

Topics

- Killing of wild animals
- eSakshya
- iDEX
- The Pradhan Mantri Awas Yojana (Urban)
- Potassium cyanide
- National Security Strategy (NSS)
- What Is a K-Shaped Recovery?
- Cocoa Producer
- Melting of Antarctica
- Mains



By saurabh Pandey





Saurabh Pandey CSE

Saurabh Pandey CSE

4.8★

1K+

3+

77 reviews

Downloads

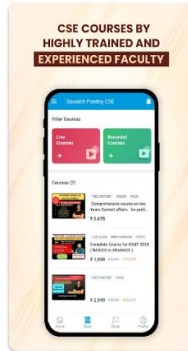
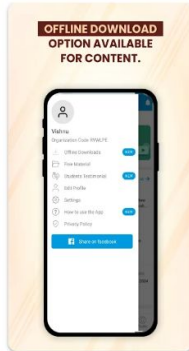
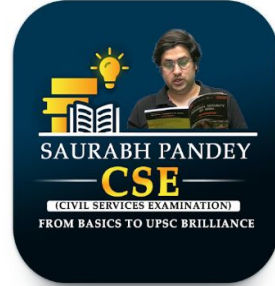
Rated for 3+

Install

Share

Add to wishlist

This app is available for your device



App support ▾

Target Mains -2024/25 -

Q What role technology can play in criminal justice system ??

प्र. आपराधिक न्याय प्रणाली में प्रौद्योगिकी क्या भूमिका निभा सकती है??

**Connect with sir
9057921649**

**send your answer - Saurabh pandey
upsc telegram channel**

MAINS GURUJI

Connect with sir 90579 21649

**UPSC MAINS
MENTORSHIP
PROGRAM**

starting
10th JULY
2024



**BY SAURABH
PANDEY SIR**

**Target 400 + in
GS paper**

**How to approach
Essay ??**

**Only for serious
UPSC ASPIRANTS**

Batch-1

T.N. to allow regulated culling of wild boars in fields close to forest

The Hindu Bureau

CHENNAI

The Tamil Nadu government has decided to allow culling of wild boars that cause distress to farmers in farmland close to forest areas.

Minister for Forests M. Mathiventhan said in the Assembly on Friday that the decision was taken based on a report by the Farmers' Conflict Resolution Committee, which was constituted to study the impact of raids by elephants and wild pigs on agricultural crops. The committee comprises representatives from the Departments of Forest, Revenue, Agriculture, and Horticulture, scientific experts, and wildlife enthusiasts.

During the debate on the demand for grants for his department, the Minister said that the areas adjacent to reserve forests would be divided into three zones – Zone A (within one kilometre from forest limits); Zone B (one to five kilometres); and



Shooting of wild boars will not be allowed within 5 km from the reserve forest, says Minister

Zone C (beyond five kilometres). Shooting of wild pigs will not be allowed within five kilometres from the reserve forest, he added.

While farmers have been requesting the State government to allow culling of wild boars, experts have expressed concerns about indiscriminate killing.

Mr. Mathiventhan said the shooting must adhere to a scientific approach and take into account the intensity of conflict and the frequency of incidents on farmland, located outside Zone C.



Killing of wild boar

The Tamil Nadu government has decided to allow culling of wild boars that cause distress to farmers in farmland close to forest areas.

Rule

Section 11 of wildlife protection act 1972 regulate killing of wild animals

As per clause (1)(A) of the section, the Chief Wildlife Warden (CWLW) of a state may if satisfied that a wild animal specified in Schedule I (mammals) has become dangerous to human life or disabled or diseased beyond recovery permit hunting or killing of such animal

Ahead of roll-out of the new criminal laws, Union Home Ministry tests eSakhsya App



Vijaita Singh

NEW DELHI

Days ahead of the implementation of the three criminal laws, the Union Ministry of Home Affairs (MHA) is testing eSakhsya (e-evidence), a mobile-phone application to help police record scene of crime, search and seizure in a criminal case and upload the file on the cloud-based platform. The police official will have to upload a selfie after the procedure is complete. Each recording could be maximum four minutes long and several such files could be uploaded for each First Information Report (FIR), according to the details shared with State police departments.

The Bharatiya Nyaya Sanhita (BNS) that replaces the Indian Penal Code, 1860; the Bharatiya Sakhsya (BS) which replaces the Indian Evidence Act, 1872; and the Bharatiya Nagarik Suraksha Sanhita (BNSS) that replaces the Code of Criminal Procedure, 1898

The mobile application will be available to all police stations to download and register

are all set to come into force from July 1.

Conviction rate

The BNSS mandates compulsory audiovisual recording of search and seizure in each criminal case and mandatory forensic examination in all cases where an offence attracts punishment of seven years or more. Procuring hardware and cloud space is an expensive affair and many States do not have enough resources, said an official, adding that it will also help uniformity in investigations, thereby increasing the conviction rate.

The mobile application developed by the National Informatics Centre (NIC) will be available to all police stations which register and download the app.

A senior government of-

icial said the app was under final stages of trial and the police were given two options. "If there is connectivity issue, the police can record the crime scene on their own device such as personal mobile phones and generate a hash value, come back to the police station and upload the file. The other method is they can directly upload through eSakhsya for which good Internet speed is required," explained the official.

Another police officer cautioned that the sanctity of the chain of evidence submission will have to be adhered to, else, it could benefit an accused.

"Many accused escape the clutches of law due to procedural infirmities. The new laws make everything digital; if there is slightest of issue in procuring digital evidence, it could lead to criminals walking free. Forensic evidence is not always challenged on the grounds of quality but on the chain of command," said the officer.

eSakshya

- **the Union Ministry of Home Affairs (MHA) is testing eSakshya (e-evidence), a mobile phone application to help police record scene of crime, search and seizure in a criminal case and upload the files on the cloud-based platform.**
- **The police official will have to upload a selfie after the procedure is complete.**
- **Each recording could be maximum four minutes long and several such files could be uploaded for each First Information Report (FIR)**

Urban Affairs Ministry to revamp affordable housing scheme



The Hindu Bureau

NEW DELHI

The Pradhan Mantri Awas Yojana (Urban), a scheme to enable affordable housing for urban poor, would be revamped with new features based on learning from the past nine years since when it has been operational, the Ministry of Housing and Urban Affairs said on Tuesday.

The PMAY (Urban), launched in 2015, has been given an extension till December 2024. The mission aims to address urban housing shortage among the poor and middle income groups, including the slum dwellers, by ensuring a *pucca* house to all eligible urban households.

No delays

A senior official of the Housing and Urban Affairs Ministry said that the revamp would focus on ensuring that there are no delays on reaching out to beneficiaries who have signed up for the scheme.

The Ministry had also announced a scheme for

Special Assistance to States for Capital Investment 2023-24 and 2022-23 and for improving and speeding up basic urban planning ecosystem in cities by incentivising the States.

Both the schemes among other things also incentivised States for creating an enabling ecosystem for affordable housing for built up area up to 66 sq m through favourable by-laws and adoption of enabling policy by the States.

Under the scheme, the States have reported that through the enabling provisions under their affordable housing policy, approximately 5,00,000 dwelling units have been constructed in last four to five years in States like Gujarat, Haryana, Odisha, Chhattisgarh, Maharashtra, Rajasthan, Tamil Nadu, Assam and Uttar Pradesh, the official said.

During 2023-2024, as reported by the States, approximately 44,000 dwelling units have been constructed in Assam, Gujarat, Maharashtra, Haryana and Rajasthan.



The Pradhan Mantri Awas Yojana (Urban)

- **The Pradhan Mantri Awas Yojana (Urban), a scheme to enable affordable housing for urban poor, would be revamped with new features based on learning from the past nine years since when it has been operational.**
- **The PMAY (Urban), launched in 2015, has been given an extension till December 2024.**
- **The mission aims to address urban housing shortage among the poor and middle income groups, including the slum dwellers, by ensuring a pucca house to all eligible urban households.**

- **PM Modi had started the Pradhan Mantri Awas Yojana.**
- **Under the Pradhan Mantri Awas Yojana, all homeless citizens of India are given housing by the central government.**
- **Prime Minister Narendra Modi inaugurated the Pradhan Mantri Awas Yojana (PMAY) on 25 June 2015.**
- **Then the main goal of the Pradhan Mantri Awas Yojana was that every family living below the poverty line should have their own house by the year 2023 so that they do not have to take a house on rent.**
- **The government claims that this goal has almost been achieved.**



Who can apply under PM Awas Yojana?

- Eligibility criteria have been set by the Government of India to apply under the Pradhan Mantri Awas Yojana (PM Awas Yojana Apply Online 2024).
- According to this, the age of the applicant should be less than 70 years.
- There should not be any house or flat in the name of the applicant or any member of his family.
- The applicant should not have taken any kind of government exemption to buy a house, the ownership of the house should be either in the name of a woman, or there should be only men in that family.

Apart from this, the maximum annual income of the applicant's family should not exceed Rs 18 lakh



- **For this, the applicant has been divided into four different parts economically.**
- **These include Economically Weaker Section (EWS) - those with annual total income less than three lakh rupees.**
- **Low Income Group (LIG) - those with Rs 3 lakh to 6 lakh annually, Middle Income Group-1 (MIG-I) - those with Rs 6 lakh to 12 lakh annually and Middle Income Group-2 (MIG-II) - those with Rs 12 lakh to 18 lakh annually.**
- **However, government assistance for repair or improvement of house is available only to EWS or LIG category.**

Defence Ministry signs 350th contract under iDEX for ‘miniaturised satellite’



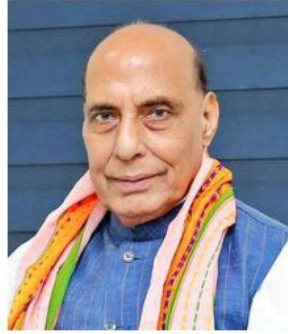
The Hindu Bureau
NEW DELHI

The 350th contract under the Innovations for Defence Excellence (iDEX), the flagship initiative of the Defence Ministry, was signed with SpacePixxel Technologies for the design and development of a “miniaturised satellite capable of carrying electro-optical, infrared, synthetic aperture radar, and hyperspectral payloads up to 150 kg”, the Defence Ministry announced on Tuesday.

This challenge is being led by the Indian Air Force.

Pros of the satellite

“This 350th iDEX contract enables innovation in space electronics, wherein many payloads earlier deployed on dedicated large satellites are now being mi-



Rajnath Singh

niaturised,” the Ministry said.

The modular small satellite will integrate multiple miniaturised payloads as per requirement, providing advantages such as faster and economical deployment, ease of manufacturing, scalability, adaptability, and less environmental impact, it stated.

The contract was ex-

changed between Anurag Bajpai, Additional Secretary (Defence Production) & CEO, Defence Innovation Organisation (DIO), and Awais Ahmed Nadeem Alduri, founder and CEO of the SpacePixxel Technologies.

SpacePixxel has been actively working to build and launch high-resolution hyperspectral imaging satellites to provide detailed earth observation data, the statement said.

Established by the DIO under the Department of Defence Production, iDEX has launched 11 editions of the Defence India Start-up Challenge and recently unveiled the Acing Development of Innovative Technologies with iDEX (ADITI) scheme to promote innovations in critical and strategic defence technologies.

The iDEX initiative was launched by the Hon'ble PM in April 2018. iDEX aims to achieve self - reliance and foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs, start-ups, individual innovators, R&D institutes and academia.

iDEX has partnered with leading incubators in the country to provide handholding, technical support and guidance to the winners of iDEX challenges.

Defence India Start-up Challenge (DISC) are launched with Problem Statements (PS) from Armed Forces and OFB/DPSUs for resolution by innovators.

Death by oxygen deprivation

The Hindu Bureau



Q. How does potassium cyanide cause sudden death?

A: Potassium cyanide when consumed causes death by gradually arresting the

supply of oxygen to our body's cells by forming complexes with haemoglobin and cytochrome (a protein which helps in the respiration of cells), depriving them of their capacity to transport or exchange oxygen.

Normally, oxygen is carried to different parts of the body from the lungs by the blood using haemoglobin — the iron-containing, oxygen-carrying molecule of the red blood cells. Haemoglobin is made up of a globular protein and four heme groups. The iron (in ferrous state) present in these heme complexes can bond to either an oxygen molecule or a water molecule or exchange one for the other without much difficulty. It is because of this ability that haemoglobin is able to pick up oxygen from the lungs, carry it to the cells, and bring water in return.

Cells respire oxygen with the help of myoglobin (haemoglobin-like proteins present in the cells) and cytochrome, which carries electrons. Specific forms of cytochrome and haemoglobin also cause sudden death when poisoned by cyanide.

When potassium cyanide is consumed, it splits into a potassium



A small but deadly mass of potassium cyanide crystals next to a one-eurocent coin. MORIENUS (CC BY-SA 3.0)

ion and a cyanide ion. The cyanide ion has a greater affinity for the ferrous iron than. As a result it occupies the site meant for oxygen in haemoglobin. This process is irreversible and prevents the transfer of oxygen.

One form of cytochrome, designated cytochrome-a, also binds with the cyanide ion and stabilises the iron to such an extent that it does not take part in the electron transfer to the cell. This prevents oxygen intake by the cell.

The symptoms of cyanide poisoning are giddiness, headache, and bluish tinge of the skin. If not treated immediately, unconsciousness and death will follow.
(A. Karthikeyani, Udumalpet; C. Ravi Chandra, Secunderabad; and R. Ramaa, Chennai)

For feedback and suggestions for 'Science', please write to **science@thehindu.co.in** with the subject 'Daily page'

Potassium cyanide

- **Potassium cyanide when consumed causes death by gradually arresting the supply of oxygen to our body's cells by forming complexes with haemoglobin and cytochrome (a protein which helps in the respiration of cells), depriving them of their capacity to transport or exchange oxygen.**
- **Normally, oxygen is carried to different parts of the body from the lungs by the blood using haemoglobin – the iron-containing, oxygen-carrying molecule of the red blood cells. Haemoglobin is made up of a globular protein and four heme groups.**

- **The iron (in ferrous state) present in these heme complexes can bond to either an oxygen molecule or a water molecule or exchange one for the other without much difficulty.**
- **It is because of this ability that haemoglobin is able to pick up oxygen from the lungs, carry it to the cells, and bring water in return.**

- **Cells respire oxygen with the help of myoglobin (haemoglobin-like proteins present in the cells) and cytochrome, which carries electrons.**
- **Specific forms of cytochrome and haemoglobin also cause sudden death when poisoned by cyanide.**
- **When potassium cyanide is consumed, it splits into a potassium ion and a cyanide ion. The cyanide ion has a greater affinity for the ferrous ion than. As a result it occupies the site meant for oxygen in haemoglobin.**

- **This process is irreversible and prevents the transfer of oxygen.**
- **One form of cytochrome, designated cytochrome-a, also binds with the cyanide ion and stabilises the iron to such an extent that it does not take part in the electron transfer to the cell.**
- **This prevents oxygen intake by the cell**

India needs the anchor of a national security strategy



The new National Democratic Alliance government faces some thorny old problems in national security. It will have to make decisions – or else continue to defer them – on everything from whether to build another aircraft carrier, to the process of implementing theaterisation, to managing strategic relations with the United States and competition with China. How will the coalition government, with competing demands on its resources and attention, make those decisions?

Its best option is to step back and consider national security holistically, from first principles. It should not consider this reform or that relationship in a piecemeal, haphazard way; that would risk wasting scarce resources and undermining national goals. It should, instead, commit to a new rubric for making these decisions – it should commit to writing a National Security Strategy (NSS).

Most powerful states publish some form of national security strategy. India does not. Consequently, its capability investment decisions are made by haggling between the military services. Plans and priorities get stuck in well-worn grooves, and are never systematically re-evaluated. Grand strategic vision becomes concentrated in the hands of a few individuals at the apex of government, where it gets hidden behind closed doors, or crowded out by other political whims.

Many strategic risks

India cannot afford to be so reactive. The world is throwing up a slew of strategic risks, from climate change to pandemics, which require decades of coordinated policy effort to address. China alone represents an unprecedented array of interconnected challenges, from an explosive naval build-up, to geoeconomic clout in South Asia, to leverage in global supply chains. And even distant conflicts, from Ukraine to Gaza, are revealing new technologies and tactics of war that will invariably spread to India's neighbourhood.



Arzan Tarapore

a research scholar at the Center for International Security and Cooperation at Stanford University, U.S., and a senior non-resident fellow at the Australian Strategic Policy Institute

The country must have a regular process to make sense of growing global tumult and plan for it

India needs a regular process to make sense of this tumult and plan for it.

A blueprint for expanding power

A regular and well-crafted NSS would give India five critical benefits that it currently lacks. First and logically foremost, it would force the government to undertake a comprehensive strategic assessment – a review of the country's threats and opportunities, and a stocktake of global security trends. Such a periodic review would force New Delhi to spotlight evolving challenges, such as the growth of the Chinese navy, even though it does not pose an urgent and lethal threat today. In the absence of an NSS, long-term threats will be neglected until they pose an immediate and grave threat – when they will be much harder to manage.

Second, an NSS would provide a coherent framework for long-term planning. Strategic competition requires intense work in peacetime, to conceptualise how best to secure India's expanding interests and deter its adversaries, and then to develop the requisite military capabilities and international partnerships. An NSS, done rigorously, would give the government an overarching strategic blueprint to adjudicate, for example, between the Indian Navy demanding a new aircraft carrier, or the Indian Army seeking to raise a new infantry division. In the absence of such a process, scarce resources may get wasted on vanity projects with comparatively little strategic value, and the military services left scrambling to fill capability gaps with emergency procurements.

Third, an NSS would provide an instrument for signalling to friend and foe alike. It would help to clarify India's strategic intent – declaring that, for example, India takes seriously its role as a net security provider in the Indian Ocean, so that it will counter armed coercion against other, smaller countries.

Equally valuable, an NSS would also clarify India's policy for its partners, highlighting areas

of converging interests, or explaining the limits on cooperation – to help mitigate instances of mismatched expectations.

Fourth, an NSS would create a mechanism to force various arms of the government to synchronise their efforts. Within the military, an NSS would give the Integrated Defence Staff and future joint organisations a clearer top-down mandate to better align the work of the Indian Army, Indian Air Force, and Indian Navy. Beyond the military, an NSS would provide common goals and plans so that various national security agencies, including the Ministries of Defence, External Affairs, and Home Affairs, and the intelligence agencies, could better coordinate daily at the working level, rather than episodically at the Cabinet level.

Issue of accountability

Finally, an NSS would introduce a novel accountability tool, to ensure that the bureaucracy adheres to the political leadership's intent, and that the government's policies are as transparent as possible to Parliament and the people. The citizens of India have a legitimate need to know how their government is planning to safeguard their national security, and how well it is performing.

Some national security strategies are better than others. A fully effective strategy should be a public document issued with the imprimatur of the Prime Minister, because its purpose is to synchronise efforts widely across government, and credibly signal the government's political intent throughout the country and the world. A strong NSS would not automatically resolve conflicts between various arms of the government, but it should at least identify trade-offs and opportunity costs, so that political leaders can make rational decisions for long-term growth. In that way, an NSS would offer the intellectual scaffolding that is absolutely necessary for India to become one of the world's leading powers.

National Security Strategy (NSS)

- **A regular and well-crafted NSS would give India □ve critical bene□ts that it currently lacks.**
- **First and logically foremost, it would force the government to undertake a comprehensive strategic assessment — a review of the country’s threats and opportunities, and a stocktake of global security trends.**
- **Such a periodic review would force New Delhi to spotlight evolving challenges, such as the growth of the Chinese navy, even though it does not pose an urgent and lethal threat today.**

- **Second, an NSS would provide a coherent framework for long-term planning.**
- **Strategic competition requires intense work in peacetime, to conceptualise how best to secure India's expanding interests and deter its adversaries, and then to develop the requisite military capabilities and international partnerships**

- **Third, an NSS would provide an instrument for signalling to friend and foe alike.**
- **It would help to clarify India's strategic intent — declaring that, for example, India takes seriously its role as a net security provider in the Indian Ocean, so that it will counter armed coercion against other, smaller countries**



- **Fourth, an NSS would create a mechanism to force various arms of the government to synchronise their efforts.**
- **Within the military, an NSS would give the Integrated Defence Staff and future joint organisations a clearer top-down mandate to better align the work of the Indian Army, Indian Air Force, and Indian Navy.**
- **Beyond the military, an NSS would provide common goals and plans so that various national security agencies, including the Ministries of Defence, External Affairs, and Home Affairs, and the intelligence agencies, could better coordinate daily**



Finally, an NSS would introduce a novel accountability tool, to ensure that the bureaucracy adheres to the political leadership's intent, and that the government's policies are as transparent as possible to Parliament and the people.

K-shaped recovery fuelling similar trend in inflation: HSBC



The Hindu Bureau

NEW DELHI

An uneven K-shaped recovery in economic growth is also fuelling a similar trajectory for inflation dynamics, with food and rural price rise outpacing the inflation in other goods and services, and that faced by urban consumers, respectively, HSBC researchers said on Tuesday.

There has been much debate over India's post-pandemic recovery being driven by demand for higher-end goods and services. Apart from the dichotomy

between rural and urban inflation, and food prices compared with other goods, HSBC pointed to goods inflation being higher than that for services.

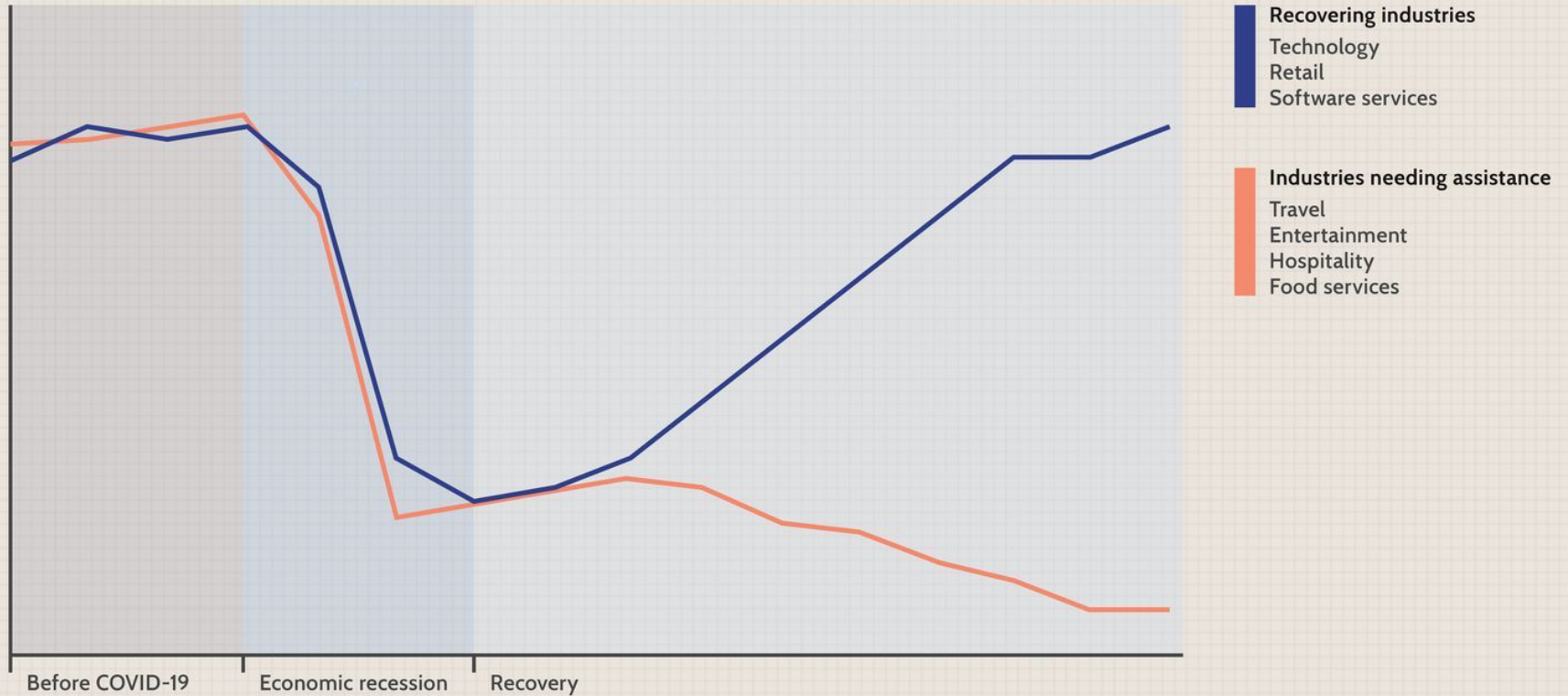
"Perhaps inflation and growth dynamics were never meant to differ," HSBC's chief economist for India and Indonesia Pranjul Bhandari wrote. "The same shocks that are driving the variance in growth, like the pandemic and climate change, hurting some groups more than others, are also likely driving the variance in prices," Ms. Bhandari added.

What Is a K-Shaped Recovery?



- A K-shaped recovery occurs when, following a recession, different parts of the economy recover at different rates, times, or magnitudes.
- This is in contrast to an even, uniform recovery across sectors, industries, or groups of people.
- A K-shaped recovery leads to changes in the structure of the economy or the broader society as economic outcomes and relations are fundamentally changed before and after the recession.
- This type of recovery is called K-shaped because the path of different parts of the economy when charted together may diverge, resembling the two arms of the Roman letter "K."

K-Shaped Recovery



Trouble in cocoa land



Harvesting woes: Recently extracted cocoa beans at a farm in Asikasu. Despite government efforts to stabilise the sector and recent soaring global cocoa prices, many Ghana farmers say they feel abandoned and have turned to illicit trade to survive in the world's number two producer. Ghana is emerging from one of its worst economic crisis in years after securing a \$3 billion credit from the International Monetary Fund and restructuring most of its debt. AFP

Cocoa Producer

- Cocoa beans are grown on cacao trees and have been consumed for thousands of years.
 - Today, dried and fermented seeds can be used to create chocolate, while the fat of the beans – or cocoa butter – can also be extracted and used for a variety of purposes, from moisturizing the skin and hair to cooking.
- Cocoa was first harvested in what is today **Central America**.
- Soon, though, it became popular around the world, and it is now produced in many regions worldwide

- **While many nations produce cocoa beans, there are a few that stand out from the pack. One of those is Cote d'Ivoire. This nation is responsible for 30% of the world's cocoa.**
- **Familiar brands like Cadbury and Nestle mostly source their cocoa from this country. Ghana is another top producer of cocoa. The production of cocoa contributes significantly to the nation's GDP.**

- **Unfortunately, operational costs have become a problem in recent years, leading to cocoa smuggling to the Ivory Coast.**
- **Indonesia is relatively new to the cocoa industry, only ramping up producing during the 1980s. Today, the nation is one of the top producers in the world.**
- **Other nations that are top producers of cocoa include Brazil, Cameroon, Dominican Republic, Ecuador, Mexico, Nigeria, and Peru.**



Studies have shown that warm seawater is seeping into the 'grounding zone', where land and ice meet. FILE PHOTO

New 'tipping point' of runaway melting found in Antarctica

Agence France-Presse

PARIS

Scientists have discovered a new tipping point toward "runaway melting" of Antarctic ice sheets, caused by warm ocean water intruding between the ice and the land it sits on, according to a study published on Tuesday.

While this type of melting has been previously studied, models used by the UN's Intergovernmental Panel on Climate Change to project the impact of global warming on the Antarctic have yet to factor in this phenomenon.

They have also systematically underestimated ice loss seen thus far, said the study, published in the journal *Nature Geoscience*. As temperatures rise due to human-caused global warming, Antarctic ice sheets are melting, threatening a rise in global sea levels and putting coastal communities at risk. "Increases in ocean temperature can lead to a tipping point being passed, beyond which ocean water intrudes in an unbounded manner beneath the ice sheet, via a process of runaway melting," the study said. Antarctic ice sheets sit atop the bedrock and extend beyond the coast to float on the sea.

Previous studies have shown that warm seawater is seeping into the "grounding zone" – where land and ice meet – and further inland. As the water warms, even by a fraction, the intrusion accelerates from short distances of 100 metres to tens of kilometres, melting ice along the way by heating it from below, explained the study's lead author Alexander Bradley. "Every 10th of a degree (of warming) makes these kind of processes closer, these tipping points closer," said Mr. Bradley, a researcher with the British Antarctic Survey.

Melting of Antarctica



- **Scientists have discovered a new tipping point toward “runaway melting” of Antarctic ice sheets, caused by warm ocean water intruding between the ice and the land it sits on.**
- **As temperatures rise due to human-caused global warming, Antarctic ice sheets are melting, threatening a rise in global sea levels and putting coastal communities at risk.**
- **“Increases in ocean temperature can lead to a tipping point being passed, beyond which ocean water intrudes in an unbounded manner beneath the ice sheet, via a process of runaway melting,”**

- **Antarctic ice sheets sit atop the bedrock and extend beyond the coast to float on the sea.**
- **Previous studies have shown that warm seawater is seeping into the “grounding zone” — where land and ice meet — and further inland.**
- **As the water warms, even by a fraction, the intrusion accelerates from short distances of 100 metres to tens of kilometres, melting ice along the way by heating it from below,**

Link in description

Msg -9057921649

**Download -
saurabh pandey
cse app**

NEW BATCH LAUNCHED

Connect with sir 90579 21649

**Complete Agriculture
optional**

Paper 1 and Paper 2

Live classes

Starting 1st July

Score 300+



ATTENTION!! BATCH FOR 2025/26 LAUNCHED

connect with sir -9057921649

CURRENT AFFAIRS PLUS (FOR UPSC 2025)



INCLUDES

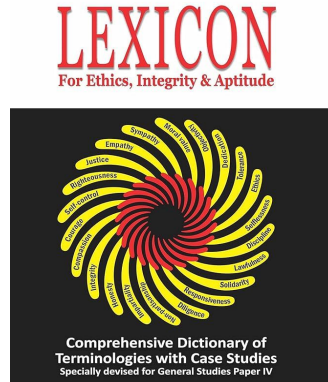
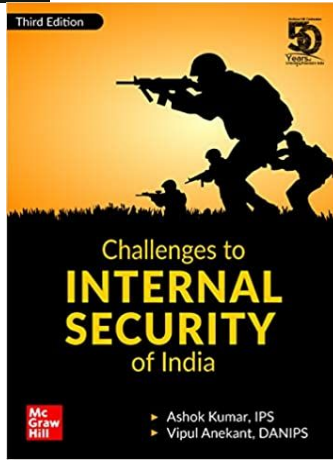
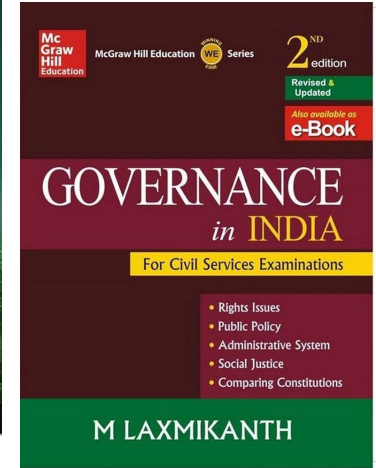
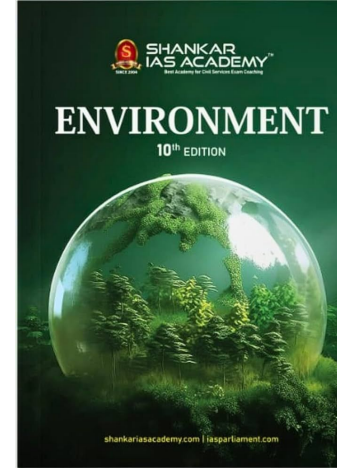
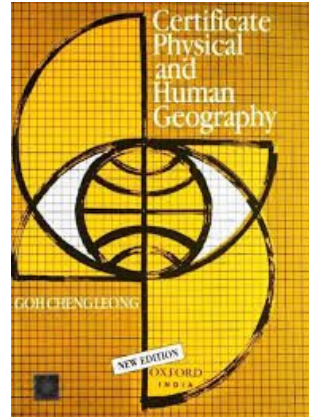
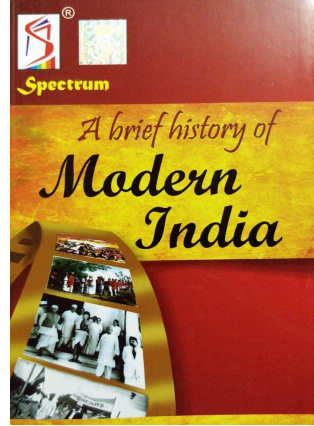
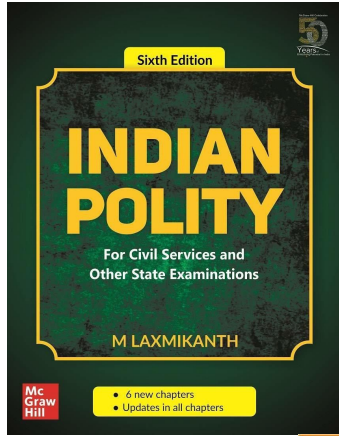
- PIB Analysis with pdf
- Down to earth
- physics.org
- science daily
- Major newspapers
- With practice test and Mains Mock

starting
1st may
2024



**BY SAURABH
PANDEY SIR**

ALL Advance books for upsc IN ONE COURSE



Chronicle
Nurturing Talent Since 1990

Starting 1st june

Visit -
saurabhpandeyupsc.com

Msg - 9057921649

COMBO COURSE FOR UPSC 2025

ALL Advance books for upsc IN ONE COURSE

Starting 1st july
Visit -
saurabhpandeyupsc.com
Msg - 9057921649



**ATTENTION!! BATCH FOR 2025/26
LAUNCHED**
connect with sir -9057921649

**CURRENT AFFAIRS PLUS
(FOR UPSC 2025)**

INCLUDES

- PIB Analysis with pdf
- Down to earth
- physics.org
- science daily
- Major newspapers
- With practice test and Mains Mock

starting 1st may 2024

**BY SAURABH
PANDEY SIR**

Scan - to get free content



The hindu session pdf

Download the hindu session pdf

Telegram link in description box

Download the hindu pdf - <https://t.me/gesreporter>



Connect with sir
9057921649

FOR UPSC 2025 /26



Launched

1- Current affairs plus - PIB, YOJANA, Down to earth , physics.org , Major newspapers.

2- Books series - all advanced books in one course

UPCOMING

1- Mains Mentorship program

2- GS-1 ,2,3 and 4

3- Mapping

4- NCERTS

5- Test series for 2025

6- essay

7- Agriculture optional

**DOWNLOAD - Saurabh
pandey cse app**

+91 90579 21649

Saurabh pandey upsc performance - UPSC PRELIMS 2024
(Detailed pdf to be shared)

Connect with sir
9057921649



X 22nd october 2...



Periodical cicada emergence disrupts food webs

The periodical mass emergence of cicadas in eastern North American forests can "rewire" forest food webs and initiate a cascade of impacts that propagates throughout the food chain, as per a study that quantified effects of the 2021 brood X cicada emergence. The study found that when insect-eating birds have prey in the form of cicadas and thus shift their focus away from their usual prey – leaf-eating caterpillars – the caterpillars feast more heavily upon the leaves of oak saplings, doubling insect leaf damage.

- The periodical mass emergence of cicadas in eastern North American forests can "rewire" forest food webs and initiate a cascade of impacts that propagates throughout the food chain, as per a study that quantified effects of the 2021 Brood X cicada emergence.

The cicadas are a superfamily, the Cicadoidea, of insects in the order

Hemiptera.



Edit in Google Slides

X 10th october 2...



States as per Article 244(2).

What are Scheduled Areas?

- Scheduled Areas cover 11.3% of India's land area, and have been notified in 10 States: Andhra Pradesh, Telangana, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, and Himachal Pradesh

How are Scheduled Areas governed?

- The President of India notifies India's Scheduled Areas. States with Scheduled Areas need to constitute a Tribal Advisory Council with up to 20 ST members.
- They will advise the Governor on matters referred to them regarding ST welfare.
- The Governor will then submit a report every year to the President regarding the administration of Scheduled Areas.

- The national government can give directions to the State regarding the administration of Scheduled Areas.
- The Governor can repeal or amend any law enacted by Parliament and the State Legislative Assembly in its application to the Scheduled Area of that State.



Edit in Google Slides

X 7TH DECEMBE...



Garba dance of Gujarat makes it to UNESCO list

Sreeparna Chakrabarty
NEW DELHI

Gujarat's traditional dance form "Garba" was on Wednesday included in the list of Intangible Cultural Heritage by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

The popular dance form is the 15th cultural item from India to make it to the UNESCO list. Kolkata's Durga Puja was the last one added two years ago.

The inclusion has been made under the provisions of the 2003 Convention for the Safeguarding of Intangible Cultural Heritage. The international cultural body described the 'Garba' as a ritualistic and devotional dance performed in India.

- Gujarat's traditional dance form 'Garba' was on Wednesday included in the list of **Intangible Cultural Heritage** by the United Nations Educational, Scientific and Cultural Organization (UNESCO).
- The popular dance form is the 15th cultural item from India to make it to the UNESCO list. Kolkata's Durga Puja was the last one added two years ago.
- The inclusion has been made under the provisions of the 2003 Convention for the Safeguarding of Intangible Cultural Heritage.
- The international cultural body described the 'Garba' as a **ritualistic and devotional dance performed in India.**



Garba Dance is Making the World Sick

Garba is a traditional dance form of Gujarat, India. It is performed during the Navratri festival. The dance is characterized by its rhythmic movements and the use of traditional instruments like the dhol and the garba. The dance is performed in a circular pattern, with the dancers moving in a clockwise direction. The dance is a blend of traditional and modern elements, and it has become a popular form of entertainment in Gujarat and other parts of India.



Edit in Google Slides

WION
Russia loads 'Avangard' missile into launch Silo, fears of nuclear warfare on rise | World DNA

Que-3 With reference to exercise 'Mitra Shakti', consider the following statements

- Between India and Nepal.
- The aim of the exercise is to jointly rehearse sub-conventional operations under Chapter VII of the United Nations Charter, which authorises the Security Council to take enforcement measures, including the use of military force, to address threats to international peace and security.
- "Exercise MITRA SHAKTI-2023" recently commenced in Goa.

How many of the above statements are correct?

a) Only one b) Only two
c) All three d) None

Ans 3- (a)

- "Exercise MITRA SHAKTI-2023" recently commenced in Aunadh (Pune).
- Between India and Sri Lanka.

The Constituent Assembly debated whether fundamental rights including this one could be suspended or limited during an Emergency. The Article cannot be suspended except during the period of Emergency.

Can High Courts be approached in cases of violation of fundamental rights?

- Both the High Courts and the Supreme Court can be approached for violation or enactment of fundamental rights through five kinds of writs:
- Habeas corpus (related to personal liberty in cases of illegal detentions and wrongful arrests)
- Mandamus — directing public officials, governments, courts to perform a statutory duty;
- Quo warrant — to show by what warrant is a person holding public office;

- Prohibition — directing judicial or quasi-judicial authorities to stop proceedings which it has no jurisdiction for; and
- Certiorari — re-examination of an order given by judicial, quasi-judicial or administrative authorities.
- In civil or criminal matters, the first remedy available to an aggrieved person is that of trial courts, followed by an appeal in the High Court and then the Supreme Court.
- When it comes to violation of fundamental rights, an individual can approach the High Court under Article 226 or the Supreme Court directly under Article 32.
- Article 226, however, is not a fundamental right like Article 32.

IE

- 12th BRICS summit

1023 Nobel Prize In Economic Sciences awarded To Claudia Gold...

awarded to
of women's

Que-2 Consider the following statements

- Article 244, pertaining to the administration of Scheduled and Tribal Areas, is the single most important constitutional provision for STs.
- Articles 244(1) provides for the application of Fifth Schedule provisions to Scheduled Areas notified in any State other than Assam, Meghalaya, Tripura, and Mizoram, the Sixth Schedule applies to these states as per Article 244(2).
- The Prime Minister of India notifies India's Scheduled Areas.

How many of the above statements are correct?

a) Only one b) Only two
c) All three d) None

Ans (b)

The President of India notifies India's Scheduled Areas.

Scheduled Areas cover 11.3% of India's land area, and have been notified in 10 States: Andhra Pradesh, Telangana, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra and Himachal Pradesh. In 2015, Kerala proposed to notify 2,133 habitations, five gram panchayats and two wards in five districts. It awaits the Indian government's approval.

- The President of India notifies India's Scheduled Areas. States with Scheduled Areas need to constitute a Tribal Advisory Council with up to 20 ST members. They will advise the Governor on matters referred to them regarding ST welfare. The Governor will then submit a report every year to the President regarding the administration of Scheduled Areas.
- The national government can give directions to the State regarding the administration of Scheduled Areas. The Governor can repeal or amend any law enacted by Parliament and the State Legislative Assembly in its application to the Scheduled Area of that State. The Governor can also make regulations for a Scheduled Area, especially to prohibit or restrict the transfer of land by or among members of the STs, and regulate the allotment of land to STs and money-lending to STs.



Ethics vs privilege committee

- Objective: It oversees the moral and ethical conduct of members and examines cases of misconduct referred to it.
- Appointment of members in Lok Sabha: The members of the Ethics Committee are appointed by the Speaker for a period of one year.

Procedure for complaints

- Any person can complain against a Member through another Lok Sabha MP, along with evidence of the alleged misconduct, and an affidavit stating that the complaint is not "false, frivolous, or vexatious".
- If the Member himself complains, the affidavit is not needed.
- The Speaker can refer to the Committee any complaint against an MP.
- The Committee does not entertain complaints based only on media reports or on matters that are sub-judice.
- The Committee makes a prima facie inquiry before deciding to examine a complaint. It makes its recommendations after evaluating the complaint.

- The Rules (for example, the Rules of Procedure and Conduct of Business in the Lok Sabha) applicable to the Committee of Privileges also apply to the ethics panel.
- An allegation of corruption against an MP can be sent to either body, but usually more serious accusations go to the Privileges Committee.
- The mandate of the Privileges Committee is to safeguard the "freedom, authority, and dignity of Parliament".
- These privileges are enjoyed by individual Members as well as the

House as a whole.

- An MP can be examined for breach of privilege; a non-MP too can be accused of breach of privilege for actions that attack the authority and

Santiniketan finds its place on UNESCO's World Heritage List

World body makes announcement on Sunday. Manu's son was, nurtured by Tagore, has been reported by Bengal Culture Ministry says it holds important heritage in human values

By India Desk

Santiniketan, a town established by Nobel laureate Rabindranath Tagore, has been included in UNESCO's World Heritage List on Sunday. The town, located in West Bengal, is known for its unique blend of Indian and Western architectural styles, and its role in the development of modern Indian education.



The UNESCO World Heritage Committee, which meets in Paris, announced the inclusion of Santiniketan in its list of World Heritage Sites. The town, founded by Rabindranath Tagore in 1901, is a unique blend of Indian and Western architectural styles, and its role in the development of modern Indian education. The town is known for its unique blend of Indian and Western architectural styles, and its role in the development of modern Indian education.

Santiniketan, a town established by Nobel laureate Rabindranath Tagore, made it to the UNESCO's World Heritage List on Sunday.

Located in West Bengal's Birbhum district, Santiniketan, which means "abode of peace", started taking shape in 1901 and is the place where Tagore laid the foundations of Visva-Bharati University

EU chief promises a plan of action as migrants flock to Italian island

Ulysses von der Leyen, along with Italian PM Giorgia Meloni, visits Lampedusa where more than 2000 people have arrived this week. EU leaders program have arrived in Italy this year, almost double the figure by the corresponding period in 2022.

By Reuters

EUROPEAN COMMISSION

European Commission President Ursula von der Leyen said she will lead a mission to Italy to help the government deal with the influx of migrants. She said she will lead a mission to Italy to help the government deal with the influx of migrants.



von der Leyen said she will lead a mission to Italy to help the government deal with the influx of migrants. She said she will lead a mission to Italy to help the government deal with the influx of migrants.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Que-2 With reference to Parliaments special sessions, consider the following statements

- There is specific provision in the Constitution that deals with special sessions.
- Article 352, which deals with the proclamation of Emergency, refers to a 'special sitting' of the House, this clause was added through the 44th Amendment Act in 1978, which included safeguards against the Emergency.
- The Question Hour was suspended during the session.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None



Que-3 Consider the following statements about Sacred Ensembles of the Hoysala

- This includes five temples in Karnataka, has been recently inscribed on the UNESCO's World Heritage List.
- The Hoysala Temples, built in the 12th and 13th centuries by the Hoysala kings, are dedicated to Shiva and Vishnu.
- The temples became targets of plundered and destruction by the Delhi Sultanate army of Ala-ud-din Khaji in the early 14th century and another Delhi Sultanate army of Sultan Muhammad bin Tughluq in 1326 AD.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None



Que-4 Consider the following statements about SHREYAS scheme

- It comprises 4 central sector sub-schemes.
- The objective of the Scheme is to provide coaching of good quality for economically disadvantaged Scheduled Castes (SCs) and Other Backward Classes (OBCs) candidates to enable them appear in competitive and entrance examinations.
- The ceiling of the total family income under the scheme is 2 lakhs per annum and 3500 slots are allotted per annum.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

Que-5 Consider the following statements about Women's Reservation Bill

- The Constitution (One Hundred and Twenty-Eighth Amendment) Bill, 2023, seeking to reserve 33% of seats in Lok Sabha and state Assemblies for women.



Que-5 With reference to Shumang Leela, consider the following statements

- Shumang Leela is a traditional form of theatre in Tripura.
- In this the roles of women are all played by men, called Nupi Shabis.
- It is performed in an open courtyard surrounded by spectators on all four sides.

Which of the following given above is/are correct

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

Ans: (d)

- Shumang Leela is a traditional form of theatre in Manipur.
- In the case of women's theatre groups, the roles of men are played by women.
- Shumang Leela translates to "courtyard performance".
- Today, Shumang Leela is of two types: Nupa Shumang Leela, performed only by men, and Nupi Shumang Leela, performed only by women.

Que-6 Consider the following statements about Red Sanders also called Red Sandalwood

- It is a species found in the southern tropical dry deciduous forest of Telangana.
- The tree reaches an average height of 10 to 15 metres.
- The species is listed as 'Endangered' in the International Union for Conservation of Nature and falls in Appendix II of CITES.

Which of the following given above is/are correct

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

Ans: (d)

- It is a species found in the southern tropical dry deciduous forest of Andhra Pradesh (AP).
- CITES (shorter name for the Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as the Washington Convention).
- In India, it has been enlisted under Schedule IV of the Wildlife (Protection) Act, 1972.
- The heartwood of Red Sanders is in demand in the domestic and international markets for making

furniture, handicrafts and musical instruments in China and Japan. The red dye obtained from the wood is used as a colouring agent in the textiles, medicine and food industries.

Que-7 Consider the following statements about Compressed Biogas (CBG) and compressed natural gas (CNG)

- Chemically, CBG is the same as CNG — both are compressed methane — and has the same calorific value.
- CNG is a by-product of petroleum, CBG can be produced from any biomass, be it crop residue, cattle dung, sugarcane press mud, municipal wet waste or effluents from a sewage treatment plant.
- CBG cannot be transported through cylinders or pipelines to retail outlets.

Which of the following given above is/are correct

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

Que-8 Finance Minister announced 500 new 'waste to wealth' plants under Galvanizing Organic Bio-Agro Resources Dhan scheme (GOBARDHAN) in the Union Budget 2023. Consider the following statements about this

- The new GOBARDHAN scheme is an upgrade and an expansion of the old one of the same name, launched in 2018 by the Department of Drinking Water and Sanitation.
- This scheme limited itself to cluster or community-level biogas plants, for instance, for Arganwadis or farms.
- Compressed biogas (CBG) was never a part of the initial scheme launched in 2018 because it is very different from biogas in terms of utilisation and constituents.

Which of the following given above is/are correct

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

Que-7 Lamu Archipelago, recently in News, belongs to which country

a) Somalia b) Malaysia
c) Indonesia d) Kenya

Ans: (d)

- The Lamu Archipelago is located in the Indian Ocean close to the northern coast of Kenya, to which it belongs. The islands lie between the towns of Lamu and Kiunga, near the Coast Province. It is a part of Lamu District.

Que-8 Consider the following statements about "Operation Sadbhavana", recently in News

- Launched by an Indian Army.
- For development of Jammu and Kashmir.

Some of the objectives achieved through Operation Sadbhavana are national integration, tourism, women's empowerment, employment generation, education, and development activities geared towards nation-building.

Which of the following given above is/are correct

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

Ans: (b)

- For development of Ladakh.
- The Indian Army is organising multiple welfare activities, such as running schools and infrastructure development projects, as part of "Operation Sadbhavana" in the Union Territory of Ladakh.

Que-1 Consider the following statements

- A spy balloon is literally a gas-filled balloon that is flying quite high in the sky, more or less where we fly commercial airplanes.
- Disadvantage that low Earth orbit satellites have is that they are continually moving around the Earth.
- Geosynchronous orbit satellite has the disadvantage that it's harder to see things clearly when you're very, very far away.

Which of the following given above is/are correct

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

Ans: (c)

- The disadvantage these low Earth orbit satellites have is that they are continually moving around the Earth.
- of what we call persistence, allowing satellites to capture images continuously.

Que-2 With reference to Paris Club, consider the following statements

- The Paris Club is a group of mostly western creditor countries.
- It grew from a 1956 meeting in which Brazil agreed to meet its public creditors in Paris.
- Their objective is to find sustainable debt-relief solutions for countries that are unable to repay their bilateral loans.

Which of the following given above is/are correct

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

Ans: (b)

- It grew from a 1956 meeting in which Brazil agreed to meet its public

Exchange traded fund

- An exchange-traded fund (ETF) is a pooled investment security that can be bought and sold like an individual stock.
- ETFs can be structured to track anything from the price of a commodity to a large and diverse collection of securities.
- ETFs can even be designed to track specific investment strategies.

ETF share prices fluctuate all day as the ETF is bought and sold; this is different from mutual funds, which only trade once a day after the market closes.

- ETFs offer low expense ratios and fewer broker commissions than buying the stocks individually.
- An ETF must be registered with the Securities and Exchange Commission.

Pros and Cons of Exchange-Traded Funds



BIMSTEC
WHAT YOU SHOULD KNOW

Stands for The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation

7 MEMBER COUNTRIES

Founded in 1997 through Bangkok Declaration

- Accounts for 20% of the world population
- Grossed GDP of \$2.7 trillion
- Most populous the world's traded goods from the Bay region year
- Focus Areas: trade, technology, energy, transport.





DELIMITATION COMMISSION

- Delimitation literally means the act or process of fixing limits or boundaries of territorial constituencies in a country or a province having a legislative body. The job of delimitation is assigned to a high power body. Such a body is known as Delimitation Commission or a Boundary Commission
- In India, such Delimitation Commissions have been constituted 4 times - in 1952 under the Delimitation Commission Act, 1952, in 1963 under Delimitation Commission Act, 1962, in 1973 under Delimitation Act, 1972 and in 2002 under Delimitation Act, 2002.

- The Delimitation Commission in India is a high power body whose orders have the force of law and cannot be called in question before any court. These orders come into force on a date to be specified by the President of India in this behalf.
- The copies of its orders are laid before the House of the People and the State Legislative Assembly concerned, but no modifications are permissible therein by them.

productivity, uphold good health and prevent poverty.

- The second set consists of policies to reduce inequality and promote economic security at older ages in a fiscally sustainable manner, considering pensions and health care.
- While many older persons are in excellent health or economically active stages, others live with ailments or are in poverty. Public spending in most countries has not been sufficient to cover the growing demand for long-term care, the analysis points out.

CURRENT AFFAIRS BY SAURABH PANDEY SIR

Question 5 With reference to Doppler radar network, consider the following statements

- It is named after Christian Doppler, the physicist who first proposed the concept of the Doppler effect.
- It is a system of multiple radar stations that work together to provide comprehensive coverage of a specific area.
- The entire stretch of India will be covered under the Doppler Weather Radar Network to better predict extreme weather events more accurately.

Which of the following given above is/are correct

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

CURRENT AFFAIRS BY SAURABH PANDEY SIR

- 5- (c)
- It is named after Christian Doppler, the physicist who first proposed the concept of the Doppler effect. The Doppler effect is the change in frequency or wavelength of a wave (such as sound or light) as it approaches or moves away from an observer.
 - What is a Doppler radar network?
 - A Doppler radar network is a system of multiple radar stations that work together to provide comprehensive coverage of a specific area. The system uses the Doppler effect to detect and track moving objects, such as weather systems, aircraft, and vehicles.
 - How does a Doppler radar network work?
 - Each station in the network includes a radar transmitter, which sends out a microwave signal, and a radar receiver, which detects the reflected signal. The transmitter and receiver are typically located at the same site, but they can also be separated by a significant distance. The radar signal reflects off any moving objects in its path and the change in frequency of the signal due to the Doppler effect is used to determine the speed and direction of the moving object.
 - What are the uses of a Doppler radar network?
 - Doppler radar networks are widely used for weather forecasting and severe weather warning, tracking of aircraft and vehicles, and also used in meteorology and atmospheric sciences. These radar networks provide detailed information about storm systems, including the location, size, and movement of thunderstorms, tornadoes, and other severe weather events.

CURRENT AFFAIRS BY SAURABH PANDEY SIR

Question 6 Consider the following statements about Army Day

- India celebrates Army Day on January 15 every year.
- The Army Day is celebrated every year to honour Cariappa and the defence forces.
- 75th Army Day was held in Hyderabad this year.

Which of the following given above is/are correct

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

CURRENT AFFAIRS BY SAURABH PANDEY SIR

- In 1997 Bangkok Declaration launched a modest grouping (of Bangladesh, India, Sri Lanka and Thailand), with the acronym, BIST-EC.
- Originally formed as BIST-EC (Bangladesh, India, Sri Lanka and Thailand Economic Cooperation) in 1997, it became BIMST-EC after Myanmar joined, and BIMSTEC in 2004, with the inclusion of Nepal and Bhutan. This unique set of five countries from South Asia and two from Southeast Asia are parents to an institution with an unwieldy name but lofty ambitions.

6- (a)

- The portal ensures end-to-end coverage of all the linked schemes.
- Anyone can apply for a loan.

7- (b)

- Any serving or retired three-star officer from either of the three services, below 62 years on the date of projected appointment, would be eligible to be elevated as the CDS and will superannuate at the age of 65. Earlier, the post was only open for four-star generals.

8- (c)

- The Chief of Defence Staff is principally responsible for getting the armed forces better integrated than operating in silos as has been the case for decades.
- The job includes the creation of new military commands which integrate the Army, Air Force, and Navy to fight together.
- According to the government, the CDS acts as the Principal Military Adviser to the Defence Minister only on tri-services matters. The three service chiefs will continue to advise the Defence Minister exclusively on the matters concerning their respective services.
- The CDS will not hold any military command, including over the three service chiefs.
- As the Permanent Chairman of the Chief of Staff Committee, the CDS brings about jointness in operation, logistics, transport, training, support services, communications, repairs and maintenance of the three services.



Target Mains -2024/25 -

Q What role technology can play in criminal justice system ??

प्र. आपराधिक न्याय प्रणाली में प्रौद्योगिकी क्या भूमिका निभा सकती है??

**Connect with sir
9057921649**

**send your answer - Saurabh pandey
upsc telegram channel**

