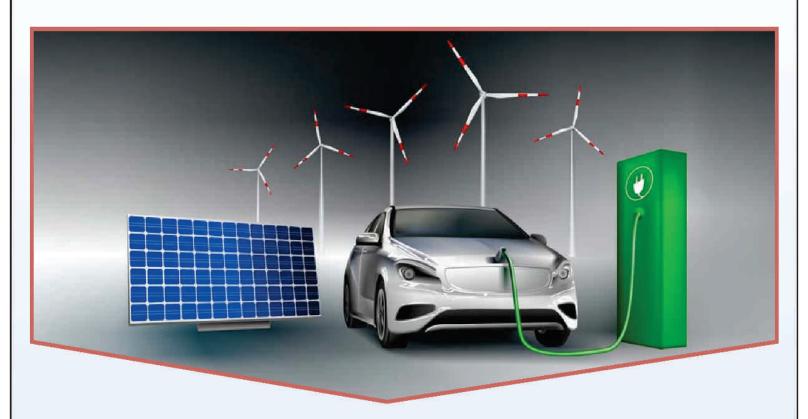
PERFECT 7

Weekly Current Affairs

An Initiative of Dhyeya IAS



India's Electric Vehicle Market

Ambition 2030

- India's Covid-19 Testing and Tracing
 Strategies: Consistency Needed
- 3 Issues Around Ken-Betwa Interlinking Project
- CAATSA and Turkey's S-400 Deal: Concerns for India
- Opening Banking Arena for Corporate Players: An Analysis
- 6 Commercial Approach to Agriculture: A New Outlook
- Connecting India's North East for Development and Prosperity







DHYEYA IAS: AN INTRODUCTION



Vinay Kumar Singh Founder & CEO

he guiding philosophy of the institute, throughout, has been creation of knowledge base. Dhyeya IAS inculcates human values and professional ethics in the students, which help them make decisions and create path that are good not only for them, but also for the society, for the nation, and for the world as whole. To fulfill its mission in new and powerful ways, each student is motivated to strive towards achieving excellence in every endeavor. It is done by making continuous improvements in curricula and pedagogical tools.

The rigorous syllabi not only instills in them, a passion for knowledge but also attempts to teach them how to apply that knowledge in real-life situations. The programmes lay emphasis on well-rounded personality development of the students and also in inculcating the values of honesty and integrity in them.



Q.H. Khan Managing Director

hyeya IAS is an institution that a ims at the complete development of the student. Our faculty are hand-picked and highly qualified to ensure that the students are given every possible support in all their academic endeavors. It is a multi-disciplinary institution which ensures that the students have ready access to a wide range of academic material.

Our brand of education has broad horizons as we believe in exposure. Our students are encouraged to widen their knowledge base and study beyond the confinements of the syllabus. We aim to lend a gentle guiding hand to make our students recognize their inner potential and grow on their own accord into stalwarts of tomorrow's society.





PERFECT 7: AN INTRODUCTION



Kurban Ali Chief Editor

ith immense pleasure I would like to inform you that the new version of 'Perfect 7', from the Dhyeya IAS, is coming with more information in a very attractive manner. Heartily congratulations to the editorial team. The 'Perfect 7' invites a wider readership in the Institute. The name and fame of an institute depends on the caliber and achievements of the students and teachers. The role of the teacher is to nurture the skills and talents of the students as a facilitator. This magazine is going to showcase the strength of our Institute. Let this be a forum to exhibit the potential of faculties, eminent writers, authors and students with their literary skills and innovative ideas.

Please do visit our website www.dhyeyaias.com and our youtube channel for regular and updated information on current affairs.



Ashutosh Singh Managing Editor

to our magazine, but also left no stone unturned to keep it 'near to perfect'. We all know that beginning of a task is most vital and full of challenges. So we met the same fate.

Publishing 'Perfect 7' provided us various challenges because from the beginning itself we kept our bar too high to ensure the quality. Right from the very first issue we had a daunting task to save aspirants from the 'misinformation' or 'overdose of information'. Focussing on civil services examination 'Perfect 7' embodies in itself perfect friend and guide in your preparation. This weapon is built to be precise yet comprehensive. It is not about bombardment of mindless facts, rather an analysis of various facets of the issues, selected in a systematic manner. We adopted the 'Multi Filter' and 'Six Sigma' approach, in which a subject or an issue is selected after diligent discussion on various levels so that the questions in the examination could be covered with high probability.

Being a weekly magazine there is a constant challenge to provide qualitative study material in a time bound approach. It is our humble achievement that we feel proud to make delivered our promise of quality consistently without missing any issue since its inception.

Your suggestions and popular demands always motivate us and keep our morale high.

May this version of 'Perfect 7' instill a new energy and a new spirit in you. We wish that the bond of affection between you and Dhyeya IAS reaches at a new height.



PREFACE





hyeya family has decided to bring a new colourful and vibrant version of 'Perfect 7' – a panacea for current affairs, which will add positive and dynamic energy in your preparation.

'Perfect7' is an outstanding compilation of current affairs topics as per the new pattern of Civil Services Examination (CSE). It presents weekly analysis of information and issues (national and international) in the form of Articles, News Analysis, Brain Boosters, PIB Highlights and Graphical Information, which helps to understand and retain the information comprehensively. Hence, 'Perfect 7' will build in-depth understanding of various issues in different facets.

'Perfect7' is our genuine effort to provide correct, concise and concrete information, which helps students to crack the CSE. This magazine is the result of the efforts of the eminent scholars and the experts from different fields. 'Perfect 7' is surely a force multiplier in your effort and plugs the loopholes in the preparation.

We believe in environment of continuous improvement and learning. Your constructive suggestions and comments are always welcome, which could guide us in further revision of this magazine.

Omveer Singh Chaudhary

Editor Dhyeya IAS s a proud jewel of Dhyeya IAS, 'Perfect 7' now comes in a new coloured avatar. 'Perfect 7' is a quintessential part of your preparation strategy for Civil Services Examination. A regular and manageable dose of current affairs will now reach you in new format, making it more reader friendly. Our humble attempt to serve you is surely rewarded by your appreciations. It encourages us to innovate and provide the best as per our ability.

A dedicated team of experts at Dhyeya IAS toils night and day to make your dream of Civil Services come true. I heartily thank and express my gratitude to the esteemed readers and all the people involved in making this magazine a shining star in the galaxy of Dhyeya IAS.

Rajat Jhingan

Editor Dhyeya IAS



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Weekly **Current Affairs** An Initiative of Dhyeya IAS

December ⊕ 2 0 2 0 ISSUE ⊕ 03

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(Ex. Editor Rajya Sabha, TV) & by Team Dhyeya IAS

IMPORTANT ISSUES

01

India's Electric Vehicle Market: Ambition 2030

Why in News?

- India's electric vehicle market could be worth \$206 billion (₹14,42,000 crore) in ten years, if India were to achieve its 2030 electric vehicle (EV) ambitions, an independent study released by the CEEW Centre for Energy Finance (CEEW-CEF) said.
- The study has also estimated a cumulative investment need of \$180 billion (₹12,50,000 crore) in vehicle production and charging infrastructure until 2030 to meet India's EV ambition.

Introduction

- Should India achieve its 2030 electric vehicle ambition and targets, it would present a market opportunity worth nearly \$206 billion (Rs 14,42,000 crore) in the course of this decade, says an independent study released today by the CEEW Centre for Energy Finance (CEEW-CEF).
- To meet India's EV ambition, there will be an enormous need of investment in infrastructure creation related to vehicle production and charging. It is



approximated that there will be the need for almost \$180 billion (Rs 12,50,000 crore) in investments.

While India is yet to officially spell out its electrification targets for 2030, the aspiration as stipulated by NITI Aayog-government's primary think tank, states that 70 per cent of all commercial cars, 30 per cent of private cars, 40 per cent of buses, and 80 per cent of two-wheeler (2W) and three-wheeler (3W) sales would be electric by the end of this new decade.

As a result, the CEEW-CEF study says cumulative EV sales in all vehicle segments would jump to over 100 million units by FY30 - 200 times its current market size of just half a million as on March 2020.

Challenges Ahead

 Availability and affordability of capital for OEMs, battery manufacturers, charge point operators, and end consumers would be key to determining the





pace, efficiency and cost of India's • transition to electric vehicles. Consistent policy support would also be critical.

- The study estimates that realising this ambition would require an estimated annual battery capacity of 158 GWh by FY30, which provides a massive market opportunity for domestic manufacturers.
- Even if 50 per cent of the battery manufacturing capacity were indigenous, investments would amount to as much as \$6.1 billion (Rs 42,900 crore) by FY30. Further, cumulative investments required would exceed \$12.3 billion (Rs 85,900 crore) in case of 100 per cent indigenisation of battery manufacturing.
- The recently approved production-linked incentive (PLI) scheme for the automobile and battery manufacturing sectors could help enable the right ecosystem for indigenisation and job creation in the EV sector.
- Another big opportunity would be in the area of charging infrastructure. India would need a network of over 2.9 million public charging points by FY30, beyond the in-home charging points, says the study. This would require investment of up to \$ 2.9 billion (Rs 20,600 crore) until 2030. Currently, there are only about 1,800 public charging points across the country.
- Similar opportunities exist in the automobile loan market too.

If EVs garner 30 per cent of vehicle sales by 2030, the central and state governments are set to lose revenue from petrol and diesel taxes by 15 per cent compared to business as usual. When pushing for EV transition, the government's plans should also include diversification of revenue sources.

Steps in Right Direction

- Union Minister of Road Transport and Highways & MSME Nitin Gadkari, had said that the government is trying to create an ecosystem to accelerate the uptake of electric vehicles in the country.
- Addressing a virtual conference '9th Edition of Auto Serve 2020'Electric Mobility Conference Opportunities 2020-Seizing in New Normal, the minister emphasised that the government is planning to set up at least one electric vehicle charging kiosk at around 69,000 petrol pumps across the country.
- The government has taken a number of steps to promote electric vehicles such as the reduction in GST to 5%, allowing delinking of battery cost of 2-3 wheelers from vehicle cost as it accounts for nearly 30% of the cost etc. which means permitting sales and registration of EVs without batteries.
- Union Minister reiterated that, the "government is also working towards making India a global automobile manufacturing hub in the next five years.' India is poised

to become a global automobile manufacturing hub in the next 5 years.

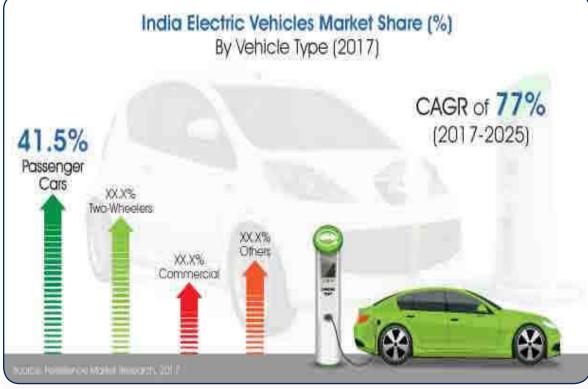
- India's auto industry has made significant strides in terms of development of different designs and models, robust R&D, huge stable market, government frame-work and bright & young engineering minds. He added India already is the largest manufacturer of two-wheelers in the world.
- Considering the huge potential of the sector, the government has earmarked over Rs 51,000 crore for this sector under the Production Linked Incentive (PLI) Scheme, the highest amongst the 10 champion sectors. H
- There is a huge requirement of about 25 million skilled jobs in the automobile sector in near future. This is very significant as this industry is going to create maximum jobs and growth.

Probable Impacts of Shifting to **Electric Vehicles**

- Policy interventions and behavioural changes can drive changes in passenger transport mode-share and this in turn can impact energy consumption, air quality, congestion, and road safety.
- A 30 per cent EV sales in future combined with a higher share of public transport would lead to a 31 per cent reduction in oil imports (worth INR 2,16,043 crore (USD 28.3 billion) relative to a normal scenario. This would result in a concomitant reduction







of 36 per cent in carbon monoxide (CO) emissions, 28 per cent in nitrogen oxide (NOx) emissions, 29 per cent in particulate matter (PM) emissions, and 20 per cent in GHG emissions, in the same scenario.

ownership in India to reach 80 per 1,000 people for all vehicles (passenger + freight) excluding 2Ws as per the vehicle stock model. Inclusive of 2Ws, the vehicle ownership will be at 259 vehicles per 1,000 people. As per the projections, even in 2030, vehicle ownership levels in India would be much lower compared to the rest of the world. For instance, in 2016,

vehicle ownership in Brazil stood at 330 per 1,000 people and that in South Korea at 424 per 1,000 people as per available data (MoRTH 2018).

In the course of transition to electric mobility, new high-skilled jobs in the manufacturing of batteries, EV powertrain, and charging infrastructure are likely to be created. Additional consumption of electricity will drive job creation in the power sector. Simultaneously, reduced consumption of oil would lead to a reduction in jobs created in the petroleum sector and in internal combustion engine (ICE) vehicle manufacturing. India is already shifting to a gas based

economy and other alternatives to oil and petroleum, it is a pro-active step to create jobs in electric power generation.

Way Forward

Among the many measures to revive the economy in the aftermath of COVID-19, electric mobility should be prioritised as a key sector for India's economic recovery and sustainable growth. In a 30%

electric vehicle scenario, the domestic value-add generated in manufacturing, reduction in oil import bill, and environmental and health benefits far outweigh the loss in value addition from the petroleum and automotive sectors.

General Studies Paper- III

opic:

Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

opic:

 Science and Technologydevelopments and their applications and effects in everyday life.

Q. Discuss the probable impacts of adoption of electric vehicles in India and also highlight the steps taken by the government to promote the use of electric vehicles?





(02)

India's Covid-19 Testing and Tracing Strategies: Consistency Needed

Why in News?

- Indian Prime Minister Narendra Modi has called on the country's worst-affected states to give top priority to testing and contact tracing to combat coronavirus.
- India is registering 95% recovery rate from coronavirus, which is the best performance by any Covid affected nation so far.
- Daily cases in India have been falling since mid-September, but there's concern that varied testing strategies may be hindering the battle against the disease.

Background

- Experts from Indian Public Health Association (IPHA) have recommended the Central government relook the Covid-19 testing strategy in such a way that it results in guiding the public health response and effectively limiting the spread of the disease.
- In a third joint statement on the Covid-19 pandemic in India, a task force of eminent public health experts has advised the government that the experience from other countries indicates that increased testing does not prevent the deaths from Covid-19.
- The current benchmark for the adequacy of testing is 140 tests per million population per day, and sample positivity rate of less than five percent. In order to reach this target indiscriminate testing is being resorted to.



Testing by itself is not a control strategy. Moreover, daily testing of more than one million, mostly ill-defined population, is imposing heavy economic cost without commensurate benefit for control effort.

- There is a need to relook at the testing strategy in a way that it results in guiding the public health response and effectively limiting the spread of the disease.
- populated urban areas, and the limited disease spread in rural areas must be different. In most cases, by the time the testing is done and the results are made available, the infection has already spread to close contacts. This is more pronounced in rural areas.
- The presence of a large number of asymptomatic cases in all states/
 UTs further compounds the problem of early detection as the current testing strategy does not allow for testing of asymptomatic persons unless they are close contacts of a diagnosed case, the report mentioned.
- A large number of tests e.g. RT-PCR, CBNAAT, TRUNAT, RAT, etc have been employed for the Covid-19 test. In order to achieve the pre-defined target, peripheral health functionaries are using whichever test is available, flouting the guidelines. For example, use of RAT in areas that are neither a containment zone nor a health facility.
- The strategy of "Test, Track, Treat, isolate" focusing on early



identification of the cases to limit their transmission to others and also for effective clinical management is helpful when the epidemic is at its very early stage to avoid its foothold in the community.

Testing Methods Deployed in India

- India had been using the what's known as a PCR test - regarded as the gold standard of testing - very widely.
- But currently, only 60% of all tests use this method, and many Indian states - who are in charge of their own health policies - have switched to rapid antigen testing (RAT), a faster but less reliable • method.
- RAT tests are known to miss up to 50% of cases due to false negatives (where infected people are not detected), although some experts believe they are still useful in areas which have become virus hotspots.
- India isn't alone in using these and some European tests, countries grappling with further waves of infection have also resorted to rapid testing.
- India has approved the use of a new type of rapid coronavirus test based on gene editing technology in a bid to boost its testing numbers.
- With the second highest number of cases in the world after the US, India is trying to increase testing, but there've been issues around the reliability of some types of test. The latest one gives fast results, like a pregnancy test,

and is named after a fictional Indian detective character, called Feluda. It uses a technique known as Crispr - short for Clustered Regularly Interspaced Palindromic Repeats - which is a gene editing technology.

RT-PCR

- This was the test done till now globally to detect coronavirus in patients
- The COVID-19 RT-PCR test is a real-time reverse transcription polymerase chain reaction (rRT-PCR) test for the qualitative detection of nucleic acid from SARS-CoV-2
- An ideal diagnostic is both specific and sensitive, which means that people who test positive truly have the disease and none of the people carrying the virus slip through the test as a false negative. RT-PCR meets both criteria, with specificity and sensitivity rates of 90 percent and above.
- RT-PCR tests, the RNA (ribonucleic acid) is converted to DNA (deoxyribonucleic acid) by using specific primers and probes, with fluorescent reporters, to amplify and detect viral nucleic acid presence. It requires expensive Real Time PCR machines which are available at specialised sites.

Feluda Test

- The total time required for the test is less than one hour. The test is based on a bacterial immune system protein called Cas9.
- It starts the same way as a normal

real time reverse transcriptionpolymerase chain reaction, it then differs by using a specifically designed PCR reaction to amplify a part of the viral nucleic acid sequence. Then a highly specific CRISPR, FnCAS9 binds to that sequence

- Using the innovative chemistry on a paper strip, the CRISPR complex, bound to that specific sequence, can be visualised as a positive band - like one sees in simple pregnancy tests.
- Any throat/nose swab sample can be taken and then you do an RT-PCR which converts the RNA and makes multiple copies of DNA. Once you have multiple copies of DNA, then you complicit with the Crispr-Cas9 system and you put it into the strip. Once you put it in the strip, the result will come out in one minute.

Inconsistent Testing Strategies

- Maharashtra is the worst-affected state in India. with 17% of all cases. In terms of total coronavirus cases, it's followed by states with smaller populations such as Karnataka, Andhra Pradesh, Tamil Nadu and Kerala. But Uttar Pradesh and Bihar - two other states with large populations - appear to be doing much better. They have lower proportions of confirmed cases at 2.9% and 1.6%.
- What the testing data reveals is that in both Bihar and Uttar Pradesh (and some other states) less than 50% of total tests use the PCR method - so cases are being missed.





- In Maharashtra, nearly 60% of tests have been PCR tests (although they are increasingly using rapid testing in the state capital, Mumbai.)
- And Tamil Nadu state has relied totally on PCR testing, which means it is likely to have a far more accurate idea of the spread of the virus.
- There's evidence that states may also not be testing enough in highly populated areas where infections tend to be higher. As of 30 November, 13% of Uttar Pradesh's cases were found in its capital, Lucknow, although fewer than 6% of total tests in the state have been carried out there.
- India's Covid-19 national guidelines say states should trace contacts of at least 80% of positive

- cases within 72 hours. But India's parliamentary committee on health and family welfare has said that "poor contact tracing and less testing could have been a factor for the exponential growth of Covid". It's difficult to get reliable information from every state about contact tracing.
- Uttar Pradesh was recently lauded by the WHO for "early and systemic tracking of high-risk contacts".
- By contrast, data for Karnataka shows its numbers for primary and secondary contact tracing have fallen since September.In Kerala, the data shows 95% of all cases since 4 May have been traced back to the primary and secondary contacts of infected persons.



- But none of these datasets reveals
 if 80% of contacts of someone
 who was positive were traced
 within the timeframe set out in
 the national guidelines.
- And many states do not make this data public.

Way Forward

- There is a need to re-assess the thrust on testing strategy and shift to syndromic management, especially in the high seroprevalence states and districts for efficient management of resources.
- A pragmatic and differential testing strategy needs to address issues of testing high-risk populations, testing only in the early stages of the outbreak, and testing as part of monitoring. Universalization of testing may be an extremely expensive proposition and unlikely to yield any public health benefits for control strategy.

General Studies Paper-II

Topic

Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Q. With the change in the scale of epidemic, there is an urgent need to change the strategy for screening and testing of coronavirus. Discuss.







Issues Around Ken-Betwa Interlinking Project

Why in News?

- The Ken-Betwa project, India's first river interlinking project.
- An expert panel of India's environment ministry has deferred environment clearance for the Lower Orr Dam, which is part of the Ken-Betwa river interlinking project, and sought fresh data to decide whether a new public hearing is expected for the project or not.
- Identified as a national project, it is part of the Ken-Betwa river interlinking project and envisages construction of a 45 metre high and 2,218-metre long dam across Orr river near village Didauni in Madhya Pradesh to provide irrigation facility to 90,000 hectares of area.

Introduction

- Ken-Betwa Link Project (KBLP) was declared as National Project in the year 2009, which entailed 90:10 funding i.e. 90% Union Government & 10% State Governments (Madhya Pradesh and Uttar Pradesh), which has now been changed to 60:40.
- Keeping in view of its immense benefits to Bundelkhand region, the project is required to be put on fast track for which it may be necessary to provide funding for this project.
- The ministry of water resources pushed for the project saying the project would ensure availability of water to drought-prone areas in the both the states of Uttar Pradesh and Madhya Pradesh. Besides, the ministry said that it would provide annual irrigation to about 6 lakh hectares of land and drinking water facility to 13.42 lakh people in both the states.

- The project was initially mooted in the early 1980s and was actively taken by the NDA government under Prime Minister Atal Bihari Vajpayee but then it was challenged in the Supreme Court. The apex court finally in 2013 asked the UPA government to start the process but no progress was made.
- The project has been revived by the NDA government under Narendra Modi and Rs 100 crore was allotted in 2014 to expedite preparation of detailed project reports.
- The Detailed Project Report (DPR) of Ken-Betwa link project (KBLP) (Phase-I, Phase-II and Comprehensive) has been completed.
- The techno-economic clearance and various statutory clearances of the KBLP Phase-I have been accorded (except Stage-II Forest clearance and clearance from Central Empowered Committee (CEC) of the Supreme Court).
- The Environmental clearance and Forest land diversion clearances for Lower Orr dam (part of phase-II) have been recommended by Environment Appraisal Committee (EAC) and Forest Appraisal Committee (FAC) of Ministry of Environment, Forest and Climate Change (MoEF& CC) respectively.
- The forest clearance was recommended in February 2019 by the Forest Advisory Committee (FAC) of the MoEFCC allowing diversion of 968.24 hectares of forest land. The project proponents finally submitted the forest clearance in October 2020 to seek a final environment clearance which was recommended to them in 2016.
- Ministry of Tribal Affairs (MoTA) clearance for Rehabilitation and Resettlement (R&R) plan of Project

Affected Families (PAFs) of Lower Orr dam has also been accorded.

Inter-linking of Rivers

- Interlinking of River (ILR) programme is of national importance and has been taken up on high Priority. Union Minister for Water Resources monitors the progress of ILR from time to time.
- Under the National Perspective Plan (NPP) prepared by Ministry of Water Resources, NWDA (National Water Development Agency) has already identified 14 links under Himalayan Rivers Component and 16 links under Peninsular Rivers Component for inter basin transfer of water based on field surveys and investigation and detailed studies.
- Out of these, Feasibility Reports of 14 links under Peninsular Component and 2 links (Indian portion) under Himalayan Component have been prepared. Draft Feasibility Reports of 7 link projects (Indian portion) of Himalayan Component have also been completed.
- The ambitious project of Inter-Linking of Rivers is the longcherished dream of former Prime Minister Atal Bihari Vajpayee.
- PM Modi has earlier emphasised that water is limited for India's population and there are areas which face floods, there are localities that are dry. PM Modi has said that interlinking of the river can solve the issue. In 2018, PM Modi had said that 17 per cent of the world's population resides in India, however, India has only four per cent of water.
- The central government officials discussed the status of the 47 intra-state link proposals from nine states. Apart from this, officials discussed the restructuring of





- several authorities such as the National Water Development Agency, the National Interlinking of Rivers Authority (NIRA) and Task Force for Interlinking of Rivers.
- As of now, six ILR projects the Ken-Betwa, Damanganga- Pinjal, Par-Tapi-Narmada, Manas-Sankosh-Teesta-Ganga, Mahanadi-Godavari and Godavari-Cauvery (Grand Anicut) — have been under examination of the authorities. With regard to the peninsular rivers, the Centre has chosen to focus on the Godavari-Cauvery link than the earlier proposal to link the Mahanadi-Godavari-Krishna-Pennar-Cauvery rivers. The latter has eluded consensus given reservations from Odisha.

Data Outdated

- Expert panel in its latest meeting noted that as per the rules governing green clearance to the projects, if forest clearance is "not submitted by the project proponent within the prescribed time limit of 18 months" such project would be "referred to the expert appraisal committee for having a relook, in case the primary data used in the preparation of the environmental impact assessment report is more than three years old".
- The rules state that in such a situation, the "expert appraisal committee may get the fresh data collected and on that basis and after due diligence, either reiterate its earlier recommendations or decide for reappraising the project proposal on account of valid reasons, as the case may be".

- It also holds that in case the expert committee decides to reappraise the project it may also decide on the "requirements of information for reappraisal as also the need for a fresh public hearing".
- In accordance with the rules, the expert appraisal committee noted that Lower Orr dam project was granted forest clearance in February 2019 "after almost 31 months" of the environment ministry's July 2016 letter regarding environment clearance.
- Thus, primary data used for the environmental impact assessment preparation is more than three years old.

Issues Surrounding the Project

- The expert committee's caution is unsurprising given that the Ken-Betwa river interlinking project, since its inception, has been contentious.
- 2019, a Supreme Court committee had questioned the basis on which wildlife clearance was granted to it and questioned its economic viability as well.
- The project involves submergence of over 9,000 hectares of area and out of that 5,803 hectares are prime forests of the Panna Tiger Reserve (PTR).
- As the project would lead to submergence of prime forest area, which is also the habitat of endangered species like tiger and vultures, it had faced stiff opposition from the wildlife experts and conservationists.
- The Supreme Court's committee in its report had noted that the cost of implementation of the landscape management plan for tiger conservation and the species

recovery programme for vultures and gharial is yet to be worked out and once included in the costbenefit analysis, could make the Ken-Betwa project economically unviable.

Way Forward

Inter-linking of rivers is a complex task and challenging in terms of environmental changes and cost-benefit analysis. There is an urgent need to plan water supply for the increasing population. But environmental concerns cannot be ignored. Threat to protected species of plants and animals and the challenges to rehabilitate them are of prime importance and tracking their growth and data for conservation is important. Such updated data will help to plan the conservation strategies. Interlinking of the rivers is surely a daunting task but there is a need to balance development and 333 nature.

General Studies Paper-II

Topic:

Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

General Studies Paper-III

Topic:

Conservation, environmental pollution and degradation, environmental impact assessment.

Q. Ken-Betwa Interlinking project is India's first river inter-linking project. Discuss the objectives it proposes to serve and what issues are halting its progress.







CAATSA and Turkey's S-400 Deal:Concerns for India

Why in News?

- The United States on December 15, imposed sanctions on Turkey for acquiring S-400 air defence systems from Russia. It may be recalled that the ground-to-air defenses system was acquired by Turkey from Russia in mid-2019. At that time Turkey had said that the acquisition pose no threat to NATO allies.
- India has also inked similar deal with Russia and is set to receive S-400 air defence system from Moscow in 2021. The sanctions imposed by the US on Turkey has made India cautious and New Delhi is closely monitoring the decision taken by US administration.

Background

- The Trump administration slapped sanctions on Turkey on Monday over a multibillion-dollar acquisition of a Russian missile system.
- long-anticipated move expected to further stoke tensions between Washington and Ankara in the weeks ahead of President-elect Joe Biden's ascension to the White House and send a message to foreign governments considering future weapons deals with Russia.
- In 2017, Turkish President Recep Erdogan brokered a deal reportedly worth \$2.5 billion with Russian President Vladimir Putin for the S-400 missile system.
- Despite warnings from the United States and other NATO allies, Turkey accepted the first of four missile batteries in July 2019. A week later, the United States cut Turkey, a financial and manufacturing partner, from the F-35 program.
- The sanctions put a ban on all U.S. export licenses and authorizations to the Republic of Turkey's Presidency of Defense Industries as well as an asset freeze and visa restrictions on

- the organization's president, Ismail Demir, and other top officers.
- Notably, outgoing President Donald Trump has given a waiver to India and it remains to be seen whether incoming Biden administration would continue with the same. It is likely that Biden would continue with the stand taken by Trump as far as S-400 deal is concerned but it may happen that the new president may change his stand over new deals.

Turkey's Rationale

- In Turkey's case, a series of events has informed its choice of the S-400. These range from its disappointment with the EU over accession talks, the European bloc's reaction to the coup attempt against President Recep Tayyip Erdogan in 2016, the US sheltering of Fethullah Gulen and his supporters, and Washington's support for the Kurds in Syria during the Syrian civil war.
- All of this compelled Erdogan to look to Russia and the S-400 followed in part from this decision. But interestingly, Trump at Osaka expressed sympathy for Turkey's S-400 choice and said that he understood Erdogan's decision. He also blamed former US president administration Barack Obama's for placing conditions on Turkey's purchase of the US Patriot missiles and treating Ankara unfairly.
- This has raised hopes that Turkey will escape sanctions over the S-400. And if that turns out to be the case, then the US should show similar consideration towards India's purchase of the S-400. For, if Turkey being a NATO ally can escape the interoperability argument, then India being a long-time recipient of Russian weapons platforms should definitely not be subjected to CAATSA sanctions.

CAATSA

- Countering America's Adversaries through Sanctions Act (CAATSA) was passed unanimously by the US Congress and signed reluctantly by US President Donald Trump. Enacted on August 2, 2017, its core objective is to counter Iran, Russia and North Korea through punitive measures.
- Title II of the Act primarily deals with sanctions on Russian interests such as its oil and gas industry, defence and security sector, and financial institutions, in the backdrop of its military intervention in Ukraine and its alleged meddling in the 2016 US Presidential elections.
- Section 231 of the Act empowers the US President to impose at least five of the 12 listed sanctions enumerated in Section 235 of the Act — on persons engaged in a "significant transaction" with Russian defence and intelligence sectors.
- As part of Section 231 of the Act, the US State Department has notified 39 Russian entities, dealings with which could make third parties liable to sanctions. These include almost all of the major Russian companies/ entities such as Rosoboronexport, Sukhoi Almaz-Antey, Aviation. Russian Aircraft Corporation mig, and United Shipbuilding Corporation which are active in manufacturing defence items and/or their exports.
- CAATSA, if implemented in its stringent form, would have affected India's defence procurement from Russia.
- Russian maker of S-400s Almaz-Antey Air and Space Defense Corporation JSC — is on the list of 39 Russian entities.
- Apart from the S-400 air defence system, Project 1135.6 frigates and Ka226T helicopters will also be affected. Also, it will impact joint ventures, like Indo Russian Aviation

Ltd, Multi-Role Transport Aircraft Ltd and Brahmos Aerospace. It will also affect India's purchase of spare parts, components, raw materials and other assistance.

S-400 Air Defence Missile System

- The S-400 Triumf, (NATO calls it SA-21 Growler), is a mobile, surface-toair missile system (SAM) designed by Russia. It is the most dangerous operationally deployed modern long-range SAM (MLR SAM) in the world, considered much ahead of the US-developed Terminal High Altitude Area Defense system (THAAD).
- The system can engage all types of aerial targets including aircraft, unmanned aerial vehicles, (UAV and ballistic and cruise) missiles within the range of 400km, at an altitude of up to 30km.
- The system can track 100 airborne targets and engage six of them simultaneously.
- It represents the fourth generation of long-range Russian sams, and the successor to the S-200 and S-300. The S-400's mission set and capabilities are roughly comparable to the famed US Patriot system.
- The S-400 Triumf air defence system integrates a multifunction radar, autonomous detection and targeting systems, anti-aircraft missile systems, launchers, and command and control centre. It is capable of firing three types of missiles to create a layered defence.
- The S-400 is two-times more effective than previous Russian air defence systems and can be deployed within five minutes. It can also be integrated into the existing and future air defence units of the Air Force, Army, and the Navy.

India's Strategic Needs

- From India's point of view, China is also buying the system. In 2015, Beijing signed an agreement with Russia to purchase six battalions of the system. Its delivery began in January 2018.
- China's acquisition of the S-400 system has been viewed as a "game changer" in the region. However, its effectiveness against India is limited. According to experts, even if stationed right on the India-China border and moved into the Himalaya mountains, Delhi would be at the limit of its range.
- India's acquisition is crucial to counter attacks in a two-front war, including even high-end F-35 US fighter aircraft.
- In October 2015, Defence Acquisition Council considered buying 12 units of S-400 for its defence needs. But. on evaluation, in December 2015, five units were found adequate. The deal is worth about USD 5 billion.
- The deal is near fruition, and negotiations are at an "advanced stage", and now it is expected to be signed before a summit meeting between Prime Minister Narendra Modi and Russian President Vladimir Putin.

India as an Exception to CAATSA

- The US sees India as a major market for the US defence industry. In the last one decade, it has grown from near zero to USD 15 billion worth of arms deals.
- This value is all set to increase further with the US likely accepting an Indian request for Sea Guardian drones.
- Admiral Harry Harris, Commander of the US Pacific Command has favoured relief citing the "strategic opportunity" that India presents to the US and also the opportunity "to trade in arms with India."



- The Senate and House Armed Services Committee in a joint conference report to the National Defense Authorisation Act (NDAA)-2019 provided a modified waiver to section 231 of CAATSA. A conference report refers to the final version of a Bill that is negotiated between the House of Representatives and the Senate via a conference committee.
- The NDAA-2019 now moves to the Senate and the House for formal passage before it can be sent to the White House for President Donald Trump to sign into law.
- The portion of the bill National Defense Authorisation Act — that amends CAATSA does not mention any country, but the intended beneficiaries of the amended waiver are India, Vietnam and Indonesia.

Way Forward

India has long held the stance of non-alignment and catering to the national interests of the nation. China as an adversary and Pakistan as a belligerent nation poses a threat two front war. India has long maintained a position that India's complex defense needs and threats are of prime importance rather than joining any block. Balancing Russian and US interests are much lower in priority for India than to meet the border challenges. 333

General Studies Paper- II

Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

Q. Explain CAATSA and its significance for USA? On which issue, US has put sanctions on Turkey by invoking CAATSA and why is New Delhi concerned about it?







Opening Banking Arena for Corporate Players: An Analysis

Why in News?

- The Reserve Bank of India's internal working group (IWG) reviewing corporate structure of private sector banks has suggested sweeping changes in bank ownership in its report released on 20th November 2020, including allowing large corporate and industrial houses to own banks by amending the Banking Regulation Act, 1949.
- The other significant proposal is to allow large non-banking financial companies (NBFCs) with asset size of Rs 50,000 crore and above (including those within the fold of corporate houses), and with a decade's track record, to convert to banks.
- Comments on the IWG's report are to be submitted by January 15, 2021.

Background

Banking sector is a vital cog of any healthy economy. While the sector contributes significantly to the welfare in an economy by providing intermediation through maturity and risk transformations to balance the utility preferences of the economic agents, it is tightly regulated considering the social externalities of the negative spillovers. One of the channels through which regulations ensure that the incentives of the banking companies align with that of the larger society is through having a say in the market structure and organisation of banking business. Licensing regimes, which aim to ensure that only those participants with the right amount of ability and willingness to do banking business in line with the social and economic preferences of a financial system

- are permitted to organise such businesses, have been a key component of the regulatory arsenal of prudential regulators, including Reserve Bank of India.
- Prior to nationalisation of banks, Indian banking sector had been organised in the private sector. The sector was opened up again post liberalisation with the first round of licensing of private banks that was done in 1993. Since then, there have been two more rounds of licensing of banks in the private sector - in 2001 and 2013 - culminating with the ontap licensing regime of universal banks since 2016. This period has been interspersed with licensing of differentiated and specialised banks such as Local Area Banks (LABs), Small Finance **Banks** (SFBs) and Payments Banks (PBs).
- The Reserve Bank of India had constituted an Internal Working Group (IWG) on June 12, 2020 review extant ownership guidelines and corporate structure for Indian private sector banks. The Terms of Reference of the IWG inter alia included review of the eligibility criteria for individuals/ entities to apply for banking license; examination of preferred corporate structure for banks and harmonisation of norms in this regard; and, review of norms for long-term shareholding in banks by the promoters and other shareholders.
- One of the recommendations of the report which is under the spotlight says:
 - "Reserve Bank may take steps to ensure harmonisation and uniformity in different licensing guidelines, to the extent possible. Whenever new licensing guidelines are

issued, if new rules are more relaxed, benefit should be given to existing banks, and if new rules are tougher, legacy banks should also conform to new tighter regulations, but a non-disruptive transition path may be provided to affected banks."

Concerns

- The proposal for allowing large corporate or industrial houses as bank promoters, and allowing the conversion of NBFCs into banks owned by industrial houses look difficult for the RBI. Allowing industrial or corporate houses to promote banks could open floodgates for many aspiring companies, and would need to be dealt with caution by the RBI given governance concerns.
- It is to be noted that the RBI had allowed companies as promoters in Universal Banking License issued in 2013 but backtracked while issuing 2014 Small Finance Banks license norms, claiming concerns around governance.
- Since the nationalisation of 14 large private banks in 1969, the RBI has not given licenses to large corporate and industrial houses for setting up banks. At present, there are 12 old and nine new private banks (established in the post-1991 period) with the majority of ownership held by individuals and financial entities.
- Another important recommendation of the IWG is to allow conversion of large non-banking financial companies (NBFCs), including those owned by corporate houses, with assets of Rs 50,000 crore and above and 10 years of operations into full-fledged banks. If the RBI





accepts this recommendation, it would lead to a backdoor entry of corporate-owned NBFCs into the banking space.

Sour Past-Experiences

- Before the nationalisation of banks in 1969, India's banking system was in the hands of the private sector. Most of the privately-owned banks were in the form of joint-stock companies controlled by big industrial houses. For instance, the Tatas were the major shareholders of the Central Bank of India which was established in 1911. The Birla family, one of the leading corporate houses of India, controlled the United Commercial Bank.
- In those times, connected lending practices were rampant in private banks. As promoters of private banks, corporate and industrial houses used to channel large sums of low-cost depositors' money into their group companies. With many private banks pursuing imprudent lending, bank failures ballooned. During 1947-58, for instance, 361 banks of varying sizes failed in India. The failed banks were amalgamated or ceased to exist.
- Private banks owned by industrial houses were operating predominantly in metros and urban areas. Much of their lending was concentrated in a few organised sectors of the economy and limited to big business houses and large industries. Whereas farmers, small entrepreneurs, artisans and self-employed were dependent on informal sources (mainly traditional moneylenders and relatives) to meet their credit requirements

Banking Governance at Risk

- Historically, has the maintained a cautious approach towards corporate ownership of banks. Apart from the inherent conflict of interest, the poor quality of corporate governance practices is another key reason why the RBI has not issued banking licenses to corporate houses.
- Globally too, regulators do not encourage the entry of large corporates into the banking sector mostly due to governance and financial stability concerns.
- Over the years, the potential risks associated with connected lending have increased manifold because of the quantum leap in size and complexities in corporate India. The pervasive use of front and shell companies makes it difficult to identify the actual owner of businesses. Opaque onshore and offshore ownership structures can easily circumvent • any regulatory measures put in place by the RBI to curb connected lending within a corporate conglomerate.
- Regarding the IWG's recommendation allowing large NBFCs to convert into full-fledged banks, the long-lasting solution lies in scaling up regulatory oversight of all NBFCs - big or small - given their distinct purpose and complementary role in the domestic banking system.

Risk Outweighs the Gains

RBI's working group feels that allowing corporates to promote banks can be an important source of capital. In a capital-starved economy like India, this makes

- sense. Further, these corporates "management bring can expertise, experience, strategic direction to banking".
- The group also noted that internationally, "there are very few jurisdictions which explicitly disallow large corporate houses".
- All these reasons make sense, but there are major drivers behind RBI not allowing corporate intrusion in the banking sector over the last five decades. At the heart of this is the conflict of interest it would create.

Way Forward

- In India, incidents of frauds and defaults are increasing at an alarming rate across the spectrum. Financial scandals have even occurred in some of India's big corporate houses that have long prided themselves on being above-board.
- Further, corporate ownership of banks would further concentrate economic power in the hands of a few corporate and industrial Increased houses. economic have concentration would adverse effects on the domestic economy and politics. It would not only widen inequalities but would also lead to policy capture where special interests would shape public policies. **333**

General Studies Paper- III

Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Q. India's banking sector is already grappling with rising NPA's and has been fragmented. In such a scenario, opening banking sector to corporate players will further expose banking sector to systemic risks. Discuss.







Commercial Approach to Agriculture: A New Outlook

Context

- The majority of agricultural marketing already happens outside the mandi network, with only 7,000 APMC markets operating across the country. Bihar, Kerala and Manipur do not follow the APMC system at all. However, most private buyers are currently small traders at local mandis. The removal of stock limits and facilitation of bulk purchase and storage through the amendment to the Essential Commodities Act could bring large corporate players into the agriculture space.
- Farmers are the producers who will get more options to sell their produce with the entry of large companies in produce procurement. While the middlemen and small traders may be impacted with greater competition. It's time that the agriculture should be treated as business rather than some subsidized charity scheme funded by the government.

Background

According to a gazette notification, the president gave assent to three bills (on 27th September 2020): The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020 (FPTC), The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Bill, 2020 (FAPAFS), and The Essential



Commodities (Amendment) Bill 2020.

- The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020 aims to permit the sale of agricultural produce outside mandis regulated by the Agricultural **Produce** Marketing Committees (APMC) constituted by different state legislations.
- The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Bill, 2020, provides for contract farming.
- The Essential Commodities (Amendment) Bill 2020 deregulates the production, supply, distribution of food items like cereals, pulses, potatoes, onion and edible oilseeds.
- Indeed, when these ordinances were brought in June, there

- was no widespread opposition. Ashok Gulati, eminent agriculture economist, called it a "1991 moment" for Indian agriculture. But winter is fast becoming the trimester for protesters to learn a new grammar of anarchy, and this year has turned out to be no different.
- Farmers mainly from Punjab, with sporadic support from other states, are staging a protest believing to represent whole farming community from north to south. To be sure, the protesters still constitute a fraction of the total population dependent on agrarian economy. Yet, they marched to Delhi and blocked several borders of the national capital restricting flow of goods and services. Their demand? Repeal the agriculture reforms in totality.

Protests to Save Privilege

Punjab and Haryana were the earliest beneficiaries of the Green

Revolution. Farmers in these states worked hard, and used the region's natural abundance and the influx of new technology to soon become the grain bowl of India. The government would guarantee a Minimum Support Price (MSP) for their produce year after year; the APMC system worked well; and up to 70% of the central food grain procurement continued to happen from these two states.

- But this monopoly on government procurement also eventually became their undoing.
 - Other states such as Uttar Pradesh and Madhya Pradesh caught up on food grain production.
 - As Punjab and Haryana got guaranteed prices year after year, there was no local innovation.
 - Instead, more chemicals made their way to the fields, leading to the rise of cancer. The story of the Bhatinda-Bikaner daily cancer train is welldocumented.
 - Young people from rich rural families migrated overseas or were happy to do odd jobs on farms, with labour coming in from far-off Bihar and other states, leading to the erosion and exodus of local talent.
- The problem of plenty has hit Punjab hard since the turn of the century. Since then, Haryana, Himachal Pradesh, Karnataka, Kerala, Gujarat, Maharashtra and Tamil Nadu have gone past Punjab

- on per capita net state domestic product calculated at constant prices with 2011-12 reference.
- While farmers from Uttar Pradesh, Madhya Pradesh, Bihar, Jharkhand and southern states improvised and did local innovations and did industry-farm integration which led to farmbased industries being set up in these states, Punjab and Haryana were mostly depended on MSPs protected government and mechanisms.
- Addicted to the allure of MSP, Punjab's agriculture has become relatively uncompetitive. And its farmers are now up in arms, worried that the option of free market trade will expose that weakness. The MSP demand is simply a smokescreen — the government, to adhere to India's food security act and to run a host of welfare programmes, will continue to procure on the basis of MSP.

Misguided Concerns

- Even as the farmer protests against the three new agriculture-related laws have gathered momentum, one thing seems obvious: Much of the opposition really is just to one of the three laws. Even in that one — the Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act — there are only some contentious provisions, which, although key, can still leave doors open for negotiation.
- The Essential Commodities (Amendment) Act is about doing

away with the Centre's powers to impose stockholding limits on foodstuffs, except under "extraordinary conditions". These could be war, famine, other natural calamities of grave nature and annual retail price rise exceeding 100% in horticultural produce (basically onions and potato) and 50% for non-perishables (cereals, pulses and edible oils).

- Given that stock limits apply only to traders — the amendment exempts processors, exporters and other "value chain participants" as long as they don't keep quantities beyond their installed capacity/demand requirements — it shouldn't concern farmers at all. Farmers, if anything, would gain from removal of stocking restrictions on the trade, as it potentially translates into unlimited buying and demand for their produce.
- The Farmers (Empowerment Protection) Agreement on Price Assurance and Farm Services Act has to do with providing a regulatory framework for contract cultivation. This specifically concerns agreements entered into by farmers with agri-business firms (processors, large retailers or exporters) ahead of any planting/rearing season for supplying produce of predetermined quality at minimum guaranteed prices.
- Again, there is little rationale for objecting to an Act that merely



enables contract farming. Such exclusive agreements between companies and farmers are already operational in crops of particular processing grades (the potatoes used by beverages and snacks giant PepsiCo for its Lay's and Uncle Chips wafers) or dedicated for exports (gherkins). The processors/exporters in these cases typically not only undertake assured buyback at pre-agreed prices, but also provide farmers seeds/planting material extension support to ensure that only produce of desired standard is grown.

The point to note is that contract cultivation is voluntary in nature and largely for crops not amenable to trading in regular APMC (Agricultural Produce Market Committee) mandis.

Contentions Issue

- FPTC Act (Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act), is a bone of • contention.
- It permits sale and purchase of farm produce outside the premises of APMC mandis. Such trades (including on electronic platforms) shall attract no market fee, cess or levy "under any State APMC Act or any other State law".
- At issue here is the very right of the Centre to enact legislation

on agricultural marketing. Article 246 of the Constitution places "agriculture" in entry 14 and "markets and fairs" in entry 28 of the State List. But entry 42 of the Union List empowers the Centre to regulate "inter-State trade and commerce". While trade and commerce "within the State" is under entry 26 of the State List, it is subject to the provisions of entry 33 of the Concurrent List under which the Centre can make laws that would prevail over those enacted by the states.

- Entry 33 of the Concurrent List covers trade and commerce in "foodstuffs, including edible oilseeds and oils", fodder, cotton and jute. The Centre, in other words, can very pass any law that removes all impediments to both inter- and intra-state trade in farm produce, while also overriding the existing state APMC Acts. The FPTC Act does precisely that.
- Centre is within its rights to frame laws that promote barrierfree trade of farm produce (inter- as well as intra-state) and do not allow stockholding or export restrictions. But these can be only after the farmer has sold. Regulation of first sale of agricultural produce is a "marketing" responsibility of the states, not the Centre.

Way Forward

The Punjab farmer protest has had little resonance in most parts of India. This is because other states are hardly a beneficiary of MSP, except where state governments procure directly from farmers. Also, the adoption of collective negotiation through Farmer Producer Organisations and involvement of private buyers has been growing faster in other states, even if this remains low in absolute terms. **333**

General Studies Paper- II

Topic:

Government policies interventions for development in various sectors and issues arising out of their design and implementation.

General Studies Paper- III

Topic:

Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution Systemobjectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.

Q. Agricultural reforms has long been a victim of politics and freebies for elections. Farmer's concerns are of prime importance, but there is a need to align with changing sectoral dynamics across the nation. Discuss.







Connecting India's North East for Development and **Prosperity**

Context

The North East has historically suffered from poor transport connectivity within and between the seven states as well as with the rest of India and neighbouring countries. This has not only life impeded everyday and livelihoods but also regional development and national security. As China builds and consolidates its hold in its own border regions as well as neighbouring countries through highways across Asia and also Europe, India is lagging behind even in the homestead.

Background

- India's North-East Region (NER) comprises eight States - Assam, Arunachal Pradesh. Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. Occupying eight percent of India's geographical spread, the region is home to a small percent of the country's population, with substantial portion of the population, nearly 68 percent of the population of the region living in the State of Assam alone.
- Connectivity and infrastructure are essential components of promoting sustainable development especially in geographically land-locked and hilly regions.
- It is noteworthy that all the eight states of the NER possess different developmental prospects resources to support their efforts in



contributing to the regional as well as national economy.

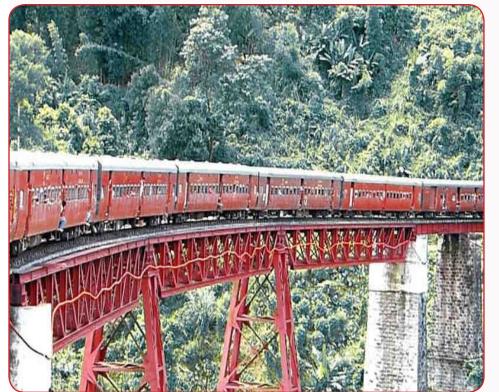
- Despite its huge untapped natural resources and its acknowledged status as the eastern gateway for India's 'Look East Policy', the NER has remained alienated from the economic resurgence that the rest of the country is experiencing for the past few decades. Apart from a protracted spell of insurgencies in some states and persistent violence, the overall conditions in the region have generally been characterized by as a low-level equilibrium of poverty, development, civil conflict, and lack of faith in political leadership.
- Poor transport connectivity in the North East is one of many reasons for its regional backwardness. This connectivity pertains to various modes and routes of transport facilitating the movement of persons and goods. It also pertains

to transport within and between the seven sister states as also mainland India and neighbouring countries, including Bangladesh, Nepal, Bhutan, Myanmar, and China. The poor state of transport infrastructure and regional connectivity has adverse implications for tourism, trade, and commerce therein as well as the everyday possibilities for residents in terms of life and livelihoods. The scarcity of all-weather roads continues to be one of the biggest infrastructural deficits in the region, whereas rail, water, and air connectivity are yet to receive the thrust they require.

Strategic Significance of NER

While the remoteness of the northeastern states is generally well known, what is lesser known is the fact that more than 98% of the region's borders are shared with





foreign countries. This includes a nearly 4,097 kilometres (km) long border with Bangladesh, 3,488 km with China, 1,751 km with Nepal, 1,643 km with Myanmar, and 699 km with Bhutan. The geographical connection with the rest of India is confined to a narrow strip of land, called the Siliguri Corridor, which is about 200 km long and 60 km wide. At its narrowest, it is just 17 km wide, thereby obtaining the derisive epithet "chicken's neck."

- region entails profound The potential of emerging as the main decisive factor for the successful implementation of India's Look East Policy (LEP).
- Moreover, connectivity projects with high strategic value, such as roads, bridges, petroleum refineries, and gas cracker projects, often had to be demanded and obtained from the state by popular agitation. For instance, the DholaSadiya Bridge was born out of

the Assam Agitation. An actionable clause of the Assam Accord, 1985, marking the end of the Assam agitation, it nevertheless took 33 years to become a reality. It bears mentioning that this bridge-the longest in India-has given the country tremendous strategic advantage.

- The completion of the two bridges over the Brahmaputrathe DholaSadiya Bridge and the Bogibeel Bridge—has come not a moment too soon. While India took 33 years to build one bridge, the Chinese side has executed impressive roads and railway lines close to the Indian side.
- China has laid a railway line in Lhasa, the capital of Tibet, in 2006, with a daily train service between Beijing and Lhasa ever since.

Schemes and Programs Underway

In the last four years under the schemes of Ministry of



Development of North Eastern Region, road projects worth Rs.821.56 crore were sanctioned and under schemes of North Eastern Council (NEC) Rs.1293.65 crore was released for development of infrastructure like roads and bridges, ISBT, airports, railway in North Eastern Region.

Road Connectivity

 Under the SARDP-NE including Arunachal Package of Roads and Highways, 1262 km of road length worth Rs.17,065 crore has been completed in the last four years in the North East Region (NER). Under BharatmalaPariyojana (BMP) roads stretches aggregating to about 5301 km in NER have been approved for improvement. Out of this, 3246 km road length has been approved for development of Economic Corridors in the North East. Under Pradhan Mantri Gram Sadak Yojana, road length of 20,708 km has been constructed at a cost of Rs.9033.76 crore, thereby connecting 3123 habitations in North Eastern Region.

Rail Connectivity

 In respect of Rail Connectivity, during the last four years the entire North East Region has been converted to the Broad Gauge (BG) network.

Air Connectivity

 In respect of Air Connectivity, modernization and development of Airports have been taken up. This includes construction of a new integrated terminal





building at Guwahati, Imphal and Agartala Airports; Extension of Runway at Dibrugarh Airport; Strengthening of Runway, Taxiway at Dimapur Airport; and upgradation works at Tezu Airport. The Greenfield Airport at Pakyong has been completed and is now operational. A new Greenfield Airport at Holongi (Itanagar) has also been taken up for improving connectivity in the North East region. Moreover, Regional Connectivity Scheme (RCS-UDAN) has been launched to provide connectivity to unserved and underserved Airports within the country and to promote regional connectivity by making the airfare affordable through Viability Gap Funding (VGF). The North East has been kept as a priority area under RCS-UDAN.

- Tourism
 - · The Ministry of Tourism has identified several segments like Eco-Tourism, Rural Tourism, Medical Tourism, Wellness Tourism, Adventure Tourism, Cruise Tourism. Sustainable Tourism. Agri-Tourism, Promotion of Cuisines as having huge potential for the North • East Region. The Swadesh Darshan Scheme of Ministry of Tourism is aimed at developing theme based tourist circuits in the Country, including the North

East Region. Under this scheme, projects worth Rs.1315.06 crore have been sanctioned for the North East Region in the last four years and Rs.783.40 crore has been released for the same. The Ministry of Tourism also organizes the 'International Tourism Mart' in the North East States for promotion of the North East Region.

In addition to above, Ministry of Development of North Eastern Region has also taken up projects for filling gaps in infrastructure through its schemes such as NLCPR-State, North East Road Sector Development Scheme (NERSDS), Schemes of North Eastern Council (NEC) and North East Special Infrastructure Development Scheme (NESIDS).

North Eastern Region Vision 2020

- This document provides an overarching framework for the development of the North Eastern Region to bring it at par with other developed regions under which different Ministries, including Ministry of Development of North Eastern Region have undertaken various initiatives.
- The outlays by Central Ministries in the North Eastern Region have increased substantially. Mandatory earmarking of at least 10% of GBS of Central Ministries/Departments for North Eastern Region (NER) and

creation of Non-Lapsable Central Pool of Resources (NLCPR) has augmented resource flow to the region.

 Strengthening infrastructure and connectivity is a major thrust area identified by the Vision document.
 Several connectivity initiatives have been undertaken in the recent past.

Way Forward

Better connectivity is important not only for strategic and geopolitical reasons but also for economic considerations. The strength of the country would be determined by its economic robustness and the North East certainly has the potential to emerge as an important driver in reviving the Indian economy. Here, it would be important to ensure that sustainable and inclusive growth practices become institutionalised. However, this would not be possible without improving connectivity. **333**

General Studies Paper-II

 Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

General Studies Paper-III

Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Q. North Eastern Region in India is in dire need for connectivity with the mainland. It is not just for strategic and defence issue but also essential for developmental and economic issues. Comment.

IMPORTANT BRAIN BOOSTERS

Havana Syndrome

1. Why in News?

- Nearly four years after a mysterious neurological illness, referred to as "Havana syndrome", started to afflict American diplomats and intelligence operatives in Cuba, China, and other countries.
- A report by the National Academies of Sciences (NAS) has found "directed" microwave radiation to be its "plausible" cause.



2. The Syndrome

- In late 2016, US diplomats and other employees stationed in Havana reported feeling ill after hearing strange sounds and experiencing odd physical sensations in their hotel
- The symptoms included nausea, severe headaches, fatigue, dizziness, sleep problems, and hearing loss, which have since come to be known as "Havana Syndrome".
- Cuba had denied any knowledge of the illnesses even though the US had accused it of carrying out "sonic attacks", leading to an increase in tensions.

3. Microwave Weapons

- "Microwave weapons" are supposed to be a type of direct energy weapons, which aim highly focused energy in the form of sonic, laser, or microwaves, at a target.
- People exposed to high-intensity microwave pulses have reported a clicking or buzzing sound, as if seeming to be coming from within your head.
- It can have both acute and long-term effects without leaving signs of physical damage.

5. Limitations of the Report

- Firstly, the report solely focuses on events surrounding the US embassy in Havana since the information made available on patients from China was "too sparse and fragmentary to be able to draw any substantive conclusions about these cases," the committee notes.
- Moreover, among all the victims, not everyone reported the same symptoms and the panel had limited access to personalised data because of potential security concerns or ongoing active investigations.
- It also said the findings were affected by the government's slow and uneven response to the incidents wherein patients were evaluated by various methods and clinicians at different points in their illness.

4. NAS Report: Key Points

- The NAS report, titled "An assessment of illness in US government employees and their families at overseas embassies", by a committee of 19 experts in medicine and other fields examined four possibilities to explain the symptoms — infection, chemicals, psychological factors and microwave energy. The experts examined the symptoms of about 40 government employees.
- The report concluded that "directed pulsed RF energy appears to be the most plausible mechanism in explaining these cases among those that the committee considered".
- By calling it "directed" and "pulsed" energy, it means victims' exposure was targeted and not due to common sources of microwave energy, such as, a mobile phone.
- The report also mentions that the immediate symptoms that patients reported — including sensations of pain and buzzing sound apparently emanated from a particular direction, or occurred in a specific spot in a room.
- The more chronic problems suffered by Havana personnel included mainly "vestibular processing and cognitive problems as well as insomnia and headache".







ASI's Protective Ring around Hampi Stone Chariot

1. Why in News?

- Tourists can no longer get too close to the iconic stone chariot in front of the Vijaya Vittala Temple in the UNESCO World Heritage site of Hampi. The architectural marvel has been cordoned off by a protective ring by the Archaeological Survey of India (ASI).
- Besides the Stone Chariot, several other monuments in Hampi, including Ugra Narasimha and Saasive Kalu Ganesha, will be cordoned off in the next phase. In the past two years, Hampi has witnessed several incidents of vandalism, according to officials here.



2. Need for Protection

- Every tourist visiting the site photographs the sensitive monument and touches it. Some even climb it to take their photos with the monument.
- The protected monument is facing the risk of being damaged by such objectionable behaviour of some of the tourists.
- The chariot inside the temple complex is a shrine dedicated to Garuda, but the sculpture of Garuda is now missing.

3. Historical Significance

- The "Stone Chariot", as it is often referred is the flagship tourist attraction of Hampi. This is not a chariot, as the name suggests, rather a shrine built like a chariot, located inside the Vittala Temple campus.
- Hampi is a UNESCO World Heritage Site.
- Stone Chariot is a shrine dedicated to Garuda, the vehicle of Lord Vishnu.
- Stone Chariot in Hampi is one of the three most popular stone chariots in India. Other two are in Konark (Odisha) and Mahabalipuram (Tamil Nadu).
- The delicately carved chariot at Hampi, art historians say, reflects the skill of temple architecture under the patronage of the Vijayanagara rulers who reigned from 14th to 17th
- The Stone Chariot was built in the 16th century by the orders of King Krishnadevaraya of Vijayanagara Empire.
- The emperor is said to have been impressed by the Sun temple of Konark during the war with Kalinga and wanted to recreate a similar one in Hampi.

4. Architecture

- Built in Dravidian style, chariot has carvings depicting mythical battle scenes.
- Standing on two giant wheels, two elephants are seen pulling the chariot.
- Stone Chariot is made of multiple smaller stones assembled to perfection. Stone Chariot was partially damaged by invading army towards the end of Vijayanagara Empire.

5. UNESCO World Heritage Site

- A World Heritage Site is a landmark or area with legal protection by an international convention administered by the United Nations Educational, Scientific and Cultural Organization (UNESCO).
- World Heritage Sites are designated by UNESCO for having cultural, historical, scientific or other form of significance.
- The sites are judged to contain "cultural and natural heritage around the world considered to be of outstanding value to humanity".
- To be selected, a World Heritage Site must be a somehow unique landmark which is geographically and historically identifiable and has special cultural or physical significance.
- There are 38 World Heritage Sites located in India. These include 30 cultural sites, 7 natural sites and 1 mixed-criteria site. India has the sixth largest number of sites in the world.





Rohingya Refugees Relocated to Bhasan Char Island

1. Why in News?

Bangladesh has begun relocating Rohingyas from refugee camps near Ukhia in Cox's Bazar district of Bangladesh to Bhasan Char -- an island in the Bay of Bengal.



5. Facilities at the Island

- According to a report in the Bangladesh newspaper Daily Sun, 1,440 houses have been constructed at 4 m height from the land, and can accommodate around 100,000 people.
- Officials told the media that people relocated to the island can engage in farming and livestock breeding, but will not be able to "transact money" as Bangladesh is yet to officially recognise them as refugees and refers to them only as "stateless" people.
- Of 120 shelters, 20 are allocated for civil administration, learning centres, mosques, community clinics, day-care centres, orphanage etc.
- The Bangladesh government with help of UNHCR and other organisations created a proper camp for the refugees.
- The plan has been in the making since 2017. In 2018, Prime Minister Sheikh Hasina said it would be a temporary measure.

2. Background

- Rohingya, members of a Muslim minority, had fled neighbouring Myanmar in 2017 during Myanmar army crackdown against a group called the Arakan Rohingya Salvation Army, which Myanmar said was a Islamist terrorist group.
- Last November, Gambia, with backing from the Organisation of Islamic Cooperation, took Myanmar to the International Court of Justice (ICJ) for violating the 1948 Genocide Convention. State counsellor Aug San Suu Kyi represented Mynanmar at the hearings.
- UN-appointed "independent international fact finding committee" said "[t]he horrors inflicted on Rohingya men, women and children during the August 2017 operations, including their indiscriminate killing, rise to the level of both war crimes and crimes against humanity".
- After May 2017, the refugees poured in from the state of Rakhine, first at Gundum, south of Ukhia. The entire Ukhia sub-district was overflowing by September 2017.
- The refugees' exodus was at such a great pace that the Bangladesh government had to establish another area of Teknaf, south of the Ukhia refugee camp.
- The camps in Cox's Bazar area were crowded but the Rohingyas had begun to settle down with UN Office of the High Commissioner for Human Rights (OHCHR) and WHO supporting the campaign.

3. Current Scenario

- It is estimated that more than 8 lakh Rohingya, live in the camps at Cox's Bazar in unhygienic conditions. Bangladesh's plan is to move some 1 lakh refugees to Bhasan Char, 39 km from Naokhali on the mainland.
- Opposing Bangladesh's move to relocate thousands of Rohingya refugees to Bhasan Char, humanitarian and human rights groups said the island is flood-prone and vulnerable to frequent cyclones.
- They also repeatedly raised concerns over the habitability of the island and whether refugees living there would have access to food, water, medical care, and education.
- Bangladesh says transporting refugees to Bhasan Char will ease chronic overcrowding in its camps at Cox's Bazar, which are home to more than one million Rohingya.

4. Bhasan Char Island

- Bhasan Char is less an island and more mud flat, and is vulnerable to going under water from tides and flooding.
- The refugees can remain isolated from the general public, easing the task of the Bangladesh administration.
- The construction of housing for the refugees began in 2018 with a proper doublemoated barricade all around, supposedly for preventing flood waters.
- The outer moat is 40m wide and the inner one is about 60m wide with about 50m wide raised berm with a road on top, probably for patrolling.
- The dangers of storms and cyclones are compounded on this remote island of Bhasan Char since it is the southern-most island directly facing the Bay of Bengal.
- The government has built shelters, hospitals and masjids.







NRIs to Vote via Post

1. Why in News?

- Non-resident Indians (NRIs), who under the current election laws must cast their vote in person at their respective constituencies in India, may soon get to vote remotely in an Indian election, from their country of residence.
- Election Commission reportedly, in a proposal sent to the Law Ministry recently, has suggested that NRIs be allowed to vote through electronically-transmitted postal ballot system (ETPBS). It's a facility already extended to service voters that include members of the Armed forces and para-military forces and employees government abroad.



Voting by Expatriates **UK and US**

- A British citizen living abroad can register as an overseas voter for up to 15 years after leaving the UK, as long as he is a British or Irish citizen and was a registered voter in the UK in the last 15 years. Those who were minors at the time of leaving the country can also vote as long as their parent or guardian was registered to vote in the UK.
- American expatriates enjoy voting rights in the US irrespective of how long they have been living abroad. They can vote for federal office candidates in the primary and general elections. Adults can exercise absentee voting by submitting a completed Federal Post Card Application or FPCA to their local election officials.

2. Background

- Voting rights for NRIs were introduced only in 2011, through an amendment to the Representation of the People Act 1950.
- A 12-member committee was set up after the 2014 Lok Sabha elections to study mainly three options — voting by post, voting at an Indian mission abroad and online voting.
- The committee ruled out online polling as it felt this could compromise "secrecy of voting". It also shot down the proposal to vote at Indian missions abroad as they do not have adequate resources.
- In 2015, the panel finally recommended that NRIs should be given the "additional alternative options of e-postal ballot and proxy voting", apart from voting in person.
- Under proxy voting, a registered elector can delegate his voting power to a representative. The Law Ministry accepted the recommendation on proxy voting.

3. NRI Voters

- According to a UN report of 2015, India's diaspora population is the largest in the world at 16 million people.
- Registration of NRI voters, in comparison, has been very low: a little over one lakh overseas Indians registered as voters in India, according to the EC.
- In last year's Lok Sabha elections, roughly 25,000 of them flew to India to vote.

4. Current Process of Voting for NRIs

- An NRI can vote in the constituency in which her place of residence, as mentioned in the passport, is located.
- She can only vote in person and will have to produce her passport in original at the polling station for establishing identity.

5. EC's Proposal

- According to the EC proposal, any NRI interested in voting through the postal ballot in an election will have to inform the Returning Officer (RO) not later than five days after the notification of the election.
- On receiving such information, the RO will dispatch the ballot paper electronically.
- The NRI voters will download the ballot paper, mark their preference on the printout and send it back along with a declaration attested by an officer appointed by the diplomatic or consular representative of India in the country where the NRI is resident.
- It must be returned by post to the returning officer of the NRI's constituency in India such that it is received latest by 8 a.m. on the counting day.







Cannabis Removed from 'most dangerous drug' Category

1. Why in News?

In a decision that could influence the global use of medicinal marijuana, the United Nations Commission on Narcotic Drugs (CND) recently voted to remove cannabis and cannabis resin from Schedule IV of the 1961 Single Convention on Narcotic Drugs, decades after they were first placed on the list.

2. CND Vote

- At its 63rd session, the 53-member CND has chosen to affirm a World Health Organisation (WHO) recommendation from 2019 to remove cannabis from its 'most dangerous' category, with 27 Member States voting in favour, 25 against, and one abstention.
- However, both substances will continue to remain on Schedule I, the least dangerous category.
- The proposals CND rejected recently included removing extracts and tinctures of cannabis from Schedule I and adding certain preparations of dronabinol to Schedule III of the 1961 Convention.
- India was part of the voting majority, along with the US and most European nations. China, Pakistan and Russia were among those who voted against, and Ukraine abstained.
- The Vienna-based CND, founded in 1946, is the UN agency mandated to decide on the scope of control of substances by placing them in the schedules of global drug control conventions.
- Cannabis has been on Schedule IV-the most dangerous category- of the 1961 Single Convention on Narcotic Drugs for as long as the international treaty has existed.



3. Cannabis in India

- Currently in India, the Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985, illegalises any mixture with or without any neutral material, of any of the two forms of cannabis – charas and ganja — or any drink prepared from it.
- Its production, manufacturer, possession to a certain limit, and sale is a punishable offence.

4. Cannabis Plant

- According to the WHO, cannabis is a generic term used to denote the several psychoactive preparations of the plant Cannabis sativa.
- The major psychoactive constituent in cannabis is Delta-9 tetrahydrocannabinol (THC).
- The Mexican name 'marijuana' is frequently used in referring to cannabis leaves or other crude plant material in many countries.
- Most species of cannabis are dioecious plants that can be identified as either male or female. The unpollinated female plants are called hashish.
- Cannabis oil (hashish oil) is a concentrate of cannabinoids compounds which are structurally similar to THC — obtained by solvent extraction of the crude plant material or of the resin.

5. Cannabis Industry

- As per drug policy experts, the CND decision would add momentum to efforts for decriminalising cannabis in countries where its use is most restricted, while further legalising the substance in others.
- Scientific research into marijuana's medicinal properties is also expected to grow.
- Global attitudes towards cannabis have changed dramatically, with many jurisdictions permitting cannabis use for recreation, medication or both, despite it remaining on Schedule IV of the UN list.
- Currently, over 50 countries allow medicinal cannabis programs, and its recreational use has been legalised in Canada, Uruguay and 15 US states, as per UN News.







Japan's Hayabusa 2 Mission

1. Why in News?

- The Japanese space agency, JAXA, has successfully retrieved a 16 kg capsule that is hoped to contain flecks of an asteroid.
- The capsule landed in Australia's remote outback following a six-year mission by the \$250m Hayabusa 2 mission to retrieve samples from the asteroid Ryugu.

2. Hayabusa 2 Mission

- The Hayabasu 2 mission was launched in December 2014 when the spacecraft was sent on a six-year-long voyage to study the asteroid Ryugu and collect samples that it is now bringing back to the Earth.
- The spacecraft arrived at the asteroid in mid-2018 after which it deployed two rovers and a small lander onto the surface.
- In 2019, the spacecraft fired an impactor into the asteroid's surface to create an artificial crater with a diametre of a little more than 10 metres, which allowed it to collect the samples.
- Hayabasu 2's predecessor, the Hayabusa mission brought back samples from the asteroid Itokawa in 2010.

3. Asteroids

- Asteroids are rocky objects that orbit the Sun, much smaller than planets. They are also called minor planets. According to NASA, there are 994,383 known asteroids, the remnants from the formation of the solar system over 4.6 billion years ago.
- Asteroids are divided into three classes. First, those found in the main asteroid belt between Mars and Jupiter, which is estimated to contain somewhere between 1.1-1.9 million asteroids.
- The second group is that of trojans, which are asteroids that share an orbit with a larger planet. NASA reports the presence of Jupiter, Neptune and Mars trojans. In 2011, they reported an Earth trojan as well.
- The third classification is Near-Earth Asteroids (NEA), which have orbits that pass close by the Earth. Those that cross the Earth's orbit are called Earth-crossers. More than 10,000 such asteroids are known, out of which over 1,400 are classified as potentially hazardous asteroids (PHAs).



4. Asteroid Ryugu

- Ryugu is classified as a PHA and was discovered in 1999 and was given the name by the Minor Planet Center in 2015.
- It is 300 million kilometres from Earth and it took Hayabusa2 over 42 months to reach
- Ryugu in Japanese means "Dragon Palace," the name of a sea-bottom castle in a Japanese folk tale.

5. Key Points

- Scientists will now study the contents of the capsule to find out about the origin of the asteroid's organic matter and water and how these are related to life and ocean water on Earth.
- Scientists say it could provide clues to the origin of the solar system and life on our planet.
- Scientists said there are traces of carbon and organic matter in the asteroid soil samples.
- For Hayabusa 2, it's not the end of the mission it started in 2014. After dropping the capsule, it returned to space and head to another distant small asteroid called 1998KY26 on a journey slated to take 10 years.







Tharu Tribals in Terai and Tourism

1. Why in News?

- The Uttar Pradesh government has recently embarked upon a scheme to take the unique culture of its ethnic Tharu tribe across the world.
- The intention is to put Tharu villages on the tourism map, and to create jobs and bring economic independence to the tribal population.

2. Tharu Tribe

- The community belongs to the Terai lowlands, amid the Shivaliks or lower Himalayas.
- Most of them are forest dwellers, and some practice agriculture.
- The word 'tharu' is believed to be derived from 'sthavir', meaning followers of Theravada Buddhism.
- The Tharus live in both India and Nepal. In the Indian Terai, they live mostly in Uttarakhand, Uttar Pradesh, and Bihar.
- According to the 2011 census, the Scheduled Tribe population in Uttar Pradesh was more than 11 lakh; this number is estimated to have crossed 20 lakh now.
- Members of the tribe survive on wheat, corn and vegetables grown close to their homes. A majority still lives off the forest.



3. Home Stay Scheme

- The state government is working to connect Tharu villages in the districts of Balrampur, Bahraich, Lakhimpur and Pilibhit bordering Nepal, with the home stay scheme of the UP Forest Department.
- Once they are part of this scheme, the Tharu villages will not only be economically independent but would also create jobs for the people there.
- The idea is to offer tourists an experience of living in the natural Tharu habitat, in traditional huts made of grass collected mainly from the forests.
- The Uttar Pradesh Forest Corporation will train the Tharu people to communicate effectively with visitors, and encourage villagers to acquaint them with aspects of safety and cleanliness, and with the rules of the forest.
- Tharu homeowners will be able to charge tourists directly for the accommodation and home-cooked meals.
- The UP government expects both domestic and international tourists to avail of the opportunity to obtain a taste of the special Tharu culture by staying with them, observing their lifestyle, food habits, and attire.

4. Main Objectives of the Mission COVID Suraksha

- They speak various dialects of Tharu, a language of the Indo-Aryan subgroup, and variants of Hindi, Urdu, and Awadhi.
- In central Nepal, they speak a variant of Bhojpuri, while in eastern Nepal, they speak a variant of Maithili.
- Tharus worship Lord Shiva as Mahadev, and call their supreme being "Narayan", who they believe is the provider of sunshine, rain, and
- Tharu women have stronger property rights than is allowed to women in mainstream North Indian Hindu custom.
- Most Tharutribals consume alcoholic beverages, and some eat beef.
- Standard items on the Tharu plate are bagiya or dhikri which is a steamed dish of rice flour that is eaten with chutney or curry and ghonghi, an edible snail that is cooked in a curry made of coriander, chili, garlic, and onion.

MCQ's WITH EXPLANATORY ANSWERS (Based on Brain Boosters)

Havana Syndrome

- With reference to the Havana Syndrome, consider the following statements:
 - 1. Havana Syndrome is a neurological illness caused by micro-waves.
 - 2. Micro-wave weapons are basically directed energy weapons. They are like directed sonic, laser or energy waves on the target.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: (c)

Explanation. Both the statements are correct. Nearly four years after a mysterious neurological illness, referred to as "Havana syndrome", started to afflict American diplomats and intelligence operatives in Cuba, China, and other countries. A report by the National Academies of Sciences (NAS) has found "directed" microwave radiation to be its "plausible" cause.

"Microwave weapons" are supposed to be a type of direct energy weapons, which aim highly focused energy in the form of sonic, laser, or microwaves, at a target. People exposed to highintensity microwave pulses have reported a clicking or buzzing sound, as if seeming to be coming from within your head. It can have both acute and long-term effects — without leaving signs of physical damage. **333**



Consider the following statements:

1. Recently the Hampi stone chariot at the Vijaya Vittala Temple, is being cordoned off by ASI for protecting it from vandalism.

- 2. Hampi is a protected site under UNESCO World Heritage Site list. It list sites for having significant cultural, historical, scientific or other forms of importance.
- 3. Hampi stone chariot is a distinct architecture of Vesara style which depicts classical dances of ancient Sangam era.

Which of the statements given above is/are correct?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) None of the above

Answer: (a)

Explanation. Statement 1 and 2 are correct. Tourists can no longer get too close to the iconic stone chariot in front of the Vijaya Vittala Temple in the UNESCO World Heritage site of Hampi. The architectural marvel has been cordoned off by a protective ring by the Archaeological Survey of India (ASI).

The protected monument is facing the risk of being damaged by such objectionable behaviour of some of the tourists.

A World Heritage Site is a landmark or area with legal protection by an international convention administered by the United Nations Educational, Scientific and Cultural Organization (UNESCO). World Heritage Sites are designated by UNESCO for having cultural, historical, scientific or other form of significance. The sites are judged to contain "cultural and natural heritage around the world considered to be of outstanding value to humanity".

Statement 3 is incorrect. Built in Dravidian style, chariot has carvings depicting mythical battle scenes. Standing on two giant wheels, two elephants are seen pulling the chariot.







Consider the following statements:

- 1. Bangladesh relocated Rohingya refugees at an island called Bhasan Char, which is vulnerable to flooding during monsoons.
- 2. Rohingya refugees came from Myanmar which is said to have committed war crimes against the Rohingyas.
- 3. Bangladesh has not recognized Rohingyas as 'refugees', rather categorized them as 'stateless' people.

Which of the statements given above is/are correct?

a) 1 and 2

b) 2 and 3

c) 1 and 3

d) All of the above

Answer: (d)

Explanation. Statement 1 is correct. Bangladesh has begun relocating Rohingyas from refugee camps near Ukhia in Cox's Bazar district of Bangladesh to Bhasan Char -- an island in the Bay of Bengal.

Statement 2 and 3 are correct. Rohingya, members of a Muslim minority, had fled neighbouring Myanmar in 2017 during Myanmar army crackdown against a group called the Arakan Rohingya Salvation Army, which Myanmar said was a Islamist terrorist group. UN-appointed "independent international fact finding committee" said "[t]he horrors inflicted on Rohingya men, women and children during the August 2017 operations, including their indiscriminate killing, rise to the level of both war crimes and crimes against humanity".

Officials told the media that people relocated to the island can engage in farming and livestock breeding, but will not be able to "transact money" as Bangladesh is yet to officially recognise them as refugees and refers to them only as **333** "stateless" people.

NRIs to Vote via Post

Consider the following statements:

- 1. NRIs cannot vote in India under the current laws.
- 2. Currently India has the largest diaspora around the
- 3. NRI voters also have the option of 'proxy; voting in addition to voting in-person.

Which of the statements given above is/are correct?

1 and 2

2 and 3

c) 1 and 3

d) All of the above

Answer: (b)

Explanation. Statement 1 is incorrect. An NRI can vote in the constituency in which her place of residence, as mentioned in the passport, is located. She can only vote in person and will have to produce her passport in original at the polling station for establishing identity.

Statement 2 and 3 are correct. According to a UN report of 2015, India's diaspora population is the largest in the world at 16 million people. Voting rights for NRIs were introduced only in 2011, through an amendment to the Representation of the People Act 1950. A 12-member committee was set up after the 2014 Lok Sabha elections to study mainly three options voting by post, voting at an Indian mission abroad and online voting. In 2015, the panel finally recommended that NRIs should be given the "additional alternative options of e-postal ballot and proxy voting", apart from voting in person. Under proxy voting, a registered elector can delegate his voting power to a representative. The Law Ministry accepted the recommendation **333** on proxy voting.

Cannabis Removed from 'most dangerous drug' Category

Consider the following statements:

- 1. United Nations Commission on Narcotic Drugs (CND) recently voted to remove cannabis and cannabis resin from 'most dangerous drug' category but it still remains on the list of least dangerous category.
- 2. Cannabis is completely banned all over the globe.
- 3. WHO has recommended to remove the drug from 'most dangerous category'.

Which of the statements given above is/are correct?

1 and 2

2 and 3

c) 1 and 3

All of the above

Answer: (c)

Explanation. Statement 1 is correct. In a decision that could influence the global use of medicinal marijuana, the United Nations Commission on Narcotic Drugs (CND) recently voted to remove cannabis and cannabis resin from Schedule IV of the 1961 Single Convention on Narcotic Drugs, decades after they were first placed on the list.





Statement 2 is incorrect. Global attitudes towards cannabis have changed dramatically, with many jurisdictions permitting cannabis use for recreation, medication or both, despite it remaining on Schedule IV of the UN list. Currently, over 50 countries allow medicinal cannabis programs, and its recreational use has been legalised in Canada, Uruguay and 15 US states, as per UN News.

Statement 3 is correct. According to the WHO, cannabis is a generic term used to denote the several psychoactive preparations of the plant Cannabis sativa. The major psychoactive constituent in cannabis is Delta-9 tetrahydrocannabinol (THC). At its 63rd session, the 53-member CND has chosen to affirm a World Health Organisation (WHO) recommendation from 2019 to remove cannabis from its 'most dangerous' category, with 27 Member States voting in favour, 25 against, and one abstention. However, both substances will continue to remain on Schedule I, the least dangerous category.



Q. Consider the following statements:

- JAXA's Hayabusa 2 Mission was recently in news, it was meant to study asteroid Ryugu and bring back samples of that asteroid.
- 2. One of the objectives of studying the asteroid is to find clues for the origin of the solar system and the life on planet Earth.
- 3. Hayabusa 2 Mission is the first ever successful mission to bring particles of an asteroid back to planet Earth.

Which of the statements given above is/are correct?

a) 1 and 2

b) 2 and 3

c) 1 and 3

d) None of the above.

Answer: (a)

Explanation. Statement 1 and 2 are correct. The Japanese space agency, JAXA, has successfully retrieved a 16 kg capsule that is hoped to contain flecks of an asteroid. The capsule landed in Australia's remote outback following a six-year mission by the \$250m Hayabusa 2 mission to retrieve samples from the asteroid Ryugu.

Scientists will now study the contents of the capsule to find out about the origin of the asteroid's organic matter and water and how these are related to life and ocean water on Earth. Scientists say it could provide clues to the origin of the solar system and life on our planet. Scientists said there are traces of carbon and organic matter in the asteroid soil samples.

Statement 3 is incorrect. Hayabasu2's predecessor, the Hayabusa mission brought back samples from the asteroid Itokawa in 2010.

Tharu Tribals in Terai and Tourism

Q. With reference to TharuTribals, consider the following statements:

- 1. Tharu tribe in Uttar Pradesh derives their name from 'sthavir', meaning followers of Theravada Buddhism.
- UP Governmet has embarked on a tourism scheme for the tribe where outside people have the opportunity to live with the tribe and experience their language, culture and food. This will make the tribe economically independent.

Which of the statements given above is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Answer: (c)

Explanation. Both the statements are correct. Tharu community belongs to the Terai lowlands, amid the Shivaliks or lower Himalayas. Most of them are forest dwellers, and some practice agriculture. The word 'tharu' is believed to be derived from 'sthavir', meaning followers of Theravada Buddhism. The Tharus live in both India and Nepal. In the Indian Terai, they live mostly in Uttarakhand, Uttar Pradesh, and Bihar.

The Uttar Pradesh government has recently embarked upon a scheme to take the unique culture of its ethnic Tharu tribe across the world. The intention is to put Tharu villages on the tourism map, and to create jobs and bring economic independence to the tribal population. The state government is working to connect Tharu villages with the home stay scheme of the UP Forest Department. The idea is to offer tourists an experience of living in the natural Tharu habitat, in traditional huts made of grass collected mainly from the forests. Once they are part of this scheme, the Tharu villages will not only be economically independent but would also create jobs for the people there.



IMPORTANT NEWS

US Puts India in 'Currency Manipulator List'

- U.S. Treasury labeled Switzerland and Vietnam currency manipulators on and added three new names, including India, to a watch list of countries it suspects of taking measures to devalue their currencies against the dollar.
- The designation of a country as a currency manipulator does not immediately attract any penalties, but tends to dent the confidence about a country in the global financial markets.
- In what may be one of the last broadsides to international trading partners by the departing administration of President Donald Trump, the U.S. Treasury said that in the year through June 2020 Switzerland and Vietnam had intervened heavily in currency markets to prevent effective balance of payments adjustments.

- Once on the Monitoring List, an economy will remain there for at least two consecutive reports "to help ensure that any improvement in performance versus the criteria is durable and is not due to temporary factors," according to the US treasury department.
- Treasury also said its "monitoring list" of countries that meet some of the criteria has hit 10, with the additions of Taiwan, Thailand and India. Others on the list include China, Japan, Korea, Germany, Italy, Singapore and Malaysia.
- The report also said that India and Singapore had also intervened in the foreign exchange market "sustained, asymmetric manner" but did not meet other requirements to warrant designation as manipulators.

Parameters:

- An economy meeting two of the three criteria in the Trade Facilitation and Trade Enforcement Act of 2015 is placed on the Monitoring List. This includes:
 - 1. A "significant" bilateral trade surplus with the US — one that is at least \$20 billion over a 12-month period.
 - 2. A material current account surplus equivalent to at least 2 percent of gross domestic product (GDP) over a 12-month period.
 - 3. "Persistent", one-sided intervention — when net purchases of foreign currency totalling at least 2 percent of the country's GDP over a 12 month period are conducted repeatedly, in at least six out of 12 months. 333

US Blacklists Chinese Firms

- The U.S. Commerce Department announced it's blacklisting Semiconductor Manufacturing International Corp., drone maker SZ DJI Technology Co. and more than 60 other Chinese companies "to protect U.S. national security."
 - In total, the US is expected to add around 80 additional companies and affiliates to the so-called entity list, nearly all of them Chinese.
 - The designations by the Commerce Department are expected to name some Chinese companies that Washington says have ties to the
- Chinese military, including some helping it construct and militarise artificial islands in the South China Sea, as well as others involved in alleged human rights violations, the sources said.
- The Trump administration has often used the entity list - which





- now includes more than 275 Chinabased firms and affiliates — to hit key Chinese industries.
- These include telecoms equipment giants Huawei Technologies Co (and 150 affiliates), ZTE Corp over sanction violations, as well as surveillance camera maker Hikvision over suppression of China's Uighur minority.
- "This action stems from China's military-civil fusion doctrine and evidence of activities between SMIC and entities of concern in the Chinese military industrial complex," the Commerce Department said in a statement.
- The move, which has previously been reported, is seen as the latest in US President Donald Trump's effort to cement his toughon-China legacy. comes just weeks before Democratic Presidentelect Joe Biden is set to take office on January 20.
- Shanghai-based SMIC, a supplier to Qualcomm Inc. and Broadcom Inc., lies at the heart of Beijing's intention to build world-class semiconductor industry and wean itself from reliance on American technology.



Washington in turn views China's ascendancy and its ambitions to dominate spheres of technology as a potential geopolitical threat. A blacklisting threatens to cripple SMIC's longer-term ambitions by depriving it of crucial gear.

Kissan Rail

The government is planning to increase the number of Kisan Rail trains under the Indian Railways, which transport vegetables and fruits to different parts of the country, to help farmers get better prices and reduce wastage, which is to the extent of 15%. "Currently, we are running four Kisan Rail trains. There has been more demand for running such trains as farmers are getting benefits. The Indian Railways, in close coordination with the agriculture ministry, is planning to introduce more trains and routes," said a



- senior agriculture department official.
- The first Kisan Rail train service on the Indian Railways network was launched on 7 August 2020. The train runs between Devlali in Maharashtra and Danapur in the state of Bihar. The Kisan Rail consists of 10 parcel vans as well as one luggage cum brake van and operates on a weekly basis.

Doubling Farmers' Incomes by 2022

This train is a step towards realizing the goal of doubling farmers' incomes by 2022. Indian Railways aims to help double farmers' income with the launch of Kisan Rail.

Seamless National Cold **Supply Chain for Perishables**

This train will help in bringing perishable agricultural products like vegetables, fruits to the market in a short period of time. The train with frozen containers is expected to build a seamless national cold supply chain for perishables, inclusive of fish, meat and milk.

Rail Initiative **Announced in Budget 2020**

- announcement regarding the "Kisan Rail" was made in the current year's Budget. Finance Minister Nirmala Sitharaman had announced this initiative in her Budget speech envisaging setting up of a 'Kisan Rail' through the public-private-partnership (PPP) mode for a cold supply chain to transport perishable goods.
- The proposal to use refrigerated parcel vans to ferry perishables was first announced by then railway minister Mamata Banerjee in the 2009-10 Budget, however, it has failed to take off. **333**





2020 Human Development Index

- Human Development Index is the measure of a nation's health, education, and standards of living. India's HDI value for 2019 is 0.645 placing the country in the medium human development category.
- India slipped two spots to rank 131 among 189 countries in the 2020 human development index, a report released by the United Nations Development Programme (UNDP) said. Human Development Index is the measure of a nation's health, education, and standards of living. However, if the Index were adjusted to assess the planetary pressures caused by each nation's development, India would move up eight places in the ranking, according to the report.
- For the first time, the United Nations Development Programme introduced a new metric to reflect the impact caused by each country's per-capita carbon emissions and its material footprint, which measures the amount of fossil fuels, metals and other resources used to make the goods and services it consumes. This paints a "less rosy, but clearer assessment" of human progress.
- While India is ranked 131, its neighbours Bhutan is ranked 129, Bangladesh 133, Nepal 142, and Pakistan 154, the report said. India



had ranked 129 in 2018 in the index.

- Norway topped the index, followed by Ireland, Switzerland, Hong Kong and Iceland.
- According to the 2020 Human Development Report, life expectancy of Indians at birth in 2019 was 69.7 years while Bangladesh has a life expectancy of 72.6 years and Pakistan 67.3 years.
- The report, published by the United Nations Development Programme, also shows India's gross national income per capita fell to USD 6,681 in 2019 from USD 6,829 in 2018 on purchasing power parity (PPP) basis. Purchasing power parity or PPP is a measurement of prices in

- different countries using the prices of specific goods to compare the absolute purchasing power of the countries' currencies.
- The HDI itself is an assessment of a nation's health, education and standards of living. Although this year's report covers 2019 only, and does not account for the impact of COVID, it projected that in 2020, global HDI would fall below for the first time in the three decades since the Index was introduced.
- Purchasing power parity or PPP is a measurement of prices in different countries that uses the prices of specific goods to compare the absolute purchasing power of the countries' currencies. 333

Hybrid Renewable Energy Park in Kutch

The upcoming hybrid renewable energy park in the district of Kutch, for which Prime Minister Narendra Modi recently laid the foundation stone, is expected to attract an investment of Rs 1,50,000 crore.

Also, it is being said that the project will create employment opportunities for 1 lakh people. Besides the hybrid renewable energy park, PM Modi laid the foundation stone for a desalination

plant at Mandvi, a 30,000 MW capacity hybrid renewable energy park along the border of Indo-Pak at Khavda, as well as a milk processing and packaging unit at Anjar. The upcoming hybrid

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renewable energy park, being touted as the world's biggest such facility, according to a PTI report. It will be capable of producing electricity of 30,000 megawatt or 30 gigawatt, utilizing both wind farms and solar panels installed in one place.

- The hybrid renewable energy park in Kutch will enhance border security and generate employment, besides helping avoid emission of five crore tonnes of carbon dioxide annually, Prime Minister Narendra Modi said while laying the foundation of the mega park near Khavda in Kutch district
- The first of its kind energy project is spread over 72,600 hectares

of waste land. It is expected to play a major role in fulfilling the nation's vision of generating power of 450 gigawatt by the year 2030. The energy park will come up in land of more than 70,000 hectares area, which is equal to the size of countries like Bahrain and Singapore. The upcoming hybrid renewable energy park will be bigger than the biggest metro cities in India.

The second proposed project, for which the Prime Minister laid the foundation stone is a 100 MLD desalination plant. To convert sea water into fresh water, this plant is coming up near the coastal town



of Mandvi. Once functional, the plant will provide water of 10 crore liters to a population of 8 lakh living in Kutch's Lakhpat Abdasa, Mandvi, Mundra and Nakhatrana villages. The third project is a milk processing as well as packaging plant at Anjar's Sarhad Dairy, which is fully automated and will have Rs 2 lakh litres processing capacity per day.

06

Green Building

◆ Vice President Venkaiah Naidu appealed to the Finance Commissions and local bodies to encourage green buildings through various measures including tax incentives. He asked all States to create online portals to provide single window clearance for green buildings. Observing that the implementation of Bureau of Energy Efficiency's Energy Conservation Building Code (ECBC) has not been uniform across the nation, Naidu appreciated Telangana and Andhra Pradesh for taking a lead. He was speaking at the virtual inauguration of the 12th GRIHA (Green Rating for Integrated Habitat Assessment) Summit, organised by the GRIHA Council from Hyderabad.

The Vice President said that India had the potential to lead the Global Green Building Movement

- and emphasised the need to promote green building concept by both the private and the government sectors.
- ◆ He also launched three e-publications of GRIH A Council namely - 30 Stories Beyond Buildings, Shashwat Magazine, and Version 2019 Manual of the Council.

Stresses on Cool Roofs

Opining that the roof cooling should be an area of priority for all, the VP noted, "In India, over 60 per cent of roofs are made from metal, asbestos, and concrete thus trapping heat inside buildings and contributing to heat island effect in urban areas. Cool roofs offer a simple and a cost-effective solution that can lower indoor temperatures by 2 to 4 degrees Celsius as compared to traditional roofs, especially in low-income households and slums in urban areas."

Need to Revisit Traditional House Designs

 Vice President Venkaiah Naidu said," Our civilisation teaches us to live in harmony with nature. We need to revisit our traditional house designs refined over thousands of





years. Unfortunately, our modern structures are such that no sparrow can come and make a nest in our house. This is not our culture

Emerging Market

The evolution and expansion of India's building stock has a critical role to play in its battle against climate change. Accounting for more than 40 percent of the country's total energy consumption, energy use from

buildings is increasing at 8 percent annually. If conventional inefficient building practices continue, buildings would account for over 70 percent of emissions by 2050, thus posing a major threat to India's green ambitions.

According to the International Finance Corporation (IFC), 70 percent of the buildings required by 2030 are yet to be constructed in India. If India were to embrace the

concept of green buildings to meet this huge demand, it would be a win-win for the environment and the economy. The green buildings market in India is currently at a nascent stage of development, with only 5% buildings being classified as green. While this might come across as a challenge at the outset, it does open up a wide array of opportunities for the development of green buildings. **333**

Red List Assessment of Grasshopper Species in Nilgiri **Biosphere Reserve**

- A specialist group of International Union for Conservation of Nature (IUCN) would conduct a first of its kind red-list assessment of grasshopper species in Nilgiri biosphere reserve in south India followed by other parts of the country.
- The assessment, to be done by IUCN's Species Survival Commission (SSC), Grasshoppers Specialist Group, would study the ecosystem by taking grasshoppers as its indicators, and also steps for their conservation.
- Dhaneesh Bhaskar, vice-chair, IUCN's SSC, Grasshoppers Specialist Group, said the assessment will help in understanding the condition of the grasshopper's ecosystem.
- "The grasshoppers are primarily considered as agricultural pest which is not true as they live in all sorts of environments except those covered in snow. They are

- basically the indicators of the ecosystem and environment which means their survival status explains a lot about the environment they are living in," said Bhaskar.
- The project will be started from the Nilgiri biosphere reserve spread in three states of Kerala, Tamil Nadu and Karnataka.
- "We have made a list of at least 30 species of grasshoppers which live in the forests of Nilgiri including the ones living on trees, ground and those which are semiamphibious. We would study their present survival status and then chalk out actions for their conservation, if needed," said Bhaskar.
- The project is funded by United Arab Emirates-based Mohammad Bin Zayed Species Conservation Fund, which works for the conservation of different species across the world.



- Red list assessment is fundamental importance for nature conservation as it helps to identify species with high extinction risk. Without this knowledge, it will not be possible to save species from conservation.
- The international body will follow the "Assess-Plan-Act principle" in the assessment. The principle comprises assessing the conservation status of species and identifying major threats, planning necessary conservation action based on the red list assessments and implementing the conservation action.





IMPORTANT PRACTICE QUESTIONS (For Mains)







- What is India's plan to have its own space station and how will it benefit our space programme?
- Do you think the Constitution of India does not accept the principle of strict separation of powers rather it is based on the principle of 'checks and balances'? Explain.
- The 1857 Uprising was the culmination of the recurrent big and small local rebellions that had occurred in the preceding hundred years of British rule. Elucidate.
- How far is Integrated Farming System (IFS) helpful in sustaining agricultural production?
- (05) 'Communalism arises either due to power struggle or relative deprivation.' Argue by giving suitable illustrations.
- E-Governance is not only about utilization of the power of new technology, but also much about critical importance of the 'use value' of information Explain.
- 'India's relations with Israel have, of late, acquired a depth and diversity, which cannot be rolled back." Discuss.

IMPORTANT FACTS (For Prelims)







Which country's Prime Minister will be the Chief Guest for India's Republic Day celebrations to be held on 26th January 2021?

Britain (Boris Johnson)

In which Indian state capital, Reserve Bank of India (RBI) is to set up first Automated Bank-note Processing Centre?

Jaipur

Who is the winner of the 'Social Entrepreneus of the Year Award-India 2020' given by Schwab Foundation of Social Entrepreneurship?

Ashraf Patel

Which countries have been selected to host 2030 & 2034 Asian Games, respectively?

Qatar (2030), Saudi Arabia (2034)

Which former President of India has authored the book titled, 'The Presidential Years'?

Pranab Mukherjee

In which city, the 26th UN Conference on Climate Change or CoP 26 will be held?

Glasgow, Britain

Which state has passed Land Grabbing (Prohibition) Act, under which there is a provision of minimum 10 years of imprisonment?

Gujarat

IMPORTANT QUOTES (For Essay and Answer Writing)







"The day science begins to study non-physical phenomena, it will make more progress in one decade than in all the previous centuries of its existence."

Nikola Tesla

"We are the representatives of the cosmos; we are an example of what hydrogen atoms can do, given 15 billion years of cosmic evolution."

Carl Sagan

"When something is important enough, you do it even if the odds are not in your favour."

Elon Musk

"In science, nothing is ever 100% proven."

Michio Kaku

"Intelligence is the ability to adapt to change."

Stephen Hawking

"Dreams are often most profound when they seem the most crazy."

Sigmund Freud

"A computer would deserve to be called intelligent if it could deceive a human into believing that it was human."

Alan Turing



AN INTRODUCTION

Dhyeya IAS, a decade old Institution, was founded by Mr. Vinay Singh and Mr. Q.H. Khan. Ever since its emergence it has unparallel track record of success. Today, it stands tall among the reputed institutes providing coaching for Civil Services Examination (CSE). The institute has been very successful in making potential realize their dreams which is evidents from success stories of the previous years.

Quite a large number of students desirous of building a career fro themselves are absolutely less equipped for the fairly tough competitive tests they have to appear in. Several others, who have a brilliant academic career, do not know that competitive exams are vartly different from academic examination and call for a systematic and scientifically planned guidance by a team of experts. Here one single move my invariably put one ahead of many others who lag behind. Dhyeya IAS is manned with qualified & experrienced faculties besides especially designed study material that helps the students in achieving the desired goal.

Civil Services Exam requires knowledge base of specified subjects. These subjects though taught in schools and colleges are not necessarily oriented towards the exam approach. Coaching classes at Dhyeya IAS are different from classes conducted in schools and colleges with respect to their orientation. Classes are targeted towards the particular exam. classroom guidance at Dhyeya IAS is about improving the individuals capacity to focus, learn and innovate as we are comfortably aware of the fact that you can't teach a person anything you can only help him find it within himself.

DSDL Prepare yourself from distance

Distance learning Programme, DSDL, primarily caters the need for those who are unable to come to metros fro economic or family reason but have ardent desire to become a civil servant. Simultaneously, it also suits to the need of working professionals, who are unable to join regular classes due to increase in work load or places of their posting. The principal characteristic of our distance learning is that the student does not need to be present in a classroom in order to participate in the instruction. It aims to create and provide access to learning when the source of information and the learners are separated by time and distance. Realizing the difficulties faced by aspirants of distant areas, especially working candidates, in making use of the institute's classroom guidance programme, distance learning system is being provided in General Studies. The distance learning material is comprehensive, concise and examoriented in nature. Its aim is to make available almost all the relevant material on a subject at one place. Materials on all topics of General Studies have been prepared in such a way that, not even a single point will be missing. In other words, you will get all points, which are otherwise to be taken from 6-10 books available in the market / library. That means, DSDL study material is undoubtedly the most comprehensive and that will definitely give you added advantage in your Preliminary as well as Main Examination. These materials are not available in any book store or library. These materials have been prepared exclusively for the use of our students. We believe in our quality and commitment towards making these notes indispensable for any student preparing for Civil Services Examination. We adhere all pillars of Distance education.

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