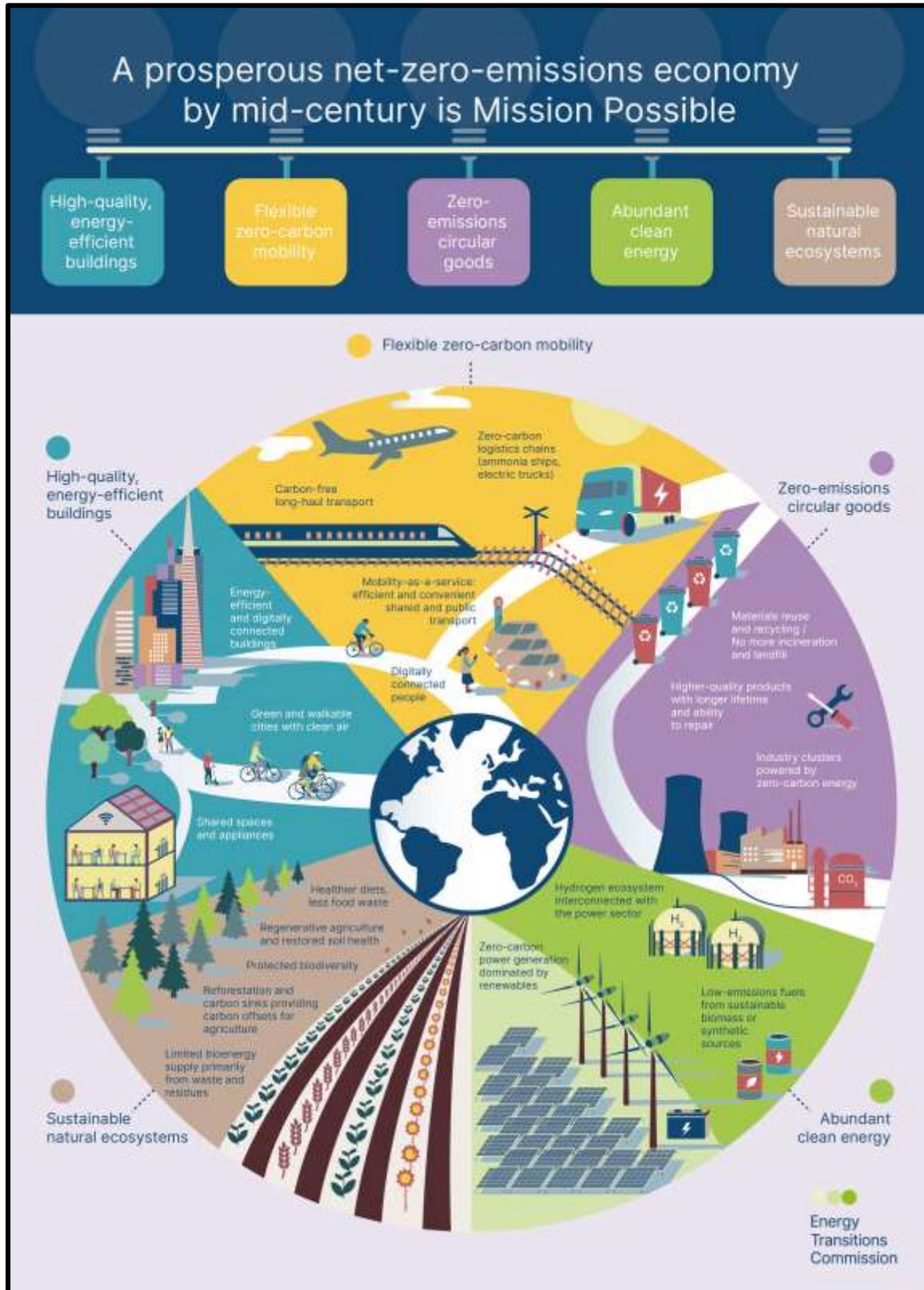
- Permanent Court of Arbitration Established in: 1899. HQ: Hague, European nation.
- It is AN intergovernmental organization dedicated to serve the international community within the field of dispute resolution and to facilitate arbitration and different sorts of dispute resolution between States.
- The PCA contains a three-part structure structure consisting of: body Council- to administrate its policies and budgets, Members of the Court- a

panel of freelance potential arbitrators, and International Bureau- its Secretariat, headed by the Secretary-General.

- It has monetary help Fund that aims at serving to developing countries meet a part of the prices concerned in international arbitration or different means that of dispute settlement offered by the PCA.

Topic 5: NET ZERO EMISSIONS

Importance for Prelims: Environment



US President's Climate Envoy is in Bharat. One purpose of dialogue can be the net-zero goal for 2050, that the USA needs Bharat to air board on.

- Net-Zero Emissions 'Net zero emissions' refers to achieving Associate in Nursing overall balance between gas emissions created and gas emissions taken out of the atmosphere.
- First, human-caused emissions (like those from fossil-fuelled vehicles and factories) ought to be reduced as near to zero as attainable.
- Second, any remaining GHGs ought to be balanced with the same quantity of carbon removal, for instance by restoring forests.
- Time-Frame: The timeframe for reaching net-zero emissions differs considerably if one is concerning CO₂ alone, or concerning all major GHGs (including gas, inhalation general anaesthetic, and HFCs). For non-CO₂ emissions, the net-zero date is later as a result of a number of these emissions — like gas from agricultural sources — square measure somewhat tougher to end.
- In eventualities that limit warming to one.5 degrees C, dioxide (CO₂) reaches NetZero on the average by 2050. Total GHG emissions reach net-zero between 2063 and 2068. international Scenario: As of June 2020, twenty countries and regions have adopted net-zero targets.
- This list solely includes countries that adopted a net-zero targets in law or another policy document.
- The Kingdom of Asian country is already carbon-negative, i.e. absorbs additional CO₂ than it emits. Indian Scenario: India's per capita CO₂ emissions – at one.8 tonnes per person in 2015 – square measure around a ninth of these within the USA and around a 3rd of the world average of four.8 tonnes per person.
- However, overall, Bharat is currently the planet's third-largest electrode of CO₂, behind China and also the USA.

Context: FCAT conclusion can create cathartic films even additional tedious: Filmmakers Concept: Film Certification proceedings assembly
The Film Certification proceedings assembly (FCAT) may be a statutory body implanted beneath the Ministry of data and Broadcasting as per Section 5(D) of the Cinematograph Act, 1952.

- The FCAT hears appeals filed by candidates aggrieved by any order of the Central Board of Film Certification (CBFC). The FCAT was established in 1991 and it's headquartered in Indian capital. Generally, Associate in Nursing attractiveness against a CBFC order to the FCAT would be followed by a second review of the film by the Censor Board.
- An aggrieved person must file Associate in Nursing attractiveness inside thirty days from the date of the CBFC order. Associate in Nursing attractiveness against a call of the FCAT are often created to the top of the Ministry of data and Broadcasting or through the country's system.
- The FCAT is headed by a boss United Nations agency is mostly a retired Supreme Court decide. He/she is power-assisted by alternative members of the assembly.

Topic 6: PLI FOR WHITE GOODS, SOLAR MODULES

Importance for Prelims: Government Schemes

White merchandise The Union cupboard approved the assembly joined Incentive (PLI) theme for White merchandise (Air Conditioners and junction rectifier Lights) with a fund outlay of Rs. 6,238 crore.

- The PLI theme for White merchandise shall extend associate degree incentive of four-dimensional to six on progressive sales of products factory-made in Republic of India for a amount of 5 years to firms engaged in producing of Air Conditioners and junction rectifier Lights.
- An entity availing edges beneath the other PLI theme of Govt. Republic of India won't be eligible beneath this theme for identical product however the entity might take edges beneath alternative applicable schemes of Govt. of Republic of India or schemes of State governments.
- The theme are enforced as a pan Republic of India theme and isn't specific to any location, space or section of population.
- A variety of world and domestic firms, as well as variety of MSMEs ar possible to learn from the theme.
- What ar White goods? a serious appliance, conjointly called giant|an outsized|an oversized} domestic appliance or large electrical appliance could be a non-portable or semi-portable machine used for routine housework tasks like change of state, laundry laundry, or food preservation.
- Such appliances ar typically conjointly called white merchandise, because the product were historically white in color, though a range of colors ar currently accessible.
- star Modules The Union cupboard has approved the Ministry of recent & Renewable Energy's proposal for implementation of the assembly joined Incentive (PLI) theme 'National Programme on High potency Solar PV

(Photo Voltic) Modules' for achieving producing capability of Giga Watt (GW) scale in high potency star PV modules with associate degree outlay of Rs.4,500 crore.

- Solar PV makers are elect through a clear competitive bidding method.
- PLI are disbursed for five years post authorisation of star PV producing plants, on sales of high potency star PV modules.

Topic 7: LOK ADALATS

Importance for Prelims: Polity



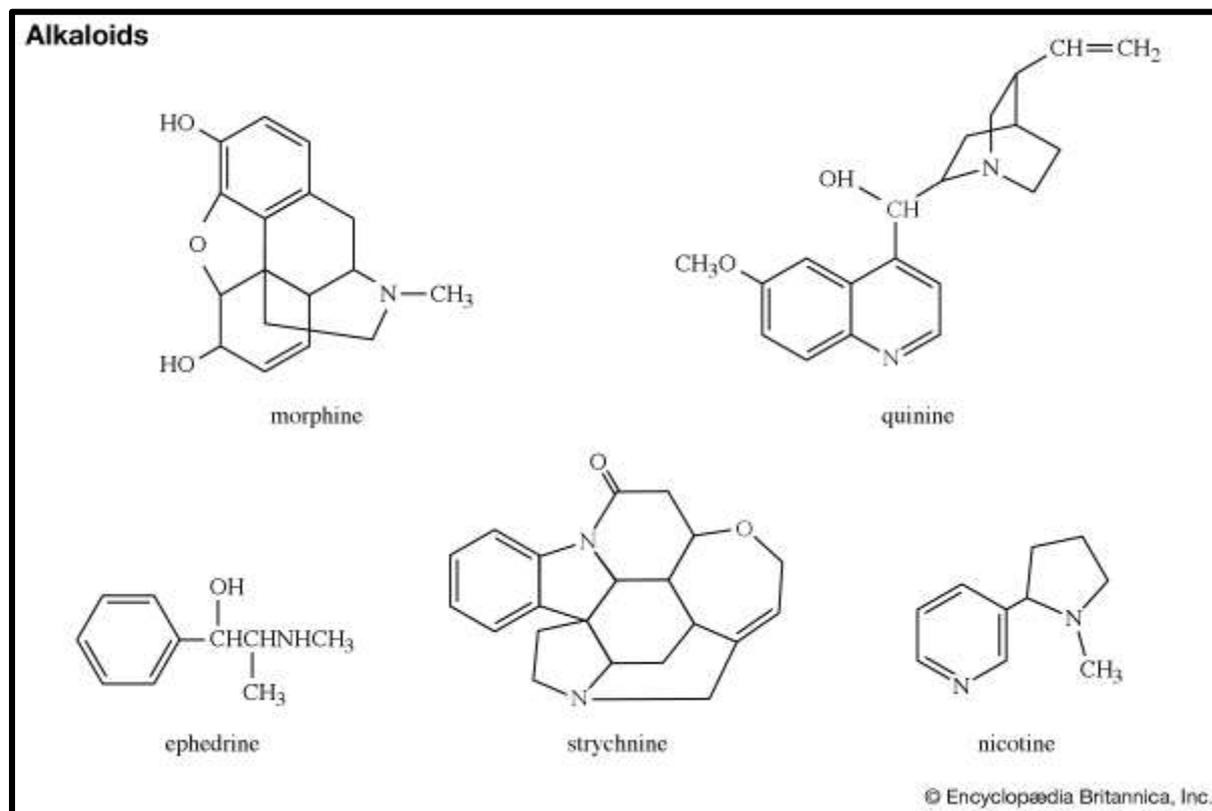
For Lok Adalats, speed overrides quality .The system should look on the far side swift disposal of cases and specialise in simply and truthful outcomes.

- Lok Adalat is one amongst the choice dispute redressal mechanisms, it's a forum wherever disputes/cases unfinished within the court of law or at pre-litigation stage area unit settled/ compromised amicably.
- The Lok Adalats area unit fashioned to fulfil the promise given by the preamble of the Indian Constitution– securing Justice – social, economic and political of each subject of Bharat.
- Constitutional basis: Article 39A of the Constitution provides for free of charge legal aid to the disadvantaged and weaker sections of the society and to push justice on the bottom of civil rights.
- Articles fourteen of the Constitution additionally create it obligatory for the State to ensure equality before the law.
- Statutory provisions: underneath the Legal Services Authorities Act, 1987 Lok Adalats are given statutory standing.

- the choice created by the Lok Adalats is taken into account to be a finding of fact of a civil court and is final and binding on all parties.
- No attractiveness: there's no provision for associate appeal against the decision created by Lok Adalat.
- But, they're liberated to initiate proceedings by approaching the court of applicable jurisdiction by filing a case by following the desired procedure, in exercise of their right to litigate.
- Court fee: there's no court fee owed once a matter is filed in a very Lok Adalat.
- Note: If a matter unfinished within the court of law is remarked the Lok Adalat and is settled after, the court fee originally paid within the court on the complaints/petition is additionally refunded back to the parties.
- Nature of Cases to be remarked Lok Adalat: Any case unfinished before any court. Any dispute that has not been brought before any court and is probably going to be filed before the court.
- Provided that associatey matter about an offence not compoundable underneath the law shall not be settled in Lok Adalat.

Topic 8: ALKALOIDS

Importance for Prelims: Science & tech



The Central government has determined to rope within the non-public sector to begin production of focused flower straw from India's controlled substance crop to spice up their yield of alkaloids, used for medical functions and exported to many countries.

- Alkaloids are a gaggle of present chemical compounds that principally contain basic atomic number 7 atoms.
- This cluster conjointly includes some connected compounds with neutral and even weak acidic properties.
- Some artificial compounds of comparable structure are termed alkaloids.
- additionally to carbon, element and atomic number 7, alkaloids may additionally contain O, sulphur.
- Alkaloids are created by an oversized style of organisms as well as bacterium, fungi, plants, and animals.

- They will be sublimate from crude extracts of those organisms by acid-base extraction.
- They have a large vary of medical specialty activities as well as antiprotozoal drug (e.g. quinine), antiasthma (e.g. ephedrine), malignant tumor etc.
- The boundary between alkaloids and different nitrogen-containing natural compounds isn't clear-cut.
- Compounds like organic compound peptides, proteins, nucleotides, macromolecule, amines, and antibiotics ar typically not referred to as alkaloids.
- Properties Most contain O in their molecular structure; those compounds ar typically colourless crystals at close conditions. Oxygen-free alkaloids, like alkaloid or coniine, ar generally volatile, colourless, oily liquids.
- Most have a bitter style or ar toxic once eaten.
- organic compound production in plants gave the impression to have evolved in response to feeding by anthophilous animals.
- Most ar weak bases. Extraction owing to the structural diversity of alkaloids, there's no single methodology of their extraction from natural raw materials.
- Most ways exploit the property of most alkaloids to be soluble in organic solvents however not in water, and also the opposite tendency of their salts.

Topic 9: RED SEA

Importance for Prelims: Geography



Iran state TV acknowledges ship attacked in sea.

- Red {sea|sea}: The Red Sea (Erythraean Sea) could be a H₂O recess of the ocean, lying between Africa and Asia.
- The association to the ocean is within the south through the Bab el Mandeb strait and therefore the Gulf of Aden.
- To the north lie the Sinai Peninsula, the Gulf of city, and therefore the Gulf of city (leading to the city Canal).
- The ocean is underlain by the sea Rift that is a component of the good vale.
- The six countries bordering the sea are: Kingdom of Saudi Arabia, Yemen , Egypt , Sudan , Eritrea, Djibouti.

Topic 10: FERTILIZER PRICING

Importance for Prelims: Economy

Table 1. Fertilizer Prices and Costs, Illinois, 2009 through 2017

Year	Fertilizer Prices ¹			Implied Fertilizer Costs Corn ²	Central Ill. Fertilizer Costs Corn ³	Actual Minus Implied Costs ⁴
	Anhydrous Ammonia	Diammonium Phosphate	Potash			
	\$/ton	\$/ton	\$/ton	\$/acre	\$/acre	
2009	808	725	847	194	185	-9
2010	506	454	511	121	122	1
2011	773	673	570	173	159	-14
2012	846	665	639	183	200	17
2013	879	611	578	179	193	14
2014	691	545	461	147	171	24
2015	729	559	479	153	166	13
2016	608	489	378	129	154	25
2017	509	425	318	109		

¹ Prices taken from Illinois Production Cost Report produced by Agricultural Marketing Service, U.S. Department of Agriculture. They are average prices from October in the year proceeding production to June in the year of production.

² Calculated given applications of 215 pounds of anhydrous ammonia, 190 pounds of DAP, and 90 pounds of potash.

³ Fertilizer costs taken for corn grown in Central Illinois on high-productivity farmland as reported by Illinois FBFM.

⁴ Actual fertilizer costs minus implied fertilizer costs.

After diesel, fertilizers to require toll on farmers; IFFCO hikes costs by 45-58%

- Farmers obtain fertilisers at MRPs (maximum retail price) below their traditional offer and- demand-based market rates or what it prices to produce/import them.
- The distinction between the retail value and production cost/domestic value is given as grant to makers.

Present regime – Partial DBT (Since April 2018)

- The grant goes to fertilizer corporations, though its final beneficiary is that the farmer UN agency pays MRPs but the market-determined rates.
- Manufacturers of fertilizers (urea) receive 100 percent of grant when fertilizer is delivered to the farmer, and also the latter's identity viz.

Aadhaar is captured on the purpose of sale (PoS) machine at the dealer's look.

- Therefore, the grant continues to be routed through makers albeit the sale of fertiliser is being verified exploitation Aadhar scheme
- The makers sell organic compound at the utmost retail value (MRP) controlled by the Centre, that is unbroken at a coffee level.
- They conjointly get grant compensation on unit specific basis underneath the new evaluation theme (NPS).
- The MRPs of non-urea fertilisers square measure decontrolled or mounted by the businesses. The Centre, however, pays a flat per-tonne grant on these nutrients to confirm they're priced at "reasonable levels (based on Nutrient based mostly grant scheme)

Recent proposal:

- At gift, the Centre is following a "no denial" policy. Anybody, non-farmers enclosed, should purchase any amount of fertilisers through the PoS machines.
- It results in bulk purchase of organic compound that's used for non agri functions.
- Hence , government is considering to place a cap on the utmost quantity of fertilisers anybody should purchase throughout kharif/rabi seasons.

Topic 11: PRINCIPLE OF NON-REFOULEMENT

Importance for Prelims: International Relations



SC permits deportation of Rohingyas detained in J&K subject to adherence to procedures prescribed for deportation.

- Non-refoulement could be a basic principle of law of nations that forbids a rustic receiving asylum seekers from returning them to a rustic within which they'd be in probably danger of abuse supported “race, religion, position, membership of a selected group or political opinion”.
- Unlike political asylum, that applies to people who will prove a reasoned concern of abuse supported bound class of persons, non-refoulement refers to the generic return of individuals, as well as refugees into war zones and alternative disaster locales.
- It could be a principle of customary law of nations, because it applies even to states that don't seem to be partiesto the 1951 Convention regarding the standing of Refugees or its 1967 Protocol.

- It is additionally a principle of the Trucial law of countries.

Topic 12: SAGAR VISION

Importance for Prelims: International Relations



Seychelles central to India's SAGAR vision: PM

SAGAR (Security and Growth for dead the Region)

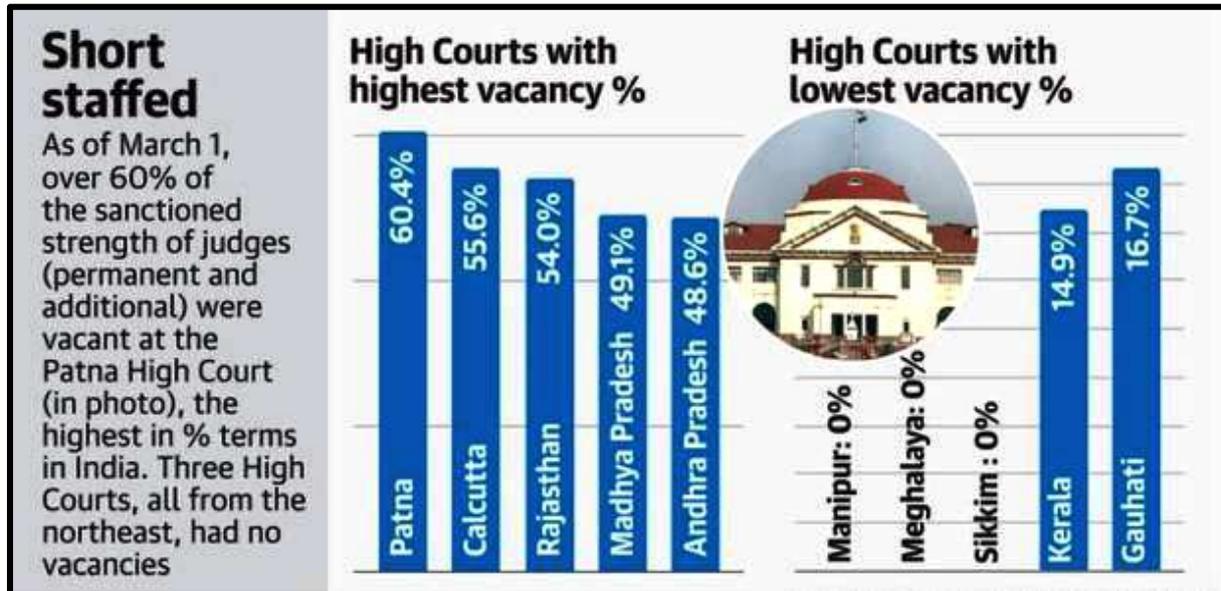
- SAGAR could be a term coined by PM Modi in 2015 throughout his Mauritius visit with attention on the blue economy.
- It could be a maritime initiative which supplies priority to the ocean region for guaranteeing peace, stability and prosperity of Republic of India within the ocean region.
- The goal is to hunt a climate of trust and transparency; respect for international maritime rules and norms by all countries; sensitivity to every other`s interests; peaceful resolution of maritime issues; and increase in maritime cooperation.
- It is in line with the principles of the ocean Rim Association.

About IORA:

- The ocean Rim Association was came upon with the target of strengthening regional cooperation and property development among the ocean Region
- The IORA could be a regional forum, three-way in nature, delivery along representatives of state, Business and domain, for promoting co-operation and nearer interaction among them.
- It is predicated on the principles of Open Regionalism for strengthening Economic Cooperation notably on Trade Facilitation and Investment, Promotion moreover as Social Development of the region.
- India, Australia, Iran, Indonesia, Thailand, Malaysia, African country, Mozambique, Kenya, Sri Lanka, Tanzania, Bangladesh, Singapore, Mauritius, Madagascar, UAE, Yemen, Seychelles, Somalia, land and Sultanate of Oman square measure among the members of IORA.

Topic 13: AD-HOC JUDGES IN SUPREME COURT

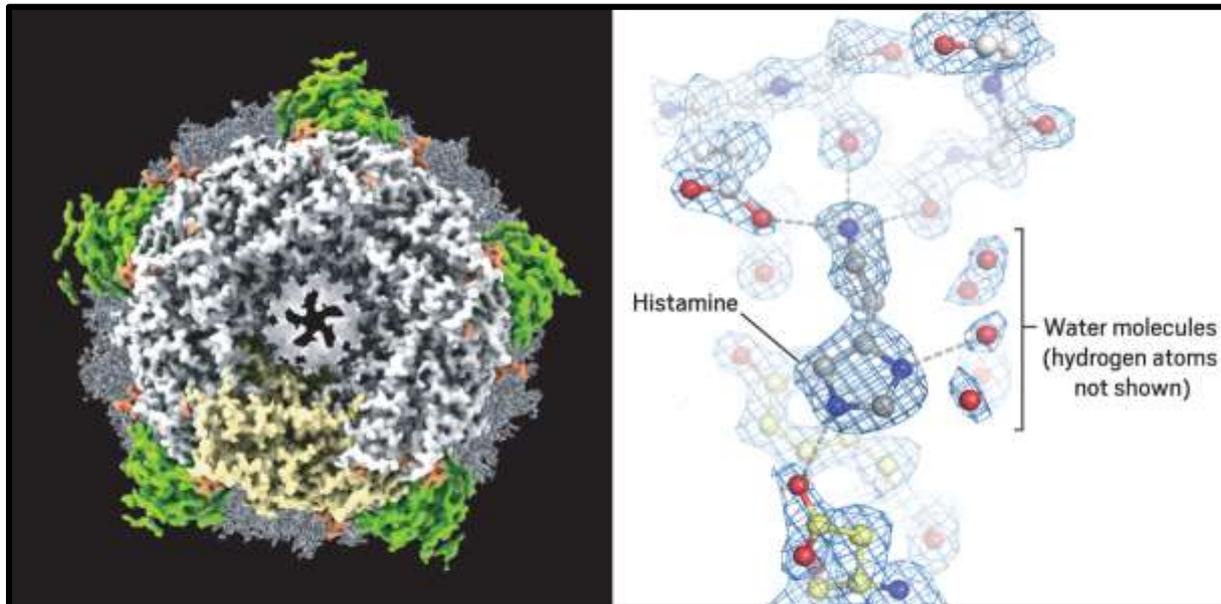
Importance for Prelims: Polity



- The retired choose World Health Organization sits in such a session of the Supreme Court has all the jurisdiction, powers and privileges of the chooses however don't seem to be deemed to be a Judge.

Topic 14: CRYOGENIC ELECTRON MICROSCOPY

Importance for Prelims: Science & tech



Scientists use cryo-electron research to unravel however ‘guardian’ of the ordering works.

Cryo-electron research

- Cryo-electron research may be a specific style of microscopy that's supported the principle of forming a 3D image by assortment and combination of thousands of projections of bio-molecules.
- With the assistance of this, the researchers will currently visualize the processes ne'er seen before by phase change the mid-movement of the bio-molecules.
- Cryo-electron research makes it attainable to freeze the bio-molecules at the refrigerant temperature that is, at -150°C , protective their form.
- By this, the structure of molecules is disclosed in exquisite detail. It is important for higher understanding of basic Chemistry and for the event of prescription drugs because it simplifies and improves the imaging of bio-molecules.

- It facilitates the study of fine viruses, macromolecule complexes and cellular structures at a molecular resolution because it offers the scientists a chance to possess a glance at the machinery of life in an exceedingly 3D type.
- The earlier varieties of lepton microscopes created it not possible to check the bio molecules in 3D type because the powerful beams typically destroyed the biological matter.
- The resolution currently has improved from shapeless blobs to imaging the proteins at atomic resolution. The Cryo-Electron research has broken many limitations, moving organic chemistry into a replacement Era.

Topic 15: APPRECIATION & DEPRECIATION OF RUPEE

Importance for Prelims: Economics

DEPRECIATION AND APPRECIATION



★ Depreciation refers to the fall in value of a currency caused by the demand for foreign currency exceeding its supply in the market



★ Appreciation is the opposite of depreciation, i.e., the rise in the value of a currency

Indian Rupee fell sharply by a hundred and five paise against the greenback on Wed.

Appreciation and Depreciation of Currency

- In a floating rate of exchange system, economic process (based on demand and provide of a currency) verify the worth of a currency.
- Currency Appreciation: it's a rise within the worth of 1 currency in relevancy another currency.
- Currencies appreciate against one another for a spread of reasons, together with government policy, interest rates, trade balances and business cycles.
- Currency appreciation discourages a country's export activity as its merchandise and services become costlier to shop for.
- Currency Depreciation: it's a fall within the worth of a currency in a very floating rate of exchange system.
- Economic fundamentals, political instability, or risk aversion will cause currency depreciation.

- Currency depreciation encourages a country's export activity as its merchandise and services become cheaper to shop for.

Topic 16: ADB

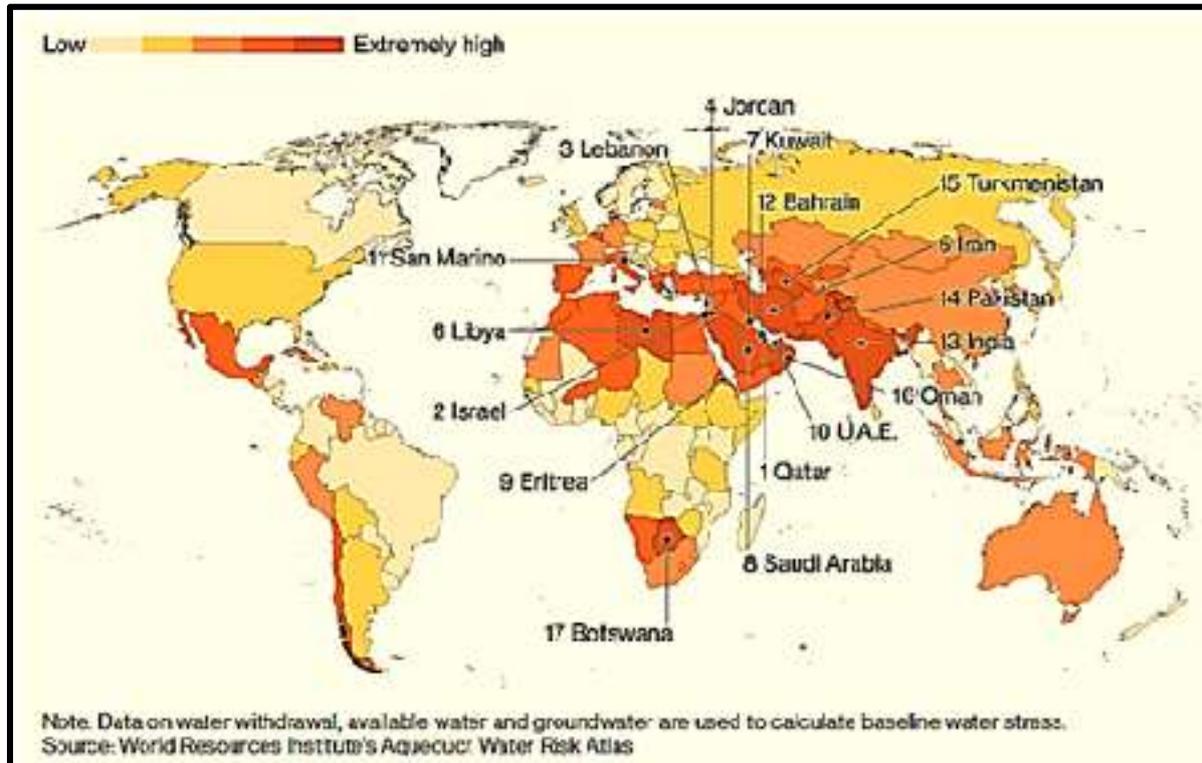
Importance for Prelims: International Organisations

ADB Approves USD 484 Mn Loan to boost Transport property At CKIC In state.

- ADB may be a regional development bank established on nineteenth Gregorian calendar month 1966.
- ADB currently has sixty eight members, forty nine from inside Asia.
- ADB's 5 largest shareholders area unit Japan and therefore the us (each with fifteen.6% of total shares), the People's Republic of China (6.4%), India (6.3%), and Australia (5.8%).
- It aims to market social and economic development in Asia.
- ADB is committed to achieving a prosperous, inclusive, resilient, and property Asia and therefore the Pacific, whereas sustaining its efforts to eradicate extreme financial condition.
- ADB is headquartered in Manila, Philippines.

Topic 17: AQUEDUCT WATER RISK ATLAS

Importance for Prelims: International Reports



Aqueduct Water Risk Atlas free by the planet Resources Institute (WRI) ranks India at thirteenth among the world's seventeen very water-stressed countries.

Aqueduct Water Risk Atlas(AWRA)

- The AWRA, developed by the planet Resources Institute, could be a international water risk mapping tool that assists companies, investors, governments, and alternative users comprehend wherever and the way water risks and opportunities square measure emergence globally.
- The Atlas employs a durable, peer reviewed methodology and therefore the most correct offered information to make high-resolution, customizable international maps of water risk.
- Aqueduct currently includes thirteen indicators of water risk, together with new additions like groundwater convenience and water depletion, and monthly snapshots of water stress and variability.

World Resources Institute (WRI)

- It could be a international analysis non-profit organization (based in USA) that focuses on seven areas: Food, Forests, Water, Energy, Cities, Climate, Ocean.
- The mission is to shift human society to measure in ways in which safeguard Earth's surroundings.

Topic 18: UNITED BENGAL PLAN

Importance for Prelims: History



United geographic region arrange

- British geographic region roughly consisted of modern Bangla Desh and therefore the Indian state of province.
- In 1905, geographic region was partitioned off to realize some political returns however people's growing movement underneath the auspices of Congress junction rectifier to the reunion in 1911.
- In 1947, in conjunction with India and Islamic Republic of Pakistan, there virtually emerged a 3rd sovereign country: United geographic region.
- The division of the province was demanded on communal lines.
- However, the arrange was thwarted following united and unanimous efforts of the Hindus of geographic region.
- Hindu opinion was firmly against a sovereign and united geographic region.

Shyama Prasad Mookerjee and his plan-

- Though Mookerjee was a staunch advocate of the integrity of the country, however once the division of India became close at hand, he campaigned for the division of geographic region.
- In February 1947, the Hindu Mahasabha underneath Mookerjee imply the demand for dividing geographic region on spiritual grounds.
- He demanded province for Hindu Bengalis.
- He had opposed a bid to make a united, however freelance geographic region in 1947 that was pushed by Sarat Satyendra N. Bose, brother of Netaji Subhas Chandra Satyendra N. Bose, and Huseyn sufferer Suhrawardy, former Pakistani prime minister.

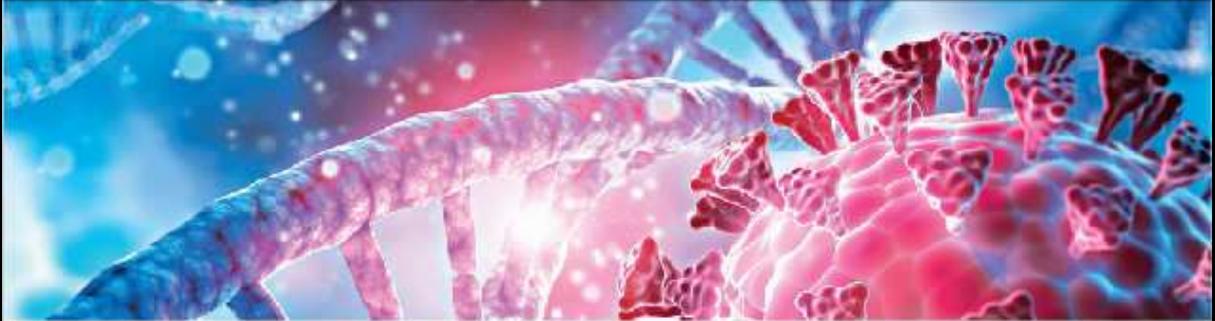
Leaders WHO were in favour and against the arrange

- Against: nationalist leader, statesman and Vallabhbhai Patel were implacably hostile a United geographic region.
- In favour: Suhrawardy in conjunction with few alternative high geographic region politicians like Sarat Satyendra N. Bose and K.S. Roy came up with an alternate for the Partition.

Topic 19: DOUBLE MUTANT VARIANT B.1.617

Importance for Prelims: Science & tech

MUTATIONS, VARIANTS & STRAINS



Mutation is a change in the virus's genetic sequence. They are extremely common. About 4,000 have been recorded in the coronavirus's spike protein alone. Mutations arise when viruses make shoddy copies of themselves inside a patient

Variant is a virus whose genetic sequence differs from its parent

Strain is a variant with many mutations that significantly alter its behaviour

The “double mutant” virus that scientists had flagged last month as having a sway on the unfold of the pandemic in India, features a formal scientific classification: B.1.617.

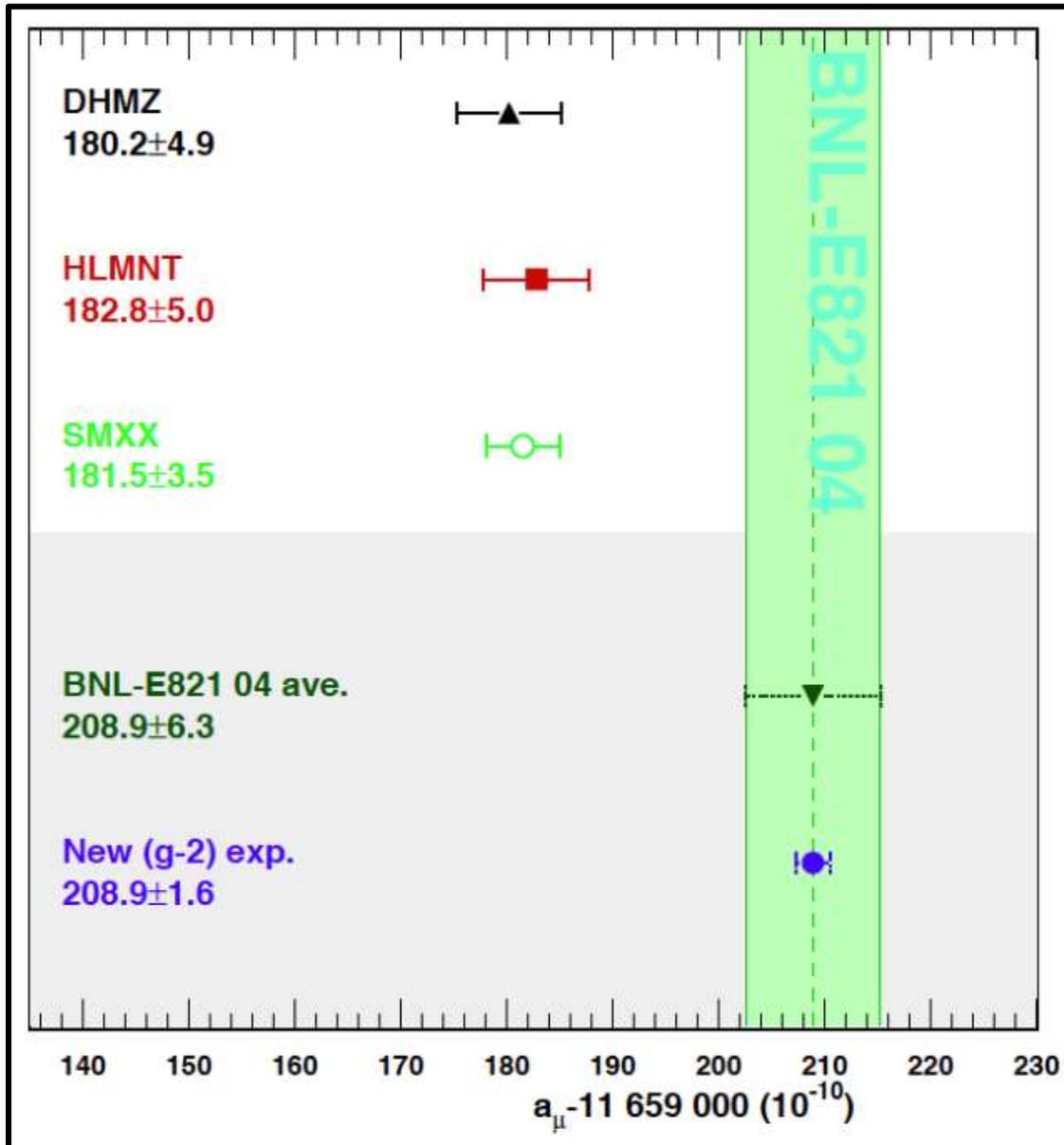
- The variant is common in India and features a few shaping mutations, E484Q and L425R, that modify it to become a lot of infectious and evade antibodies.
- Though these mutations have one by one been found in many different coronavirus variants, the presence of each mutations along were initial found in some coronavirus genomes from India.
- Certain variants of the coronavirus, as an example, B.1.1.7 and B.1.351 — are termed the “United Kingdom” and “South Africa” variant, severally, as a result of they need mutations related to massive spikes in these countries

or cut back the effectualness of vaccines and square measure termed “variants of concern (VOC)”.

- So far, solely 3 international VOCs are identified: the U.K. variant, the South African and also the Brazilian (P.1) lineage.

Topic 20: MUON G-2

Importance for Prelims: Science & tech



Newly printed results of a world experiment hint at the chance of latest physics governing the laws of nature.

- The results of the experiment, that studied a particle known as the negative muon, don't match the predictions of the quality Model, on that all high-energy physics relies, associated instead confirm a discrepancy that had been detected in an experiment twenty years antecedently.

- The experiment, known as negative muon $g-2$ (g minus two), was conducted at the North American nation Department of Energy's Fermi National Accelerator Laboratory (Fermilab).

What is the quality Model?

- The customary Model could be a rigorous theory that predicts the behaviour of the building blocks of the universe.
- It lays out the foundations for 6 varieties of quarks, six leptons, the Higgs particle, 3 elementary forces, and the way the subatomic particles behave below the influence of magnetic force forces.
- The negative muon is one in every of the leptons. it's almost like the negatron, however two hundred times larger, and far additional unstable, extant for a fraction of a second.

Muon $g-2$ experiment

- It measured a amount concerning the negative muon, following up a previous experiment at Brookhaven National Laboratory, below the North American nation Department of Energy.
- Concluded in 2001, the Brookhaven experiment came up with results that didn't identically match predictions by the quality Model.
- The negative muon $g-2$ experiment measured this amount with bigger accuracy.

What amount was measured?

- It is termed the g -factor, a live that derives from the magnetic properties of the negative muon.
- The rate at that the negative muon wobbles is delineate by the g -factor, the amount that was measured.
- This price is thought to be about to a pair of, therefore scientists live the deviation from a pair of.

- Hence the name $g=2$. The new experimental results (combined from the Brookhaven and Fermilab results) proclaimed are: g -factor: 00233184122
abnormal magnetic moment: 00116592061.

Topic 21: GURU TEJ BAHADUR

Importance for Prelims: History



SAD president Sukhbir Singh Badal these days requested that a first deposit be established in Delhi to showcase the lifetime of Guru Tej Bahadur on the occasion of his four-hundredth birth day of remembrance.

Guru Tej Bahadur (1621-1675)

- Guru Tej Bahadur was the ninth of 10 Gurus of the Sikh faith.
- One hundred and fifteen of his hymns are included in the Guru religious text.
- He stood up for the rights of Kashmiri Pandits who approached him against the imposition of the jizya tax.
- He was publicly killed in 1675 on the orders of Mughal emperor Aurangzeb in Delhi for refusing to convert.
- In the words of Noel King of the University of Golden State, "Guru Tej Bahadur's martyrdom was the first-ever martyrdom for human rights within the world."

He is lovingly remembered as 'Hind di Chaadar'.

Topic 22: AEFI

Importance for Prelims: Science & tech

180 individuals died once vaccination in Asian country until March twenty nine, over half dozen large integer inoculated by then. However, the info doesn't mirror if the deaths were caused because of the immunogen.

Adverse events following immunisation (AEFI)

- As vaccine-preventable infectious diseases still decline, individuals became more and more involved concerning the risks related to vaccines.
- Furthermore, technological advances and endlessly redoubled data concerning vaccines have semiconductor diode to investigations centered on the protection of existing vaccines that have typically created a climate of concern.
- Adverse event following immunisation is any untoward medical prevalence that follows immunisation and that doesn't essentially have a causative relationship with the usage of the immunogen.
- If not speedily and effectively controlled, will undermine confidence in a very immunogen and ultimately have dramatic consequences for immunisation coverage and unwellness incidence.
- Alternatively, vaccine-associated adverse events could have an effect on healthy people and will be promptly known to permit extra analysis and acceptable action to require place.
- In order to reply promptly, expeditiously, and with scientific rigour to immunogen questions of safety, WHO has established a worldwide consultative Committee on immunogen Safety.

Topic 23: ALTERNATIVE INVESTMENT FUNDS

Importance for Prelims: Economics



Markets regulator SEBI rationalised the reportage necessities for various investment so as to supply easy compliance for such entities.

AIFs

- As outlined in Securities and Exchange Board of Bharat (Alternative Investment Funds) rules, 2012, AIFs ask any in camera pooled investment fund, (whether from Indian or foreign sources), within the style of a trust or a corporation or a body company or a indebtedness Partnership (LLP).

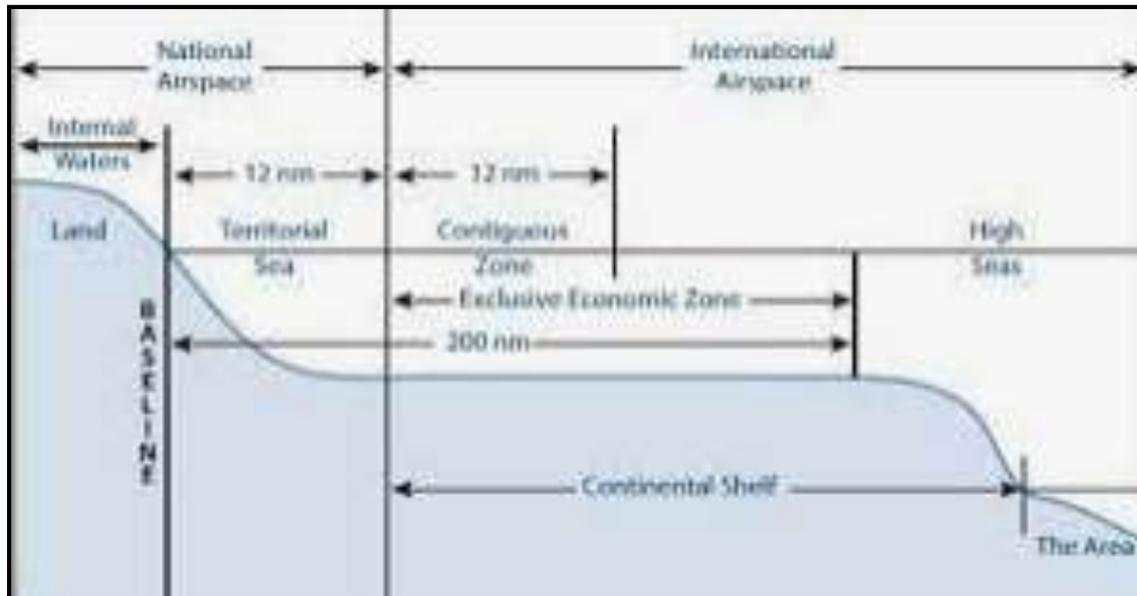
- AIF doesn't embody funds lined underneath the SEBI (Mutual Funds) rules, 1996, SEBI (Collective Investment Schemes) rules, 1999 or the other rules of the Board to manage fund management activities.
- Hence, in India, AIFs square measure personal funds that square measure otherwise not coming back underneath the jurisdiction of any administrative body in Bharat.

Categories:

- As per SEBI (AIF) rules, 2012, AIFs shall obtain registration in one amongst the 3 categories:
- **Category I:** chiefly invests in start- ups, SME's or the other sector that Govt. considers economically and socially viable.
- **Category II:** These embody various investment like personal equity funds or debt funds that no specific incentives or concessions square measure given by the govt. or the other Regulator
- **Category III :** various investment like hedge funds or funds that trade with a read to create short term returns or such alternative funds that square measure open complete and that no specific incentives or concessions square measure given by the govt. or the other Regulator.

Topic 24: EXCLUSIVE ECONOMIC ZONE / UNCLOS

Importance for Prelims: International Relations



Pentagon defends navy ship declarative direction rights within India's EEZ

- In AN uncommon move, the navy declared that on weekday it conducted a freedom of navigation operation in Indian waters while not previous consent to challenge India's "excessive maritime claims."
- The Government of India's expressed position on the world organization Convention on the Law of the ocean (UNCLOS) is that the Convention "does not authorise alternative States to hold call at the EEZ and on the ocean bottom, military exercises or manoeuvres, particularly those involving the employment of weapons or explosives, while not the consent of the coastal state.
- While India sanctioned UNCLOS in 1995, the U.S. has didn't bed thus far.

Exclusive Economic Zone (EEZ)

- The 1982 world organization Convention on the Law of ocean|the ocean} (UNCLOS) outlined the EEZ as a zone within the sea over that a sovereign nation has bound special rights with regard to the exploration and usage of marine resources, which has the generation of energy from wind and water, and additionally oil and gas extraction.

- The EEZ is a locality that's adjacent to and on the far side the territorial ocean.
- It will be a most of two hundred transportation miles from the baseline. The baseline is generally measured is that the low-water line on the coast as indicated on large-scale charts formally approved by the coastal state.
- The EEZ doesn't embrace the territorial ocean and additionally doesn't embrace the ocean bottom on the far side two hundred transportation miles.
- The EEZ includes the contiguous zone.
- Within the EEZ, the country has rights over natural resources. The country has jurisdiction over some activities for the explanations of environmental protection, among others.
- It additionally needs to respect the rights of alternative countries within the EEZ like the liberty of navigation.
- The distinction between territorial ocean and therefore the EEZ is that the previous confers full sovereignty over the waters, whereas the latter is just a “sovereign right” that refers to the coastal nation’s rights below the surface of the ocean. The surface waters ar high sea.
- Rights of the country within the EEZ
- The coastal state has the rights to:
 - Explore and exploit, conserve and manage the natural resources (living or nonliving).
 - Produce energy from wind, currents and water.
 - Establish and use artificial islands, structures and installations.
 - Conduct marine research.
 - Protect and preserve the marine surroundings.

UNCLOS

- The world organization Convention on the Law of the ocean (UNCLOS) is a world pact that was adopted and signed in 1982.

- It replaced the four Geneva Conventions of April, 1958, that severally involved the territorial ocean and therefore the contiguous zone, the ocean bottom, the high seas, fishing and conservation of living resources on the high seas.
- The Convention has created 3 new establishments on the international scene : the International court for the Law of the ocean the International Davy Jones's locker Authority the Commission on the boundaries of the ocean bottom
- UNCLOS because the presently prevailing law of the ocean is binding fully.
- There ar seventeen components, 320 articles and 9 annexes to UNCLOS
- The law of the ocean provides for full rights to nations for a 200-mile zone from their bounds.
- The ocean and oceanic bed extending this space is regarded to be Exclusive Economic Zone (EEZ) and any country will use these waters for his or her economic utilization.

Topic 25: NAGZIRA TIGER RESERVE

Importance for Prelims: Environment



Three labourers killed in fire at Nagzira tiger reserve.

- Nagzira life sanctuary is found between Bhandara-Gondia district of geographic region.
- Nagzira life Sanctuary is secured within the arms of nature and adorned with a picturesque landscape, luxuriant vegetation and is a living out of doors deposit to explore and appreciate nature.
- This sanctuary incorporates a variety of fish, thirty four species of mammals, 166 species of birds, thirty six species of reptiles and 4 species of amphibians.
- The invertebrate fauna includes variety of butterfly and alternative insect species.
- Large wild mammals found here embrace the tiger, leopard, Indian Bibos gaurus, sambar, nilgai, chital, wild boar, sloth bear, deer, chevrotain and canid.
- The Nagzira-Navegaon tiger reserve is established to conserve tigers wandering outside the Tadoba reserve territory.

- The Nagzira sanctuary, that was of one hundred fifty sq. kilo-meter and therefore the Navegaon park, was of a hundred thirty sq. kilo-meter, that has been multiplied to 700 sq. kilo-meter for brand spanking new tiger reserve.

Topic 26: INDIA NETHERLANDS STRATEGIC PARTNERSHIP

Importance for Prelims: International Relations



Prime Minister Narendra Modi recently control a virtual summit along with his Netherlands counterpart Mark Rutte. The leaders united to diversify the ties in trade and economy between the countries. They conjointly united to expand their relations in sensible cities, agriculture, science and technology, healthcare, and space.

Partnership in Water Sector

- During the summit, Asian country and Kingdom of The Netherlands launched a strategic partnership on water. beneath the partnership, the countries united to alleviate the joint working party on water to ministerial level. It conjointly aimed to broaden bilateral cooperation in new areas of water.
- Under the partnership the countries can concentrate on water budgeting, changing waste to energy and suburbanised treatment technologies and price effective water technologies.
- Why did Asian country sign the water sector partnership with the Dutch?

- Netherlands is that the world leader in water management. common fraction of Kingdom of The Netherlands lies beneath water level. Yet, the Dutch have with success understood water connected challenges and have tested technologies and solutions in delta management, chemical process, control.

Topic 27: LA SOUFRIERE VOLCANO

Importance for Prelims: Geography

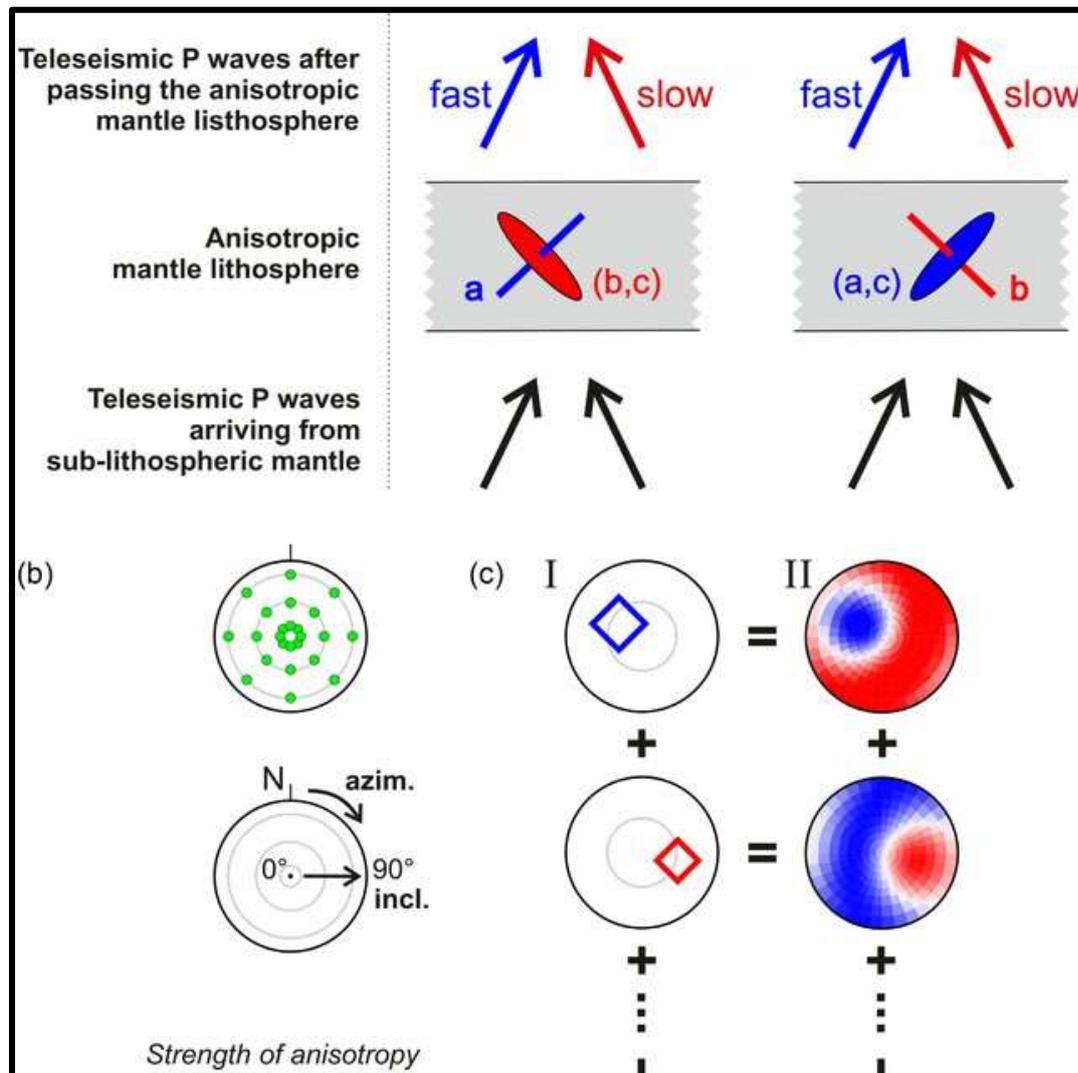


La Soufriere volcano erupts on Caribbean's Saint Vincent, evacuation underway. The volcano last erupted in 1979, and a previous eruption in 1902 killed some 1,600 people.

- La Soufrière or Soufrière Saint Vincent is a vigorous volcano on the island of Saint Vincent in Saint Vincent and also the Grenadines.
- It is that the highest peak in Saint Vincent, and has had 5 recorded explosive eruptions since 1718, last in Gregorian calendar month 2021.
- At 1,234 m (4,049 ft), La Soufrière is that the highest peak on Saint Vincent in addition because the highest purpose in Saint Vincent and also the Grenadines.
- Soufrière may be a stratovolcano with a crater lake and is that the island's youngest and northmost volcano.

Topic 28: ANISOTROPY

Importance for Prelims: Science & tech



Non-uniformity of range foresees considerably giant earthquake events

- Anisotropy is that the property of a fabric that permits it to alter or assume completely different properties in several directions as against symmetry.
- It may be outlined as a distinction, once measured on completely different axes, during a material's physical or mechanical properties (absorbance, ratio, conduction, strength, etc.)
- An example of property is light-weight returning through a polarizer. Another is wood, that is less complicated to separate on its grain than across it.

Topic 29: TERRITORIAL ARMY

Importance for Prelims: Defence

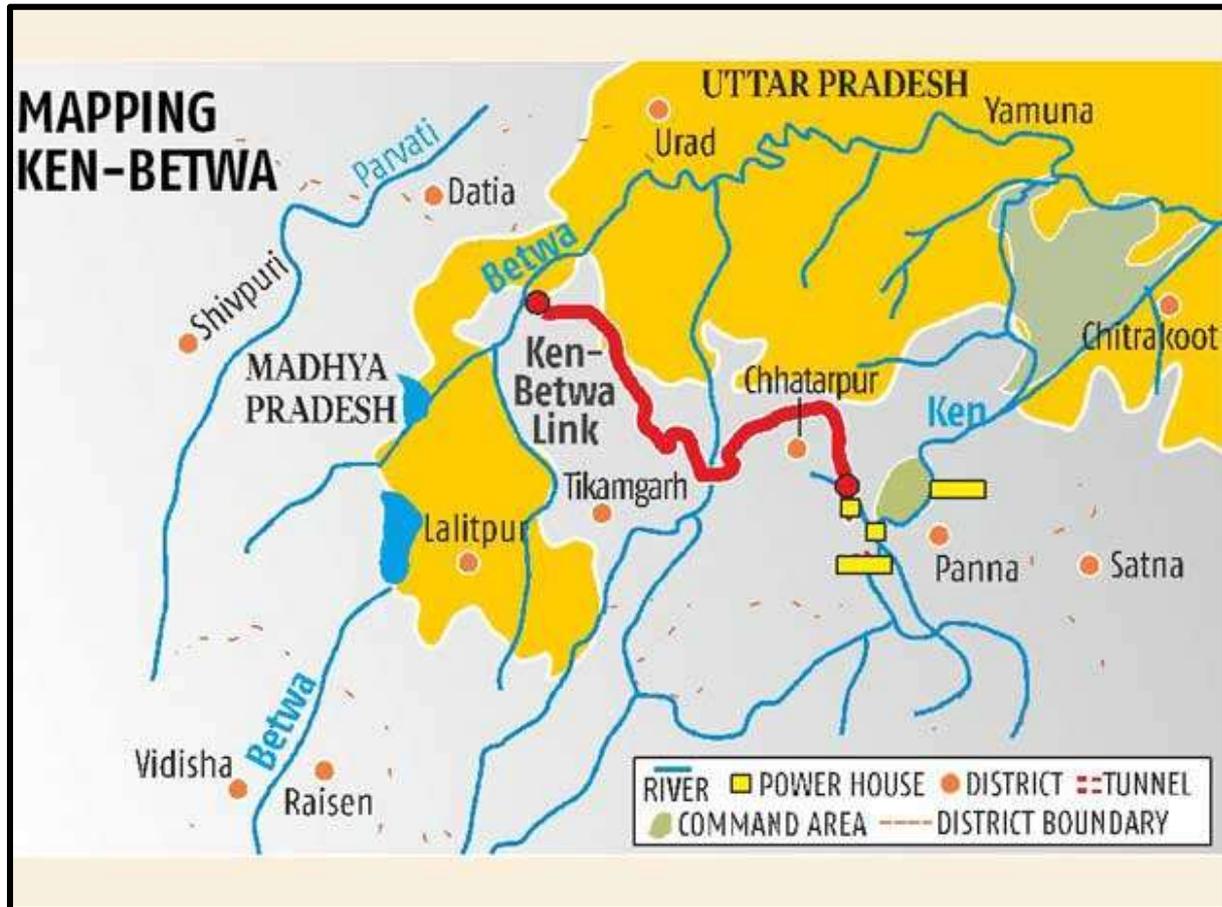


Kashmir: Militants kill territorial soldier at his home

- India's 1st governor Shri C Rajagopalachari formally inaugurated the Indian territorial on October nine in 1949.
- It is a company wherever volunteers apply for a brief amount of coaching per annum, therefore on be able to tackle any emerging scenario or to serve for the defence of Asian nation.
- The territorial, additionally called the 'Terriers', is taken into account the second line of national defence when the service.
- The territorial is a component of an everyday Army and its gift role is to alleviate the service from static duties and assist civil administration in coping with natural calamities and maintenance of essential services in things wherever lifetime of the communities is affected or the protection of the country is vulnerable and to supply units for Regulars Army as and once needed.
- Territorial Army comes underneath the Defence Ministry

Topic 30: KEN BETWA PROJECT

Importance for Prelims: Economy



Sonia Gandhi writes to Prakash Javadekar, asks him to not implement Ken-Betwa project.

Ken Betwa Link Project (KBLP):

- The Ken-Betwa Link Project (KBLP) is that the stream interlocking project that aims to transfer surplus water from the Ken stream in MP to Betwa in UP to irrigate the drought-prone Bundelkhand region.
- The region unfold across the districts of 2 states chiefly Jhansi, Banda, Lalitpur and Mahoba districts of UP and Tikamgarh, Panna and Chhatarpur districts of MP.
- The project involves building a 77-metre tall and a 2-km wide Dhaudhan dam and a 230-km canal.

- Ken-Betwa is one amongst the thirty stream interlocking comes formed across the country.
- The project has been delayed thanks to political and environmental problems.

Ken and Betwa Rivers

- Ken and Betwa rivers originate in MP and square measure the tributaries of Yamuna.
- Ken meets with Yamuna in Banda district of UP and with Betwa in Hamirpur district of UP.
- Rajghat, Paricha and Matatila dams square measure over Betwariver.
- Ken stream passes through Panna tiger reserve.

National Perspective set up for interlocking of rivers:

- The National stream Linking Project (NRLP) formally referred to as the National Perspective set up, envisages the transfer of water from water 'surplus' basins wherever there's flooding, to water 'deficit' basins wherever there's drought/scarcity, through inter-basin water transfer comes.
- Under the National Perspective set up (NPP), the National water program Agency (NWDA), has known thirty links (16 underneath the solid ground part and fourteen underneath the chain of mountains Component) for the preparation of practicability reports (FRs).
- The NPP for transferring water from water-surplus basins to water-deficit basins was ready in August 1980.

Topic 31: DIRECT TAX

Importance for Prelims: Economics

Direct Taxes

- Direct taxation is levied on income, wealth and profit
- Direct taxes include
 - income tax
 - national insurance contributions
 - capital gains tax
 - corporation tax
- The burden of a direct tax cannot be shifted
- Over the last twenty years in the British economy, there has been a shift towards indirect taxes



08:04

The Centre's tax collections, web of refunds, were calculable at Rs nine.45 hundred thousand large integer throughout 2020-21, around five-hitter more than the revised estimates of Rs nine.05 hundred thousand large integer for the year, the govt. same.

- A tax could be a tax that an individual or organization pays on to the entity that obligatory it.
- An individual remunerator, as an example, pays direct taxes to the govt. for numerous functions, together with tax, property tax, private property tax, or taxes on assets.
- There are indirect taxes, like sales taxes, wherever a tax is levied on the vendor however paid by the client.

Corporate Tax:

- It is levied on a firm's profit by the govt..
- It is taxed on operational earnings once expenses are subtracted.
- The rate of company tax in Asian country varies from one form of company to a different i.e. domestic companies and foreign companies pay tax at completely different rates .

Dividend Distribution Tax (DDT):

- Dividend refers to the distribution of profits to shareholders of a corporation.
- Thus, the dividend distribution tax could be a form of tax that's owed on the dividends offered to its shareholders by the company.
- Higher dividends mean a bigger tax burden for the company entity.

Minimum Alternate Tax

- At times it should happen that a remunerator, being a corporation, could have generated financial gain throughout the year, however by taking the advantage of assorted provisions of Income-tax Law (like exemptions, deductions, depreciation, etc.), it should have reduced its liabilities or might not have paid any tax the least bit.
- Due to a rise within the range of zero nonexempt corporations, Minimum Alternate Tax (MAT) was introduced by the Finance Act, 1987 with result from assessment year 1988-89. Later on, it had been withdrawn by the Finance Act, 1990 and so reintroduced by Finance Act, 1996.
- MAT is a crucial tool with that minimisation may be prevented.

Topic 32: CHILIKA LAKE

Importance for Prelims: Environment



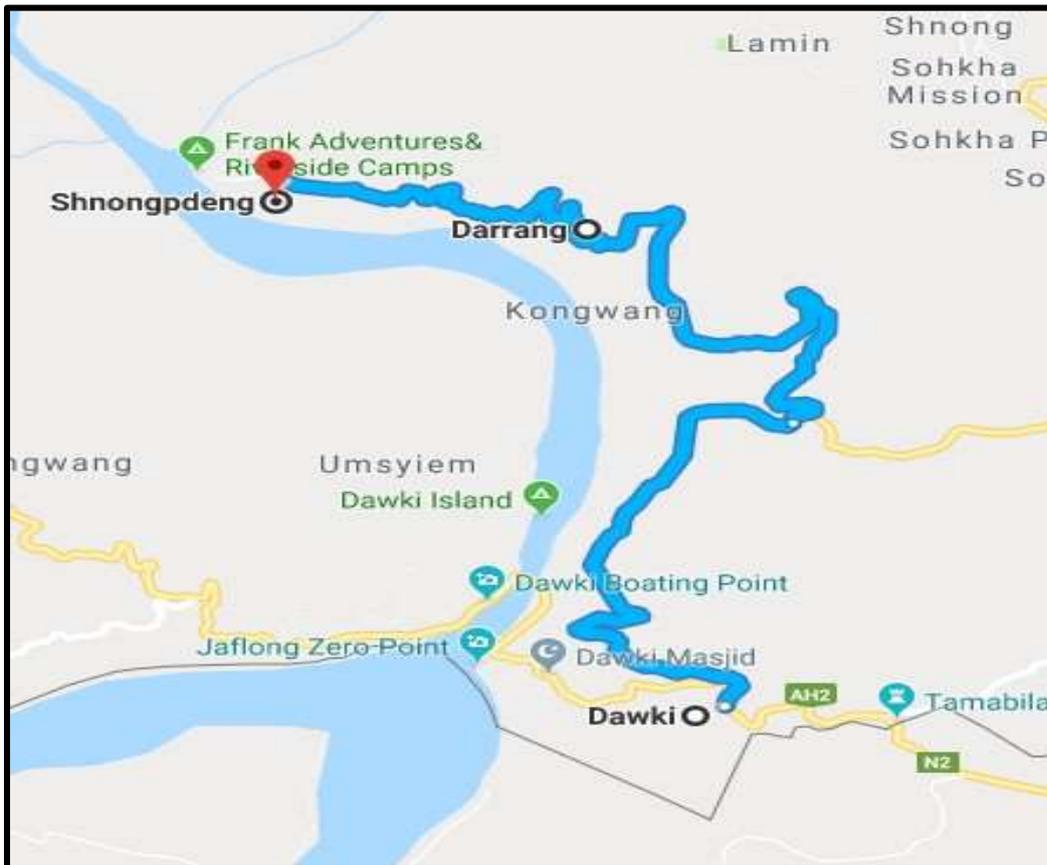
The population of dolphins in Chilika, India's largest briny water lake, and on the Odisha coast has doubled this year compared with last year.

Chilika Lake

- Chilika is Asia's largest and world's second largest laguna.
- It lies on the East Coast of Asian country within the state of Odisha, separated from the mighty Bay of geographical region by atiny low strip of sand.
- It spreads over Puri, Khurda and Ganjam districts of Odisha on the East Coast of Asian country, at the mouth of the Daya watercourse, flowing into the Bay of geographical region, covering a part of over one,100 sq. kilometers.
- It is that the largest wintering ground for migratory birds on the Indian sub-continent and is home to variety of vulnerable species of plants and animals.
- In 1981, Chilika Lake was selected the primary Indian land of international importance below the Ramsar Convention.
- Major attraction at Chilika is Irrawady dolphins that ar usually noticed off Satpada Island.
- The massive Nalabana Island (Forest of Reeds) covering concerning sixteen sq klick within the laguna space was declared a building in 1987.
- Kalijai Temple – placed on associate island within the Chilika Lake.

Topic 33: UMNGOT RIVER

Importance for Prelims: Geography



Residents of twelve Meghalaya villages oppose dam on India's clearest stream.

- Umngot stream is that the cleanest stream in Asian country and in some components is as clear as crystal and you'll truly see the stream bed.
- Umngot stream, that flows in each Asian country and Bangla Desh, is in Meghalaya
- The stream is that the natural boundary between RiPnar (of Jaintia Hills) with HimaKhyrim (of Khasi Hills) over that hangs one span suspension bridge.

Topic 34: CSIR -NEERI

Importance for Prelims National Organisations

The Council of Scientific and Industrial analysis (CSIR) has divested Rakesh Kumar, Director, National setting Engineering and analysis Institute (NEERI) .

- The CSIR-National Environmental Engineering analysis Institute (CSIR-NEERI) could be a analysis institute created and funded by Government of Republic of India.
- It was established in Nagpur in 1958 with concentrate on water system, disposition, and communicable diseases and to some extent on industrial pollution and activity diseases found common in post-independent Republic of India.
- NEERI could be a pioneer laboratory within the field of ecology and engineering and a part of Council of Scientific and Industrial analysis (CSIR).
- NEERI has 5 zonal laboratories at urban center, Delhi, Hyderabad, city and Mumbai. NEERI falls beneath the Ministry of Science and Technology (India) of

central government.

About CSIR

- Council of Scientific and Industrial analysis (CSIR) is that the largest analysis and development (R&D) organisation in Republic of India.
- Established: Sep 1942
- Located: New DelhiCSIR is funded by the Ministry of Science associate degreed Technology and it operates as an autonomous body through the Societies Registration Act, 1860.
- CSIR covers a good spectrum of streams – from radio and house physics, earth science, geophysics, chemicals, drugs, genomics, biotechnology and

applied science to mining, physical science, instrumentation, environmental engineering and knowledge technology.

- It provides important technological intervention in several areas with relevancy social group efforts that embody the setting, health, water, food, housing, energy, and farm and non-farm sectors.

Organisation Structure

- President: Prime Minister of Republic of India (Ex-officio)
- Vice President: Union Minister of Science and Technology (Ex-officio)
- Governing Body: The Director-General is that the head of the governance.
- The different ex-officio member is that the finance secretary (expenditures).
- Other members' terms square measure of 3 years.
- **CSIR consultive Board:** 15-member body composed of outstanding members from several fields of science and technology.
- Its perform is to produce science and technology inputs to the governance.
- Member terms square measure of 3 years.

Topic 35: CORALS

Importance for Prelims Environment



New findings from Rutgers University say corals can survive temperature change. This is thanks to their capability to create rock laborious skeletons, the study finds.

- Corals are created of genetically identical organisms known as polyps. These polyps have microscopic protists known as zooxanthellae living inside their tissues.
- The corals and protists have a mutualistic relationship.
- The coral provides the zooxanthellae with the compounds necessary for **photosynthesis**.
- In come back, the zooxanthellae provide the coral with organic product of chemical change, like carbohydrates, that are used by the coral polyps for synthesis of their carbonate skeleton. In addition to providing corals with essential nutrients, zooxanthellae are chargeable for the distinctive and exquisite colours of corals.

- They are known as the “rainforests of the seas”.
- There are two varieties of corals:
- Stony, shallow-water corals—the kind that build reefs.
- Soft corals and problem corals that board dark cold waters.

Coral Bleaching

- When corals face stress by changes in conditions like temperature, light, or nutrients, they expel the dependent protocist zooxanthellae living in their tissues, inflicting them to show utterly white. This development is termed coral bleaching.
- The pale white color is of the semitransparent tissues of carbonate that a
- visible thanks to the loss of pigment manufacturing zooxanthellae.
- Corals will recover if the stress-caused bleaching isn't s
- Coral bleaching has occurred within the Caribbean, Indian, and Pacific oceans on an everyday basis.

Topic 36: INDIA H2 ALLIANCE

Importance for Prelims Current Events

Reliance, different energy majors type element coalition.

- The international energy and industrial majors have joined along to make a replacement coalition referred to as the Bharat H2 Alliance. The initiative to make the alliance was begun by the Reliance industries and Chart Industries.
- The IH2 alliance can chiefly specialize in industrial clusters like refineries, steel, cement, fertiliser, ports and supplying and industrial transport use cases. it'll conjointly produce standards for storage and transport of element in pressurized and liquefied type.
- The following are the most objectives of IH2A:
 - To build element economy and provide chain in Bharat
 - To facilitate develop blue and inexperienced element production and storage
 - To build hydrogen-use industrial clusters
 - To increase hydrogen-powered fuel cells-based transport
- The {india|India|Republic of Bharat|Bharat|Asian country|Asian nation} H2 Alliance can closely work with the govt of India on the subsequent 5 areas:
 - To develop National element Policy and roadmap 2021-30.
 - To produce National H2 Task Force and Mission in a very operation model
 - To establish National giant H2 Demonstration Stage comes
 - To produce a National Bharat H2 Fund
 - To produce a decent element joined capability.

Topic 37: SHAPHARI SCHEME

Importance for Prelims Governance

To bolster confidence in India's frozen shrimp turn out, the country's biggest food export item, the Centre has taken off a brand new theme to certify hatcheries and farms that adopt sensible cultivation practices.

Shaphari theme

- The theme has been developed by the Marine merchandise Exports Development Authority (MPEDA).
- The certification theme for cultivation merchandise is named 'Shaphari' – a Sanskrit word meaning superior quality of work merchandise appropriate for human consumption.
- The Shaphari theme relies on the United Nations' Food and Agriculture Organization's technical pointers on cultivation certification and can have 2 elements — certifying hatcheries for the standard of their seeds and, separately, approving shrimp farms that adopt the requisite sensible practices.
- The entire certification method are going to be on-line to minimise human errors and guarantee higher quality and transparency.

Topic 38: PANGONG TSO

Importance for Prelims Geography



To bolster confidence in India's frozen shrimp turn out, the country's biggest food export item, the Centre has come into being a replacement theme to certify hatcheries and farms that adopt smart cultivation practices.

Shaphari theme

- The theme has been developed by the Marine merchandise Exports Development Authority (MPEDA).
- The certification theme for cultivation merchandise is termed 'Shaphari' – a Sanskrit word which means superior quality of piscary merchandise appropriate for human consumption.
- The Shaphari theme is predicated on the United Nations' Food and Agriculture Organization's technical pointers on cultivation certification and can have 2 parts — certifying hatcheries for the standard of their seeds and, separately, approving shrimp farms that adopt the requisite smart practices.
- The entire certification method are going to be on-line to minimise human errors and guarantee higher credibleness and transparency.

Topic 39: ICLEI

Importance for Prelims International Organizations



ICLEI elects Atishi as next world Vice President; initial from South Asia.

- ICLEI – native Governments for property may be a world network of over one,750 native and regional governments committed to property urban development.
- Active in 100+ countries, It influence property policy and drive native action for low emission.
- It focuses on nature-based, equitable, resilient and circular development.
- ICLEI creates connections among the native, regional, national and world governmental levels.
- ICLEI advocate for sturdy national and world property policies that mirror the interests of native and regional governments and their communities.

- ICLEI forges strategic alliances with international organizations, national governments, educational and monetary establishments, civil society and also the personal sector.

Topic 40: ONE WEB

Importance for Prelims Science & tech



OneWeb to supply services in Kazak.

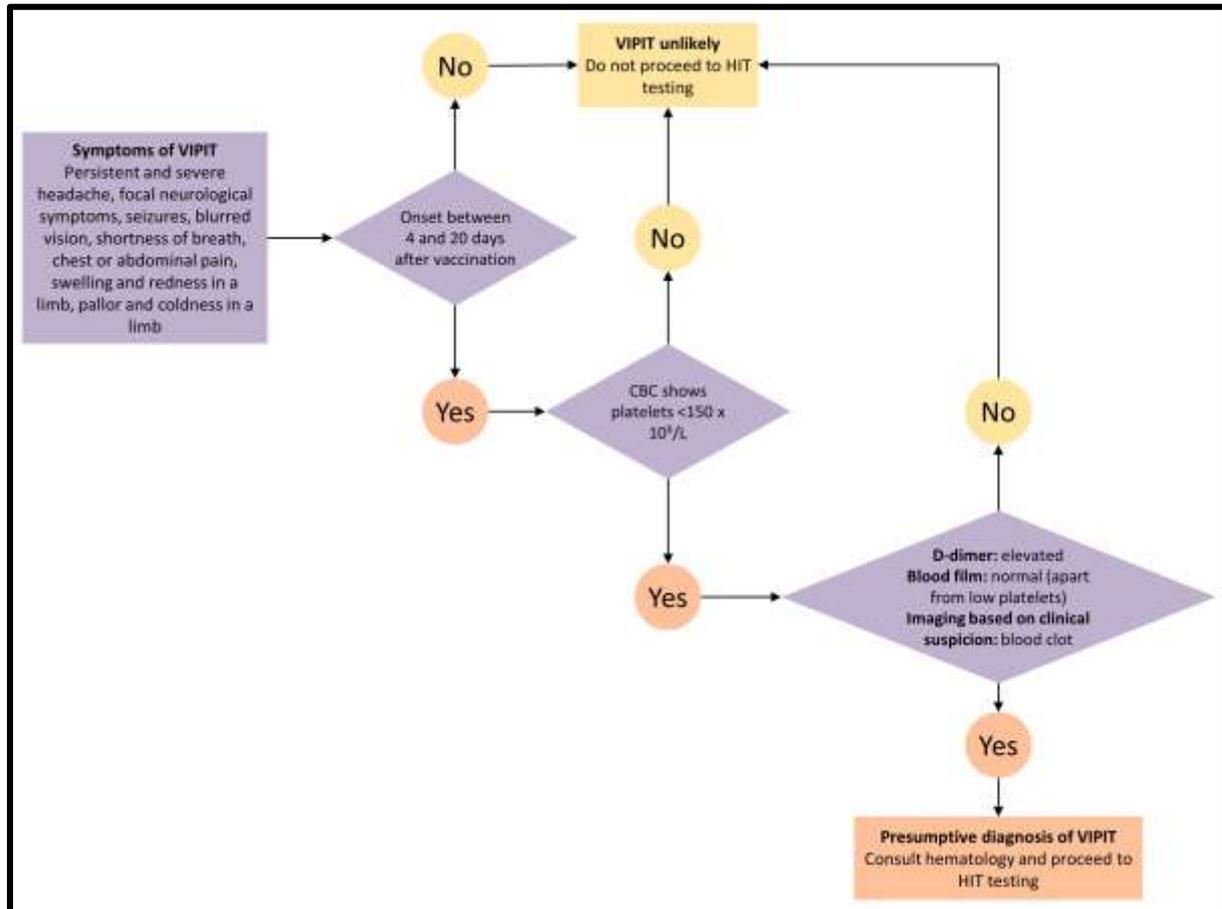
- OneWeb may be a world communications company based by Greg filmmaker.
- The company is headquartered in London, uk and McLean, Virginia, us.
- OneWeb was fashioned with a mission to supply high speed, low latency wireless broadband access to billions of individuals across the world, particularly in rural areas through a constellation of satellites in low earth orbit.
- The company was one in all the earliest to propose a mega-constellation to deliver net to remote elements of the globe however SpaceX's Starlink

constellation already has concerning 800 satellites in low-earth orbit against OneWeb's seventy four.

- The initial focus are going to be to deliver a viable industrial net service to the united kingdom and therefore the Arctic region by time of year next year.
- One internet intends to finish its target of getting 650 satellites in orbit by 2022 for its world coverage.
- Goal are going to be to launch world industrial net service that specialize in remote areas by 2022.

Topic 41: VIPIT

Importance for Prelims Science & tech



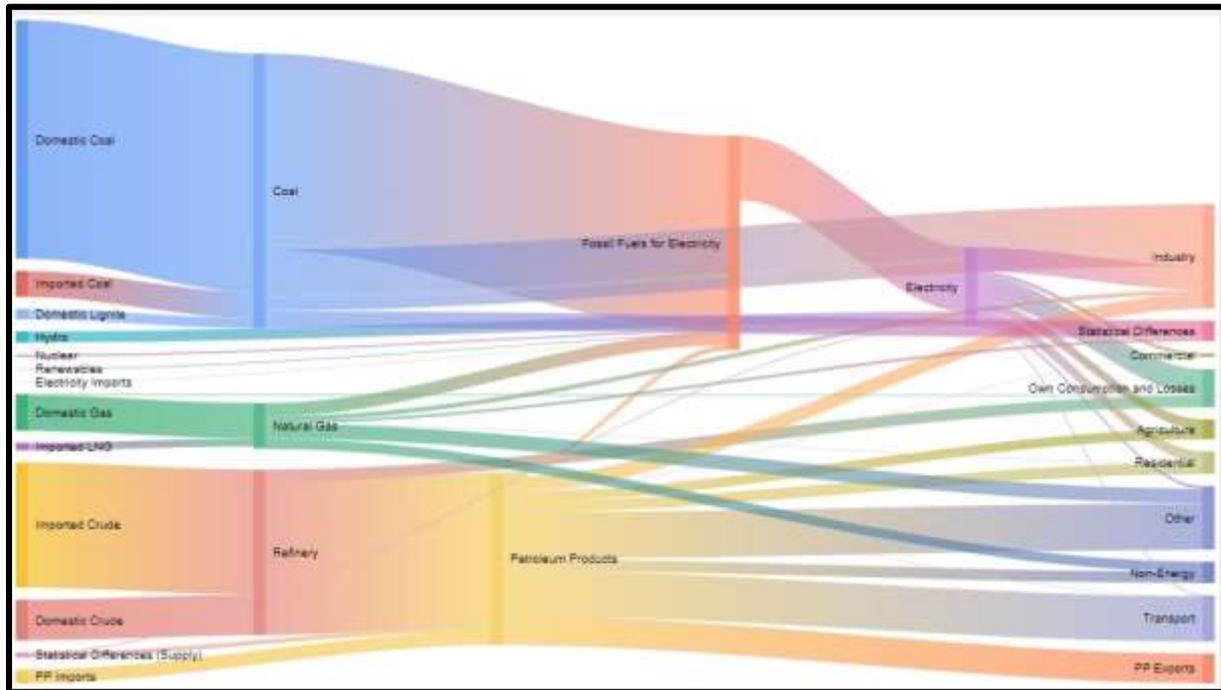
The curious case of VIPIT: Studies required to spot status markers, diagnostic tests, treatments.

- The UK, EU, and Scandinavian countries have reported that the AstraZeneca COVID-19 immunogen seems to be related to rare cases of great blood clots, as well as blood clots within the brain.
- These blood clots have 2 vital features: they occur four to twenty days once vaccination, and that they are related to low platelets (tiny blood cells that facilitate type blood clots to prevent bleeding).
- Doctors are using the term "vaccine-induced prothrombotic immune thrombocytopenia" (VIPIT).
- VIPIT looks to be rare, occurring in anywhere from one in each one hundred twenty five,000 to one in one million folks.

- There are no confirmed cases of VIPIT with the other COVID-19 immunogen.

Topic 42: INDIA ENERGY DASHBOARD

Importance for Prelims: Economy



The Asian country Energy Dashboards Version a pair of.0 was launched by NITI Aayog.

- India Energy Dashboards (IED) is associate degree endeavour to supply single-window access to the energy knowledge for the country.
- Energy knowledge published/provided by Central Electricity Authority, Coal Controller’s Organisation, and Ministry of fossil oil and gas is compiled within the Dashboards.
- NITI Aayog launched the Version one.0 in could 2017.
- The key options of the improved version, Asian country Energy Dashboards Version a pair of.0, are –
- The IED provides statistic knowledge from FY 2005-06 till FY 2019-20;
- Enhanced knowledge transfer – It permits simple downloading of knowledge into convenient program formats in an exceedingly cleaner, a lot of intuitive way;

- IED provides knowledge at sub-yearly frequencies further. This includes monthly knowledge and API connected knowledge from some portals maintained by the govt. agencies.
- The monthly knowledge is sourced from the monthly reports that area unit often revealed for the electricity, fossil oil and gas sectors.
- API connected knowledge from Saubhagya, UJALA, PRAAPTI, and Vidyut PRAVAH has been incorporated within the portal.

Topic 43: SMALLCASES

Importance for Prelims: Economics

- A tiny case could be a basket of stocks which will replicate a specific investment theme, plan or a sector. So, a dividend-yield tiny case could also be created from high dividend paying stocks AND an IT tiny case, of leading computer code companies.
- Small case these days hosts dozens of ready-made portfolios and investment methods that are created by SEBI-licensed professionals like brokers and analysis analysts, exploitation quantitative models and algorithms to screen and weight constituents.
- Small case, that provides infrastructure to the creators of those portfolios, is partnered with all leading brokerages together with Zerodha, HDFC Securities, Kotak Securities, Axis Direct, wildflower and Angel Broking.
- While some brokerage homes reverend their own in-house tiny cases, some have faith in tiny cases designed by a subsidiary of tiny case, Windmill Capital.
- To invest in tiny cases you would like a demat account. after you buy/sell atiny low case, the stocks/ETFs that includes in it'll be attributable or debited to your account.
- The minimum investment quantity could vary counting on the stocks that compose atiny low case. Once atiny low case is chosen, you'll invest a payment or favor to run a scientific investment in it.
- Standard brokerage charges ar applicable. additionally, there'll be a nominal, one-time registration fee of ₹100-150.

Topic 44: INDUSTRIAL & MEDICAL OXYGEN

Importance for Prelims: Science & tech



Consumption of medical gas doubled in 5 days in Gujarat.

Medical gas

- Medical gas is that the gas that we have a tendency to use to treat patients. we have a tendency to use it to take care of enough gas level in our blood.
- Oxygen medical aid is that the use of gas as a medical treatment. we are able to use it to treat low blood gas levels, carbon monoxide gas toxicity, cluster headaches, etc.
- This gas provides a basis for nearly all trendy anaesthetic techniques, restores tissue gas tension by increasing the gas availableness, aids revitalisation, aids vas stability, etc.

- However, there area unit some facet effects furthermore. what is more, high concentrations will cause toxicity.

Industrial gas

- Industrial gas is concentrated on uses in industrial plants together with combustion, oxidation, cutting and chemical reactions. the commercial gas purity levels aren't applicable for human use and there may well be impurities from dirty instrumentation or industrial storage that might build individuals unwell.
- Followings area unit the uses of gas in industry:
- Multi-industry uses gas fastening, gas cutting, gas scarfing, flame cleansing, flame straightening, etc.
- Metals producing uses: production
- Petroleum industry: coal chemical action, manufacture of gas compound, propene compound, synthesis gas, etc.
- Glass and ceramics: conversion of air-fuel combustion systems into oxy-fuel combustion systems for top potency and reduction of Night emissions.
- Pulp and paper manufacturing: gas as a bleaching chemical.

Difference between Medical gas and Industrial gas

- Medical gas is that the gas that we have a tendency to use to treat patients. we have a tendency to use gas to take care of enough gas level in our blood.
- Industrial gas is that the gas that we have a tendency to use for industrial functions. we have a tendency to use gas in industries principally for combustion and chemical action processes.

Topic 45: NEW YEAR FESTIVALS IN INDIA

Importance for Prelims: Culture



Chaitra Shukla Pratipada

- It marks the start of the yr of the VikramSamvat additionally referred to as the Vedic [Hindu] calendar.
- VikramSamvat relies on the day once the emperor Vikramaditya defeated Sakas, invaded Ujjain and mixed up a brand new era.
- Under his oversight, astronomers shaped a brand new calendar supported the luni-solar system that's still followed within the northern regions of Asian country.
- It is that the 1st day throughout the waxing part (in that the visible facet of moon is obtaining larger each night) of the moon within the Chaitra (first month of Hindu calendar).

GudiPadwa and Ugadi

- These festivals area unit celebrated by the individuals within the Deccan region as well as Mysore, Andhra Pradesh and geographic region.
- The common apply within the celebrations of each the festivals is that the merry food that's ready with a mixture of sweet and bitter.

- A notable concoction served is saccharide (sweet) and nim tree (bitter), known as bevu bella within the South, signifying that life brings each happiness and sorrows.
- Gudi may be a doll ready in Maharashtrian homes.
- A bamboo stick is adorned with inexperienced or red brocade to create the gudi. This gudi is placed conspicuously within the house or outside a window/ door for all to examine.
- For Ugadi, doors in homes area unit adorned with mango leaf decorations known as toranalu or Torana in Kannada.

Cheti Chand

- Sindhis celebrate the yr as Cheti Chand. Chaitra month is termed ‘Chet’ in Sindhi.
- The day commemorates the birth day of Uderolal/Jhulelal, the saint of Sindhis.

Navreh

- It is that the satellite yr that's celebrated in Cashmere.
- It is that the Sanskrit word ‘Nav-Varsha’ from wherever the word ‘Navreh’ has been derived.
- It falls on the primary day of the Chaitra Navratri.
- On at the present time, Kashmiri pandits check out a bowl of rice that is taken into account as an emblem of material resource and fertility.

SajibuCheiraoba

- It may be a ritual pageant of Meiteis that is ascertained on the primary day of Manipur synodic month Shajibu, that falls in March/April each year.
- On the day of the pageant, individuals prepare a joint family feast within which ancient cuisines area unit offered to native deities at the doorway gates of the homes.

Topic 46: CHIEF ELECTION COMMISSIONER

Importance for Prelims: Polity

Recently, the President has appointed Shri Sushil Chandra, the senior-most Election Commissioner, because the Chief committeeer within the Election Commission of Asian country.

Chief Election Commissioner (CEC)

- The committee shall comprises the chief election commissioner and such range of different election commissioners, if any, because the president could from time to time fix.
- The appointment of the chief election commissioner and different election commissioners shall be created by the president.
- The president can also appoint once consultation with the committee such regional commissioners as he could take into account necessary to help the committee.

Conditions of service and Tenure of Chief Election Commissioner (CEC)

- The conditions of service and tenure of workplace of the election commissioners and therefore the regional commissioners shall be determined by the president.
- The CEC and therefore the 2 different election commissioners have equal powers and receive equal wage, allowances and different perquisites, that ar almost like those of a decide of the Supreme Court.
- They hold workplace for a term of six years or till they attain the age of sixty five years, whichever is earlier.
- They will resign at any time or may be removed before the end of their term.

Independence of Chief Election Commissioner (CEC)

- The chief election commissioner is supplied with the protection of tenure.

- He can't be faraway from his workplace except in same manner and on constant grounds as a decide of the Supreme Court.
- He are often removed by the president on the premise of a resolution passed thereto impact by each the homes of Parliament with special majority.
- He doesn't hold his workplace until the pleasure of the president, although he's appointed by him.
- The service conditions of the chief election commissioner can't be varied to his disadvantage once his appointment.
- Any different election commissioner or a regional commissioner can't be faraway from workplace except on the advice of the chief election commissioner.

Topic 47: REGEN COV

Importance for Prelims: Science & tech



Regeneron to hunt America approval for COVID-19 cocktail to be used for prevention.

- REGEN-COV, a mix of casirivimab and imdevimab, protected menage contacts from exposure to SARS-CoV-2, with seventy two per cent protection against symptomatic infections within the 1st week, and ninety three per cent then, consistent with trial knowledge discharged by the corporate.
- The current trial tested REGEN-COV to be used as a passive immunizing agent, that involves direct delivery of virus-fighting antibodies into the body in contrast to ancient vaccines within which the receiver's system is activated to develop its own antibodies.
- These knowledge mistreatment REGEN-COV as a passive immunizing agent counsel that it should each scale back transmission of the virus likewise as scale back infective agent and malady burden in people who still get infected.

Antibody Cocktail

- An protein could be a macromolecule created by immune cells that's simply the proper form and size to connect itself to a particular spot on a specific foreign substance, like a pandemic or bacterium within the blood.
- By attaching, the protein will doubtless directly stop these invaders from inflicting Associate in Nursing infection, or it will mark them for destruction by immune cells.
- The REGN-COV2 protein cocktail in these trials could be a combination of 2 potent, complementary, virus-neutralizing antibodies.
- They were elect by Regeneron scientists once screening thousands of choices.
- Each binds to the spike proteins on the virus, that is that corona we have a tendency to see in footage of the virus.
- Those spikes permit the virus to connect to and penetrate alternative cells. If we have a tendency to block that interaction, the virus is a smaller amount winning at binding to healthy cells.
- One protein comes from somebody's survivor of COVID-19.. the opposite protein is from a mouse that has been built to possess somebody's system. The cocktail doesn't contain human blood merchandise.

Topic 48: SHANTIR OGROSENA

Importance for Prelims: Defence

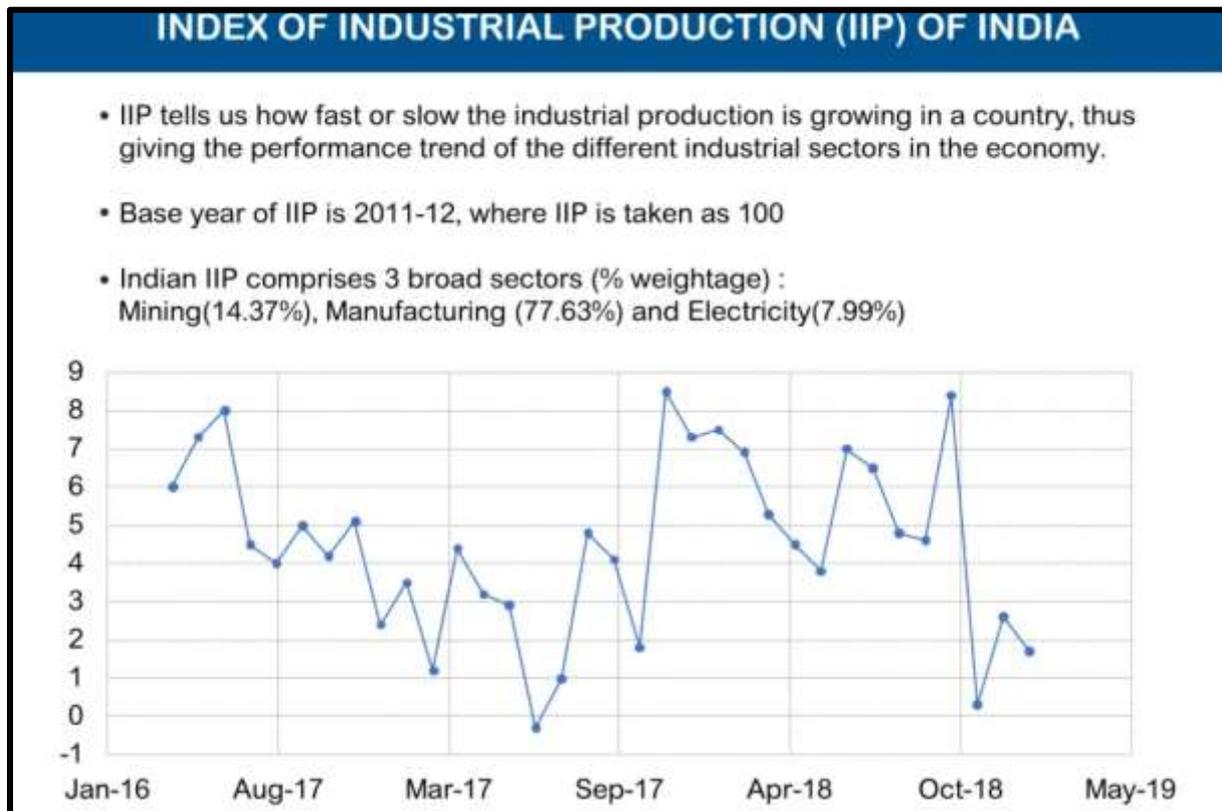
Exercise **SHANTIR OGROSENA-2021** culminated nowadays.

Exercise ShantirOgroshena

- The Exercise ShantirOgroshena (Front Runner of the Peace) could be a international military exercise.
- The 2021 edition of Exercise ShantirOgroshena are going to be control in People's Republic of Bangladesh|Bangla Desh|East Pakistan|Asian country|Asian nation} to commemorate the birth centenary of Bangladesh 'Father of the Nation' Bangabandhu Arab chief Mujibur Rahman.
- The theme of the exercise is "Robust Peace Keeping Operations".
- The military observers from USA, UK, Turkey, Kingdom of Kingdom of Saudi Arabia, Kuwait and Singapore also will be present throughout the exercise.
- The participants of Exercise ShantirOgroshena -2021 are going to be the DOGRA Regiment of Indian Army in conjunction with contingent of Royal Kingdom of Bhutan Army, Sri Lankan Army and Asian country Army.

Topic 49: INDEX OF INDUSTRIAL PRODUCTION

Importance for Prelims: Economy



IIP shrinks three.6% in Feb attributable to steep decline in producing.

Index of business Production

- The Index of business Production (IIP) is associate index that shows the expansion rates in numerous business teams of the economy in a very mounted amount of your time.
- It is compiled and revealed monthly by the Central applied mathematics Organization (CSO), Ministry of Statistics and Programme Implementation.
- IIP may be a composite indicator that measures the expansion rate of business teams classified under:
 - Broad sectors, namely, Mining, producing, and Electricity.
 - Use-based sectors, specifically Basic product, Capital product, and Intermediate product.

- Base Year for IIP is 2011-2012.
- The eight core industries of Asian nation represent regarding four-hundredth of the load of things that are enclosed within the IIP.

Significance of IIP :

- IIP is that the solely live on the physical volume of production.
- It is employed by government agencies as well as the Ministry of Finance, the bank of Asian nation, etc, for political functions.
- IIP remains very relevant for the calculation of the quarterly and advance value estimates.

Topic 50: NHRC

Importance for Prelims: National Organisations

‘Torture’ of twenty eight prisoners: NHRC asks chief secy to report on action taken.

National Human Rights Commission (NHRC):

- It could be a statutory body established on twelfth October, 1993 below the Protection of Human Rights Act (PHRA), 1993.
- The Act additionally provides for the creation of the State Human Rights Commission likewise.

Composition:

- The chairman could be a retired judge of India or a decide of the Supreme Court.
- They ar appointed by the President on the recommendations of a six-member committee consisting of:
 - Prime Minister (head)
 - Speaker of the Lok Sabha
 - Deputy Chairman of the Rajya Sabha
 - Leaders of the Opposition in each the homes of Parliament
 - Union Home Minister.

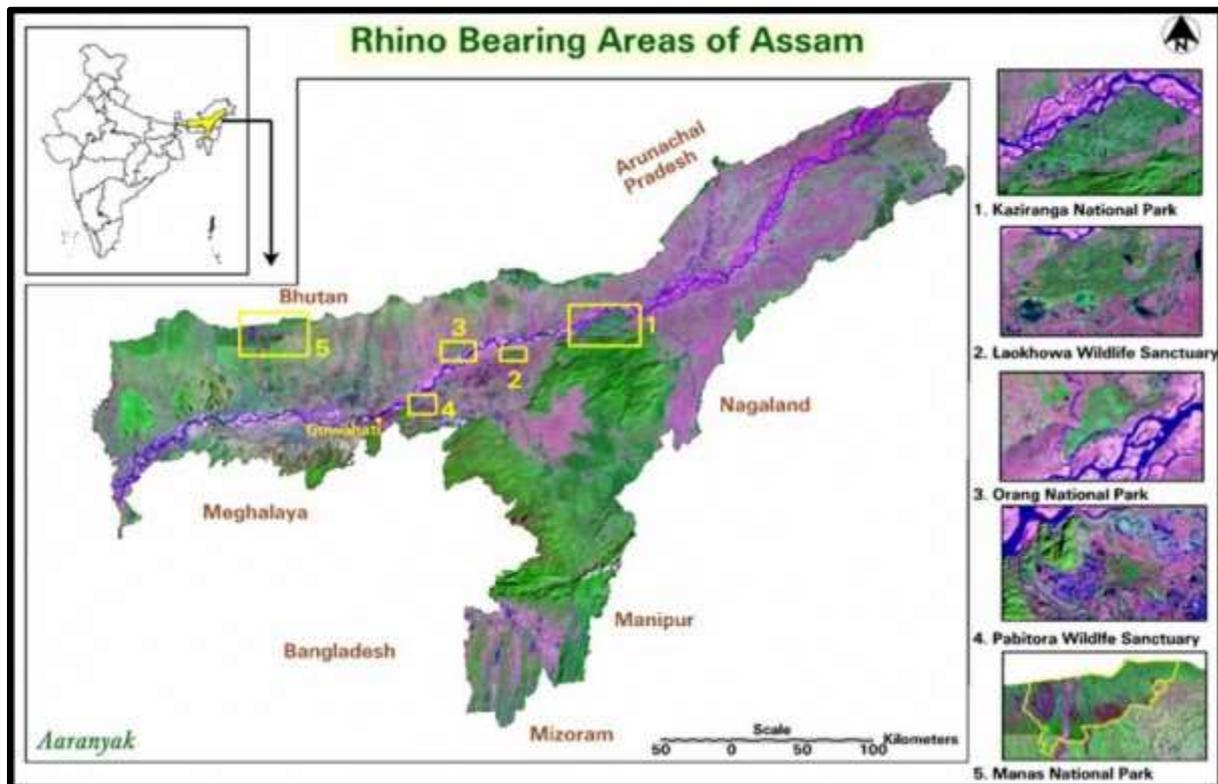
Term and removal:

- They hold workplace for a term of 3 years or till they attain the age of seventy years, whichever is earlier.

The President will take away them from the workplace below specific circumstances.

Topic 51: INDIAN RHINO VISION 2020

Importance for Prelims: Environment



The formidable Indian odd-toed ungulate Vision 2020 (IRV 2020) came to an in depth with the discharge of 2 rhinos — AN man and a feminine — in Assam’s Manas park transported from Pobitora life Sanctuary concerning 185 metric linear unit east.

- Designed in 2005, the IRV2020 is believed to possess achieved its target of accomplishing a population of three,000 rhinos in state.
- But the arrange to unfold the Rhinoceros unicornis across four protected areas on the far side Kaziranga park, great ape park and Pobitora couldn't come about.

Indian odd-toed ungulate Vision 2020

- Launched in 2005, Indian odd-toed ungulate Vision 2020 is AN formidable effort to realize a wild population of a minimum of three,000 larger one-horned rhinos contact seven protected areas within the Indian state of state by the year 2020.

- Seven protected area units are Kaziranga, Pobitora, great ape park, Manas park, Laokhowa life sanctuary, Burachapori life sanctuary and Dibru Saikhowa life sanctuary.
- It may be a cooperative effort between numerous organisations, together with the International odd-toed ungulate Foundation, Assam's Forest Department, Bodoland Territorial Council, World Wide Fund – Asian country, and also the United States Fish and life Service.

Topic 52: OFFICIAL LANGUAGE IN COURTS

Importance for Prelims: Polity

Ambedkar had projected Indo-Aryan as official language: CJI Bobde

- Article 348 (1) of the Constitution of Asian nation provides that each one one} proceedings within the Supreme Court and in every court shall be in English language till Parliament by law otherwise provides.
- Under Article 348 (2), the Governor of the State could, with the previous consent of the President, authorize the employment of the Hindi language or the other language used for any official purpose of the State, within the proceedings of the court having its principal seat in this State only if decrees, judgments or orders gone along such High Courts shall be in English.
- Section seven of the Official Languages Act, 1963, provides that the employment of Hindi or official language of a State additionally to land language is also licensed, with the consent of the President of Asian nation, by the Governor of the State for purpose of judgments etc. created by the court for that State.

Topic 53: MONKEYDACTYL

Importance for Prelims: Environment



Researchers have delineate a archosaurian reptile species with appposable thumbs, that might probably be the earliest-known instance of the limb.

- The archosaurian reptile species were reptiles, shut cousins of dinosaurs and also the 1st animals when insects to evolve hopped-up flight.
- They evolved into numerous species; whereas some were as giant as associate F-16 fighter jet, others were as little as paper airplanes.
- The new archosaurian reptile fossil was discovered within the Tiaojishan Formation of Liaoning, China, and is assumed to be one hundred sixty million years previous. it's been named Kunpengopterusantipollicatus, conjointly dubbed “Monkeydactyl”.

What has the team of researchers found?

- “Antipollicatus” in Ancient Greek means that “opposite thumbs”, associated it absolutely was hooked up to the name as a result of the researchers’ findings may be the primary discovery of a archosaurian reptile with an opposed thumb.

- By learning its limb morphology and system, they recommend that *K. antipollicatus* might have used its hand for grasping, that is probably going associate adaptation for arboreal life.

Topic 54: QUAD

Importance for Prelims: International Relations

Navies of the 'Quad' will swing along to tackle any threat in Indo-Pacific: high Indian & North American country commanders.

- It could be a four-nation alliance of Asian nation, Australia, USA and Japan that was established in 2007.
- It is usually dubbed as Associate in Nursing "Asian" or "mini" global organization, and is viewed as a counterbalance to China's military and economic clout within the Indo-Pacific region.
- The 2020 US-China Economic and censorship Commission shows China's growing power projection on the Indian Ocean rim with military or economic activities in countries like West Pakistan, Sri Lanka, Maldives, Union of Burma and Bangladesh.
- Interestingly, the QUAD, that accustomed be called the quadrilateral security dialogue, is currently called the quadrilateral framework to point it's gone on the far side a slender security dialogue.
- In Nov 2017, India, the USA, Australia and Japan gave form to the long unfinished "QUAD" Coalition to develop a brand new strategy to stay the vital ocean routes within the Indo-Pacific freed from any influence (especially China).
- Since then, QUAD has taken many steps to bolster military and strategic ties with a series of working- and ministerial-level conferences.

Participation in Malabar Exercise:

- In 2020, all four QUAD Countries – Japan, India, Australia and also the USA took half within the Malabar exercise.
- Malabar exercise is Associate in Nursing annual trilateral military service exercise between the navies of Asian nation, Japan, and also the USA that is control alternately within the Indian and Pacific Oceans.

Topic 55: NCSC

Importance for Prelims: National Organisations



National Commission for scheduled Castes starts on-line complaints portal.

- NCSC may be a constitutional body that works to safeguard the interests of the scheduled castes (SC) in Republic of India.
- Article 338 of the constitution of Republic of India deals with this commission:
- It provides for a National Commission for the scheduled Castes and scheduled Tribes with duties to analyze and monitor all matters regarding safeguards provided for them, to discuss specific complaints and to participate and advise on the design method of their socio-economic development etc.

History and Origin:

- Special Officer: ab initio, the constitution provided for the appointment of a Special Officer underneath Article 338.
- The special officer was selected because the Commissioner for scheduled Castes and scheduled Tribes.

- 65th modification, 1990: It replaced the uninominal system with a multimember National Commission for scheduled Castes (SC) and scheduled Tribes (ST).
- The Constitution (65th Amendment) Act 1990, amended Article 338 of the Constitution.
- 89th modification, 2003: By this modification, the erstwhile National Commission for SC and ST was replaced by 2 separate Commissions from the year 2004 that were: National Commission for scheduled Castes (NCSC) and National Commission for scheduled Tribes (NCST)- underneath Article 338-A.

Structure:

- It consists of president, Vice-chairperson and 3 alternative members.
- They are appointed by the President by warrant underneath his hand and seal.

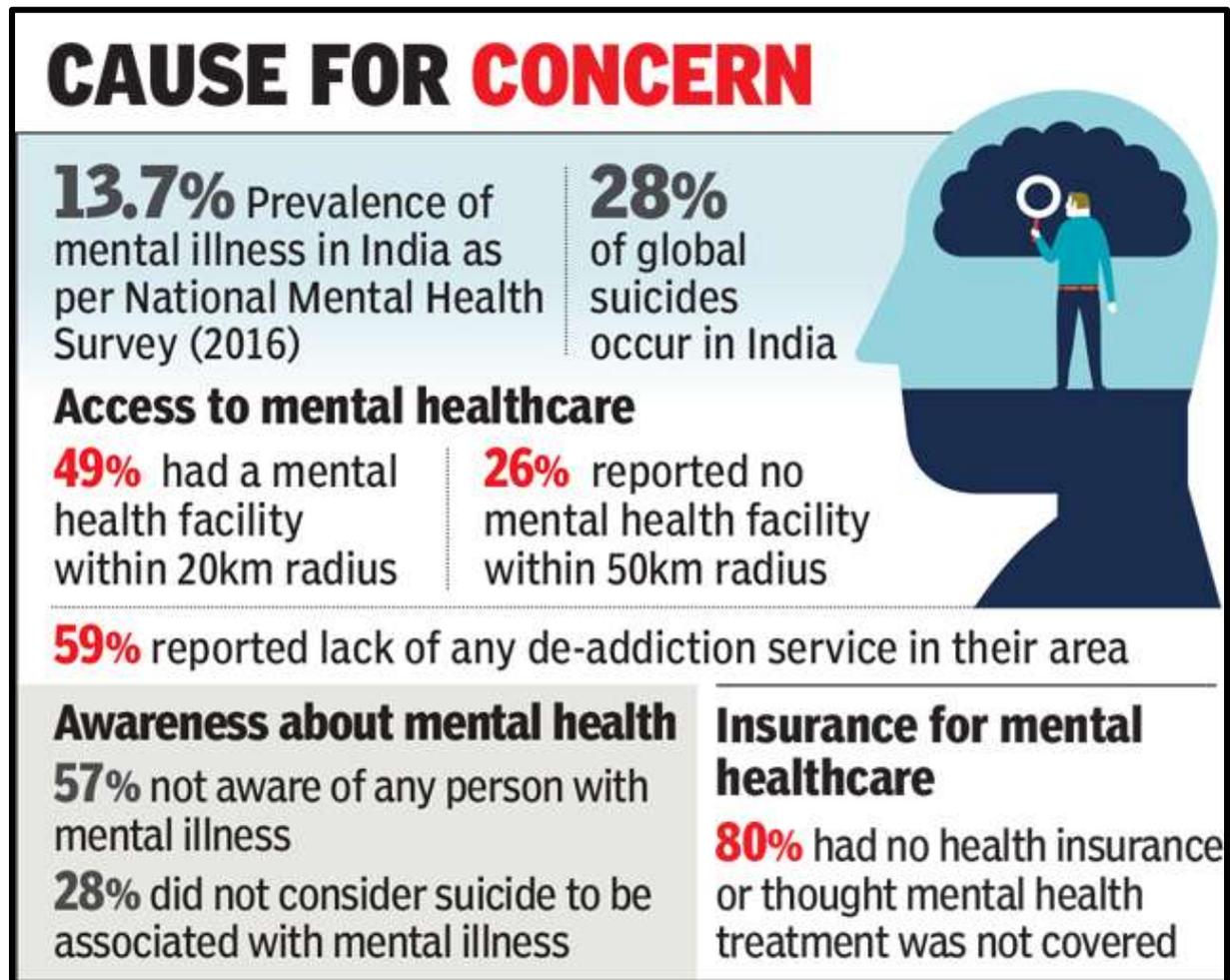
Functions:

- Monitoring and work all problems regarding the safeguards provided for the SCs underneath the constitution.
- Enquiring into complaints regarding the deprivation of the rights and safeguards of the SCs.
- Taking part in and advising the central or state governments with regard to the design of socio-economic development of the SCs.
- Regular reportage to the President of the country on the implementation of those safeguards.
- Recommending steps to be taken to more the socio-economic development and alternative welfare activities of the SCs.
- Any alternative perform with regard to the welfare, protection, development and advancement of the SC community.

- The Commission is additionally needed to discharge similar functions with relevance the Anglo-Indian Community because it will with regard to the SCs.
- Till 2018, the commission was additionally needed to discharge similar functions with relevance the opposite backward categories (OBCs). it had been mitigated from this responsibility by the 102nd modification Act of 2018.

Topic 56: MANAS PLATFORM

Importance for Prelims: Governance



Recently, the Principal Scientific advisor to the govt. of Bharat has nearly launched the MANAS Platform.

About MANAS Platform

- The MANAS platform stands for psychological state and Normalcy Augmentation System.
- It was supported as a national program by the Prime Minister's Science, Technology, and Innovation consultive Council (PM-STIAC).
- It may be a comprehensive, scalable, Associate in Nursing national digital prosperity platform and an app developed to reinforce mental well-being of Indian voters.

- It was initiated by the workplace of the Principal Scientific advisor to the govt. of Bharat.
- It may be a venture by Pune-based militia Medical faculty (AFMC) and National Institute of psychological state and Neuro-Sciences (NIMHANS), Bengaluru.
- The application has been developed by the Bengaluru centre of the Centre for Development of Advanced Computing (CDAC).
- It is predicated on life skills and core psychological method, with universal accessibility, delivering age-appropriate strategies and promoting positive perspective specializing in health.
- The current version has known 2 age teams i.e. ages fifteen to twenty, termed as Mann-Marg, and ages twenty to thirty five, termed as YoungISTAN.

PM-STIAC

- The Prime Minister's Science, Technology, and Innovation consultive Council (PMSTIAC), is Associate in Nursing overarching Council that facilitates the Principal Scientific Adviser's workplace to assess the standing in specific science and technology domains, comprehend challenges in hand, formulate specific interventions, develop a art movement roadmap and advise the Prime Minister consequently.
- The workplace of the Principal Scientific advisor (PSA) to the govt. of Bharat coordinates to facilitate and make sure the implementation of great interventions by involved government departments, agencies, and ministries.
- The PM-STIAC Secretariat is predicated at Invest Bharat and provides support to the workplace of the protein on project management and observation of the aforementioned interventions and national missions.

Topic 57: URANIUM ENRICHMENT

Importance for Prelims: Science & tech

Iran 'almost' prepared for hour U enrichment: world organisation nuclear agency.

- Uranium enrichment could be a method that's necessary to make a good fuel out of deep-mined U by increasing the share of uranium-235 that undergoes fission with thermal neutrons.
- Nuclear fuel is deep-mined from present ore deposits and so isolated through chemical reactions and separation processes.
- These chemical processes wont to separate the U from the ore aren't to be confused with the physical and chemical processes wont to enrich the U.
- Naturally occurring U doesn't have a high enough concentration of Uranium-235 at solely concerning zero.72% with the rest being Uranium-238.
- Due to the actual fact that uranium-238 is fissionable and not fissile, the concentration of uranium-235 should be multiplied before it will be effectively used as a fuel.

Topic 58: RCEP

Importance for Prelims: International Agreements

Singapore has sanctioned the Regional Comprehensive Economic Partnership (RCEP) agreement, turning into the primary country to try to to therefore.

- Regional Comprehensive Economic Partnership (RCEP) may be a trade agreement (FTA) between –
- The ten members of Association of Southeast Asian Nations
- Additional members of Association of Southeast Asian Nations +3 = China, Japan, South Korea
- Members with that Association of Southeast Asian Nations countries have FTA = Australia, New Sjaelland
- The cluster is predicted to represent a minimum of half-hour of the world gross domestic product and can emerge because the largest trade agreement within the world.
- It includes quite three billion individuals, includes a combined gross domestic product of concerning \$17 trillion, and accounts for concerning forty per cent of world trade.

Topic 59: NATO

Importance for Prelims: International Organisations



NATO can doubtless be part of the U.S. in retreating all troops from Islamic State of Afghanistan this Sept, German Defense Minister Annegret Kramp-Karrenbauer aforementioned Wednesday.

North Atlantic accord Organization:

- It is associate degree intergovernmental military alliance.
- Established by Washington accord that was signed on four Apr 1949.
- Headquarters — capital of Belgium, Belgium.
- Headquarters of Allied Command Operations — Mons, Belgium.

Significance:

- It constitutes a system of collective defence whereby its freelance member states comply with mutual defence in response to associate degree attack by any external party.

Composition:

- Since its instauration, the admission of latest member states has accumulated the alliance from the initial twelve countries to thirty. the foremost recent member state to be intercalary to North Atlantic Treaty Organization was North Macedonia on twenty seven March 2020.

- NATO membership is hospitable “any alternative European state in an exceedingly position to additional the principles of this accord and to contribute to the safety of the Atlantic space.”

Objectives:

- Political – North Atlantic Treaty Organization promotes democratic values and allows members to consult and work on defence and security-related problems to resolve issues, build trust and, within the end of the day, forestall conflict.
- Military – North Atlantic Treaty Organization is committed to the peaceful resolution of disputes. If diplomatic efforts fail, it's the military power to undertake crisis-management operations.
- These square measure dole out underneath the collective defence clause of NATO's instauration accord – Article five of the Washington accord or underneath a world organisation mandate, alone or in cooperation with alternative countries and international organisations.