News Juice Monthly

November 2023 Edition

Made from The Hindu,
The Indian Express and
PIB

Covers October 2023
Current Affairs

**For Civil Services
Preparation**

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1. Issue of Delimitation as precondition for Women Reservation

Background
The Women's Reservation Bill, providing 33% quota to women in Lok Sabha and state Assemblies, recently passed in Parliament. However, its implementation is now tied to the delimitation exercise, sparking controversy and opposition.

Meaning of Delimitation
Delimitation is a Constitutional mandate, to be carried out after every Census, to readjust the number of seats and their boundaries on the basis of latest population data. But the number of seats for the Lok Sabha and state Assemblies has remained frozen for the last 50 years, because of opposition from political parties from the South. And there is no inclination among them to allow delimitation even now, mainly because any such exercise would result in Lok Sabha seats in north Indian states increasing much more sharply, as the population rise here has been greater.

North vs. South Representation
Delimitation aims to ensure equitable representation based on population. However, it has been frozen for 50 years. Northern states claim they are underrepresented and argue for increased seats.

Government's Objectives
The government's decision to make women's reservation contingent on delimitation serves multiple objectives:

1. **Reservation in a Larger Pie:** The fear of male politicians losing their seats has historically hindered the implementation of women's reservation. Delimitation could alleviate this concern. For instance, if the Lok Sabha's strength increases to 770 due to delimitation, it would reserve 257 seats for women, leaving 513 for men to contest. This would simplify accommodating the interests of male leaders for political parties.

2. **Pressuring Opposition:** The government seeks to compel Opposition parties, particularly those from southern India, to cooperate with the delimitation exercise. Delimitation, a Constitutional mandate, has been stalled for decades due to opposition from southern parties who fear it would disproportionately benefit northern states, particularly the BJP.

Opposition's Response
The Opposition argues that connecting women reservation and delimitation is unnecessary and could undermine the representation of southern states. It's worth

noting that in previous discussions of the Women's Reservation Bill, there was no such link.

BJP's Advantage
The BJP stands to gain the most from delimitation as it has consolidated its presence in north India. The party's influence in national politics could strengthen further through delimitation.

2. The concerns of using Aadhaar in welfare

Introduction
Credit rating agency Moody's Investor Service has expressed concerns about using centralized biometric systems like India's Aadhaar in welfare programs, highlighting security and privacy issues.

India's Response
The Indian government vehemently defends Aadhaar, claiming it as the world's most trusted digital ID. Government also argued that Aadhaar's integration with the MGNREGS database doesn't require biometric authentication for workers and payments are directly credited to accounts.

Rationale for Aadhaar
Aadhaar, issued by the UIDAI, collects demographic data, fingerprints, and iris scans to provide unique identification. It aims to eliminate corruption by preventing "ghost" and "fake" beneficiaries in welfare programs.

Aadhaar's Role in Cash Withdrawals
To direct a payment using Aadhaar for MGNREGA, there are at least three steps. First, a worker's Aadhaar number must be linked to her job card. Second, her Aadhaar must be linked to her bank account. Third, the Aadhaar number must be linked correctly through her bank branch with a mapper of the National Payments Corporation of India, which acts as a clearing house of Aadhaar-based payments. Aadhaar becomes the financial address of the individual and cash transferred by the government gets deposited to the last Aadhaar-linked bank account.

Concerns About Aadhaar Usage
Aadhaar has limitations, as it doesn't address issues like quantity fraud (giving less quantity than allotted) in ration distribution or authentication challenges in rural areas with unreliable internet and fading biometrics like biometrics. Moreover, Authentication error data isn't publicly available.

There are concerns about the accountability of banking correspondents using AePS, who may misuse biometric authentication, leading to unauthorized access to bank

accounts. Instances like the ₹10 crore scholarship scam in Jharkhand highlight security risks.

Current Impasse
The government's push to make Aadhaar-based payments mandatory in MGNREGA faces resistance from workers and field officials. Critics worry about dilution of accountability in welfare programs and the potential consequences of linking voter IDs with Aadhaar.

3. UAPA Sections Invoked Against NewsClick: Delhi Police's Allegations

Allegations against NewsClick
The Delhi Police has taken action against news portal NewsClick, claiming that it received funds for promoting pro-China content. The police have filed an FIR against NewsClick under the Unlawful Activities (Prevention) Act (UAPA), a stringent anti-terror law. The UAPA sections invoked in the case include Section 16, which deals with punishment for terrorist acts.

Other UAPA Provisions Invoked
Apart from Section 16, the FIR also invokes several other sections of the UAPA, including Section 13 (unlawful activities), Section 17 (raising funds for terrorist acts), Section 18 (conspiracy), and Section 22 (C) (offences by companies and trusts). Additionally, IPC sections 153 A (promoting enmity between different groups) and 120B (criminal conspiracy) have been applied.

This action against NewsClick raises concerns about freedom of the press and the use of stringent anti-terror laws in such cases.

Definition of "Terrorist Act"
Section 15 of the UAPA defines a "terrorist act" and prescribes a minimum punishment of five years in prison up to a life sentence. In cases where the act results in death, the penalty can be the death penalty or life imprisonment. This section pertains to violent and serious acts that threaten India's unity, integrity, security, sovereignty, or economic stability.

Scope of "Terrorist Act"
The provision covers acts such as using explosives, causing death or damage to property, disrupting essential community services, and damaging India's monetary stability through counterfeit currency.

UAPA Framework

The UAPA operates under a different framework compared to the Indian Penal Code (IPC). It grants the state more authority by extending timelines for filing chargesheets and imposing strict conditions for bail.

Bail Provisions Under UAPA

To deny bail under the UAPA, the court must establish a "prima facie" case against the accused. The Supreme Court has defined "prima facie" as not delving into evidence or circumstances but considering the overall case presented by the state.

Section 43D(5) of the UAPA states that a person accused of an offense punishable under Chapters IV and VI of the Act cannot be released on bail or their own bond while in custody unless the Public Prosecutor has been given a chance to be heard. The court may deny bail if it believes there are reasonable grounds to believe the accusation is prima facie true.

4. TDSAT Asserts TRAI Cannot Regulate OTT Platforms like Hotstar

Introduction

The Telecom Disputes Settlement and Appellate Tribunal (TDSAT) recently ruled that over-the-top (OTT) platforms such as Hotstar fall outside the jurisdiction of the Telecom Regulatory Authority of India (TRAI). TDSAT argued that OTT platforms are outside the purview of the TRAI Act since they do not require any permission or a licence from the Department of Telecommunications.

Instead, they are governed by the Information Technology Rules, 2021, under the Ministry of Electronics and Information Technology (MeitY). This decision has significant implications and raises questions about the regulation of OTT services in India.

Context of TDSAT's Order

The TDSAT's decision stemmed from a petition filed by the All India Digital Cable Federation (AIDCF), which alleged that free streaming of ICC Cricket World Cup matches on Star India's Disney+Hotstar platform was discriminatory under TRAI regulations. On the other hand, AIDCF argued that the matches could be accessed for free on Star Sports TV channels only if viewers subscribed through monthly payments. Thus, AIDCF sought to restrain Star India from offering free access on mobile phones as such a practice by Star India is against the interest of cable operators.

Significance of the TDSAT Ruling

The rejection of AIDCF's plea by TDSAT is significant because TRAI, the statutory telecom regulator, and the Department of Telecommunications (DoT) under the Union Ministry of Communications, are attempting to regulate OTT services. However, Ministry of Electronics and Information Technology has disagreed with Ministry of

Communications, citing that internet-based communication services do not fall under DoT's jurisdiction. This disagreement highlights the complexity of regulating OTT services in India.

Why the IT Ministry Disagrees with DoT?

The Ministry of Electronics and Information Technology (MeitY) asserts that internet-based communication services, such as WhatsApp, do not fall within DoT's jurisdiction as per the Allocation of Business Rules. Despite DoT's initial draft Telecommunication Bill, MeitY's objections have led DoT to revisit and reframe portions of the Bill, particularly those related to regulating OTT communication services.

Conclusion

In conclusion, TDSAT's recent ruling reinforces the complexity of regulating OTT platforms in India, with differing opinions between regulatory bodies and stakeholders. The ongoing debate raises questions about the future regulatory landscape for OTT services in the country.

5. SC to hear petition challenging electoral bonds

Introduction

The Supreme Court has agreed to hear petitions challenging the electoral bonds scheme. The petitions have been filed by two NGOs — Common Cause and Association for Democratic Reforms (ADR).

What is the electoral bonds scheme?

Announced in the 2017 Union Budget, electoral bonds are interest-free bearer instruments used to donate money anonymously to political parties. Simply put, anyone can donate money to political parties through them.

Such bonds, which are sold in multiples of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh, and Rs 1 crore, can be bought from authorised branches of the State Bank of India (SBI). Donor is required to pay the amount via a cheque or a digital mechanism (cash is not allowed) to the authorised SBI branch.

The political parties can choose to encash such bonds within 15 days of receiving them and fund their electoral expenses. There is no limit on the number of bonds an individual or company can purchase. If a party hasn't enchased any bonds within 15 days, SBI deposits these into the Prime Minister's Relief Fund.

Rationale behind the scheme

Political parties continued to receive most of their funds through anonymous and even cash donations. Electoral bonds were proposed to prevent anonymous and cash donations to political parties.

Two main changes were proposed then. One, it reduced the amount of money that a political party could accept in cash from anonymous sources — from Rs 20,000 to Rs 2,000. Two, the introduction of electoral bonds as a way to make such funding more transparent.

However, the final notification provided that even individuals, groups of individuals, NGOs, religious and other trusts are permitted to donate via electoral bonds without disclosing their details.

Legal Challenge and Criticism
1. The petitions have been filed by the Communist Party of India (Marxist), and NGOs Common Cause and ADR. They have challenged the scheme as "an obscure funding system which is unchecked by any authority".

2. Also, before the electoral bonds scheme was announced, there was a cap on how much a company could donate to a political party: 7.5 per cent of the average net profits of a company in the preceding three years. However, the government amended the Companies Act to remove this limit, opening the doors to unlimited funding by corporate India.

3. In general, critics argue that the anonymity of donors under the scheme further makes the process opaque instead of meeting its aim of bringing about transparency.

4. It has been claimed that because such bonds are sold via a government-owned bank (SBI), it leaves the door open for the government to know exactly who is funding its opponents. This, in turn, allows the possibility for the government of the day to either extort money, especially from the big companies or victimise them for not funding the ruling party — either way providing an unfair advantage to the party in power.

5. Further, one of the arguments for introducing electoral bonds was to allow common people to easily fund political parties of their choice but more than 90% of the bonds have been of the highest denomination (Rs 1 crore) as of 2022.

6. Debate on abortion laws

Why in news?
A married woman 26 weeks pregnant has approached the Supreme Court seeking to terminate her pregnancy citing inability to take care of the child due to post-partum depression and other health issues. She has two other children. The Supreme Court on October 9 agreed to her plea, but two days later, a two-judge Bench of Justices Hima Kohli and B.V. Nagarathna delivered a split verdict when the government brandished

a report from the All-India Institute of Medical Sciences (AIIMS) which said that the foetus was viable and had a heartbeat.

Aborting it at this stage would mean either putting a stop to the heartbeat or delivering the baby prematurely which might lead to severe complications both mental and physical for the child. The case was then referred to a larger Bench headed by the Chief Justice of India, which has observed that the highest court of the land cannot overlook the rights of an unborn child thus igniting a pro-life versus pro-choice debate.

What does the MTP Act say?
According to the Medical Termination of Pregnancy (MTP) Amendment Act 2021, opinion of only one registered medical practitioner will be required for the abortion of a foetus up to 20 weeks of gestation and of two for the termination of pregnancy from 20 to 24 weeks of gestation. The opinion of a state-level medical board is required for abortions over 24 weeks, in case of suspected foetal abnormalities.

How is the 2021 law different from the earlier 1971 MTP Act?
The 2021 Act increased the upper gestation limit from 20 to 24 weeks for special categories of women, including survivors of rape, victims of incest and other vulnerable women like differently abled and minors. A confidentiality clause was added which said that the name and other particulars of a woman whose pregnancy has been terminated cannot be revealed except to a person authorised by law. It also extended MTP services, under the clause of failure of contraceptive, to unmarried women to provide access to safe abortion based on a woman's choice, irrespective of marital status.

What is the global trend on abortion laws?
Globally, there has been a trend towards liberalisation of abortion laws and increased access to abortion services. Since the early 1990s, nearly 60 countries across the world have eased abortion laws to expand the grounds under which abortion is legal. Only four countries, namely the U.S., El Salvador, Nicaragua, and Poland have removed legal grounds for abortion during this time period. Most notably, the U.S. Supreme Court eliminated the constitutional right to abortion in 2022.

What arguments did SC judges give while delivering a split verdict on the case?
A two-judge Bench of Justices Kohli and Nagarathna first allowed the woman to end her pregnancy, then withdrew the verdict and differed on whether the abortion could go forward. This was following a medical report from AIIMS that said the foetal heart would have to be stopped as part of the procedure. To this, Justice Kohli said she would not proceed with the earlier decision wondering which court could ask to stop the heartbeat of a foetus that has life. However, Justice Nagarathna differed and said that the petitioner was determined about her decision to not proceed ahead with her pregnancy triggering a pro-life versus pro-choice debate. The petitioner through her

counsel had argued that she was asking for her rights under Article 21 (protection of life and personal liberty), which overrides the MTP Act.

Is a foetus a living being? What does the law say?
According to experts, the Indian legal scenario is not clear on whether the foetus is a living being or not. A pro-choice discourse, according to experts, is not a materially and politically conducive argument for Indian society. Even if the Supreme Court takes a pro-choice view in this case, it will not be able to set a precedent for the future. The reason is that the Indian public health system is not geared up to address this and that private health care is very expensive. So, getting a safe abortion in India has become very precarious.

What were the observations by the CJI-headed Bench?
On October 12, the top court asked the woman to reconsider her decision to terminate the pregnancy and carry the foetus for a few more weeks so that the child isn't born with any deformities. The Bench observed that there are rights of the unborn child too and that a woman's autonomy is also important. The Bench said that the rights of the unborn child should also be balanced.

What is the way forward?
The petitioner's counsel and the Additional Solicitor General have both said that the 27-year-old woman was unwilling to continue with her pregnancy even after the AIIMS report. She has said that she was under medication for post-partum depression and other medical issues. The three-judge Bench, headed by the CJI, asked the AIIMS medical board to examine if there is any abnormality in the foetus. The apex court also asked the medical board to examine the health status of the woman, who says she is suffering from depression and severe post-partum psychosis. The government has also offered to take care of the child and put it up for adoption if the woman agrees to carry it full term.

7. Gyan Sahayak Scheme Overview and Controversy related to it

Why in news?
The Gyan Sahayak Scheme, introduced by the Gujarat state government, has generated opposition from various quarters, including student groups, political parties, and educators. This scheme is designed to address teacher vacancies in government schools by appointing teachers on a contractual basis until regular appointments can be made. The controversy surrounding the scheme has even led to protests and calls for its cancellation.

Gyan Sahayak Scheme - An Interim Solution
The Gyan Sahayak Scheme was launched in July to ensure that teaching positions in primary, secondary, and higher secondary government schools are temporarily filled

until regular appointments can be completed. The scheme's primary objective is to prevent any disruptions in the educational process. Teachers under this scheme are appointed on a contractual basis.

Basis for the Scheme: National Education Policy (NEP) 2020
The scheme draws its foundation from the National Education Policy (NEP) 2020, which emphasizes the development of communication, critical thinking, problem-solving skills, and interdisciplinary expertise among students. The Gyan Sahayak Scheme aims to equip teachers with these skills to enhance the holistic development of students.

Applicability: Government and Grant-in-Aid Schools
The Gyan Sahayak Scheme is targeted at government and grant-in-aid schools. The government has announced the hiring of 15,000 Gyan Sahayaks in primary schools and 11,500 in secondary and higher secondary schools. Salaries for Gyan Sahaks vary depending on the school level.

Eligibility and Appointment Process
Candidates for Gyan Sahayak positions in primary schools must have cleared the Gujarat Examination Board's Teachers Eligibility Test (TET)-2, while secondary and higher secondary Gyan Sahayaks must have cleared the Teacher Aptitude Test (TAT). There are age limits for candidates, and the selection process is based on merit and preference.

Contract Terms and Provisions
Gyan Sahayaks are appointed on an 11-month contract, which may be renewed after a review. School Management Committees have the authority to make and renew these contracts. The Samagra Shiksha office in Gandhinagar advertises vacant positions and invites applications from candidates annually.

Protests and Controversy
Since the announcement of the Gyan Sahayak Scheme, it has faced opposition from various groups, including political parties, teachers, and candidates awaiting regular appointments. Concerns have been raised about the scheme's impact on education quality, and protests have been organized to push for its cancellation. Even the Akhil Bharatiya Vidyarthi Parishad (ABVP), affiliated with the BJP, has expressed dissent.

On one hand while lakhs of candidates, who have cleared TET and TAT, are waiting for regular appointments as teachers, parents have expressed their concern over contractual teachers not taking 'interest' in teaching students.

8. Why Reforms in Special and Local Laws (SLLs) are Essential

Introduction

The recent introduction of Bills related to criminal laws in India has sparked significant discussion. While these bills aim to bring much-needed reforms to the Indian Penal Code (IPC), Code of Criminal Procedure (CrPC), and Indian Evidence Act (IEA), they often overlook the Special and Local Laws (SLLs) which constitute a vital part of the broader criminal justice system in India. This article emphasizes the importance of reforming SLLs and their substantial role in the criminal justice framework.

Significance of SLLs

SLLs play a crucial role in the Indian criminal justice system. In 2021, approximately 39.9% of all cognizable offenses were registered under SLLs, as per the Crime in India Statistics. These laws have triggered essential debates concerning the boundaries of state power in criminalization, particularly in terms of individual rights and liberties.

Need for Reform in SLLs

SLLs present a range of substantive and procedural issues. Some SLLs, like the Unlawful Activities (Prevention) Act, 1967 (UAPA) and the Maharashtra Control of Organised Crime Act, 1999 (MCOCA), have vague definitions for offenses such as 'terrorist act' and 'unlawful activity.' Additionally, certain SLLs, like the Protection of Children from Sexual Offenses Act, 2012, have faced criticism for their applicability to consensual sexual activities among minors, raising concerns about criminalizing conduct that might be better suited for civil or regulatory treatment.

Procedural Challenges in SLLs

SLLs have also diluted universally accepted due process values. For instance, the UAPA grants increased search and seizure powers, while the MCOCA allows confessions recorded by police officers. Stringent provisions in SLLs, such as those in the UAPA, Narcotic Drugs and Psychotropic Substances Act, 1985, and Prevention of Money Laundering Act, make obtaining bail extremely difficult.

The Evolution of Criminal Laws

Over time, there has been a significant shift in the landscape of criminal laws. This shift represents a departure from the original intent of codifying all criminal laws, as envisioned by the Indian Penal Code (IPC) inspired by Jeremy Bentham's concept of a "Pannomion," — an all-comprehensive collection of rules codified in a single place. While the IPC was meant to serve as a comprehensive collection of criminal laws, the growing reliance on SLLs has led to an understanding of criminal laws that deviates from the IPC's original scope.

The Need for Comprehensive Reform

It is essential to ensure that SLLs do not overshadow the idea of codifying penal laws as envisaged in the IPC and CrPC. All SLLs that criminalize conduct should be integrated as separate chapters within the broader penal code. Similarly, SLLs that introduce distinct procedures for reporting offenses, arrest, investigation, prosecution,

trial, evidence, and bail should be included as either separate procedures within the CrPC or as exceptions to its general provisions.

Conclusion
Neglecting the substantive and procedural aspects of SLLs in ongoing reform efforts is a significant limitation. Therefore, a second generation of reforms is necessary to address these shortcomings and harmonize SLLs within the overall framework of India's criminal laws.

9. Understanding Parliamentary Questions in Lok Sabha

Introduction
The recent 'cash for query' allegations against MP Mahua Moitra has brought into question the way Members of Parliament (MPs) ask questions in Lok Sabha.

A political storm has erupted after BJP MP Nishikant Dubey accused Trinamool Congress (TMC) leader Mahua Moitra of "asking questions in Parliament in exchange for cash and gifts" from a businessman. Dubey demanded immediate suspension of Moitra from the House and urged Lok Sabha Speaker Om Birla to constitute an "inquiry committee" to look into the charges against her.

Moitra hit back at Dubey, saying she "welcomed any move against her after the Lok Sabha Speaker is finished dealing with pending charges against him (Dubey)". She said the charges against her were "defamatory, false, baseless and not supported by even a shred of evidence".

Procedure for Raising Questions
MPs follow a specific procedure governed by parliamentary rules to ask questions. This process involves notice submission and adherence to various regulations.

Notice Submission: MPs must provide notice to the house's Secretary-General, including the question's text, the Minister's designation to whom the question is directed, the desired answer date, and order of preference if multiple questions are tabled for the same day.

Limit on Notices: MPs can submit up to five notices of questions, both for oral and written answers, for a specific day. Any additional notices received are considered for subsequent days within that session.

Notice Period: Typically, the notice period for a question is not less than 15 days.

Ways to Submit Notices: MPs can submit notices online through the 'Member's Portal' or using printed forms available in the Parliamentary Notice Office.

Speaker's Admissibility Review: The Speaker of Lok Sabha assesses the question notices based on established rules to determine their admissibility.

Conditions for Admissibility of Questions

Several rules govern whether a question is admissible, including limitations on word count, prohibition of arguments, defamation, or references to individuals' character, and restrictions on raising broad policy issues.

Additionally, questions are not admissible if they pertain to matters under judgment in court, before any tribunal, or being considered by a Parliamentary Committee. Questions that may jeopardize the country's unity and integrity are also prohibited.

Types of Questions

There are four types of questions that MPs can ask: starred, unstarred, short-notice questions, and questions addressed to private Members.

Starred Questions: MPs ask starred questions. These questions require oral answers from the Minister-in-charge. These questions need to be submitted at least 15 days in advance (so that the Minister-in-charge has the time to prepare the answers), and only 20 questions can be listed for oral answers each day. As Starred questions require oral answers, supplementary questions are can be asked thereon.

Unstarred Questions: Unstarred questions receive written replies from the Ministry. Similar to starred questions, they need to be submitted at least 15 days in advance, with a maximum of 230 questions each day. Unstarred questions do not permit follow-up or supplementary questions.

Short Notice Questions: These questions concern urgent public matters and can be asked with less than 10 days' notice, with reasons provided. They receive oral answers and allow for supplementary questions.

Questions to Private Members: An MP can ask question to even a private MP when the subject relates to a Bill, Resolution, or any matter connected to the House's business for which that MP is responsible.

Importance of Raising Questions

Asking questions is a fundamental parliamentary right for MPs and serves as a crucial mechanism for legislative control over executive actions. The significance of raising questions includes:

- Acquiring information on administrative and government activities.
- Criticizing government policies and schemes.

- Highlighting government shortcomings.
- Encouraging ministers to take constructive actions for the public good.
- Simultaneously, questions enable the government to gauge public reactions to its policies and actions, potentially leading to the establishment of a parliamentary commission, a court of inquiry, or the enactment of legislation.

10. Tragic Loss of Agniveer Soldier in Siachen

Introduction
Gawate Akshay Laxman, an Agniveer soldier stationed at the Siachen glacier, the world's highest battlefield, has tragically lost his life in the line of duty, marking the first such casualty since the inception of the Agnipath recruitment scheme.

Agnipath Scheme
Agnipath Scheme (also spelled Agneepath Scheme) is a tour of duty style scheme approved by the Government of India on 14 June 2022, for recruitment of soldiers below the rank of commissioned officers into the three services of the armed forces.

All recruits are hired only for a four year period. Personnel recruited under this system are to be called Agniveers (transl. Fire-Warriors), which is a new military rank. The scheme was implemented in September 2022.

This scheme bypasses many things including long tenures, pension and other benefits which were there in old system.

Disparity in Benefits
The news of his demise has ignited criticism within the veterans' community, highlighting a notable disparity in benefits between Agniveers and regular soldiers. While the families of regular soldiers receive pensions and other entitlements in the event of a soldier's death in the line of duty, Agniveer families receive different benefits.

Agniveer Benefit Details
According to the terms of engagement for Agniveers, in case of battle-related casualties, the next of kin receive a non-contributory insurance payout of ₹48 lakh, an ex gratia payment of ₹44 lakh, and a sum equivalent to 30% of the Agniveer's salary contributed to the Seva Nidhi scheme, matched by the government with interest. Additionally, they receive the remaining salary due until the completion of the soldier's four-year tenure, which amounts to over ₹13 lakh, and a contribution of ₹8 lakh from the Armed Forces Battle Casualty Fund.

Discrepancy Highlighted

Legal expert Major Navdeep Singh (retired) has brought attention to the notable disparity in benefits. He points out that even the family of a temporary trainee civil employee, in cases such as an accident while on leave or suicide, is entitled to family pension, unlike the family of an Agniveer Battle Casualty in Siachen. This discrepancy has raised concerns and questions regarding the treatment of Agniveer soldiers and their families in the event of such tragic incidents.

11. Uneven Distribution of Medical Colleges Sparks Debate

Introduction
Recently, Nagaland celebrated the inauguration of its first medical college at Phriebagei in Kohima, the Nagaland Institute of Medical Sciences and Research (NIMSR), which will have 100 MBBS seats for the upcoming academic session.

HOW STATES STACK UP AGAINST NMC'S RATIO

Name of the State/UT	Total Seats	Projected population	Total MBBS seats allowed	% more than allowed
Puducherry	1,630	16,46,000	165	890.28
Andaman & Nicobar	114	4,03,000	40	182.88
Dadra & Nagar Haveli	177	6,99,000	70	153.22
Sikkim	150	6,89,000	69	117.71
Telangana	7,415	3,80,90,000	3,809	94.67
Manipur	525	3,22,3,000	322	62.89
Karnataka	11,020	6,76,92,000	6,769	62.8
Tamil Nadu	11,225	7,68,60,000	7,686	46.04
Kerala	4,605	3,57,76,000	3,578	28.72
Himachal Pradesh	920	74,68,000	747	23.19
Chandigarh	150	12,31,000	123	21.85
Goa	180	15,75,000	158	14.29
Andhra Pradesh	5,635	5,31,56,000	5,316	6.01
Uttarakhand	1,150	1,16,37,000	1,164	−1.18
Gujarat	6,600	7,15,07,000	7,151	−7.7
Jammu & Kashmir	1,147	1,36,03,000	1,360	−15.68
Maharashtra	10,295	12,63,85,000	12,639	−18.54
Mizoram	100	12,38,000	124	−19.22
Delhi	1,497	2,13,59,000	2,136	−29.91
Chhattisgarh	1,945	3,01,80,000	3,018	−35.55
Rajasthan	5,075	8,10,25,000	8,103	−37.37
Haryana	1,835	3,02,09,000	3,021	−39.26
Punjab	1,750	3,07,30,000	3,073	−43.05
Tripura	225	41,47,000	415	−45.74
Odisha	2,325	4,62,76,000	4,628	−49.76
West Bengal	4,825	9,90,84,000	9,908	−51.30
Madhya Pradesh	4,180	8,65,79,000	8,658	−51.72
Assam	1,450	3,57,13,000	3,571	−59.4
Uttar Pradesh	9,253	23,56,87,000	23,569	−60.74
Arunachal Pradesh	50	15,62,000	156	−67.99
Jharkhand	980	3,94,66,000	3,947	−75.17
Bihar	2,565	12,67,56,000	12,676	−79.76
Meghalaya	50	33,49,000	335	−85.07
Total	1,01,043	138,81,63,000	1,38,816	

Source for seats: Rajya Sabha answer by government on March 14; Census projection for population

The government has been emphasising on an equal distribution of medical colleges across the country. In August, the National Medical Commission (NMC) introduced regulations that put a temporary halt on establishing new medical colleges and expanding existing ones in states with more than 100 medical education seats per million population. The aim is to address regional disparities in doctor availability and ensure quality education for all.

Debate Over Guidelines
These guidelines have stirred controversy, particularly in southern states that are now ineligible for additional medical education seats. While the NMC justifies its approach, states like Tamil Nadu have voiced strong opposition.

Current Distribution of Medical College Seats

The data reveals that it's not just southern states that exceed the NMC's recommended population-to-seats ratio. Thirteen states and Union Territories have crossed this threshold. Tamil Nadu, Karnataka, and Maharashtra have the most seats, but they differ in their compliance with the new norm.

Shortage of Medical College Seats
Some states, including Meghalaya, Bihar, and Jharkhand, face severe shortages in medical college seats concerning their populations. For instance, Meghalaya has only 50 seats for an estimated 33.5 lakh people, while Bihar and Jharkhand have larger populations but significantly fewer seats.

Future Implementation
The NMC's ratio will apply to new medical colleges or seat increases in existing colleges starting from the 2024-25 academic year.

The NMC's Perspective
Experts agree that rationalizing the distribution of medical colleges is necessary, considering the growth of private medical colleges. The NMC defends its position by stating that it aims to provide the right teaching environment, improve the quality of education, and reduce regional disparities in healthcare professionals' availability. The guidelines are based on the World Health Organization's recommendations regarding the number of physicians per unit of population.

12. Proposal to Replace 'India' with 'Bharat' in Textbooks

Introduction
In 2022, the Social Science committee of the National Council of Educational Research and Training (NCERT) recommended the use of 'Bharat' instead of 'India' in all Social Science textbooks up to Class 12. The implementation depends on NCERT's decision.

Debates Over the Nation's Name
The discussion around changing the nation's name from 'India' to 'Bharat' gained momentum after the G20 Summit in New Delhi, where the invitation referred to "The President of Bharat," and not the usual "President of India". Speculation about this change continues.

Historical Roots of 'Bharat'
The name 'Bharat' finds its origins in Puranic literature and the Mahabharata, describing it as the land between the southern sea and the northern abode of snow. Bharata was also an ancient legendary king, believed to be ancestor all the people of the subcontinent.

'India' and 'Hindustan'

'Hindustan' is believed to have originated from 'Hindu,' a Persian term for 'Sindhu,' referring to the Indus River. The Greeks transliterated it to 'Indus,' and 'India' referred to the region beyond the Indus. In the 16th century, 'Hindustan' was used for the entire Indo-Gangetic plain, associated with the Mughal territories.

In the late 18th century, 'India' gained prominence on British maps, while 'Hindustan' lost its South Asian association. This transition reflected changes in colonial perspectives and British territorial influence.

The Decision of the Constituent Assembly
The Constituent Assembly of India decided that "India, that is, Bharat, shall be a Union of States" as per Article 1 of the Constitution. There were debates over whether 'Bharat' should be the primary name. Some argued that 'India' was just an English translation of 'Bharat'.

Others, like Hargovind Pant, advocated for 'Bharatvarsha' and rejected 'India,' considering it an insulting word imposed by foreign rulers. Seth Govind Das emphasized the civilizational connotations of 'Bharat.'

Ultimately, the Constituent Assembly chose 'India, that is, Bharat.' Dr. BR Ambedkar, Chairman of the Constituent Assembly's Drafting Committee, emphasized the need to focus on practical work instead of civilizational debates.

13. One Nation, One Student ID Initiative

Introduction
The 'One Nation, One Student ID' initiative, launched by the Union government as part of the National Education Policy 2020, aims to streamline the education system in India by introducing the Automated Permanent Academic Account Registry (APAAR) for students.

Understanding APAAR: The Student ID
APAAR, short for Automated Permanent Academic Account Registry, is a unique identification system designed for all students in India. This initiative ensures that each student is assigned a lifelong APAAR ID, which simplifies the tracking of academic progress from pre-primary education to higher education.

Digital Access with Digilocker
APAAR also serves as a gateway to Digilocker, a digital platform where students can securely store essential documents, including exam results and report cards. This digitalization makes it easier for students to access and utilize their academic records when pursuing higher education or seeking employment.

ACADEMIC BANK OF CREDITS
Ministry of Education, Government of India

Name	
Date of Birth	
Gender	M
ABC ID	

Verified *by DigiLocker*

Digitally signed on
06/10/2022 12:47:48 IST

Note:
1. This digitally signed document is legally valid as per the IT Act 2000 when used electronically.
2. To verify this certificate, download DigiLocker Android application from Google Play and scan the QR code.

APAAR CARD REGISTRATION

The Purpose Behind APAAR

The primary goal of introducing APAAR is to make the education process hassle-free and minimize the necessity for students to carry physical documents. It helps state governments monitor literacy rates and dropout rates more efficiently, facilitating targeted improvements.

Preventing Fraud and Duplicate Certificates

APAAR plays a crucial role in reducing fraudulent and duplicate educational certificates. It ensures the authenticity of educational records by only allowing authorized institutions to deposit credits into the system.

The Functionality of APAAR ID

Each individual is assigned a unique APAAR ID, linked to the Academic Bank Credit (ABC), which stores information about the credits earned throughout the student's educational journey. With the APAAR ID, students can store both formal and informal learning certificates, making the transfer of data to new schools seamless.

Registration Process

Students signing up for APAAR need to provide basic information such as name, age, date of birth, gender, and a photograph. This data is verified using their Aadhar number, with the assurance that only essential information for verification is used. The registration for creating APAAR ID is voluntary, not mandatory.

Addressing Concerns

Concerns exist regarding the security of Aadhar details. However, the government has stated that student information will remain confidential and will only be shared with

entities engaged in educational activities. Students can choose to stop sharing their information at any time, with any data already processed remaining unaffected.

14. Dark Pattern Sales in Airline Bookings

Deceptive Practices Under Scrutiny
Complaints have surfaced regarding airlines and online travel agents employing tactics to trick customers into unintended purchases, leading to these practices being labeled as "cybercrimes" by government officials. The Ministry of Civil Aviation has called out low-cost carrier IndiGo for rectification of its website due to such issues.

Dark Pattern: Unfair Trading Practices
Consumer Affairs Secretary has characterized these tactics as "dark patterns" in which entities manipulate consumers into purchasing unintended products, constituting unfair trading practices that could be considered cybercrimes.

Pervasive Issue
Nearly 10,000 complaints regarding such practices have been registered with the Ministry over the last eight to nine months. A review of various airline websites and platforms revealed widespread use of these "dark patterns."

IndiGo's Deceptive Techniques
For example, IndiGo's website employs tactics such as creating a false sense of urgency, pressuring customers to pay an additional fee of ₹99 to ₹1,500 for seat selection during the ticket booking process. Free seats are presented as unavailable, even when multiple options exist. Passengers can opt to "skip" seat selection, but they are not clearly informed that free seats will be automatically assigned if they decline to pay the extra fee.

IndiGo's mobile application also uses "interface interference" by placing the "skip" option inconspicuously in the top right corner with a small font size, highlighting specific information while obscuring other details.

15. Alleged PDS Scam in West Bengal

Background
In a significant development, West Bengal Forest Minister Jyotipriya Mallick was arrested by the Enforcement Directorate (ED) after a 22-hour interrogation. Mallick, the first TMC Minister to be arrested by the ED, was the Food and Supplies Minister in the TMC government's previous term (2016-2021). This arrest is linked to the alleged Public Distribution System (PDS) scam in the state.

PDS Scam in West Bengal
The scam relates to the allegedly illegal distribution of rice and wheat, in which Mallick, businessman Bakibur Rahman, and a few others are said to be involved.

According to ED officials, Rahman had close links with Mallick. Rahman would supply rice and wheat in lesser-than-mandated quantities to distributors, who were supposed to sell the grains through fair-price shops – to the poor, at lower prices. But by selling lesser quantities to distributors, the balance could then be sold in the open market later for profit.

Broader Scandal Landscape
The PDS scam is one of several investigations into alleged wrongdoings involving the Trinamool Congress (TMC). Other probes include irregularities in the recruitment of school teachers and municipal employees, as well as smuggling of cattle and coal.

Summary
The arrest of Jyotipriya Mallick, the first TMC Minister to face ED arrest, is linked to the PDS scam in West Bengal, which involves illegal grain distribution practices. The investigation sheds light on irregularities in the state's PDS and broader issues involving the TMC government.

16. Understanding the J&K Power Crisis

Introduction
The Union Territory of Jammu and Kashmir (J&K) is currently grappling with a power crisis due to reduced electricity generation from its power projects. The administration is taking steps to tackle this issue.

Current Power Generation in J&K

J&K has the potential to generate 16,475 MW of electricity, but it is currently producing only 3,263 MW. The central sector contributes 2,009 MW from seven projects, and the private sector adds 42.5 MW from four projects. Hydropower projects, including the 900 MW Baglihar project, account for over 85% of the electricity generation.

The Power Deficit
Despite having a requirement of approximately 2,600 MW, J&K is facing a deficit, with 1,200 MW supplied to the Kashmir division and 900 MW to Jammu. This leaves a shortage of about 500 MW. The deficit is exacerbated by the purchase of expensive electricity, costing the exchequer a significant amount.

Reasons for the Power Crisis
The power crisis in J&K is a result of an unusual dry spell, which led to reduced water flow in the rivers, affecting power generation in projects like Baglihar. Additionally, the high cost of purchased electricity contributes to the deficit. The region also experiences substantial transmission losses, primarily due to limited metering and electricity pilferage.

Metering Status in J&K
Around 50% of households in J&K have electricity meters, with approximately 4 lakh households equipped with smart meters. However, resistance to meter installation, especially in non-metered areas, remains a challenge. The administration aims to achieve 100% metering to minimize power cuts.

UT Administration's Efforts to Address the Power Situation
The J&K administration is actively promoting metering and encouraging the use of Advanced Digital Cable (ADC) to deter electricity theft. A significant investment through the Revamped Distribution Sector Scheme (RDSS) is underway to improve metering, install Advanced Digital Cables, and modernize transformers. Structural reforms are being pursued to reduce transmission losses to under 20%.

The Green Energy Corridor (GEC) Phase-II
The Union Cabinet approved the Green Energy Corridor (GEC) Phase-II, a 13 GW renewable energy project in Ladakh. This initiative includes the installation of a transmission line and the integration of Ladakh's grid with the National Grid. The project aims to reduce J&K's reliance on hydropower, especially during the winter season. It combines solar and wind energy, along with Battery Energy Storage Systems (BESS), to ensure a continuous power supply.

These measures are part of the UT administration's efforts to address the power crisis and provide a more stable electricity supply for J&K.

17. QR Codes for Food Products: A Step Towards Informed Choices

Introduction

The Food Safety and Standards Authority of India (FSSAI) has recommended the introduction of QR codes on food products to enhance accessibility for visually impaired individuals. This initiative aims to provide consumers with detailed information about the products they purchase, allowing them to make informed choices in a growing market of packaged foods.

Significance of the Move

India is a significant market for packaged foods and is experiencing an increasing burden of non-communicable diseases (NCDs). This rise is linked to the popularity of aggressively marketed, readily available pre-packaged foods. Consumers have the right to know the contents and quality of the products they buy. This move ensures transparency and empowers consumers to make informed decisions.

Information Provided by QR Codes

The QR codes on food products will offer comprehensive details, including ingredients, nutritional information, allergens, manufacturing date, best before/expiry date,

allergen warnings, and customer contact information. It is essential to note that the inclusion of QR codes does not replace mandatory product label information.

Legislation and Accessibility
This initiative aligns with the FSSAI's Food Safety and Standards (Labelling and Display) Regulations, 2020, and the Rights of Persons with Disabilities Act, 2016. These regulations emphasize the rights of individuals with disabilities and the importance of providing accessible health information.

Global Trends in QR Code Usage
Countries like the U.S., India, France, and the U.K. are leading users of QR codes. A survey reveals that consumers value QR codes for obtaining specific product details and find them convenient. The global packaged food market is also witnessing significant growth, further emphasizing the role of QR codes in providing essential information to consumers.

18. Implementation of DNA Systems in Police Stations

Introduction
The Indian government is introducing a system for collecting, storing, and analyzing physical and biological samples, including DNA and facial recognition, of arrested persons. This initiative is part of the Criminal Procedure (Identification) Act (CrPI) passed in April 2022. The National Crime Records Bureau (NCRB) is overseeing the implementation, but several challenges and concerns surround this new system.

Why the Legislation?
The CrPI Act replaced the outdated Identification of Prisoners Act, 1920, and enables modern techniques for capturing and recording body measurements. The aim is to enhance identification and data recording capabilities.

Role of NCRB
NCRB is responsible for storing, processing, and sharing records of these measurements in a common database accessible to authorized police and prison officials nationwide. They prescribe equipment specifications and storage methods, with records retained for 75 years.

Current Status

While police are trained to record fingerprints using the National Automated Fingerprint Identification System (NAFIS), the implementation of iris scanners, DNA capture, and facial-recognition systems faces delays. NAFIS workstations are operational in many states.

Challenges and Concerns

Privacy Concerns: Questions regarding data protection and fundamental rights, including privacy, have been raised in Parliament.

Recording Detainees: Many police officers are unaware of rules stating that measurements should not be recorded for persons detained or arrested under prohibitory and preventive sections of the law unless coupled with serious criminal charges.

Data Destruction: The responsibility for destroying data after 75 years lies with the individuals whose data was collected. This may pose challenges for people without access to legal processes.

Types of DNA Samples: The specific DNA samples that can be collected by police are yet to be defined.

Scope in Different Crimes: The scope of DNA sample use in various crimes, beyond sexual offenses, is unclear.

Safeguards Against Misuse: The NCRB has cautioned against database misuse and stresses the need for safeguards to ensure only designated officials access the data in real-time.

Connectivity Issues: Smaller states face challenges related to connectivity, making it difficult to fulfill secure Internet lease line requirements.

19. New Housing Scheme in Jharkhand - 'Abua Awas Yojna'

Introduction
The Jharkhand Cabinet recently approved the 'Abua Awas Yojna' (AAY), a housing scheme aimed at providing eight lakhs pucca houses to homeless individuals in the state. This scheme has a total budget of Rs 16,320 crore. It seeks to address housing issues among the state's poor population.

Need for AAY
While Jharkhand already has existing housing schemes like Pradhan Mantri Awas Yojana-Rural and Ambedkar Awas Yojna, they have not covered all eligible beneficiaries. Around 8 lakh deserving individuals were excluded from these schemes due to data discrepancies and other issues, as reported by the state government. Despite requests to include these eligible individuals under existing schemes, their pleas were not addressed, leading to the launch of the AAY.

AAY's Offerings

Under AAY, beneficiaries will receive a three-room house with one kitchen, covering an area of 31 sq m. The government has allocated Rs 2 lakh per beneficiary to be disbursed in four installments. This is a significant improvement compared to PMAY-Rural, where beneficiaries receive a house with only two rooms and one kitchen, with a provision of Rs 1.2-1.3 lakh per beneficiary. Additionally, AAY beneficiaries can participate in the MGNREGS to earn wages for building their houses. The scheme also allows for the addition of a toilet during house construction, funded by Swachh Bharat Mission or other available schemes. All houses built under AAY will be registered in the name of women in beneficiary families.

Bilateral Relations and International Organizations

1. Five Eyes Alliance and its role in India-Canada Standoff

Why in news?
• Canadian Prime Minister Justin Trudeau's allegations (in Canadian Parliament) of potential Indian government involvement in the killing of separatist Khalistani leader Harmeet Singh Nijjar in Canada have strained relations between the two countries.

• US Ambassador to Canada David Cohen has said in an interview that it was "shared intelligence among Five Eyes partners" that helped "lead" Canada to the claims that PM Trudeau made about killing of Nijjar.

The Five Eyes Alliance: An Overview
•The Five Eyes Alliance is an intelligence-sharing partnership consisting of the United States, United Kingdom, Australia, Canada, and New Zealand.

• It was established to share a wide range of intelligence information among these countries, united by common language, rule of law, robust human rights, and shared national interests.

• The alliance traces its origins to World War II when the UK and the US decided to share intelligence after successfully breaking German and Japanese codes.

• The alliance evolved from the Britain-USA (BRUSA) agreement to the UK-USA (UKUSA) agreement in 1946, with Canada joining in 1949 and New Zealand and Australia in 1956.

Functioning of the Five Eyes Alliance
• The Five Eyes countries cooperate on intelligence gathering and security matters, driven by common interests and mutual trust.

• Despite their closeness, these countries do not always have uniform foreign policies, as seen in New Zealand's friendly approach to China.

Impact on relations with India
• The US, UK, and Australia have close ties with India, but they also have significant Indian populations and have witnessed pro-Khalistan activities.

• Due to historical ties, outright support for either India or Canada is unlikely by other members of Five eyes alliance.

• Moreover, these countries, particularly the US, could play a mediating role between India and Canada once they have clear intelligence and information on the matter.

2. China-Philippines South China Sea Dispute: Key Points

Introduction
Tensions between China and the Philippines over territorial control in the South China Sea have escalated in recent years.

The Dispute in Brief
• **Location:** The South China Sea is surrounded by Brunei, China, Indonesia, Malaysia, the Philippines, Taiwan, and Vietnam.

- **Historical Disagreements:** Territorial disputes in the South China Sea date back centuries, but recent tensions have risen due to China's growing global power.
- **China's Claims:** China asserts sovereignty over 90% of the sea through its "nine-dash line," despite widespread international contestation.

- **Expansion and Militarization:** China has physically expanded islands and built military facilities, especially in the Paracel and Spratly Islands.
- **US Involvement:** The United States has increased military presence and provided support to countries opposing China's claims.

Significance of the South China Sea
- **Resource-Rich:** Abundant oil, natural gas, and rich fishing grounds are found in the sea.
- **Critical Trade Route:** It serves as a vital trade route, facilitating over 21% of global trade valued at $3.37 trillion.
- **Strategic Importance:** The sea's location has strategic importance for regional power dynamics.

The "Nine-Dash Line"
- **Definition:** China's territorial claim is marked by the "nine-dash line" on maps, stretching up to 2,000 km from the Chinese mainland.
- **Basis:** China justifies its claim with "historical maritime rights" but hasn't specified coordinates or adhered to UN maritime treaty limits.
- **Contested Claims:** Countries like the Philippines and Vietnam dispute China's historical evidence.

Resolution Challenges
- **International Tribunal:** In 2016, an international tribunal rejected China's claims, but China disregarded the ruling.
- **Risk of Global Conflict:** Failure to resolve disputes through diplomacy could escalate tensions and undermine international maritime laws.

Conclusion
The South China Sea dispute, centered on territorial control and China's claims, poses significant challenges to regional stability and international law. Resolution remains elusive, raising concerns about potential global conflict and its far-reaching consequences.

3. Understanding Bhutan's Unprecedented Talks with China

Boundary talks

Bhutan's Foreign Minister's, Tandi Dorji, recent visit to China holds significance due to several unprecedented factors, including a lack of diplomatic relations between Bhutan and China. His visit is the first ever by a Bhutanese Foreign Minister.

The main purpose of the visit was the holding of boundary talks. The boundary talks have not taken place for over past seven years. Moreover, the talks have shown promising results, with both countries signing a cooperation agreement for boundary delimitation.

Potential Implications for India

China's call for diplomatic relations and boundary negotiations with Bhutan raises concerns for India due to its special relationship with Bhutan. However, Bhutan has likely consulted India in its efforts to normalize relations with China while safeguarding India's security interests. India's red lines may include preventing China's presence near the southern Doklam plateau overlooking the "Siliguri corridor".

Doklam Plateau

Doklam, also called Donglang by China, is an area in Bhutan with a high plateau and a valley, lying between China's Chumbi Valley to the north, Bhutan's Ha District to the east and India's Sikkim state to the west. It has been depicted as part of Bhutan in the Bhutanese maps since 1961, but it is also claimed by China. The dispute has not been resolved despite several rounds of border negotiations between Bhutan and China. The area is of strategic importance to all three countries.

In June 2017 a military standoff occurred between China and India, as China attempted to extend a road on the Doklam plateau southwards near the Doka La pass and Indian

troops moved in to prevent further road construction. India claimed to have acted on behalf of Bhutan, with which it has a 'special relationship'. Bhutan has formally objected to China's road construction in the disputed area.
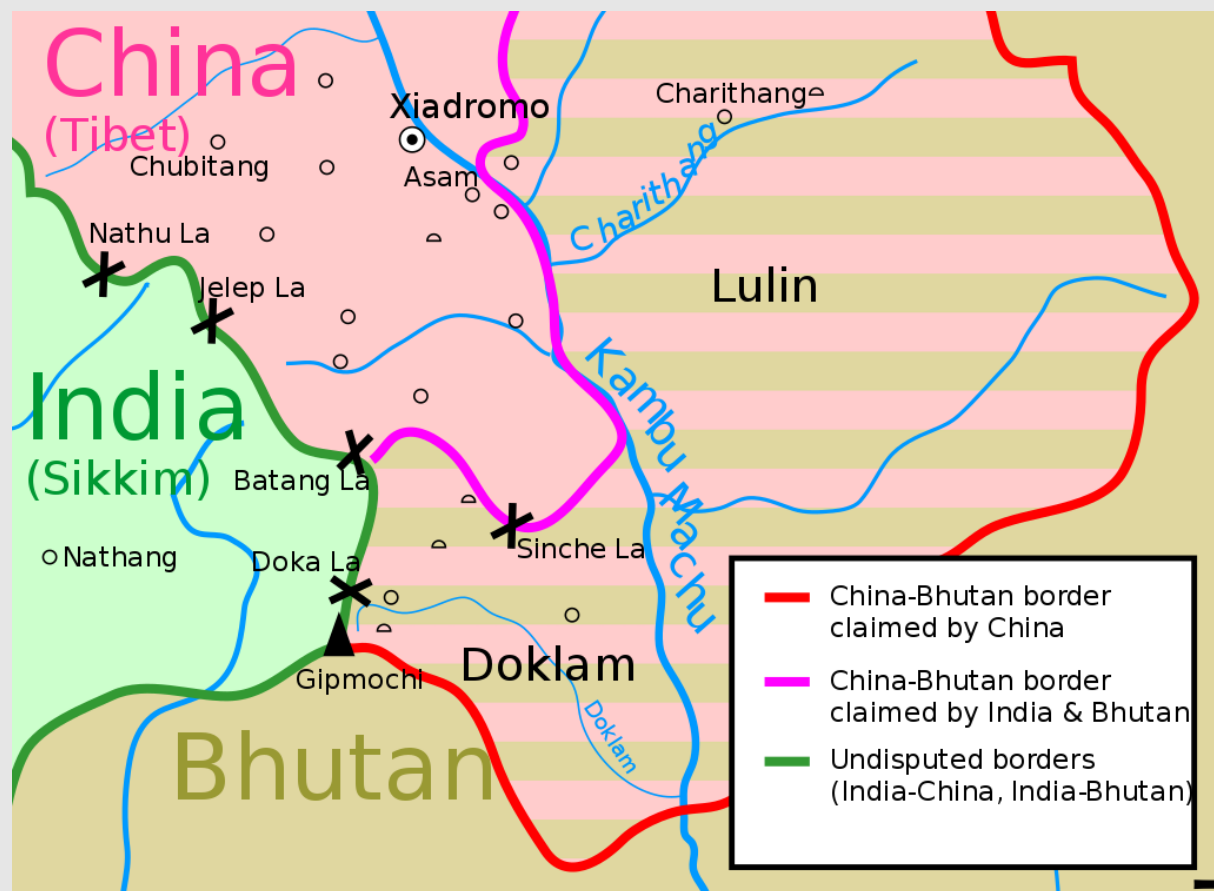
Siliguri Corridor
The Siliguri Corridor, also known as the Chicken's Neck, is a stretch of land around the city of Siliguri in West Bengal, India. 20–22 kilometres (12–14 mi) at the narrowest section, this corridor connects the eight states of northeast India to the rest of the India. The countries of Nepal and Bangladesh lie on each side of the corridor and Bhutan lies at the northern end of the corridor.

4. The Closure of the Afghan Embassy in Delhi

Introduction
On September 30, the Ministry of Foreign Affairs of the Islamic Republic of Afghanistan officially announced the closure of the Afghan Embassy in Delhi. This move has raised questions about the future of Afghanistan-India relations and its impact on travel and trade between the two countries.

Reasons for Embassy Closure
The Afghan Embassy cited several reasons for its closure, including a lack of cooperation from the Indian government and insufficient resources to continue

operations. Additionally, they have requested India to fly the flag of the Islamic Republic of Afghanistan over the embassy premises and hand over the mission to a "legitimate government" of Afghanistan in the future.

A Symbolic Role
The embassy had been functioning as a "stateless mission" since the Taliban takeover on August 15, 2021. It no longer represented the current rulers of Kabul (the Taliban), with whom India has no diplomatic relations. Instead, it served a ceremonial or symbolic role, assisting Afghan citizens and travelers in India amid the diplomatic void.

Impact on Travel and Trade
While the embassy's closure may cause confusion among Afghans in India, it is unlikely to disrupt trade and travel significantly. Afghanistan still maintains consulates in Hyderabad and Mumbai, which remain operational. These consulates are committed to serving Afghan students, refugees, and traders.

Continued Engagement
Despite the closure, India and Afghanistan maintain an informal engagement. India operates a "technical team" in Kabul, providing visas to Afghan traders and travelers. Two Weekly flights transport Afghan citizens and goods to India, and humanitarian aid from India to Afghanistan. However, these interactions remain informal, as India refuses to recognize the Taliban due to human rights concerns.

Prospects for Formal Ties
While India has not formally recognized the Taliban, its diplomats have engaged with Taliban representatives in various multilateral initiatives, such as the Moscow format dialogue. The Moscow format is one of the several dialogue platforms on Afghanistan — which began before the Taliban takeover of Kabul. The international community, including countries like China, Iran, Pakistan, Russia, Qatar, and the UAE, is increasingly engaging with the Taliban. This puts pressure on India to reconsider its position on the Taliban, despite historical differences.

Conclusion
The closure of the Afghan Embassy in Delhi marks a significant development in Afghanistan-India relations. The future of formal diplomatic ties remains uncertain, as India grapples with recognizing the Taliban government while maintaining informal engagements to address practical concerns.

5. $600 million India-Japan Fund

About India-Japan Fund
The National Investment and Infrastructure Fund (NIIF) has entered into a collaboration with the Japan Bank for International Cooperation (JBIC) to launch a $600

million India-Japan Fund (IJF) with JBIC and Government of India (GoI) as anchor investors.

This is the NIIF's first bi-lateral fund, with the GoI contributing 49% of the target corpus and the remaining 51% contributed by JBIC. The Fund will be managed by NIIF Limited (NIIFL). JBIC IG (a subsidiary of JBIC) will support NIIFL in promoting Japanese investments in India.

Use of fund
India Japan Fund will focus on investing in environmental sustainability and low carbon emission strategies.

National Infrastructure and Investment Fund (NIIF)
The National Infrastructure and Investment Fund (NIIF) is a vital financial institution in India established to promote and facilitate investments in the country's infrastructure sector. It plays a crucial role in bolstering India's economic growth and development.

Creation of NIIF: The Indian government founded NIIF in 2015 as a dedicated fund for investing in infrastructure and related projects. It was set up to catalyze both domestic and foreign investments in various infrastructure sectors.

Objectives of NIIF: NIIF's primary objectives include:

Financing Infrastructure: NIIF aims to provide long-term capital to infrastructure projects across various sectors, such as transportation, energy, urban development, and more.

Promoting Investment: It encourages both domestic and foreign investments in India's infrastructure sector, thereby contributing to economic growth.

Asset Management: NIIF engages in the management of infrastructure assets, aiming to generate attractive returns for its investors.

6. Unfriendly government elected in Maldives

New Delhi's Diplomatic Approach
India is looking forward to engaging with the new Maldives government on various issues. This statement comes in response to President-elect Mohamed Muizzu's declaration that Indian military personnel would be asked to leave the Maldives.

High-Level Diplomatic Meeting
Indian High Commissioner Munnu Mahawar recently met with President-elect Muizzu, where he conveyed Prime Minister Narendra Modi's congratulations on the electoral

victory. During this meeting, discussions were held on bilateral relations and development cooperation.

Figure 1 Pro-China leader Mohamed Muizzu

Changing Political Landscape
The recent runoff election resulted in a surprising victory for Mr. Muizzu over the incumbent President Ibu Solih. India enjoyed closed relations with Solih. The newly elected President, Muizzu, is believed to be closer to China.

The "India Out" Campaign
President-elect Muizzu has been particularly vocal about "India Out" agenda. He emphasized the importance of Maldivian sovereignty and expressed a desire for foreign troops, particularly Indian, to leave the Maldives.

Indian Military Presence in Maldives
India has maintained a strong military presence in the Indian Ocean Region (IOR) for many years. Since 2013, Indian naval and air force personnel have been stationed on the Addu and Lammu islands to operate helicopters and Dornier aircraft that India had lent to the Maldives for reconnaissance operations. In November 2021, the Maldives National Defence Force reported that 75 Indian military personnel are stationed in the country.

What led to 'India Out' Protests?
In February 2021, the Maldivian opposition protested an MoU or draft agreement on maritime security signed by External Affairs Minister S. Jaishankar with the Maldives Defence Minister, in order to construct a Coast Guard harbour base at the Uthuru Thila

Falhu atoll. The construction was inaugurated during a visit by Defence Minister Rajnath Singh in May this year, and this has been the focus of the "India Out" protests.

Introduction
Recently, Israel declared a state of war after Palestinian militants, Hamas, launched barrages of rockets which killed at least 22 Israelis and injured more than 500 people. This article provides a concise overview of Hamas, the Palestinian militant group responsible for recent attacks on Israel. It explores Hamas's origins, formation, and key moments in its history.

Hamas: A Major Palestinian Militant Group
Hamas is the largest Palestinian militant Islamist group and a significant political entity in the region. It currently governs over two million Palestinians in the Gaza Strip and is recognized as a terrorist organization by Israel, the United States, the European Union, the United Kingdom, and other nations.

Formation and Origins of Hamas
Hamas was established in the late 1980s during the first Palestinian intifada (uprising) against Israel's occupation of the West Bank and Gaza Strip. It evolved from the Palestinian Muslim Brotherhood, a non-confrontational organization that aimed to Islamize Palestinian society. However, the first intifada prompted Hamas to transform itself into a group focused on confronting Israeli occupation.

Reasons for Hamas' Creation
Hamas emerged due to a sense of failure within the Palestinian national movement during the late 1980s. The Palestine Liberation Organization (PLO), representing most Palestinians, had recognized Israel's right to exist and abandoned armed struggle in favor of a negotiated settlement. In contrast, Hamas advocated a military strategy, leading to its rise as a resistance force.

Hamas' Opposition to Peace Accords
Hamas gained prominence by opposing the Oslo Peace Accords in the early 1990s, which aimed to adopt a two-state solution, State of Palestine alongside Israel. The group believed this approach would forfeit the rights of Palestinian refugees displaced in 1948. In response, Hamas conducted suicide bombings and bus attacks, derailing the peace process and escalating violence.

Hamas' Political Rise

In 2006, Hamas achieved a remarkable victory in the Palestinian Legislative Council elections in the West Bank and Gaza Strip. Several factors contributed to its success, including its violent tactics, social services, and the failure of the peace process. This electoral triumph marked Hamas's entry into mainstream Palestinian politics.

Notable Conflicts Between Hamas and Israel

Throughout the years, Hamas and Israel have engaged in recurring conflicts. The deadliest confrontation occurred in 2014, resulting in significant casualties on both sides. In May 2021, clashes at the Al Aqsa compound in Jerusalem led to an 11-day exchange of rocket attacks and air strikes, causing casualties in Gaza and Israel.

Conclusion

Hamas's history is marked by its transformation from a non-confrontational organization to a militant resistance group. It has played a pivotal role in shaping the Palestinian-Israeli conflict, with recurring confrontations that have had significant humanitarian consequences.

8. Hezbollah's Role in Israel-Hamas Conflict

Introduction

The recent Israel-Hamas conflict has raised concerns of escalation, with the presence of Hezbollah, a Shiite Lebanese militant group. This article delves into who Hezbollah is, its origins, aims, military capabilities, and why its involvement is a cause for worry in the ongoing conflict.

Who is Hezbollah and How was it Founded?

Hezbollah, also known as the 'Party of God,' is a Shiite Islamic militant organization based in Lebanon. Formed during the Lebanese Civil War, it emerged due to tensions stemming from the presence of Palestinian refugees and Israeli interventions in southern Lebanon. Inspired by Iran's Islamic government in 1979, Hezbollah received support from Iran's Islamic Revolutionary Guard Corps (IRGC), symbolizing the rivalry between Sunni-dominated Saudi Arabia and Shia-dominated Iran.

Hezbollah's Aims

Hezbollah opposes Israel and Western influence in the Middle East. It has supported President Bashar al-Assad's regime in Syria and has become a prominent player in Lebanese politics.

Hezbollah's Military Capabilities

Hezbollah's arsenal includes a vast stockpile of unguided artillery rockets, missiles, and other weaponry. Western governments and organizations like the Gulf Cooperation Council (which includes six West Asian countries: Bahrain, Kuwait, Oman, Qatar, Saudi

Arabia and UAE) label it a terrorist organization. It previously engaged in conflicts with Israel, notably in 2006, and is known for its extensive rocket force.

Concerns Regarding Hezbollah's Role

The presence of Hezbollah in the current Israel-Hamas conflict raises concerns due to its military capabilities and the potential for escalation. Due to presence of Hezbollah, Israeli government is likely to intensify its actions.

Western support for Israel's security adds to the tension. Hamas shares common goals with Hezbollah and opposes recent diplomatic engagements between Israel and other Middle Eastern governments. This situation complicates regional stability.

Conclusion

The involvement of Hezbollah in the Israel-Hamas conflict adds complexity to an already volatile situation. Understanding Hezbollah's origins, aims, and military capabilities is crucial in assessing the potential for further escalation in the conflict-ridden Middle East.

9. Israel's Iron Dome Defense System

Why in news?

The Hamas militant group launched its worst attack inside the Jewish state's territory since 1948 on October 7, killing at least 250 Israelis and abducting several others. Israel's retaliatory strikes, meanwhile, have resulted in over 230 casualties in Gaza.

The attack has raised concerns over Israel's defence system, with many questioning the intelligence failure.

What is the Iron Dome?

The Iron Dome is a defense system used by Israel to stop rockets and missiles from reaching their targets. It protects against attacks like rockets, artillery, and mortars, as well as aircraft, helicopters, and drones. The Iron Dome was deployed in 2011.

How Israel's Iron Dome defence system works

5 Missile explodes near rocket, destroying it

Iron dome shield

1 Enemy rockets fired
2 Radar system detects rocket and tracks
3 Control system estimates impact point
4 Launcher fires missile to intercept

Iron Dome system ignores incoming threats it determines will land in uninhabited areas

How It Works

The Iron Dome has three main parts that work together: a radar that detects incoming threats, a system that manages and controls the weapons, and a unit that fires the interceptor missiles. The radar spots threats and guides the interceptor missile to the target. The missile can change its course to destroy the threat.

Why It's Effective

The system works in all weather conditions, day or night. It's designed to spot and track small objects accurately and can change the missile's path to hit the target.

Cost

The Iron Dome is expensive, with each unit costing over $50 million and each interceptor missile costing around $80,000. In contrast, the rockets it intercepts are much cheaper, costing less than $1,000. But experts believe that the value lies in saving lives and boosting morale by preventing rocket attacks.

10. Hamas Disrupts Potential Israel-Saudi Agreement

Reason for Hamas Attack

Hamas, the Palestinian militant group, has attacked Israel, potentially to disrupt ongoing negotiations between Israel and Saudi Arabia mediated by the United States. The agreement could signify a significant shift in the Middle East political landscape, with potential consequences for the priority of an independent Palestinian state.

Understanding the Potential Deal

The deal being negotiated between Israel and Saudi Arabia, brokered by the US, primarily involves Saudi Arabia formally recognizing Israel for the first time since its establishment in 1948. The driving force behind this recognition is the Kingdom's quest for security guarantees from the US, particularly protection against Iran, its longstanding rival.

Benefits for Israel

Formalizing relations with Saudi Arabia holds several advantages for Israel, including economic benefits, legitimacy in the predominantly Muslim region, and enhanced political standing for its Prime Minister Benjamin Netanyahu.

US Interests

The United States seeks to counter growing Chinese influence in the region and improve its relations with Saudi Arabia. Providing security guarantees to Saudi Arabia is seen as a way to prevent the Kingdom from aligning more closely with China.

Impact on Palestinians

The impact on the Palestinians remains uncertain. While Saudi Arabia has expressed commitment to the 2002 Arab Peace Initiative, there's the possibility that the deal might not fully address the Palestinian statehood issue.

US Timing and Iran Factor

The US aims to finalize the deal before the next presidential elections. Iran's continued nuclear program makes it imperative for the US to strengthen ties between Saudi Arabia and Israel, both of which view Iran as an adversary.

Hamas' Disruptive Role
The conflict between Israel and Hamas, along with Israel's counterattack, has caused delays in the deal's timeline and garnered sympathy for Palestinians across the Arab world. A critical statement from the Saudi Foreign Ministry expressing concerns about the situation and blaming Israel has complicated matters, leading to uncertainty about the agreement's completion.

Potential Iranian Involvement
Although there's no concrete evidence of Iran's direct involvement in the attacks, there's belief that Iran supported and possibly encouraged Hamas to launch the onslaught, indirectly contributing to the conflict's disruption.

11. Gaza is known as the world's biggest 'open air prison'

Introduction
This article explores the reasons why Gaza is often referred to as the world's largest 'open-air prison.' It delves into the historical and geopolitical factors that have led to the dire conditions in Gaza and their impact on its residents.

The Gaza Strip's Isolation
Gaza, a narrow strip of land surrounded by the Mediterranean Sea, Israel, and Egypt, has faced a prolonged air, land, and sea blockade since 2007 when Hamas, a militant organisation, won elections and came to power.

Physical Barriers and Border Crossings
Gaza is physically isolated by walls, fences, and the Mediterranean Sea, controlled by Israel on three sides and Egypt on the south.

Densely Populated and Impoverished
The Gaza Strip is 41 km long and 12 km wide at its widest point. More than 20 lakh residents live in a total area of just around 365 sq km, making it one of the most densely populated areas in the world.

This has led to around 61% of Gaza's population requiring food aid, 31% of households having difficulty in "meeting essential education needs such as tuition fees and books, due to lack of financial resources", and an unemployment rate of more than 46%, the report said. It also highlighted the shortage of electricity, leading to power cuts at an average of around 11 hours per day.

The beginning of the Gaza blockade

In the Six-Day War of 1967, Israel captured Gaza from Egypt, and began its military occupation of the territory. Between 1967 and 2005, Israel built 21 settlements in Gaza and urged Palestinian residents, through coercive measures as well as by giving financial and other incentives, to leave the territory. However, that period saw rising Palestinian resistance, both violent and non-violent, against the Israeli occupation.

In 2005, Israel withdrew its settlements from Gaza. Between then and 2007, it imposed temporary blockades on the movement of people and goods into and out of Gaza on multiple occasions.

Under the 1993 Oslo Agreement, the Palestinian Authority got administrative control over Gaza after Israel pulled out, and an election was held in 2006. The voting took place at a time when an Israeli blockade was in force, and the militant group Hamas won a majority of seats. Following the election, deadly violence broke out between Hamas and Fatah, another Palestinian political faction, leading to the death of hundreds of Palestinians.

In 2007, after Hamas assumed power in Gaza, Israel made the blockade permanent. Egypt, which also has a border crossing with Gaza, participated in the blockade. This effectively meant that most people could not go into or out of Gaza and that the movement of goods and aid was highly restricted. Israel justifies the blockade as being necessary for its security.

International Concern and 'Open Air Prison'

The term "open air prison" is widely used to describe the conditions in Gaza, a description supported by UN rapporteurs, activists, academics, and even heads of state, such as former British Prime Minister David Cameron.

12. Important terms in relation to the Israel-Palestine conflict

Why in news?

Since Hamas launched an unprecedented attack on Israel on October 7, conflict in the region has escalated to tragic proportions. This is the latest bloody chapter in the bitter conflict between Israel and Palestine that has been going on since 1948.

Here is an alphabetical list of important terms you might come across while reading about the conflict.

Abbas, Mahmoud
The 87-year old Abbas has been the president of the State of Palestine (West Bank) since 2005. The moderate pro-Palestinian voice and critic of Hamas, Abbas has condemned the killing of civilians during the ongoing violence.

Al Aqsa
Al Aqsa refers to the compound of Islamic religious buildings, including the Dome of Rock and Al Aqsa Mosque, in Jerusalem's Old City. Located adjacent to Christian and Jewish religious sites, it has been a flashpoint in the Israeli-Palestinian conflict. 'Operation Al Aqsa Storm' is the name of the recent Hamas operation.

Arab
The Arabs are an ethnic group concentrated in West Asia and North Africa, who according to tradition, are descendents of Abraham, the patriarch of Judaism, Christianity and Islam. Today, Arabs are predominantly Sunni Muslims, though Shias, Christians, Jews and polytheists also exist within the population. The Arabic language emerged in the first century CE.

Ashkelon
Named after the ancient port of Ascalon, Ashkelon is a coastal city in southern Israel, just 13 km north of Gaza. It has been constantly targeted by Hamas, who have fired innumerous rockets towards it.

Balfour Declaration
The Declaration was a public statement issued in 1917 by British Foreign Secretary Arthur Balfour to Lord Rothschild, a leader of the British Jewish community. The statement, for the first time, promised British support for a "Jewish national home" in Palestine, at the time a British Mandate. It went on to be the basis of the creation of Israel, 30 years later.

China
While a major economic partner of Israel, China has also maintained warm relations with Palestine and the rest of the Arab world. China's statement after the recent escalation was notable as it did not, unlike many other nations, condemn Hamas, instead "urged restraint" from "all parties".

Deif, Mohammed
Not much is known about Mohhamed Deif, the shadowy leader behind Hamas's latest operation and the head of Hamas's military wing since 2002. He has been at the top of Israel's hit list for a long time and survived multiple attempts on his life, which have left him with one arm, one leg and one eye.

Egypt
Besides Israel, Egypt is the other country to border Gaza, lying to its south. Egyptian forces occupied Gaza between 1949-67, till their defeat to Israel in the third Arab-Israeli War. Egypt has shut the Rafah border crossing with Gaza and refused to allow entry to civilians who might want to flee the besieged territory.

Fatah
Formerly known as the Palestinian National Liberation Movement, Fatah was founded by Yasser Arafat in 1959. Since Arafat's death in 2004, it has been riddled with factionalism and infighting. Currently chaired by Mahmoud Abbas, it heads the Palestinian Authority, which governs about 40 per cent of the West Bank from Ramallah. It lost control of Gaza to Hamas in 2006.

Gaza
Gaza is a strip of land, just 365 sq km in size, wedged between the Mediterranean Sea to the west, Israel to the north and east, and Egypt to the south. It is home to more than 20 lakh Palestinians who have been living in siege-like conditions since 2007. The recent escalation began with Hamas launching missiles into Israel from Gaza.

Hamas
Formed in the 1980s, during the first Intifada (1987-93), Hamas is a militant Sunni Islamist group and one of the two main political parties of Palestine. It came up as a more militant alternative amidst failure of the Palestinian Liberation Movement to make real gains. Currently, it governs the Gaza strip and was responsible for sparking the most recent escalation.

Hezbollah
Hezbollah is a Shiite Islamic militant organisation and political party based in Lebanon. It emerged during the Lebanese Civil War (1975-90) and has historically been at loggerheads with Israel. Amidst the outbreak of violence in Israel, Israeli forces have also intermittently engaged with Hezbollah, who, as per the IDF, fired rockets into Israel from the north.

Holocaust
Derived from the Greek word for 'burnt offering', the Holocaust refers to the genocide of European Jews by the Nazis. From 1941-45, roughly six million Jews across German-occupied Europe were murdered, often in gas chambers in extermination camps. The

Holocaust was one of the factors which ultimately led to the creation of Israel, a Jewish national home.

IDF

The Israel Defense Forces are the national military of the State of Israel. The IDF has participated in every armed conflict involving Israel since 1948. Every able-bodied citizen (male or female) must serve in the IDF for a period of at least two years. The IDF boasts of 170,000 active personnel (1.9% of population) and 465,000 reserve personnel (5.1% of population).

Intifada

Intifada literally means 'to shake off' in Arabic. It was brought to popular movement by the Palestinians in the 1980s, and is used to connote 'righteous rebellion against oppression'. Palestine underwent two Intifadas – from 1987 to 93, and from 2000 to 2005.

Iran

Iran is arguably Israel's biggest and most powerful foe. It has supported the Palestinian cause since the 1979 Revolution brought the ultra-religious Ayatollah Khomeini to power. It funds both Hamas and Hezbollah. Iran, in context of the recent escalation, has said that it will respond to the "war crimes against Palestine and Gaza."

Iron Dome

The Iron Dome is a short-range, ground-to-air, air defence system Israel uses to track and neutralise enemy missiles and rockets. Its success rate is between 80 and 90 per cent and acts as a deterrent to relatively inexpensive missile attacks on Israel soil. The success of the recent Hamas attacks raised questions about its effectiveness.

Israel

The term Israel has historically been used to refer to Jewish people. Its roots lie in the Hebrew word Yisra'el, the name given to Jacob in the Old Testament and meaning "he that striveth with God". Israelites were Jacob's descendents. The myth of the Israelite Exodus is central to Judaism, and was invoked by Zionists while setting up the State of Israel.

Jerusalem

One of the oldest extant cities in the world, Jerusalem is considered holy in all three Abrahamic religions — Judaism, Christianity and Islam. Both Israel and Palestine claim the city though As per the 1947 UN Partition Plan, Jerusalem was to be jointly governed. Today, Israel has effective control over Jerusalem and considers the city its capital.

Jordan

Jordan is an Arab country bordering Israel and the West Bank. It lies to the east of the Jordan river and is perhaps most known for the ancient city of Petra. Jordan and Israel were in a state of war from 1948, when Israel was created, till the 1994 peace treaty. Since then, relations have improved but get strained whenever the Israel-Palestine conflict heats up.

Khan Younis
A city in the southern end of the Gaza strip, Khan Younis has borne a significant brunt of Israel's ongoing bombing campaign. It contains the Khan Younis refugee camp, home to nearly 89,000 Palestinian refugees as per the UN. The city is known for its squalid conditions, made worse by Israel's brutal blockade.

Kibbutz
Kibbutz refers to intentional communities of Jews in Israel, which began by combining utopian ideals of socialism and Zionism. While traditionally established by Jewish settlers in Palestine as agricultural communities, the economy of the Kibbutzim today is highly diversified, and includes industrial and tertiary occupations.

Lebanon
Lying to the north of Israel, Lebanon is a former French territory. Israel had occupied southern Lebanon from 1985-2000, in response to a spate of attacks carried out by Palestinian fighters from the country. Lebanon continues to be home to Hezbollah, which holds 15 seats in the Lebanese parliament.

Levant
The Levant is an approximate historical geographical term, which, in its broader sense, refers to land lying to the east of the Mediterranean — from the island of Cyprus, to Lebanon, Israel, Palestine, Jordan, Syria, Turkey and even Greece.

Mossad
Mossad is the national intelligence agency of Israel, considered to be one of the best intelligence agencies in the world. It is currently under fire for its failure to predict last Saturday's Hamas attacks.

Nakba
Nakba, literally meaning "catastrophe" in Arabic, refers to the forced displacement of Palestinians due to the creation of Israel, resulting in thousands of Palestinians losing their homes. Each year, May 15 is solemnly observed by Palestinians as Nakba Day.

Netanyahu, Benjamin
Netanyahu is the longest tenured prime minister in Israel's history, in power from 1996-99, 2009-21 and currently, since 2022. He is the leader of the Likud party, a

centre-right party in the country. Some have blamed the recent escalation on Netanyahu's mismanagement of the conflict.

Occupied territory
Occupied territories refer to land areas under the control of a foreign military force. The UN describes the West Bank and East Jerusalem as occupied territories as they remain under Israel's military control since the 1967 Six-Day War.

Palestine
Formerly a British mandate after the fall of the Ottomans in World War I, united Palestine was partitioned into two by the UN in 1947. Today, the state of Palestine, claims the West Bank and Gaza Strip as its territory, though in reality, the government only controls about 40 per cent of territory on the West Bank.

PLO
The Palestine Liberation Organization (PLO) was created in 1964, and sought to establish an Arab state in the former British mandate of Palestine. A coalition of many parties and organisations, today it is officially recognised as the government of the State of Palestine.

Qatar
Qatar is a peninsular Arab country which has historically supported the Palestinian cause. Many top leaders of Palestinian militant organisations are said to have bases in the country. Some of the most vocal pro-Palestine reportage of the current conflict has come from Al Jazeera, owned and run by the Qatari state.

Ramallah
Ramallah is a major city on the West Bank and serves as the administrative and de facto capital of the Palestinian authority. It lies 10 km to the north of Jerusalem.

Russia
The Soviet Union allied with Palestine and Arab states in the Israel-Palestine conflict during the Cold War. The modern Russian state has by and large maintained that stance. Russian President Vladimir Putin has cautioned Israel against using tactics in Gaza like the Nazi siege of Leningrad (present day St Petersburg) during World War II.

Saudi Arabia
While Saudi Arabia remains, in principle, a staunch ally of Palestine, in practice it has grown closer to Israel in recent years. The recently inked Saudi-Israel deal, which planned to normalise ties between the two nations, has been cited by some experts as the reason for Hamas's attacks last week.

Settlers

In this context, settlers refer to Jews who have settled in the occupied territories of East Jerusalem, Gaza and the West Bank. Over the years, Israel has encouraged Jews from around the world to settle in these occupied territories.

Al Shifa Hospital
The Shifa Hospital is the largest medical complex in Gaza. Currently overwhelmed with casualties from Israel's bombing of the crowded area, supplies in the hospital are dwindling, causing concerns for an impending humanitarian catastrophe.

Syria
Lying to the northeast of Israel, Syria has traditionally been a supporter of the Palestinian cause. In the aftermath of the latest escalation in Israel, Israeli fighter jets bombed airports in the cities of Damascus and Aleppo, potentially to prevent the country from assisting anti-Israel fighters.

Tel Aviv
Tel Aviv grew to become one of the region's largest cities in the 1930s, with Zionists from around the world flocking to it. It was designed to be a city of the future — in stark contrast to unsanitary Arab towns around it. Today, it is Israel's most populous city, and an economic and cultural hub of Israel.

Tunnels
Due to fencing and extremely stringent border security, it is not easy to enter Israel. Thus, Palestinian militants have often used tunnels to circumvent border restrictions and launch attacks on Israel.

United States
The US, home to a large population of Jews itself, has been Israel's strongest and most steadfast ally over the years, providing it with extensive military and economic support. In the aftermath of the current escalation, the US sent its most advanced aircraft carrier, USS Gerald R Ford, to the eastern Mediterranean.

Unity Government
After Hamas's attack last week, Israel Premier Benjamin Netanyahu formed an emergency unity government to lead the war effort. Israel's politics is extremely divided with Netanyahu himself a polarising figure. Thus, a unity government, with support from two major opposition parties was formed in Israel to present a united front during the war.

Victory
Both Hamas and the IDF continue to fight with ferocity, it is unclear what victory would look like for either of them. Israel wants to wipe Hamas off the face of the planet, but historically states have seldom been able to eliminate popular movements with brute

force. On the other hand, Hamas's attacks seem to be without a clear end themselves — they did kill Israelis, civilians included, but strategically Hamas is no better off today than prior to the attack.

The West Bank

The West Bank refers to the territory allotted to the State of Palestine according to the UN's 1947 Partition Plan, lying to the west of the Jordan river. It has been under the military occupation of Israel since 1967. Currently, only about 40 per cent of the region is controlled by the Palestinian Authority.

White phosphorus

International NGO Human Rights Watch has claimed that Israel has used white phosphorus munitions in military operations in Gaza and Lebanon. These are incendiary munitions which, if in contact with humans, cause excruciating burns and long-term injuries. While not fully banned, their use in populated areas is unlawful.

X-Factor

How the conflict pans out will depend on how far Israel will go with its retaliation. IDF is far stronger militarily than Hamas, Hezbollah or any other Palestinian militia. However, if Israel continues its reprisals, other Arab states might join the conflict, might lead to a far larger conflict throughout the region that Israel would ideally like to avoid.

Yesh Atid

Yesh Atid is a centrist Israeli political party that has been part of coalition governments in the past. It is led by former TV journalist Yair Lapid and is the principal opposition to Netanyahu's government in the parliament.

Yom Kippur War

Yom Kippur is the holiest day in Judaism, a day of fasting and atonement. The Yom Kippur War was fought from October 6 to 25, 1973 between Israel and a coalition of Arab states led by Egypt and Syria, with the Arabs seeking to regain territory lost in the war of 1967. The war ended with a ceasefire, with Israel holding off the Arab onslaught with US help.

Zionism

Zionism is a political and ideological movement that emerged in the late 19th century, primarily among the Jewish community, with the aim to return the Jewish people to their 'homeland' in Palestine, at the time under Ottoman control. The movement gained traction amidst terrible anti-semitism in Europe as a means of establishing a safe haven for the Jews. It ultimately led to the creation of Israel in 1948, and continues to be the driving force behind Israeli politics.

13. How Jews first migrated to Palestine, and how Israel was born

Introduction
In this article we will discuss how did the Jewish migration to 'Israel' first begin? Before the official declaration in May 1948 of the creation of Israel, how was the stage set for it? What was the role played by the British in it?

Anti-semitism and Zionism
According to the Hebrew Bible, 'Israel' is the name God gave to Jacob, the grandson of Abraham, who is considered the patriarch of all three 'Abrahamic' religions: Judaism, Christianity, and Islam. The descendants of Abraham settled in Canaan, which is roughly the territory of modern Israel.

After around 1000 years, in the late 19th century, the land of Canaan was a part of the Ottoman Sultanate after passing through several empires (Greeks, Romans, Persians, Crusaders, Islamists, to name a few). The followers of Judaism, or Jews, were living in many countries — often as prosperous minorities, but vulnerable to persecution, especially in Europe.

In Imperial Russia, there were pogroms targeting Jews in the 1880s. In France, the Dreyfus affair of 1894, in which a Jewish soldier was falsely convicted of passing on vital information to Germany, highlighted the prevalent anti-Semitic prejudices. Antisemitism (also spelled anti-semitism or anti-Semitism) is hostility to, prejudice towards, or discrimination against Jews.

A feeling began to grow in the Jewish community that they would not be safe till they had a country to call their own. This movement — of trying to establish a Jewish homeland — came to be known as Zionism.

In 1896, Theodor Herzl, an Austro-Hungarian, published a pamphlet called 'Der Judenstaat', describing his vision of a Jewish nation. This pamphlet attained such popularity that Herzl is considered the father of political Zionism.

Initially, countries like Uganda and Argentina were considered as potential locations for this homeland. However, opinion soon settled on Palestine, where the biblical home of the Jews had once stood, and where many of their holy sites were still located.

Before World War I
Soon, Jewish migration (Aliyah) to Palestine began. The first wave of arrivals, from 1881 to 1903, is known as the First Aliyah. The migrants began to buy large tracts of land and set to farming it. Very soon, these arrivals meant losses for the native Palestinians.

Palestine at this time was just one province of the vast and not-well-governed Ottoman empire. The residents did not necessarily see themselves as 'Palestinians', identifying more as Ottoman subjects, Arabs, Muslims, or along clan and family lines.

Outside Palestine, Jews in other countries worked to gain international support for their cause. The enterprise in Israel was being funded by wealthy Jews abroad, like the Rothschild family.

Local alarm and resentment against the newcomers grew. Ottoman officials did forbid the sale of land to foreign Jews, but the order was never effectively implemented. In 1908, after the Young Turks revolution overthrew the Ottoman Sultan, Jewish migration efforts became more streamlined.

The Balfour Declaration
What possibly changed the face of West Asia forever was the Balfour Declaration of 1917, when a letter sent by a British official to a wealthy British Jew sealed the fate of lakhs of Palestinians. The British government needed Jewish support in its World War I efforts. To secure that, Foreign Secretary Arthur James Balfour backed the Zionist cause.

By now, Palestinian nationalism was growing. Various groups and organisations had come up to voice opposition to the growing Jewish influence. However, these were ridden by factionalism, and lacked the organisation and single-minded focus of the Jewish bodies.

British Mandate and World War II
After the defeat of the Ottoman empire in World War I, its erstwhile domains were divided among the Allies, with the eventual aim of promoting self-governance. Palestine fell under the British mandate. The three decades of the Mandate saw various commissions, white papers, and resolutions, even as violence raged and thousands of lives were lost.

Eventually, the British did what they had with Partition violence in India — let trouble simmer to breaking point and then withdraw. In 1947, with neither side agreeing to a partition or any other solution, and distrust and hostility at an all-time high, the British announced they were exiting Palestine, and the question would be settled by the UN.

UN resolution and wars
Throughout this period, one thing had been clear — the Jewish determination to fight and win. The Jews were very much a minority, but whenever violence broke out, they dominated. A crucial factor was they also mobilised better medical treatment facilities, while for the Palestinians, even treatable injuries could mean disaster.

On November 29, 1947, the UN General Assembly voted to divide Palestine into Jewish and Arab states, with Jerusalem under UN control. The proposed Jewish state was to consist of 55 per cent of the country, including the largely unpopulated Negev desert. Its population would comprise some 500,000 Jews and 400,000 Arabs. The Arab state was to have 44 per cent of the land and a minority of 10,000 Jews. The Arab areas would include the West Bank and Gaza.

Rejection of UN plan

The outraged Palestinian side rejected the resolution. Israel, on the other hand, declared independence on May 14, 1948. This entire period by was marked by civil war, and the Israeli military groups managed to drive out a large number of Palestinians. The creation of Israel is called Naqba, or the catastrophe, by Palestinians, who see it as the day they lost their homeland.

Immediately after Israel's declaration of independence, it was invaded by Egypt, Jordan, Iraq, Syria, and Lebanon. However, the determined Israeli side, bolstered by arms and funds from the US, managed to beat them back. This was followed by more Arab-Israeli wars, with Israel capturing large territories.

Today, of the 193 member states of the United Nations, 139 recognise Palestine, while 165 recognise Israel. Gaza and the West Bank remain under Israeli military control.
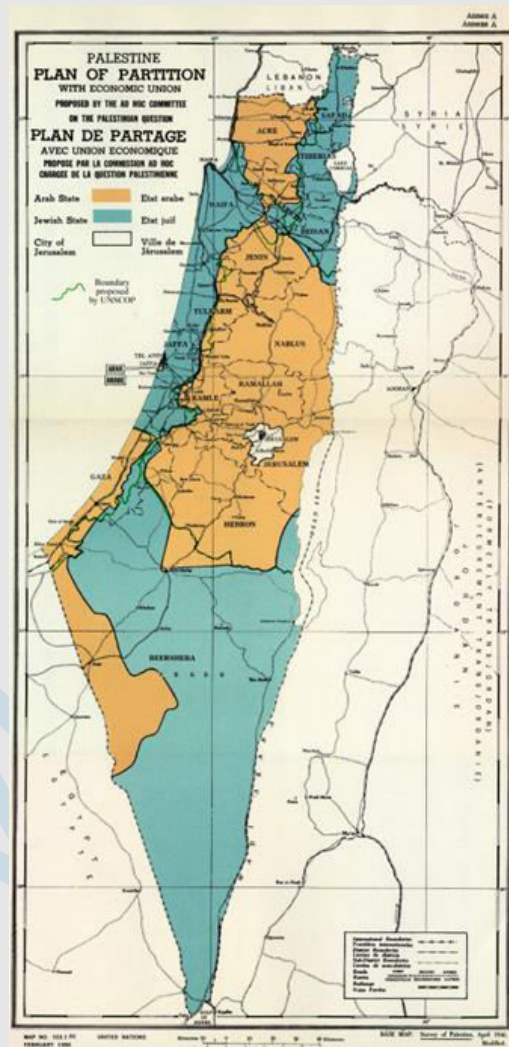
14. The Rafah Crossing and its Significance

Why is Rafah Important to Gaza?

The Rafah Crossing is vital to the Gaza Strip because it provides one of the few land routes for civilians to enter and leave Gaza, and it is not controlled by Israel. Both Israel and Egypt have imposed restrictions on the movement of people and goods to and from Gaza, which has significantly affected the living conditions of Palestinians in the region. Entry into Gaza from either side has often been conditional on obtaining permits from the respective governments. In 2022, the Rafah gate was open on 245 days, allowing thousands of people to enter and exit.

The Rafah crossing between the Gaza Strip and Egypt

Egypt is the only country apart from Israel to share a border with the Gaza Strip, which is home to 2.3 million people. The Rafah crossing between Egypt and Gaza is the sole route for aid to enter Gaza from outside Israel and the only non-Israeli exit.

Source: Datawrapper/Reuters

Goods such as diesel, cooking gas, and construction materials usually pass through the nearby Salah a-Din gate, which started operating in 2018. Before that, household goods were mostly smuggled through underground tunnels.

How Has Rafah Been Affected by the War?
The Rafah Crossing has been impacted by the conflict in the region. Israel's retaliatory airstrikes against Hamas, the group that controls Gaza, have damaged the crossing. Multiple strikes near the crossing have been verified through videos and satellite imagery. Foreign passport holders waiting at the border for it to open reported being evacuated after the crossing was struck.

What Is the Situation Now?
Currently, hundreds of people have gathered at the gates on the Gaza side, hoping that foreign and dual citizens might be allowed to leave. Efforts by the United States

and others to broker a deal with Israel and Egypt to facilitate humanitarian aid and foreign citizens' departure have not yet succeeded, and the border remains closed. Many American citizens in Gaza have faced difficulties, including limited communication due to power shortages and challenges in obtaining essential supplies.

Truckloads of aid from various countries have been waiting at the Egypt-Gaza border, but the delays in crossing have persisted, resulting in frustration and logistical challenges.

15. Israel-Hamas war: Gaza's humanitarian situation

Gaza Strip

The Gaza Strip is 365 square kilometers (141 square miles) in size and home to around 2.2 million people, 1.7 million of whom are refugees, according to the UN Relief and Works Agency (UNRWA) for Palestine Refugees in the Near East. The UNRWA provides services in eight refugee camps across Gaza.

The Gaza Strip is one of the most densely populated areas in the world at 5,900 residents per square kilometre. Some 41% of the population in Gaza are under the age of 15.

Ever more displaced Gazans and a rising death toll

Over 1.4 million Gazans have been internally displaced since Hamas' attacks on Israel earlier this month. Hamas is considered a terrorist organization by Israel, the EU, US and several other nations. More than 4,000 Palestinians have been killed since the start of the conflict.

Health care sector under strain with dead and dying
The Gaza Strip has 13 hospitals, which are "only partially operational due to supply shortages and fuel rationing."

The Gaza Strip has one power plant, generating about 70 megawatts of electricity per day. This covers a small fraction of the territory's total energy needs of at least 400 megawatts. In addition, some 120 megawatts of power are ordinarily imported from Israel. On average, Gazans have received an average of 13 hours electricity per day this year.

Following Hamas' assault, Israel stopped supplying electricity to the Gaza Strip. With Gaza's only power plant now out of fuel and offline, the territory is without electricity, meaning residents and institutions alike are dependent on power generators.

Unemployment and poverty define life in Gaza
Gaza's unemployment rate stands at over 45%. Some 60% of people aged 15-29 are without work.

As per Data gathered in 2021, over 80% of Gazans employed in the private sector earned less than the minimum wage of $442 (€419) per month. Nearly 80% of Gazans rely on humanitarian assistance.

When did the Gaza Strip blockade begin?
Israel imposed a land, sea and air blockade of the Gaza Strip in 2007, after Hamas took control of the territory. Since then, people's movements into and out of the area through Israeli checkpoints and the sole crossing into Egypt at Rafah have been severely restricted.

Following Hamas' October 7 terror assault, Israel imposed a "total blockade," shuttering all checkpoints and halting the delivery of food, aid, and fuel into the Gaza Strip.

This means the Rafah crossing to Egypt — the only checkpoint not controlled by Israel — is the sole route for food, aid and other items into Gaza. In the past, the Rafah crossing has been shut for extended periods and only open on an irregular basis.

16. Israel attacked Syria's airports

Introduction
In the ongoing conflict in Gaza between Israel and the militant group Hamas, Israeli warplanes struck two airports in Syria on October 22. Syrian state media reported that Israeli airstrikes have targeted the international airports in the capital, Damascus, and

the northern city of Aleppo. The strikes killed one person and damaged the runways, putting them out of service.

This was roughly two weeks after Hamas struck Israel, in what was the biggest attack on Israel since the founding of the Jewish state in 1948.

What are relations among Israel and Syria like?
Israel has not directly spoken of its reasons for the latest attack but has previously mentioned the need to prevent another front of the fighting from opening up towards its north. It is believed that the strikes are linked to attacking the Lebanon-based and Iran-backed militant organisation Hezbollah, which has threatened to open a front of attacks towards the north of Israel. Lebanon and Syria both border Israel in its northern region. Hezbollah and Israel have exchanged fire in the last few weeks but Hezbollah is yet to formally join the war.

Hezbollah and Israel: Historically, since the group's creation in 1982, Hezbollah has opposed Israel and Western influence in West Asia. It has also, along with Russia and Iran, supported the regime of President Bashar al-Assad in neighbouring Syria during its civil war.

Hezbollah, in turn, is supported by Iran. Hezbollah is also a Shiite organisation, and Iran's support of it reflects West Asia's two major powers and their rivalry – the Sunni Muslim-dominated Saudi Arabia and the majority Shia Muslim-dominated Iran.

Syria and Israel: Syria has opposed Israel since its formation in 1948, in line with the policy of other Arab countries for a long period. It has viewed Israeli presence and occupation to be against Palestinian and Arab interests. The two have also fought wars, including the Six-Day War of 1967 that led to Israel occupying Syria's Golan Heights – which it still controls today.

The recent strike by Israel is a warning to Syria to not enter in the ongoing war.

17. What is White phosphorus which Israel has been accused of using in Gaza

Why in news?
Israel Defense Forces (IDF) have been accused of using white phosphorus munitions in Gaza and Lebanon, in violation of International Humanitarian Law (IHL), which lays down the responsibilities of states and non-state groups in an armed conflict. The IDF has denied the allegations.

Figure 2Israel using white phosphorus in Gaza, Lebanon, endangering civilians

What is white phosphorus?
White phosphorus is a pyrophoric that ignites when exposed to oxygen, producing thick, light smoke as well as intense 815-degree Celsius heat. Pyrophoric substances are those which ignite spontaneously or very quickly (under five minutes) when in contact with air. White phosphorus emits a distinct garlic-like odour.

What are the military uses of white phosphorus?

White phosphorus is dispersed in artillery shells, bombs, and rockets. It can also be delivered via felt (textile) wedges soaked in the chemical.

Its primary military use is as a smokescreen — used to hide troop movement on the ground. The smoke acts as a visual obscurant. White phosphorus is also known to mess with infrared optics and weapons tracking systems, thus protecting forces from guided missiles.

How harmful is white phosphorus?

Upon exposure, white phosphorus can cause severe burns, often down to the bone. The burns are excruciatingly painful, difficult to heal, and susceptible to infections. White phosphorus burns on even 10 per cent of the body can be fatal. Particles of white phosphorus that remain lodged the body can reignite if in contact with air.

Inhaling white phosphorus particles or smoke can cause respiratory damage and harm to internal organs. Those who survive initial injuries often experience a lifetime of suffering — with impaired mobility and painful, horrific scars.

White phosphorus can also devastate infrastructure and property, damage crops and kill livestock, with raging fires, especially in windy conditions.

When were white phosphorus munitions first used?

Irish nationalists in the late 19th century first used white phosphorus munitions. World War I saw extensive use of the chemical by the British and Commonwealth forces in phosphorus grenades, bombs, shells and rockets.

These munitions have since been used in conflicts around the world, from the World War II to the US invasion of Iraq in 2004 and the long-drawn Nagorno-Karabakh conflict. Most recently, Russia was accused of using white phosphorus bombs during the invasion of Ukraine last year.

What is the legal status of white phosphorus munitions?

White phosphorus munitions are not under a blanket ban, though their use is regulated under the International Humanitarian Law (IHL).

It is not considered a chemical weapon because its operational utility is primarily due to heat and smoke, rather than toxicity. Thus, its use is governed by the Convention on Conventional Weapons (CCW), specifically Protocol III, which deals with incendiary weapons. Palestine and Lebanon have joined Protocol III, while Israel has not ratified the protocol.

India's Presence in Jerusalem

Long before Jerusalem became a globally contested city, India established a connection there in the 12th century. An old stone building within the city's walls bears a plaque that reads, "Indian Hospice, Estd. 12th century A.D."

Baba Farid's Role

Legend has it that Baba Farid, a Sufi saint from Punjab, meditated at this place for 40 days. His visit to Jerusalem and prayers at the Al-Aqsa mosque marked the beginning of this connection.

During his stay, he resided in a lodge. After Baba Farid's departure, the lodge evolved into a hospice for travelers from India, earning the name Zawiya Al-Hindiya, meaning "the Lodge of Hind."

Association with independent India

The leaders in Jerusalem sought assistance from Indians for the repair of the Lodge. Khwaja Nazir Hasan Ansari, a young man from Saharanpur, Uttar Pradesh, took on the task of repairing the lodge. The repairs were complete by 1924.

After India gained independence, Nazir Ansari sought official recognition for the lodge from the Indian embassy in Egypt, cementing its Indian identity. The Ansari family continues to maintain this hospice even today.

The UN Vote and India's Role
The UN resolution, calling for an immediate humanitarian truce in the Israel-Hamas conflict, received 120 votes in favour and 14 against. India's abstention is part of its diplomatic approach to the Gaza situation.

Implications of UN Resolution
UN General Assembly resolutions are not legally binding. However, they hold significant moral weight. The vote garnered support for international law and the proportionate use of force in Israel-Hamas conflict.

India's Abstention in UN Vote on Gaza Conflict
India abstained from a UN General Assembly vote concerning the Israel-Hamas conflict. India's stance in the Israel-Hamas conflict mirrors its approach in other global conflicts, like the Russia-Ukraine war. India has adopted balanced approach in the volatile Middle East.

UK, CANADA ALSO ABSTAIN

➤ UN General Assembly (UNGA) approves **non-binding resolution seeking a 'humanitarian truce' in Gaza,** leading to a cessation of hostilities between Israel and Gaza's Hamas rulers

120 VOTED FOR	14 AGAINST	45 ABSTAINED
Including China, France, Saudi Arabia, UAE, Oman, Yemen, Qatar, Pak, Syria, Indonesia, Sri Lanka & Bangladesh	Including Israel, US, Austria, Croatia, Czech Republic and Hungary and 5 Pacific Island nations	Including India, UK, Germany, Canada, Japan, Ukraine and South Korea

The Indian statement at the UN General Assembly expressed condemnation of violence, support for Israel, concern for Gaza's people, and a call for diplomacy and dialogue as a path to peace. It reaffirmed India's support for a Two-State solution in the Israel-Palestine issue.

20. India ranks 111 out of 125 countries in hunger index

India's performance
India ranks 111 out of a total of 125 countries in the Global Hunger Index (GHI) 2023. India's ranking is based on a GHI score of 28.7 on a 100-point scale, where 0 is the best score (no hunger) and 100 is the worst. This categorises India's severity of hunger as

"serious". Afghanistan, Haiti and 12 sub-Saharan countries performed worse than India on the GHI.

The Union government has contested India's performance for the third year in a row, citing flawed methodology.

What is Global Hunger Index?
The Global Hunger Index (GHI) measures and tracks hunger at global, regional and national level. The index is calculated annually, and the report is issued in October each year. Besides presenting GHI scores, each year the GHI report includes an essay addressing one particular aspect of hunger.

GHI was created in 2006 by the US-based International Food Policy Research Institute (IFPRI) and German NGO Welthungerhilfe. In 2007, the Ireland based NGO Concern Worldwide also became a co-publisher. However, in 2018, IFPRI gave up its involvement and the GHI became a joint project of Welthungerhilfe and Concern Worldwide.

GHI Scores
The Global Hunger Index measures hunger on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst, although neither of these extremes is reached in practice. The severity of hunger associated with the range of possible GHI scores is as follows:

Levels	Description	Numerical Value
Low hunger	Value less than 10	≤ 9.9
Moderate hunger	Value from 10, but less than 20	10.0–19.9
Serious hunger	Value from 20, but less than 35	20.0–34.9
Alarming hunger	Value from 35, but less than 50	35.0–49.9
Extremely alarming hunger	Value from 50 and above	≥ 50.0

Components of GHI
For each country in the list, the GHI looks at four indicators:
1. Undernourishment: Undernourishment reflects inadequate food availability. It is calculated by the share of the population whose calorie intake is insufficient.
2. Child Wasting: Child wasting reflects acute undernutrition. It is calculated by the share of children under the age of five who have low weight for their height.
3. Child Stunting: Child stunting reflects chronic undernutrition. It is calculated by the share of children under the age of five who have low height for their age.
4. Child Mortality: Child mortality reflects both inadequate nutrition and unhealthy environment. It is calculated by the mortality rate of children under the age of five.

Each country's data on the above four indicators is arranged on a 100-point scale. Thereafter, a final score is calculated after giving 33.33% weight each to components 1 and 4 (Undernourishment and Child Mortality) and giving 16.66% weight each to components 2 and 3 (Child Wasting and Child Stunting).

Countries with score of less than or equal to 9.9 are put under "low" hunger category; those with score between 10 and 19.9 are put under "moderate" hunger category; those with score between 20 and 34.9 are put under "serious" hunger category; those with score between 35 and 49.9 are put under "alarming" hunger category and those with score 50 and above are put under "extremely alarming" category.

GHI is a comprehensive measure of Hunger
Hunger is commonly understood in terms of food deprivation and is calculated based on the level of calorie intake. This is a very narrow definition of hunger.

GHI takes into account a very broad definition of hunger. It takes into account four key parameters. These parameters capture multiple dimensions of hunger such as not just inadequacy of calorie intake but also deficiency of micronutrients, providing a far more comprehensive measure of hunger. The GHI score is based on a formula which combines four indicators that together capture the multi-dimensional nature of hunger, including under-nourishment, child stunting, child wasting, and child mortality.

21. IORA and its importance for India

Why in news?
'Reinforcing Indian Ocean Identity' was the banner theme at the Indian Ocean Rim Association's (IORA) Council of Ministers (COM) held in Colombo on October 11, that was attended by foreign ministers and senior officials of the 23-nation grouping of countries.

What is the IORA and how was it formed?
The Indian Ocean Rim Association includes 23 countries from Africa, West Asia, South Asia, South East Asia, Australia and littoral states situated in and around the Indian Ocean. The grouping, whose apex body is the Council of Foreign Ministers that meet once a year, moves by rotation through members every two years. Sri Lanka took charge as Chair this year from Bangladesh, and India is Vice-Chair, meaning that the troika of IORA is within the South Asian region.
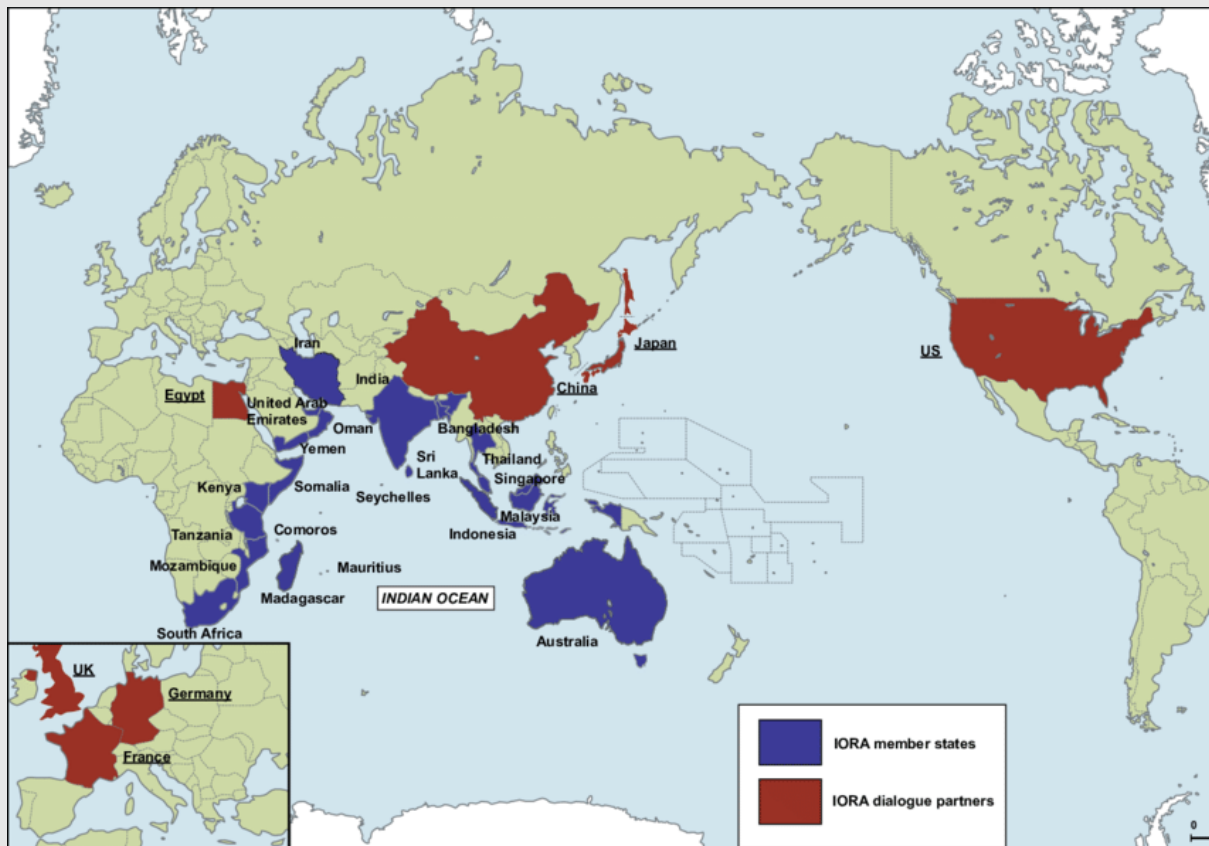
IORA's membership includes 23 countries: Australia, Bangladesh, the Comoros, France, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, the Maldives, Mauritius, Mozambique, Oman, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, the UAE and Yemen. It also has 11 dialogue partners: China, Egypt, Saudi Arabia, Germany, Italy, Japan, South Korea, Russia, Türkiye, the U.K. and the U.S.

While the IORA was formed in 1997 (then called the Indian Ocean Region-Association for Regional Cooperation) in Mauritius, its genesis came from a speech Nelson Mandela gave in Delhi in 1995. He was invited by then Prime Minister P.V. Narasimha Rao as the guest for Republic Day, and said at a ceremony that India and South Africa should explore "the concept of an Indian Ocean Rim of socioeconomic cooperation and other peaceful endeavours" that could help developing countries within multilateral institutions "such as the United Nations, the Commonwealth and the Non-Aligned Movement".

Why does the Indian Ocean Region matter?
A third of the world's population (2.6 billion people) live in the region, and 80% of global oil trade, 50% of the world's containerised cargo and 33% of its bulk cargo passes through it. The region produces a combined total of $1 trillion in goods and services and intra-IORA trade is billed at around $800 billion. India's other regional organisations, like SAARC (South Asian Association for Regional Cooperation) and

BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation), face their own challenges.

While the QUAD (Quadrilateral Security Dialogue), has made progress, it remains U.S.-led, along with military allies Australia and Japan. Meanwhile, China is actively trying to rope in India's neighbours with groupings like the Belt and Road Initiative (BRI), China-Indian Ocean Region Forum on Development Cooperation, China-South Asian Countries Poverty Alleviation and Cooperative Development Centre, which exclude India. IORA, however, remains a "safe space" for India and other countries of the region that wish to keep out the constant challenge of big-power rivalries. IORA membership is based on consensus, and Pakistan has not been admitted to the grouping since it first applied in 2001, on the basis that it has not extended MFN (most favoured nation) status to India, making the IORA a less contentious space for India as well, compared to groupings like the Shanghai Cooperation Organisation (SCO).

What does IORA focus on?
According to its charter, the IORA's seven priority areas are maritime safety and security; trade and investment facilitation; fisheries management; disaster risk management; academic, science and technology; tourism and cultural exchanges; and gender empowerment. The IORA also runs a special fund in addition, disbursing $80,000-$150,000 for project grants to members, and has a particular focus on climate change. It is clear that strategic issues and the importance of keeping a free and open sea lane, guarding against piracy, have become an integral part of the discussions.

Speaking at the conference this year, External Affairs Minister S. Jaishankar stressed the importance of maintaining the Indian Ocean as a "free, open and inclusive space" where there was "respect for sovereignty and territorial integrity" based on the UN Convention on the Law of the Seas, and in comments understood to be aimed at China, warned of the dangers of "hidden agendas, unviable projects or unsustainable debt" to countries in the Indian Ocean Region.

22. Revival of India-Sri Lanka Passenger Ferry Service after 40 years

Ferry Service Resumes After 40 Years
High-speed passenger ferry service between Nagapattinam, Tamil Nadu, and Kankesanthurai, Sri Lanka, was flagged off on October 14, 2023, after a four-decade hiatus.

The high-speed craft Cheriyapani departed Nagapattinam with 50 passengers and 12 crew members for a four-hour journey to Kankesanthurai, Sri Lanka.

Strengthening Cultural and Economic Ties

The ferry service aims to strengthen cultural, commercial, and civilisational ties between India and Sri Lanka, fostering connectivity and economic partnership.

The service is expected to ease the travel of pilgrims from Sri Lanka to religious places of significance in Tamil Nadu.

Ticketing and Operations

The Shipping Corporation of India partnered with a private agency to sell tickets for the ferry, which can accommodate 150 passengers. The service runs from Nagapattinam to Kankesanthurai and back, with specific departure and arrival times.

Temporary Suspension

The service will be temporarily suspended for two months due to rough weather conditions during the Northeast monsoon, with plans to resume in January.

23. The Aboriginal Referendum in Australia: Understanding the Proposal, Vote, and Implications

Introduction

The Aboriginal Referendum in Australia sought to establish an Aboriginal and Torres Strait Islander Voice to Parliament. This article delves into the specifics of the referendum, the voting process, and its significance.

What Was the Referendum About?
The referendum aimed to create an advisory body known as the Aboriginal and Torres Strait Islander Voice in the Australian Constitution, recognizing Indigenous peoples as the First Peoples of Australia.

Uluru Statement from the Heart
This proposal was inspired by the Uluru Statement from the Heart. The Uluru Statement from the Heart was the result of a years-long consultation process with Indigenous communities across Australia - known as the Uluru Dialogues - which culminated in the 2017 Uluru Summit. There, delegates settled on a model of constitutional recognition of Indigenous Australians which included the Voice.

Voting is compulsory in Australia, and a successful referendum requires a double majority, meaning it must garner majority voter support and majority state support. However, constitutional changes are rare in Australia, with only eight referendums succeeding since federation in 1901.

Referendum Results
The referendum resulted in approximately 40% "yes" votes and 60% "no" votes. Only the Australian Capital Territory voted "yes" by a majority, while all states returned majority "no" results.

The Voting Process
Political Divide
The referendum did not enjoy unanimous support across political parties. The Labor government supported a "yes" vote, while Liberal Queensland MP Peter Dutton strongly opposed the proposal.

Consequences of the Outcome The government is bound to respect the referendum result, with Prime Minister Anthony Albanese confirming that the Voice will not be pursued as an alternative legislative model.

The outcome represents a significant loss for the government, but its impact on Aboriginal and Torres Strait Islander people is even more substantial.

Disinformation Challenges

Representation for the Indigenous

Australians were asked to vote on whether to establish an Aboriginal and Torres Strait Islander Voice to Parliament. The Voice was proposed as a means of recognising them as the First Peoples of Australia in the Constitution

INDIGENOUS PEOPLE
Have inhabited Australia for around 60,000 years. They comprise several hundred groups that have their own histories, traditions and languages

POPULATION (2021 census)
Non-Indigenous
21,341,231
96.0%
Not stated
172,387
0.7%
Indigenous
812,728
3.3%

IDENTITY
Aboriginal 91.4%   Torres Strait Islander: 4.2%   Both 4.4%
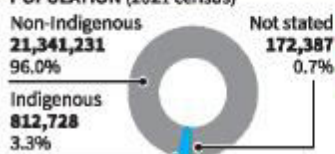
● Population plummets after British arrival in 1788, through dispossession, new diseases, slavery and killings

● Until as late as 1970s, one in three children were forcibly removed from their families for assimilation into White society. Government apologises for "Stolen Generations" in 2008

REFERENDUM RESULT
A majority of Australian voters have rejected the referendum, with at least 60% of the nation voting "no"

SOCIAL GAP
Indigenous people live around eight years less than non-Indigenous people and suffer disproportionately high rates of suicide and imprisonment

LIFE EXPECTANCY (2015-17)
Indigenous: Men 71.6   Women 75.6
Non-Indigenous: Men 80.2   Women 83.4
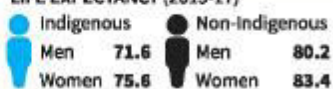
IMPRISONMENT
Around 15 times higher among Indigenous people

Gamilaraay man preparing to perform at Sydney's 2023 Indigenous festival

Sources: Reuters, Australian Government   Picture: Getty Images   © GRAPHIC NEWS

The referendum campaign was marked by disinformation and misinformation, often spread through social media, which influenced voters. The prevalence of such falsehoods raises questions about achieving constitutional change in an environment where multiple versions of "truth" circulate.

Conclusion

The Aboriginal Referendum in Australia, although unsuccessful, sparks discussions on the path forward and the need for a better understanding of Indigenous experiences and history. It highlights the challenges posed by disinformation and misinformation in contemporary democratic processes.

24. Vladimir Putin's 'Nuclear Briefcase' in China: Its History and Contents

Introduction

During a recent visit to China, Russian President Vladimir Putin was seen accompanied by officers carrying a mysterious "nuclear briefcase." This article explores the history and purpose of this enigmatic device.

What is the 'Nuclear Briefcase'?
The 'Nuclear Briefcase,' also known as 'Cheget,' is an integral part of Russia's system for authorizing nuclear strikes. It is designed to relay orders for a nuclear strike to the country's rocket forces. This system is interconnected with the 'Kazbek' electronic command-and-control network.

Usage and Key Figures
The 'Nuclear Briefcase' is carried by the Russian President, and it is also allocated to the Defence Minister and the Chief of General Staff. These three individuals are responsible for coordinating and executing potential nuclear strike orders. Notably, the President carries the briefcase during foreign visits.

Historical Use
The only known instance of a 'Nuclear Briefcase' being opened during a crisis occurred in 1995 when Russian officers mistook a scientific rocket launch for a hostile missile. The incident led to the briefcases being activated for planning a response. However, the crisis was averted, and the forces stood down within minutes.

System Operation

Upon receiving alerts of possible enemy action, the Russian electronic command-and-control networks are activated. The duty general conveys information to the other key figures holding the 'Nuclear Briefcases,' allowing them to monitor and make decisions related to the perceived threat.

Similar Devices in Other Countries

The United States also possesses a similar device officially known as the "Presidential Emergency Satchel," commonly referred to as the 'football.' This device allows the American President to authorize a nuclear attack and includes information on retaliatory options, classified site locations, and authentication codes. The Vice President also has a similar briefcase for continuity of authority.

Security Concerns

In recent times, there have been security concerns regarding the 'football.' Reports emerged in 2021 that during the January 2021 riots at the US Capitol, the Vice President's 'football' was close to the commotion. Additionally, past instances of misplaced codes under previous U.S. presidents, such as Jimmy Carter, Bill Clinton, and Ronald Reagan, highlight security challenges associated with these devices.

Conclusion

The 'Nuclear Briefcase,' a critical component of Russia's nuclear strike authorization system, is shrouded in mystery. Its historical use and its American counterpart, the 'football,' raise questions about the security and protocol surrounding these devices in an increasingly complex world.

25. Visa Shopping

Why in news?

The practice of 'visa shopping' has been gaining popularity in several Indian states, including Punjab, where travel companies often facilitate this setup for travellers. But what exactly is 'visa shopping,' and why are people engaging in it? What are its legal implications?

What is visa shopping?

Visa shopping refers to obtaining visas for countries that individuals may or may not visit during the granted visa period. This is because such visas can provide a gateway for people to enter their preferred countries, particularly in Europe, even if they have obtained a visa for another European nation.

Additionally, people who have no immediate plans to visit a specific country are also purchasing visas for such nations. This is to increase the chances of obtaining visas for countries of their choice in the future, given how the application process often takes a

long time or has chances of rejection. Also, visas usually remain valid for a few years after being issued.

How can a visa holder from one country in Europe enter another without obtaining a visa for that country?
One popular example of this is the 'Schengen Visa', which provides a 'golden opportunity' for travellers by allowing them to explore many European countries without the need for separate visas.

Through an agreement between European countries, the Schengen system was established in 1985. Under it, member countries form the Schengen area and people can travel freely between them without going through border controls. Once within the Schengen Area, travellers can move freely across more than 24 countries. The visa allows travellers to enter the region for short stays.

Many opt to apply for a Schengen Visa from a country with an easier application process. Once it is granted, travellers can traverse the Schengen region and reach their intended destination.

Are there legal issues involved in visa shopping?
This practice is not illegal if the traveller adheres to the norms and guidelines of the visa process and gets valid permission to stay in that country. Legal concerns arise if a person seeks a visa for a particular country but stays in another, or shows that his/her intentions were not to stay in that country but to only use it as an entry point.

If any person repeatedly engages in visa shopping, officials may become suspicious. Sometimes, countries raise an objection at the airport if a person's visa is of another European nation and entry is to another.

26. Canada recalls 41 diplomats from India and 1961 Vienna Convention

Recall of diplomats on ground of Parity
Amid the ongoing standoff between India and Canada, the Canadian government announced it has recalled 41 diplomats posted in India, and their family members, on October 20. Canada's Foreign Minister Melanie Joly said this was because they were "in danger of having immunity stripped on an arbitrary date" and that would have "put their personal safety at risk".

Earlier this month, India had sought 'parity' with Canada, asking it to downsize its diplomatic staff here. India has about 20 diplomats in Canada and said there should be a similar number of Canadian diplomats in India as well.

What led to Stand off?

The move followed a row over Canadian Prime Minister Justin Trudeau's remarks in Canadian Parliament in September 2023. He had then claimed a potential Indian government link to the killing of pro-Khalistan separatist leader Hardeep Singh Nijjar in Canada earlier this year — which India rejected, terming the claims to be "absurd" and "motivated".

Now, the US and UK have backed Canadian diplomats' presence. Further, they spoke of the Vienna Convention on Diplomatic Relations, which has also been mentioned by the Indian Ministry of External Affairs (MEA and the Indian Minister of Foreign Affairs, S Jaishankar.

What have the US and the UK governments said?
The US and UK backed Canada, stating that diplomats are required to be on the ground to resolve differences. US State Department spokesperson Matthew Miller said, "Resolving differences requires diplomats on the ground... We expect India to uphold its obligations under the 1961 Vienna Convention on Diplomatic Relations, including with respect to privileges and immunities enjoyed by accredited members of Canada's diplomatic mission."

What has India said?
India rejected Joly's contention, where she said that the "unilateral revocation of the diplomatic privilege and immunity is contrary to international law" and a violation of the Convention on Diplomatic Relations.

In a press release, the MEA said, "The state of our bilateral relations, the much higher number of Canadian diplomats in India, and their continued interference in our internal affairs warrant a parity in mutual diplomatic presence in New Delhi and Ottawa." It added, "Our actions in implementing this parity are fully consistent with Article 11.1 of the Vienna Convention on Diplomatic Relations."

What is the Vienna Convention on Diplomatic Relations?
The Vienna Convention on Diplomatic Relations (1961) is a United Nations treaty that set some common principles and terms on how countries must treat each other's diplomatic representatives, in order to ensure friendly relations and maintain proper communication channels between countries.

One prominent example of such principles is that of diplomatic immunity. It's the privilege of exemption from certain laws and taxes granted to diplomats by the country in which they are posted. It was framed so that diplomats can function without fear, threat or intimidation from the host country. Diplomatic immunity flows from two conventions, popularly called the Vienna Conventions — the 1961 Convention and the Convention on Consular Relations, 1963.

The 1961 Convention says, "Article 29: The person of a diplomatic agent shall be inviolable. He shall not be liable to any form of arrest or detention. The receiving State shall treat him with due respect and shall take all appropriate steps to prevent any attack on his person, freedom or dignity."

Today, 193 countries have ratified the convention, meaning they agree it should be legally binding on them. Ratification means that a country should seek approval for the treaty on the domestic level and enact a law in their country to give effect to it. India ratified it through the Diplomatic Relations (Vienna Convention) Act of 1972.

What does the 1961 Vienna Convention say about recalling diplomats?
Article 9 of the convention states that the receiving State may, at any time and without having to explain its decision, notify the sending State that the head of the mission or any member of the diplomatic staff of the mission is persona non grata or unwelcome.

"In any such case, the sending State shall, as appropriate, either recall the person concerned or terminate his functions with the mission," it says. Further, if the sending State refuses or fails within a reasonable period to carry out its obligations here, that is if they refuse to recall their diplomats, the receiving State may refuse to recognise the person concerned as a member of the mission.

Article 11, cited by the MEA in its press release, says, "In the absence of specific agreement as to the size of the mission, the receiving State may require that the size of a mission be kept within limits considered by it to be reasonable and normal, having regard to circumstances and conditions in the receiving State and to the needs of the particular mission."

On Canadian diplomatic presence in India, EAM Jaishankar said on Sunday, "Parity is very much provided for by the Vienna Convention, which is the relevant international rule on this. But in our case, we invoked parity because we had concerns about continuous interference in our affairs by Canadian personnel."

Around 2017, Russia and the United States also asked for each other's diplomats to be recalled over the principle of parity and reduced the presence of their missions, following a low in their relations.

27. India's Olympic Hosting Aspirations

Introduction
Prime Minister Narendra Modi has publicly expressed India's interest in hosting the Olympics, potentially in 2036. This article explores the process of selecting Olympic host cities and the changes introduced in recent years.

Traditional Host City Selection

In the past, cities interested in hosting the Olympics followed a multi-year evaluation process, submitting letters of interest to the International Olympic Committee (IOC). This process involved rigorous inspections and voting at the IOC. It often led to excessive spending among the bidders, to secure rights. The host city was decided seven years in advance as per the Olympic Charter.

The Olympic Agenda 2020

Under the leadership of Thomas Bach, the IOC introduced the Olympic Agenda 2020, which aimed to make host city selection more flexible, sustainable, and cost-effective. This marked a shift from the traditional approach. Thomas Bach became president of IOC in 2013.

Emphasis on Flexibility

The new approach allows for flexibility by eliminating the seven-year rule. Host cities can now be selected as late as after 2030 (for 3026 Olympics). It involves a two-stage process, including a continuous dialogue and a targeted dialogue, allowing potential hosts to engage with the IOC in a non-committal manner.

Continuous Dialogue

The continuous dialogue is a preliminary stage where potential hosts discuss their vision for the Games and long-term legacies. They can develop their own master plans and even collaborate with other cities or countries.

Targeted Dialogue

In the targeted dialogue phase, preferred host candidates engage in more determined discussions, answering the IOC's questions and providing guarantees on various aspects, including infrastructure, security, and public services.

Sustainability and Cost-Effectiveness

To ensure long-term sustainability, host cities are encouraged to use existing or temporary venues and align new infrastructure with existing development plans. All Olympic Games from 2030 onward must adhere to the IOC's climate positive commitment.

Potential 2036 Olympic Hosts

Apart from India, several nations have expressed interest in hosting the 2036 Olympics, including Mexico, Indonesia, Turkey, and Poland. Other potential bidders include Egypt, South Korea, China, Qatar, Hungary, Italy, Denmark, Canada, and Germany, each with unique considerations and potential impacts.

In conclusion, the new norm in Olympic host city selection emphasizes flexibility, sustainability, and cost-effectiveness, marking a departure from the traditional process.

India's aspiration to host the Olympics in 2036 aligns with this evolving approach to selecting host cities.

Death Sentence

Eight former Indian Navy personnel have been sentenced to death by a court in Qatar. They were arrested by Qatari authorities on August 30, 2022. Their trial began on March 29 this year, they were put in solitary confinement and now they have been awarded death sentence.

The reasons for the veterans' long custody in Qatar, and the awarding of the death penalty, are not in the public domain. The families of the veterans were not apprised of the formal charges under which the trial was being held.

What were they doing in Qatar?

The eight former Navy personnel were working at Al Dahra Global Technologies and Consultancy Services, a defence services provider company.

The company is owned by an Omani national, Khamis al-Ajmi, a retired squadron leader of the Royal Oman Air Force. This man too, was arrested along with the eight Indians, but he was released in November 2022.

One of the eight former navy personnel, Commander Purnendu Tiwari (retd), who was Managing Director of the company, received the Pravasi Bharatiya Samman in 2019 for his services in furthering the bilateral relationship between India and Qatar.

What are the charges against the men?

The charges against the men were never made public, but the fact they were put in solitary confinement led to speculation that they had been detained in connection with a security-related offence.

What is the nature of the relationship between India and Qatar?

The two countries have had friendly relations for decades. Since Prime Minister Manmohan Singh's visit to Qatar in November 2008, the first by an Indian Prime Minister, the relationship has burgeoned.

The Emir of Qatar, Sheikh Tamim Bin Hamad Al Thani, visited India in 2015, and Prime Minister Narendra Modi went to Qatar in 2016. Approximately 800,000 Indians live and work in Qatar. Indians are the largest expatriate community in Qatar.

In 2021, India was among the top four export destinations for Qatar; it is also among the top three sources of Qatar's imports. The bilateral trade is valued at $15 billion, which is mostly LNG and LPG exports from Qatar worth over $13 billion.

Reaction of External Affairs Ministry
The Ministry of External Affairs said that it was "deeply shocked by the verdict of death penalty" and was "awaiting the detailed judgement". The Ministry also said that it was "exploring all legal options".

29. China's Belt and Road Initiative: A Decade of Progress and Challenges

Ten Years of BRI
The Belt and Road Initiative (BRI) marks a decade since its inception, spanning continents with significant investments and facing scrutiny over its sustainability.

Evolution of BRI
Initial Vision: President Xi Jinping introduced the Silk Road Economic 'Belt' in 2013, aiming to enhance trade and infrastructure routes between Asia and Europe, emphasizing connectivity through Central Asia.

Maritime 'Road' Added: Subsequently, the maritime 'Road' component was introduced, focusing on connecting China with Southeast Asia, Europe, and Africa through port, bridge, and industry corridor development.
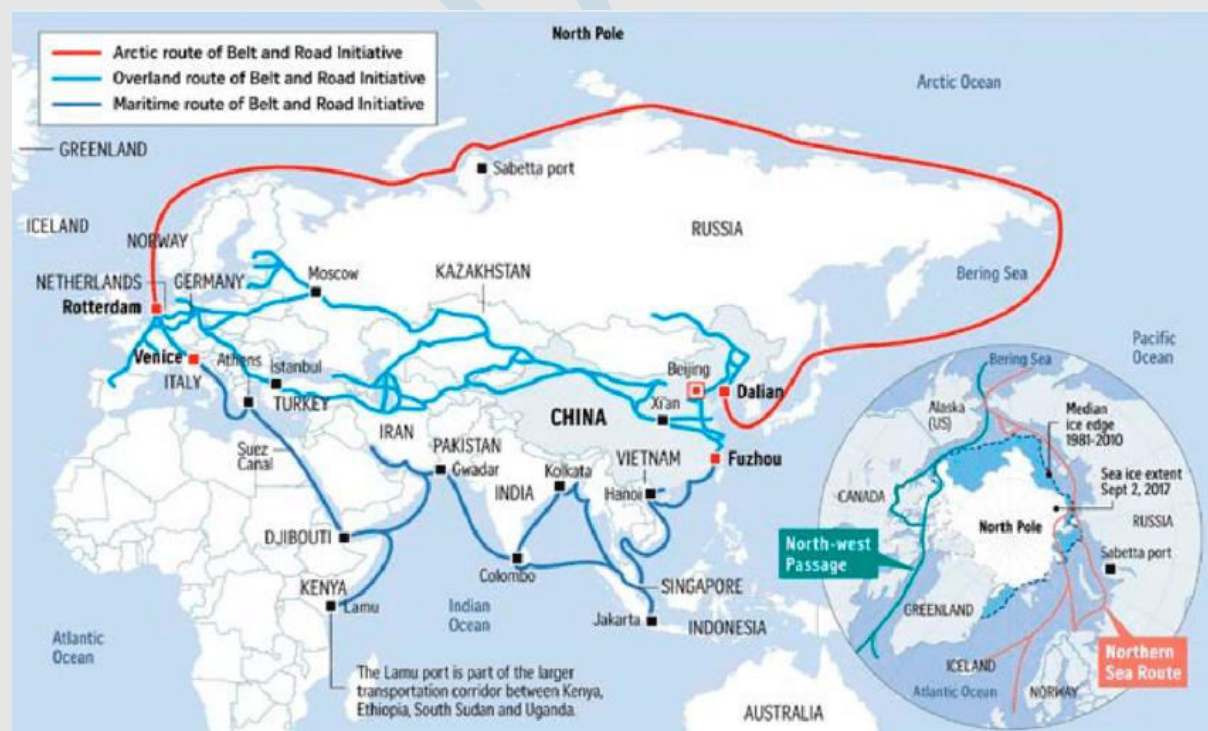
Principles: The BRI was initially based on five principles, later expanded to six, including policy coordination, infrastructure connectivity, trade, financial integration, people-to-people connections, and industrial cooperation.

BRI's Global Impact

Global Reach: The BRI has garnered support from over 150 countries and 30 international organizations, with 3,000 projects worth $1 trillion currently underway worldwide.

International Economic Corridors: Initially, six international economic corridors were proposed, but a list of 35 major corridors/projects has since been introduced, impacting major economies globally.

Challenges and Criticisms

Debt Concerns: Some nations have accused China of 'debt trap diplomacy,' aiming to acquire assets if countries cannot repay loans.

Sustainability and Transparency: Questions about the sustainability and transparency of BRI projects have been raised, particularly by India, the United States, and the EU.

Current Status and Perceptions
Cooling Enthusiasm: Geopolitical tensions and concerns have led to a reduced number of heads of state attending recent BRI forums, signaling a cooling off in initial enthusiasm.

EU's Changing View: The EU, initially positive about the BRI, now expresses growing scepticism about Beijing's intentions and project implementation.

Italy's Symbolic Departure: Italy's potential departure from the BRI signifies a setback, as it was the only G7 country to formally join the initiative.

China-Pakistan Economic Corridor (CPEC)
China–Pakistan Economic Corridor (CPEC) is a 3000 km Chinese infrastructure network project undertaken in Pakistan. This sea-and-land-based corridor is aimed to secure and reduce the passage for China's energy imports from the Middle East by avoiding the existing route from the Straits of Malacca between Malaysia and Indonesia, which in case of war could be blocked and thus hampering the Chinese energy dependent economic avenues.

Developing a deep water port at Gwadar in the Arabian Sea and a well built road and rail line from this port to Xinjiang Province in western China would be a shortcut for boosting the trade between Europe and China.[1][9] In Pakistan, it aims to overcome an electricity shortfall, infrastructural development and modernize transportation networks. Along with shifting it from an agricultural based economic structure to industrial based.

India's Perspective

India's Concerns: India's reservations about the BRI include projects in the Indian Ocean. India is also opposed to CPEC because it passes through Pakistan Occupied Kashmir, which is Indian territory.

AIIB Participation: While India refrains from endorsing the BRI, it actively participates in the China-headquartered Asian Infrastructure Investment Bank (AIIB).

Xi Jinping's Ambitious Endeavor

BRI as Xi's Legacy: The BRI represents President Xi's most ambitious foreign policy initiative, aimed at creating a China-dominated world and cultivating diplomatic leverage.

Adjusting Ambitions: In response to challenges, China is reorienting BRI projects toward green and smaller-scale development initiatives, while maintaining its dominance in global diplomacy and economics.

In summary, the Belt and Road Initiative, after a decade, faces both challenges and opportunities, with a changing global landscape and evolving perceptions, including concerns about sustainability and transparency, prompting China to adjust its ambitions and strategic direction.

Economics

1. Announcement to Establish National Turmeric Board

Introduction
• Prime Minister Narendra Modi has announced the setting up of a National Turmeric Board, fulfilling a long-pending demand from the stakeholders in the sector.
• The announcement was made at the Global Turmeric Conference 2023 in Mumbai on September 27.

What will the Board do?
• The activities of the Board are broadly would be aimed at (i) enhancement of production, productivity & quality; (ii) export promotion for achieving higher value returns for Indian turmeric and (iii) supporting development of Domestic market.
• The details about structure and functioning of the board are not yet public. However, it is expected that the board will function on lines of other existing boards such as coffee and tea boards.

2. Google's Chromebook Production in India: Significance and Impact

Google's Manufacturing Partnership
Google has initiated the production of its Chromebook laptops in India in collaboration with HP, laptop manufacturer. This development marks a significant step in India's efforts to strengthen its electronics manufacturing sector.

Global Supply Chain Diversification
Amidst worldwide geopolitical uncertainties, prominent companies are seeking to diversify their supply chains. Google's move to manufacture Chromebooks in India is part of this trend, positioning India as an alternative manufacturing hub to China.

Closure of PLI Scheme and Import Challenges
India recently closed applications for its Rs 17,000 crore production linked incentive (PLI) scheme for IT hardware, including laptops and servers. The country has also taken steps to reduce imports from China, particularly in the IT hardware sector.

Production Location and Purpose
The Chromebook laptops will be manufactured at HP's Flex facility near Chennai, which has been producing laptops and desktops since August 2020. Production began on October 2, with a focus on meeting the demand for affordable PCs, primarily in the education sector.

Competing with Windows

While Chromebooks are widely used in educational institutions worldwide, they have yet to gain significant popularity in India, where Windows-based laptops dominate. Google's move aims to strengthen its competition with Windows computers from companies like Dell, Lenovo, and Asus.

Impact on Imports
India has witnessed a surge in imports of electronic goods and laptops in recent years, with a significant share coming from China. The government's production-linked incentive (PLI) scheme attracted over 40 companies, including major players like Dell, HP, Asus, Acer, and Lenovo.

Import Management System
To reduce import dependence on China, India has introduced an 'import management system' requiring companies to register and disclose import-related data. Eventually, companies will need to source from "trusted sources" as per government guidelines.

3. Inclusion of Indian government bonds in JP Morgan index
• JP Morgan includes Indian government bonds in its GBI-EM (government bonds in its emerging markets index).
• Other global investment firms also consider adding India to their investment indexes.

JP Morgan's Decision
• Government bond inclusion would be staggered over ten months from June 28, 2024, to March 31, 2025.
• Inclusion of Indian government bonds in GBI-EM would mean flow of foreign investment into these bonds. A part of investment into GBI-EM would automatically be invested into Indian government bonds.
• Exclusion of Russia and China from the index has narrowed the choice of investors.

Impact on India's Economy
• The inflows will boost foreign exchange reserves. Estimated inflows of $25-30 billion into government securities market are expected.
• However, higher inflows may strengthen the rupee, leading to its appreciation.
• Appreciation of rupee would lead to costlier imports and hence retail inflation.
• Foreign Portfolio investment flows are volatile and subject to external factors. External shocks may trigger capital flight and market volatility.

In conclusion, India anticipates a potential economic boost from foreign inflows, but effective risk management and market stability are vital.

4. The Geographical Indication Tag for Goan Cashews

Introduction

In recent news, Goan cashews have been granted a Geographical Indication (GI) tag. This recognition carries significant implications for the cashew industry in Goa. Let's explore how cashews became a major contributor to Goa's economy, the challenges faced by cashew producers, and how the GI tag can help.

Significance of the GI Tag
A GI tag signifies that a product originates from a specific geographical region and possesses unique characteristics and qualities. It serves as a product quality recognition in the international market. Goa Chief Minister Pramod Sawant views this as a milestone for the state's cashew industry.

Differentiating Authentic Goan Cashews
Cashew manufacturers and processors hope that the GI tag will assist consumers in distinguishing genuine Goan cashews from those sourced from outside the state, which are often misleadingly marketed as 'Goan cashews.' This has been a concern as small traders from other states sell cheaper imported cashews labeled as Goan cashews, impacting the reputation of Goan cashews.

The Importance of the GI Tag
The GI tag could enhance the export potential of Goan cashews. However, strict action against illegal marketing practices is essential to protect the value of the GI tag.

Historical Significance of Cashews in Goa
Cashew was introduced to Goa by the Portuguese in the 16th century and became an integral part of the state's identity. It transitioned from a crop for afforestation and soil conservation to an economic asset. Goan prisoners in Portuguese territory discovered the edible value of cashew nuts during Goa's freedom movement.

Evolution of Cashew Production
The cashew industry in Goa gradually expanded, moving from cottage industry status to large-scale production. Cashew kernels were exported to countries like the USA, facilitating foreign trade.

Foreign Investment and Export
Foreign investors established factories in Goa due to lower import duties and favorable conditions, significantly contributing to the region's industrial production. By 1961, the cashew processing industry accounted for a substantial portion of industrial output in Goa and was a major export.

Summary
In summary, the GI tag for Goan cashews aims to protect the authenticity of these products and differentiate them from cheaper imitations in the market, ultimately benefiting the cashew industry in Goa.

Introduction
This article discusses the recent amendment to a key law in India that specifies competitive royalty rates for the mining of three strategically significant minerals: lithium, niobium, and rare earth elements (REEs). These changes are aimed at reducing imports of these critical minerals, which are crucial in various supply chains, including electric vehicle batteries, energy storage devices, and high-end motors.

The Removal of Minerals from the List
The government's decision to remove six minerals by amending the Second Schedule of the Mines and Minerals (Development and Regulation) Act, 1957, including lithium and niobium, from the list of 'specified' atomic minerals has paved the way for private sector participation through the auctioning for these minerals at concessional royalty rates.

Significance of the Move
The specification of new royalty rates aligns India's rates with global benchmarks and promotes commercial exploitation through auctions. Competitive royalty rates attract bidders to future auctions.

This move is significant in India's commitment to energy transition and achieving net-zero emissions by 2070.

New Royalty Rates
Following the Cabinet's decision, the royalty rates for these minerals have been set as follows: 3% for lithium based on the London Metal Exchange price, 3% for niobium based on the average sale price, and 1% for REEs based on the Rare Earth Oxide's average sale price.

Item No. 55 of The Second Schedule of the MMDR Act, 1957, currently specifies a royalty rate of 12% of the average sale price (ASP) for minerals that are not specifically listed in that Schedule. This rate is much higher than global benchmarks.

Focus on Lithium
India's exploration efforts extend to extracting lithium from various sources, including Jammu & Kashmir, Rajasthan, Gujarat, Odisha, and Chhattisgarh. In February, 'inferred' lithium resources of 5.9 million tonnes were established in Jammu & Kashmir. Lithium is a vital ingredient of rechargeable lithium-ion batteries that power electric vehicles, laptops, and mobile phones.

This push for domestic lithium production is also part of India's strategy to reduce reliance on lithium imports, particularly from China.

Rare Earth Elements in EVs

Rare earth elements play a crucial role in the electric vehicle (EV) supply chain, particularly in the motors. These elements, including neodymium, terbium, and dysprosium, are used in permanent magnet motors. However, global production and processing of rare earths are heavily concentrated in China.

Moreover, rare earths are typically mined by digging vast open pits, which can contaminate the environment and disrupt ecosystems. When poorly regulated, mining can produce waste-water ponds filled with acids, heavy metals, and radioactive material that might seep into groundwater.

Niobium's Applications

Niobium is a silvery metal with a layer of oxide on its surface, which makes it resistant to corrosion. It is used in alloys, including stainless steel, to improve their strength, particularly at low temperatures.

Alloys containing niobium are used in jet engines, beams and girders for buildings, and oil and gas pipelines. Given its superconducting properties, it is also used in magnets for particle accelerators and MRI scanners.

The main source of this element is the mineral columbite, which is found in countries such as Canada, Brazil, Australia, and Nigeria.

6. Angel tax for start-ups

Meaning

Angel tax – which is income tax at the rate of 30.6 per cent – is levied when an unlisted company issues shares to an investor at a price higher than its fair market value. Earlier, it was imposed only on investments made by a resident investor. However, the Finance Act 2023 proposed to extend angel tax even to non-resident investors from April 1.

What were the changes for angel tax in Budget 2023-24?

The Finance Act, 2023, had amended Section 56(2)(viib) of the Income-tax Act. The provision, colloquially known as the 'angel tax' was first introduced in 2012 to deter the generation and use of unaccounted money through the subscription of shares of a closely held company at a value that is higher than the fair market value of the firm's shares.

The provision had stated that when an unlisted company, such as a start-up, receives equity investment from a resident for issue of shares that exceeds the face value of

such shares, it will be counted as income for the start-up and be subject to income tax under the head 'Income from other Sources' for the relevant financial year. With the latest amendment, the government had proposed to also include foreign investors in the ambit, meaning that when a start-up raises funding from a foreign investor, that too will now be counted as income and be taxable. The DPIIT-recognised startups were excluded from the angel tax levy.

Exemptions to few countries
In May, the Finance Ministry had exempted investors from 21 countries including the US, UK and France from the levy of angel tax for non-resident investment in unlisted Indian start-ups. However, the list excluded investment from countries like Singapore, Netherlands and Mauritius – which have traditionally been key geographies for start-ups to raise money.

7. Dearness allowance hike for govt employees

DA hike
The Union Cabinet Wednesday approved a 4-percentage point hike in dearness allowance and dearness relief for central government employees and pensioners to 46 per cent from 42 per cent. The hike would be effective retrospectively from July 1.

Outgo for the exchequer
With this hike, the total outgo for the exchequer would be Rs 12,857 crore per year. This hike will benefit about 48.67 lakh central government employees and 67.95 lakh pensioners, an official statement said.

Rationale behind DA
The dearness allowance for employees and pensioners is estimated on the basis of the latest Consumer Price Index for Industrial Workers (CPI-IW), which is released by the Labour Bureau every month.

The last revision in DA was done on March 24, 2023, and was effective from January 1, 2023. The Centre had increased the DA by four percentage points to 42 per cent based on the percentage increase in the 12-monthly average of the All India Consumer Price Index for the period ending December 2022. DA is provided to government employees and pensioners factoring in the rising prices and the cost of living.

8. Understanding the Regional Rapid Transit System (RRTS) and Its Significance

Introduction
The Regional Rapid Transit System (RRTS) is an ambitious mass rapid transit initiative in India, dedicated to enhancing regional connectivity. Its upcoming inauguration by

Prime Minister Narendra Modi marks a significant milestone in India's transportation sector.

What is the RRTS Project?
The RRTS is an integrated, high-speed rail network aiming to facilitate balanced and sustainable urban development across the National Capital Region (NCR). Its inception dates back to a comprehensive study initiated by the Indian Railways in 1998-99, subsequently gaining momentum through the National Capital Region Planning Board's (NCRPB) vision in the "Functional Plan on Transport for NCR-2032."

The Namo Bharat Initiative by NCRTC
The National Capital Region Transport Corporation (NCRTC), a joint venture of the Central government and the governments of Delhi, Haryana, Rajasthan, and Uttar Pradesh, has spearheaded the construction of the RRTS, popularly known as Namo Bharat, under the Ministry of Housing and Urban Affairs.

RRTS vs. Existing Metro and Railway Systems
Distinguishing itself from conventional metro and railway systems, the RRTS offers increased speed and connectivity for commuters traversing longer distances across the NCR, providing enhanced comfort and frequency.

Objectives Behind the RRTS Project
The RRTS project is geared towards unlocking the NCR's full potential by improving multi-modal connectivity, reducing congestion, fostering economic growth, and creating employment opportunities across the region's diverse suburban landscape.

The Corridors and Operational Speed
The RRTS project encompasses the development of eight corridors, with phase I focusing on the construction of three key corridors and the potential for further expansion in the future. The operational speed of the RRTS trains is expected to be between 160 km/hour and 180 km/hour, surpassing the capabilities of existing metro systems.

Inauguration and Future Prospects
The upcoming inauguration by PM Modi will mark the unveiling of the 'priority section,' covering a 17-km stretch of the Delhi-Ghaziabad-Meerut corridor, a significant step towards the project's full operationalization by 2025. This initiative is expected to revolutionize the NCR's transportation landscape, catering to the needs of a rapidly growing urban population.

India's first
Rapid rail unveiled: The 82-Km Long Delhi-Ghaziabad-Meerut RRTS Corridor will have 25 stations

82 Km Approx length of the corridor

55 Min Approx travel time from Meerut to Jangpura

9. How Multilateral Development Banks have lent to India

What are Multilateral Development Banks?
Multilateral Development Banks are institutions whose members include multiple developed and developing countries, which have to fulfil certain lending obligations to facilitate developmental objectives.

They provide financing and technical assistance to countries and organisations undertaking projects across sectors including transport, energy, urban infrastructure, and waste management. Usually, developed countries in MDBs contribute to the lending pool while developing countries primarily borrow from these institutions to fund development projects.

MDBs lending to India
MDBs have played a crucial role in India's development journey by financing key infrastructure projects with longer gestation periods.

World Bank: The World Bank, established in 1944, has committed to lending worth $97.6 billion in India, including all active and closed projects. Of the total commitments, $18.7 billion (19 per cent) have been committed to projects in the public administration sector, $14.8 billion (15 per cent) to the agriculture, fishing and forestry sector, and $10.6 billion (11 per cent) to the transport sector.

Asian Development Bank: The Manila-based Asian Development Bank, formed in 1969, has cumulatively committed to assistance worth $59.7 billion in India for project

and technical assistance. Of the total assistance, $20.2 billion (34 per cent) has been committed to the transport sector, $15 billion (25 per cent) to the energy sector, and $6.7 billion (10 per cent) to the urban infrastructure sector.

Of the $2 billion it committed in 2022, $1.8 billion was committed to sovereign projects, for which the loan amount is guaranteed by either the central, state, or local government(s), and just $0.2 billion to non-sovereign projects.

Asian Infrastructure Investment Bank: The Beijing-headquartered Asian Infrastructure Investment Bank (AIIB), which was formed in 2016, has approved financing worth $9.9 billion in India. Of this, $4.2 billion (42 per cent) has been approved for the transport sector, $1.4 billion (14 per cent) for the energy sector, and $1.25 billion (12.6 per cent) for economic resilience.

Of the total 42 projects for which AIIB has approved financing, 29 are sovereign projects and 13 are non-sovereign projects.

European Investment Bank: The European Investment Bank, established in 1958, has signed off on 22 projects in India with a cumulative value of Euro 4.5 billion. Of the total amount, Euro 2.45 billion were signed off for the transport sector and Euro 1.5 billion for the energy sector.

10. Informing Customers About Credit Score Checks

New RBI Directive for Credit Information Companies
When you apply for a loan, the bank often assesses your credit score to determine your creditworthiness. To enhance transparency, the Reserve Bank of India (RBI) has issued new guidelines for credit information companies (CICs) regarding customer notifications in credit-related processes.

These new guidelines will take effect within six months from the announcement.

Customer Alerts for Credit Score Access
RBI instructs CICs to send SMS or email alerts to customers whenever their Credit Information Report (CIR) is accessed by banks or non-banking finance companies (NBFCs).

Alerts for Default or Days Past Due
In addition, banks and NBFCs must inform customers via SMS or email when submitting information to CICs about defaults or Days Past Due (DPD) on existing credit.

Understanding Credit Information Companies (CICs)

CICs are entities responsible for collecting and analyzing credit information for individuals and businesses across the country. Based on this information, a CIC calculates and generates credit scores for individuals and credit ranks for companies as per their creditworthiness and past credit history.

Impact of Credit Scores on Loans
A customer with a high credit score can obtain loans at favorable rates. Conversely, a low credit score, often resulting from defaults on previous loans, may hinder loan approvals. However, credit scores are just one aspect that lenders consider in loan approvals.

Prominent CICs in India
Notable CICs in India include TransUnion CIBIL Ltd, Equifax India, and CRIF High Mark. CICs assign credit scores within the 300 to 850 range. A score of 700 is typically considered good.

Accessing Credit Scores
Customers can typically access their credit scores from CICs, often requiring payment. However, the RBI has mandated that CICs offer a "Free Full Credit Report (FFCR)" once a year to individuals whose credit history is available. The FFCR link is required to be prominently displayed on their websites so that individuals are able to access their report conveniently.

Correcting Inaccurate Data
Customers have the option to request corrections to their Credit Information Reports. Banks and NBFCs should inform customers of the reasons for rejecting data correction requests, as specified in the RBI's circular. A list of reasons for rejection should be shared by CICs with all credit institutions.

1. India's Phosphorus Scarcity and Sewage as its Solution

India is facing a phosphorus scarcity crisis due to limited global reserves. Phosphorous is crucial for agriculture. Sewage may offer a sustainable solution to this problem.

Historical context
• Early agriculture recognized the need to replenish soil nutrients.
• Advancements in the 19th century led to synthetic fertilizers based on nitrogen, phosphorus, and potassium.
• Synthetic fertilizers revolutionized agriculture and boosted global food production.

Phosphorus Scarcity
• Phosphorus is scarce and primarily exists in specific geological formations.
• Cadmium, a toxic heavy metal, coexists with phosphorus in some reserves.

Geopolitical Concerns
• A few countries, including Morocco and Western Sahara, control most phosphorus reserves.
• Cadmium in fertilizers poses health risks, which led to EU regulations.
• Limited cadmium-free phosphorus sources raise global concerns.

India's Phosphorus Dependency
• India is the largest importer of phosphorus, mostly from cadmium-laden West African deposits.
• Cadmium absorption is a concern, particularly for crops like paddy.
• Balancing health and agriculture cost challenges India's phosphorus use.

Phosphorus Disposal Challenges
• Only a fifth of mined phosphorus is consumed through food.
• Phosphorus from food and sewage enters water bodies, causing pollution such as eutrophication of water bodies. Eutrophication refers to increase in nutrients of water bodies, which further leads to algal blooms and oxygen depletion in water bodies.

Exploring Solutions
• Reducing chemical fertilizer use through precision agriculture can mitigate phosphorus scarcity.
• Recycling phosphorus from urban sewage emerges as a promising solution.

Mining Phosphorus from Sewage

• Collecting urine, rich in phosphorus, can create a local fertilizer source.
• Retrofitting sewage treatment plants to recover nutrients, like phosphorus, is feasible.
• Phosphorus mining from sewage enables self-sufficiency and addresses water pollution.
• Incentives for reducing chemical fertilizer use and sewage mining need to be established.

2. Gujarat's Ban on Conocarpus Plants

In a recent move, the Gujarat government has imposed a ban on the cultivation of Conocarpus trees, citing environmental and health concerns.

Environmental and Health Impacts of Conocarpus
• Conocarpus trees were found to cause cold, cough, asthma, allergies, and other health issues due to pollen dispersion during the winter.
• The extensive root systems of Conocarpus trees led to damage to telecommunication lines, drainage systems, and freshwater infrastructure.
• Conocarpus leaves are unpalatable to plant-eating animals, affecting local fauna.

Similar Actions in Other States
Gujarat is not the only state to take action against non-indigenous tree species. Other states have also implemented measures to address the ecological challenges posed by such trees.

Delhi's Efforts to Remove Vilayati Kikar
• Delhi initiated efforts to remove the Vilayati Kikar (Prosopis juliflora) from the Central Ridge in 2018.
• Vilayati Kikar, introduced by the British, grew rapidly and disrupted the local ecosystem by outcompeting native trees.
• The tree also contributed to water table depletion and negatively impacted local fauna.
• Delhi's approach involves shortening the canopy of these trees, planting more native species, and addressing water depletion issues.

Kerala's Experience with Eucalyptus Trees
• The British introduced Eucalyptus trees to Kerala's Munnar region for fuel use in tea plantation boilers.
• In 2018, the state forest department halted the cultivation of acacia and eucalyptus in forest areas.
• Research revealed that invasive foreign plants like acacia, mangium, and eucalyptus reduced fodder availability, leading to conflicts between animals and human settlements.
• The cultivation of these alien plants also harmed the quality of forest habitats.

Conclusion

Gujarat's ban on Conocarpus trees is part of a broader effort by several states to mitigate the negative impacts of non-indigenous tree species on their local environments and ecosystems. These actions are aimed at preserving the ecological balance and enhancing the well-being of both the environment and the residents of these regions.

3. Punjab's Decision to Ban PUSA-44 Paddy Variety

Introduction: Ban on PUSA-44 Paddy Variety

Punjab Chief Minister Bhagwant Singh Mann recently declared a ban on the cultivation of the PUSA-44 paddy variety starting from the next year. This decision raises questions about why the state is taking this action, especially when this variety was previously highly favored by Punjab's farmers.

Origin and Popularity of PUSA-44

Development of PUSA-44: PUSA-44 was created in 1993 by the Indian Council of Agricultural Research (ICAR) in Delhi. Initially, Punjab's farmers adopted it in limited areas.

Widespread Adoption: Due to its impressive yield, Punjab's farmers expanded the cultivation of PUSA-44, making it dominant in paddy farming, covering 70 to 80% of the total paddy cultivation area in the state.

Yield Comparison

High Yield of PUSA-44: Farmers reported a significantly higher yield with PUSA-44, producing nearly 85 to 100 quintals per acre, compared to 28 to 30 quintals per acre from other paddy varieties.

Impact on Income: The higher yield meant increased income for farmers, potentially adding Rs 15,000 to 22,000 per acre, considering the Minimum Support Price (MSP) for paddy.

Reasons for Punjab's Decision

Long Duration Variety: PUSA-44 has an extended growth period, taking around 160 days to mature, which is significantly longer than other varieties. This requires more irrigation cycles, straining Punjab's already depleted groundwater.

Water Scarcity: Punjab faces severe groundwater depletion, with many areas declared 'dark zones' where groundwater levels have dropped substantially.

Stubble Burning: PUSA-44 exacerbates the issue of stubble burning. Its late harvest in October leaves farmers with limited time for proper stubble disposal before sowing winter crops, contributing to air pollution.

Stubble Quantity: PUSA varieties generate around 2% more stubble than shorter-duration varieties, compounding the stubble burning problem.

Conclusion: Balancing Agriculture and Environmental Concerns
The ban on PUSA-44 paddy variety in Punjab stems from the need to address water scarcity, reduce stubble burning, and balance agricultural practices with environmental sustainability. While it may impact farmers' income, it aims to ensure a more responsible and sustainable approach to farming in the state.

4. Why India is Launching a National Framework for Climate Services

India is introducing a National Framework for Climate Services (NFCS) led by the India Meteorological Department (IMD) to streamline climate information and services for various sectors and manage climate-related risks. This initiative is critical for sectors such as agriculture, energy, disaster management, health, and water.

The Global Framework for Climate Services (GFCS)
The NFCS is based on the Global Framework for Climate Services (GFCS), a global partnership aiming to enhance the production and utilization of climate information and services. The GFCS fosters collaboration between researchers and users to make informed, long-term decisions. It generates high-quality climate data and information for various sectors.

The announcement to establish a GFCS was made during the third World Climate Conference held in Geneva in 2009. This framework is led by National Meteorological and Hydrological Services (NMHS) in their respective nations. The framework includes active participation of policymakers, planners, investors and vulnerable communities or sectors, as they need climate information and services in a user-friendly format, so that they can prepare for expected trends and changes in the long run.

What the NFCS Will Accomplish
The NFCS aligns with the GFCS but caters to India's specific weather and stakeholder requirements. The IMD is the nodal agency for implementing the national framework. In addition to the identified sectors, India can incorporate other relevant sectors over time, such as transport and tourism.

Initially, the NFCS will address operational gaps between various agencies in need of climate services, including hydrology, power, renewable energy, transport, dams, irrigation, and health agencies at central and state levels.

Why the NFCS is Essential

The IMD, with a history dating back to 1873, has excelled in providing high-quality weather services, particularly for the Indian subcontinent. However, there are gaps in data coverage across terrains and seas, preventing comprehensive climate predictions. Moreover, there is a lack of long-term (100 years or more) climatological data.

The NFCS aims to bolster the observational network, enhance data flow, and utilize this data for weather and climate modeling. It will create tailored data and information products to support decisions related to agriculture, health, population distribution, infrastructure, and more.

Implementation of the NFCS

Since the 2009 declaration of frameworks for climate services, several countries, including Switzerland, China, Germany, and the United Kingdom, have already launched their NFCS. India has joined them with the recent workshop held in Pune, and consultations are planned with key stakeholders. A formal statement of NFCS will be released once consensus is reached among partnering stakeholders.

Early implementation and accelerated deployment of NFCS are crucial due to the increasing frequency of climate vagaries and extreme events affecting India and the world. This initiative needs to be carried out in a mission-oriented manner and guided by the highest decision-making authority in the country.

5. Mumbai's Declining Air Quality

Introduction

Over recent years, Mumbai has witnessed a noticeable decline in air quality, causing growing concern among residents. This article explores the factors contributing to this decline and the recent changes that have made the city more susceptible to poor air quality.

Mumbai's Historical Advantage

The direction and strength of winds are often the key factor in determining Mumbai's air quality. The city does not generate a lesser amount of pollutants than Delhi. The emissions from vehicles, industries and other sources are just as bad as in Delhi and in other major urban centres in the country. But strong winds, characteristic of any coastal location, turn out to be quite beneficial here.

Winds usually alternate between moving from the sea towards the land, and moving from the land towards the sea. This cycle repeats every three to four days during this time of the year. When the wind is directed towards the sea, the dust particles get

swept away. This acts as a natural cleansing mechanism. Sometimes, when the cycle gets temporarily disrupted for some reason, it has an impact on the city's air quality.

Recent Decline

In the last two years, Mumbai's air quality has deteriorated significantly. The city experienced an extended period of poor air quality from November to January, with some days surpassing even Delhi in pollution levels.

Possible reasons

Several meteorological conditions have played a role in these severe pollution events. These are as follows:

1. Change in wind patterns: Last year's unusually bad air quality was attributed to frequent and prolonged disruptions in this normal cycle of wind patterns. Instead of alternating between land and sea every 3-4 days, the winds were sometimes changing directions after eight or ten days. Such change in wind pattern was on account of prevailing La Nina conditions in the eastern Pacific Ocean. La Nina is a condition in which the sea surface temperatures in the eastern Pacific Ocean become cooler than normal.

2. Current Factors Impacting Air Quality: With La Nina having passed, the recent decline in air quality in Mumbai is attributed to different factors, including the retreat of the monsoon and increased construction activities in the vicinity.

Impact of Increasing Pollutant Sources

The consistent deterioration in Mumbai's air quality can be attributed to the city's high baseline level of pollution. Factors such as economic growth, rising vehicle numbers, increased construction, and emissions have overwhelmed the city's capacity to maintain clean air.

Haze-Like Conditions and Visibility Issues

Mumbai is now experiencing haze-like conditions on some days, a phenomenon that was not common in the past. This deterioration in visibility is reminiscent of the winter months in Delhi.

Science & Technology

1. Sample Return Mission from asteroid Bennu

Introduction
• NASA's OSIRIS-REx mission collected samples from the asteroid Bennu, located billions of kilometers from Earth.
• The mission, which started in 2016, involved mapping the asteroid, collecting samples, and returning them to Earth.

OSIRIS-REx Sample Return Process
• Journey to Bennu: The spacecraft took over two years to reach Bennu after its launch in 2016.
• Mapping and Sample Collection: OSIRIS-REx spent considerable time mapping the asteroid and collecting approximately 250 grams of rock.
• Return to Earth: The spacecraft has released its sample capsule above the Earth at an altitude of 250 kilometers over the Great Salt Lake Desert in Utah, USA.
• Continued Mission: After releasing the capsule, OSIRIS-REx is headed towards a new target, the asteroid Apophis.

Figure 3 NASA Capsule with asteroid sample

Sample Return Missions
• Definition: Sample return missions involve sending spacecraft to celestial bodies like moons, asteroids, or planets to collect samples of soil, minerals, and rock.

Benefits of Collecting Space Samples

• Scientific Insights: Samples provide information about early Earth history and the formation of the solar system.
• Resource Potential: Asteroids could serve as a resource for essential minerals.
• Sample Components: Samples can include atoms, molecules, complex compounds, and even particles from solar wind or cometary debris.

Analysis of Bennu Samples
• Significance: NASA's samples from Bennu offer insight into the formation of the solar system and the origins of life.
• Distribution: NASA plans to distribute samples among 200 mission members at 35 institutions worldwide, reserving 25% for its own research.

Previous Sample Return Missions
• Apollo Missions: NASA collected around 382 kilograms of moon rock and soil during the Apollo era.
• Soviet Missions: Soviet-era Russia conducted three successful robotic missions, gathering about 326 grams of samples.
• Recent Missions: JAXA's Hayabusa mission from 2003 to 2010 was the first time humans had brought back samples from a near-Earth object: the asteroid Itokawa. Japan followed that with Hayabusa2, which returned samples from an asteroid called Ryugu in 2020. And, also in 2020, China's Chang'e 5 mission returned samples from the moon.

Upcoming Sample Return Missions
• Japan's Martian Moons eXploration (MMX) is scheduled to launch in 2024. It aims to invest Mars' moons, Phobos and Deimos and collect samples from Phobos, the larger of the two moons, and then return to Earth in 2029.
• ESA and NASA Mars Mission: The European Space Agency and NASA are planning a sample return mission from the surface of Mars, expected to return in 2033.

2. Understanding Monoclonal Antibodies and their Role in Nipah Virus Outbreak

Introduction
• India seeks monoclonal antibody doses from Australia to combat the Nipah virus outbreak in Kerala. The current Nipah outbreak is Kerala's fourth since 2018.
• The Nipah virus outbreak has claimed lives and raised concerns in the Kozhikode district, Kerala.
• India currently has the antibody doses available for ten persons only. According to doctors, no one in the country has been administered the dosage so far since it needs to be given at an early stage of infection.

What Are Monoclonal Antibodies?

• Definition: Monoclonal antibodies are lab-made proteins that mimic the immune system's natural antibodies, targeting diseases and foreign substances.
• Function: They attach to specific antigen, aiding the immune system in eliminating disease-causing molecules. An Antigen is a foreign substance and is usually responsible for disease.

Understanding m102.4
• Description: m102.4 is a fully human monoclonal antibody effective against Hendra and Nipah viruses.
• Clinical Trials: Phase-one clinical trials demonstrated its safety and effectiveness.
• Compassionate Use: It's currently used under "compassionate use" conditions when no other authorized treatments are available.

How Monoclonal Antibodies Work
• Specific Targeting: Monoclonal antibodies are engineered to bind to disease-causing antigens. For instance, most successful monoclonal antibodies during the pandemic were engineered to bind to the spike protein of the SARS-CoV-2 virus. The binding prevented the protein from exercising its regular functions, including its ability to infect other cells.
• Historical Development: Dr. Köhler and Dr. Milstein pioneered monoclonal antibody production in 1975 using hybridoma methodology. In this methodology, a fusion cell made up of B cells (white blood cells that produce antibodies) and myeloma cells (abnormal plasma cells) is produced. These hybrid cells allowed the researchers to produce a single antibody clone, which came to be known as a monoclonal antibody.
• Modern Production: Recombinant DNA technology is now used to create monoclonal antibodies efficiently.
• Virus Interaction: Glycoproteins are one of the major components of viruses that cause diseases in humans. m102.4 binds to the Nipah virus's glycoprotein, potentially neutralizing it.

3. Successful Test Flight for Gaganyaan Crew Escape System

Introduction
The Indian Space Research Organisation (ISRO) achieved a significant milestone by successfully conducting the first test flight of the crew escape system for the Gaganyaan mission, a mission aimed at sending humans into space.

Crew Escape System
The Crew Escape System is a critical component of the Gaganyaan spacecraft, and it is responsible for safely ejecting astronauts away from the vehicle in case of an emergency.

Figure 4 Crew Module

Achieving Objectives

The test vehicle's successful lift-off and execution of predefined tasks confirmed the effectiveness of the crew escape system. The Indian Navy retrieved the crew module from the Bay of Bengal and transported it to the Chennai port, where it was handed over to ISRO.

Future Missions

Following this successful test, ISRO announced that the first unmanned Gaganyaan vehicle mission is scheduled for early 2024. The Chairman of ISRO highlighted the achievements and the successful demonstration of the Crew Escape System during the test flight.

The test flight's success is a significant step forward in India's mission to send humans into space.

4. China's Giant 'Ghost Particle' Detector

Introduction

China is constructing the world's largest neutrino detector, known as "Trident." This detector is being constructed in the western Pacific Ocean. Neutrinos, often called "ghost particles," are incredibly tiny and elusive particles that are challenging to detect.

Understanding Neutrinos

To grasp what neutrinos are, it's essential to understand atoms, the building blocks of our universe. Anything with mass, from people to objects, is composed of atoms. Atoms were once believed to be the smallest particles until scientists discovered

subatomic particles like protons, electrons, and neutrons. Neutrinos, similar to electrons, are a type of subatomic particle but possess no electric charge. They were initially considered massless until evidence showed they have a minuscule mass.

Ghostly and Hard to Detect
Neutrinos are challenging to observe because they rarely interact with other particles. Their interactions with other particles are so rare that they're often referred to as "ghost particles" because they mostly go undetected.

Detecting Neutrinos
Ghost particles rarely interact with other particles. But rarely doesn't mean "never". Sometimes they interact with water molecules, which is why China is building its ghost molecule telescope underwater.
Scientists have observed ghost particles in fleeting instances when the particles create byproducts after traveling through water or ice. These "muons" create flashes of light that can be detected by sophisticated underwater telescopes and offer one of the fews ways to study the energy and source of neutrinos.

The Impressive Trident Telescope

The University of Madison-Wisconsin's "IceCube" telescope in Antarctica is currently the largest neutrino detector, spanning about 1 cubic kilometer. China's Trident telescope in the South China Sea will be significantly larger, covering 7.5 cubic kilometers. Its size will enhance sensitivity and enable the detection of more neutrinos, making it "10,000 times more sensitive" than existing underwater telescopes.

The Significance of Detecting Neutrinos

Understanding neutrinos is crucial because these abundant particles behave mysteriously and defy established physics principles. Scientists are unsure of their origins and suspect they may have played a role in the early universe after the big bang. This hypothesis remains unproven.

Neutrinos are linked to cosmic rays, another scientific mystery. Researchers believe that comprehending neutrinos can help explain the origins of cosmic rays, something scientists have sought to understand for centuries. The study of neutrinos could provide insight into the origins of our universe, bringing us closer to solving significant scientific mysteries.

5. The new made-in-India EV charging standard for bikes and scooters

Introduction

The Bureau of Indian Standards (BIS) has approved a new EV charging standard for light electric vehicles (LEVs) in India. This standard, ISI7017 (Part 2 / Sec 7): 2023, is a collaboration between various stakeholders and is significant for several reasons.

Combining AC and DC Charging

The new charging standard is the world's first to combine both alternating current (AC) and direct current (DC) charging for LEVs. While combined charging standards for electric four-wheelers are already in use globally, this innovation allows interoperability among different EV models and charging infrastructure providers.

The Need for a National Standard

In India, electric vehicle manufacturers have been using various charging standards for their EVs, similar to the diverse charging connectors seen in mobile phones. Ola Electric, Ather Energy, and Ultraviolette Automotive, among others, have each used different standards, making it challenging for public charging stations to accommodate these varied connectors. This issue can exacerbate range anxiety, the fear of running out of charge with no suitable charging point.

Figure 5European-style combined charging system (left) and Europe-style Type 2 connector for AC charging and slow DC charging (right).

Global Standards in Other Countries

China: China uses a national standard for EV charging connectors called GB/T, combined with a vast network of charging stations, effectively addressing range anxiety concerns.

United States: While there isn't a national standard, EV makers in the US are working on some degree of standardization. Ford and General Motors (GM) are adopting the North American Charging Standard (NACS) developed by Tesla, enabling access to Tesla's fast charger network.

Europe: CCS is the primary charging connector standard in Europe and is an EU requirement for EV charging networks. Tesla has integrated CCS in its public Superchargers, benefiting both Tesla and other EV drivers.

Japan: Japan primarily uses the CHAdeMO charging standard, which is being phased out in North America but is still essential for certain EVs like the Nissan Leaf and Mitsubishi Outlander PHEV.

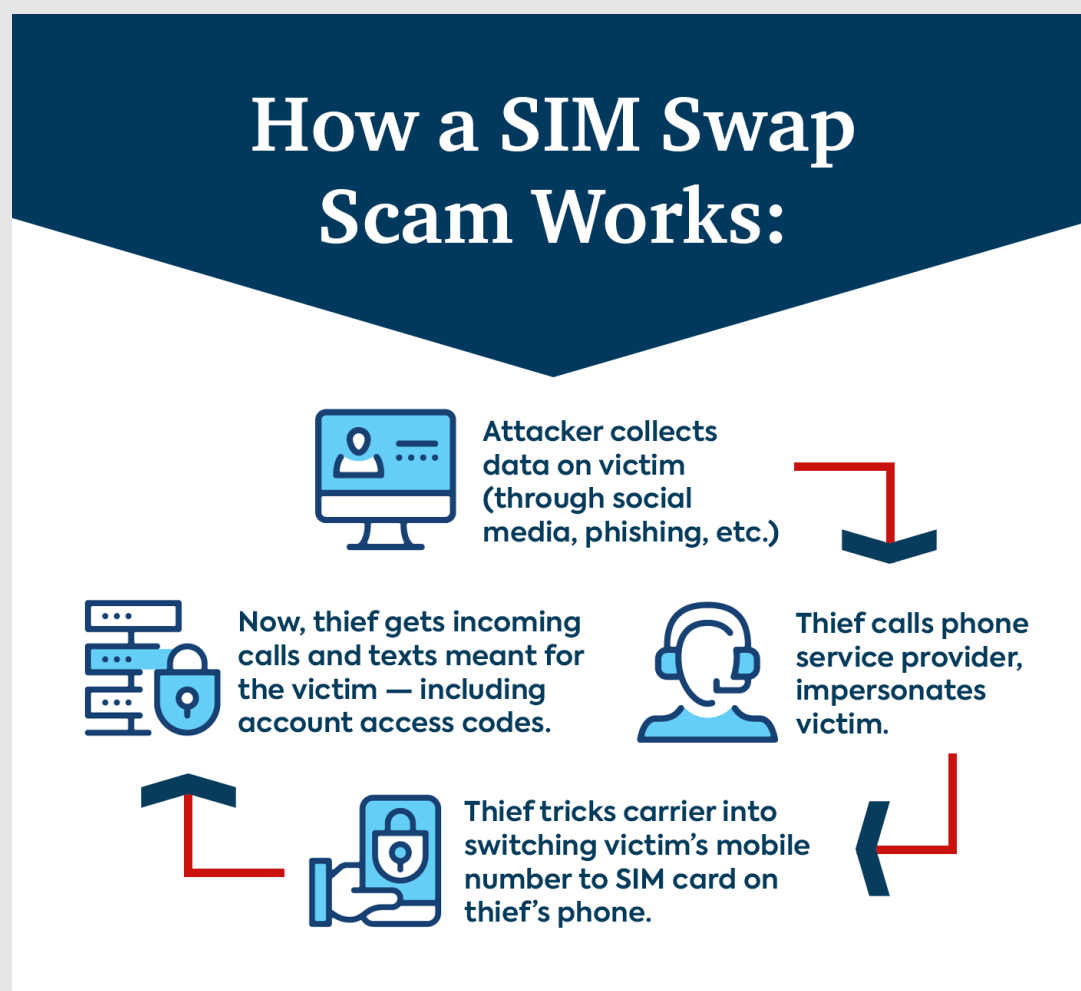## 6. Understanding the SIM Swap Scam

Introduction
The SIM swap scam is a sophisticated cybercrime that exploits the connection between physical SIM cards and banking applications. Criminals target victims to gain access to their bank accounts and personal information.

How the SIM Swap Scam Works

In this scam, fraudsters collect personal details to steal sensitive information, such as phone numbers, bank account details, and addresses. With this information, they visit a mobile operator's retail outlet, posing as the victim, to report a fake theft of the victim's SIM card. This allows them to obtain a duplicate SIM, and all activation messages and details are sent to the scamsters.

How a SIM Swap Scam Works:

Attacker collects data on victim (through social media, phishing, etc.)

Thief calls phone service provider, impersonates victim.

Thief tricks carrier into switching victim's mobile number to SIM card on thief's phone.

Now, thief gets incoming calls and texts meant for the victim — including account access codes.

The Role of Missed Calls in the Scam
Victims often receive multiple missed calls from fraudsters. These missed calls serve the purpose of distracting victims and causing them to ignore network connectivity issues. Simultaneously, the scammers are in the process of swapping SIM cards with the help of insiders at telecom companies.

Withdrawal of Money from Victims' Bank Accounts
Once the fraudsters have acquired the victim's personal details, they use them to log into the victim's bank portals and generate OTPs. Since they control the victim's SIM card, all OTPs go to the scammers, allowing them to authenticate transactions and steal money.

How Fraudsters Find Victims

The accused individuals behind this scam often obtain victim data by purchasing it from hackers involved in data breaches or from online portals. These data breaches can expose large sets of customer information, making it easier for scammers to target victims.

Lack of Arrests and Evasion
As of now, no one has been arrested in connection with the SIM swap scam, primarily because the accused quickly discard duplicate SIM cards and do not operate from a single traceable location. The stolen money is often converted into cryptocurrency, making it challenging for the police to track the transactions.

7. IIT Team Develops Efficient Carbon Nanoflorets for Solar-thermal Conversion

Researchers at IIT Bombay have developed carbon nanoflorets, a novel material capable of efficiently converting sunlight into heat. These nanoflorets have unique properties that make them ideal for a variety of applications, including heating homes and sterilizing surfaces in hospitals. The researchers have applied for a patent to commercialize this innovative technology.

Scanning Electron Microscope image of Nano Carbon Florets
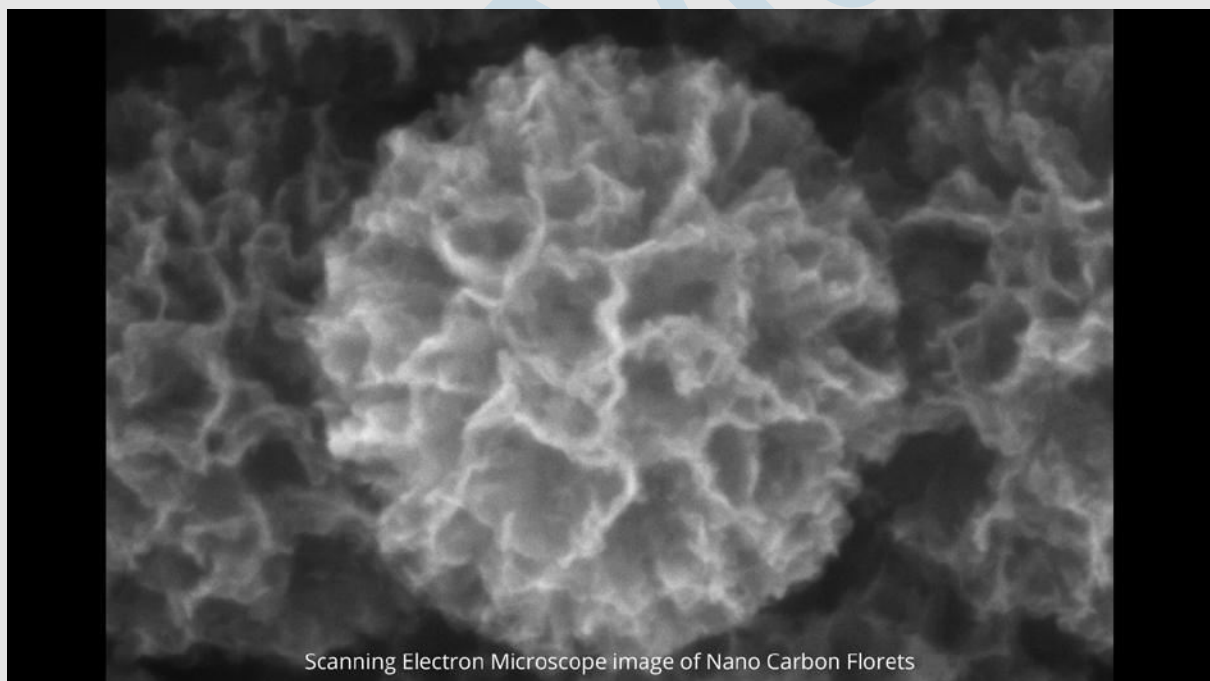
Creating 'Blacker Than Black' Carbon Nanoflorets
The journey to create these carbon nanoflorets began with a material that was initially white. Researchers at IIT Bombay heated a special form of silicon dust called DFNS (dendritic fibrous nanosilica) in a furnace. By introducing acetylene gas into the chamber, they transformed the white powder into a black material, signifying the deposition of carbon on the DFNS. They then dissolved the DFNS away, leaving behind

carbon particles arranged as spherical nanostructures with cone-shaped pits, resembling tiny marigold flowers.

Unprecedented Efficiency in Solar-thermal Conversion
These carbon nanoflorets can efficiently absorb multiple frequencies of sunlight, converting it into heat with an impressive 87% efficiency. This efficiency is among the highest reported for such materials, making it a promising option for solar-thermal conversion applications.

Unique Properties of Carbon Nanoflorets
The high efficiency of carbon nanoflorets can be attributed to several factors:

Broad Spectrum Absorption: Carbon nanoflorets can absorb infrared, visible light, and ultraviolet frequencies, allowing them to harness a larger portion of the solar energy spectrum compared to traditional photovoltaic materials.

Internal Light Reflection: The unique shape of the nanoflorets, with carbon cones, minimizes light reflection and maximizes internal light absorption, enhancing the conversion process.

Low Heat Dissipation: Due to long-range disorder in the material's structure, heat waves are not carried over long distances, reducing heat dissipation into the environment.

Commercial Potential and Sustainability
The researchers found that a 1 square meter coating of carbon nanoflorets could vaporize 5 liters of water in an hour, surpassing the efficiency by atleast 5 times of commercial solar cells. The team has applied for a patent and is enthusiastic about commercializing this technology, considering it ideal for regions with abundant sunlight and low temperatures.

The versatility of these nanoflorets allows them to be coated on various surfaces, including paper, metal, and terracotta clay. Importantly, the coating is stable, with a minimum lifetime of 8 years. Researchers believe that the carbon nanoflorets may have a wide range of unexplored applications, thanks to their unique structural and morphological properties.

Geography

1. Understanding the Sikkim Flood: Causes and Impact

What Caused the Sikkim Flood?
In early hours of October 4, a massive flood hit Sikkim, resulting from a Glacier Lake Outburst Flood (GLOF). These floods occur when glacial lakes formed by melting glaciers suddenly break free from natural dams made of rocks and debris. Sikkim, with around 80 glaciers, is vulnerable to such events.
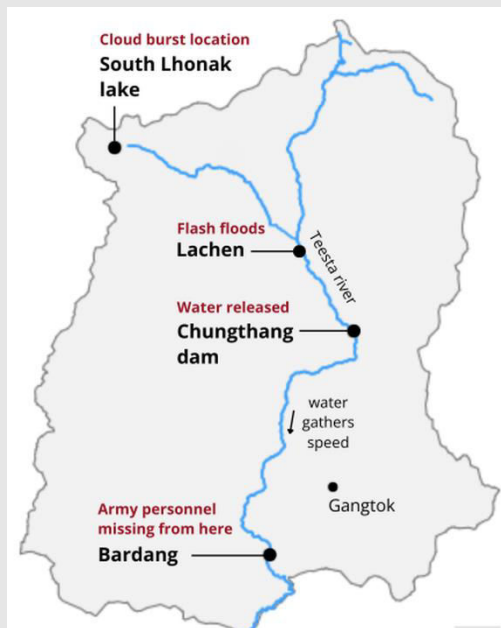
What Triggered the Sikkim GLOF Event?
The exact cause is uncertain, but it's believed to be a combination of factors. Satellite images showed the glacier-fed lake had shrunk, possibly due to drainage, but the depth was hard to determine. While there were speculations about heavy rainfall and even earthquakes in Nepal, the remote location made it challenging to confirm the cause.

Resulting Damage
The flood led to the destruction of the Chungthang dam, which supplies water to the Teesta 3 hydropower project. Several other hydropower projects along the Teesta River were also affected. Bridges were washed away, communication disrupted, and many houses, pipelines, and sewage lines destroyed. It's a significant setback to the region.

Future Risks
Studies have warned that GLOF events in the Himalayas are likely to increase due to rising temperatures and climate change. The fragile ecosystem in the region is at risk due to hydropower and infrastructure projects. Early warning systems could help anticipate such events, but they require coordination and monitoring changes in glacial lakes.

2. India-Funded Hydro Projects in Bhutan Under Scanner After Sikkim Teesta Disaster

Sikkim Disaster
On 4 October 2023, heavy rains caused the glacial South Lhonak lake in Sikkim, to breach its banks, causing a glacial lake outburst flood. The flood reached the Teesta III Dam at Chungthang at midnight, before its gates could be opened, destroying the

dam in minutes. Water levels downstream in the River Teesta rose by up to 20 feet (6.1 m), causing widespread damage.

Projects in Bhutan under scanner

After the Sikkim Teesta disaster that resulted in the destruction of the 1,200 MW Teesta-III dam and left nearly 100 people dead, two of the three India-funded mega hydro projects currently being constructed in Bhutan have now come under the scanner and changes are being made in their design.

The two projects are the 1,200 MW Punatsangchhu Stage-I (Puna-I) and the 1,020 MW Punatsangchhu Stage-II (Puna-II), on the Punatsangchhu River, less than 100 km from Bhutan's capital, Thimphu. These projects, along with the 660 MW Kholongchu project, are estimated to cost ₹21,637.28 crore, and are being funded by India. The electricity generated from these projects will be supplied to northern and eastern Indian states.

Importance of electricity exports for Bhutan

According to one estimate, about 75% of all electricity generated in Bhutan is exported to India and the revenue from the exports constitutes 25% of its gross domestic product.

India assisted projects to develop 10GW in Bhutan

Concerns of locals in Bhutan

Local communities living in areas near dams in Bhutan have reported similar issues as seen in houses near dams in the Indian Himalaya: cracks on their houses, which first occurred right after the project work for a dam began. For instance, houses near the Mangdechhu Dam on the Mangdechhu River in Bhutan – commissioned and funded

by India reported cracks in their houses. As per one report, it is one of the 13 hydro projects developed as part of Bhutan's initiative to generate 10GW of hydropower with support from India.

3. A Look at provisions of Dam Safety Act

Introduction
India has almost 6,000 large dams and about 80% of them are more than 25 years old and carry safety risks. A new Dam Safety Act (DSA) was passed in late 2021. On October 4 this year, a glacial lake outburst flood (GLOF) in North Sikkim's South Lhonak Lake washed away one of the biggest hydropower projects in India, the Teesta III dam at Chungthang. Reports have since revealed there were no early warning systems, no risk assessment or preventive measures in place as required under the Act.

Context of Dam Safety Act, 2021
Dams are artificial barriers on rivers which store water and help in irrigation, power generation, flood moderation, and water supply. In India, dams higher than 15 m or between 10 m and 15 m height that fulfil certain additional design conditions are called large dams.

As on June 2019, India has 5,745 large dams (includes dams under construction). Of these, 5,675 large dams are operated by states, 40 by central public sector undertakings, and five by private agencies. Over 75% of these dams are more than 20 years old and about 220 dams are more than 100 years old. Most of these large dams are in Maharashtra (2394), Madhya Pradesh (906), and Gujarat (632).

As a large amount of water may be stored in a dam's reservoir, its failure can cause large scale damage to life and property. Therefore, monitoring dam safety is essential. The Central Dam Safety Organisation, under the Central Water Commission (CWC), provides technical assistance to dam owners, and maintains data on dams.

The National Committee on Dam Safety devises dam safety policies and regulations. Currently, 18 states and four dam owning organisations have their own Dam Safety Organisations. CWC provides that each dam owner should carry out pre and post monsoon inspections (covering site conditions, dam operations) every year. However, as per a CAG report on flood forecasting, from 2008 to 2016, of the 17 states studied, only two had carried out such inspections.

Key Features
The Act applies to all specified dams in the country. These are dams with: (i) height more than 15 metres, or (ii) height between 10 metres to 15 metres and satisfying certain additional design conditions such as, reservoir capacity of at least one million cubic meter, and length of top of the dam at least 500 metres.

Obligation of dam owners

Dam owners will be responsible for the safe construction, operation, maintenance and supervision of a dam. They must provide a dam safety unit in each dam. This unit will inspect the dams: (i) before and after monsoon season, and (ii) during and after every earthquake, flood, calamity, or any sign of distress. Functions of dam owners include: (i) preparing an emergency action plan, (ii) carrying out risk assessment studies at specified regular intervals, and (iii) preparing a comprehensive dam safety evaluation through a panel of experts.

Dam safety authorities and delegated legislation

The Act provides for dam safety regulatory and monitoring authorities at the national and state level. The functions of the national bodies and the State Committees on Dam Safety have been provided in Schedules to the Act. The central government can amend these Schedules through a notification.

At the national level, it constitutes (i) the National Committee on Dam Safety, whose functions include evolving policies and recommending regulations regarding dam safety, and (ii) the National Dam Safety Authority, whose functions include implementing policies of the National Committee, and resolving matters between State Dam Safety Organisations (SDSOs), or between a SDSO and any dam owner in that state. The central government may notify the qualifications, and functions of the officers of the National Dam Safety Authority.

At the state level, it constitutes the (i) State Dam Safety Organisations (SDSOs), whose functions include keeping perpetual surveillance, inspecting, and monitoring dams, and (ii) State Committee on Dam Safety which will supervise state dam rehabilitation programs, review the work of the SDSO, and review the progress on measures recommended in relation to dam safety, among others. State governments may notify the qualifications, and functions of officers of the State Dam Safety Organisations. They may also notify dam safety measures to be undertaken by owners of non-specified dams.

Offences and penalties

Anyone obstructing a person in the discharge of his functions under the Act or refusing to comply with directions may be imprisoned for a year. In case of loss of life, the person may be imprisoned for two years.

4. Why are earthquakes frequent in Afghanistan?

**Introduction: Earthquake Activity in Afghanistan**

Afghanistan has experienced a series of devastating earthquakes, with the most recent one occurring on October 15, 2023. This follows a previous earthquake on October 11, which led to significant casualties.

History of Earthquakes in Afghanistan

Afghanistan has a history of enduring powerful earthquakes. Notable events include a 2022 earthquake which claimed over 1,000 lives, and a 2015 earthquake in the country's northeast that killed more than 200 people. The region has witnessed destructive earthquakes for many years.

Understanding Earthquake Occurrence

To comprehend why earthquakes happen, it is essential to know the geological processes involved. Earth's lithosphere comprises tectonic plates that move and interact along fault lines due to tectonic forces and stress. Earthquakes occur when these plates suddenly slip past each other, releasing energy and generating seismic waves. The point of origin within the Earth is termed the focus or hypocenter, while the surface point directly above it is the epicenter.
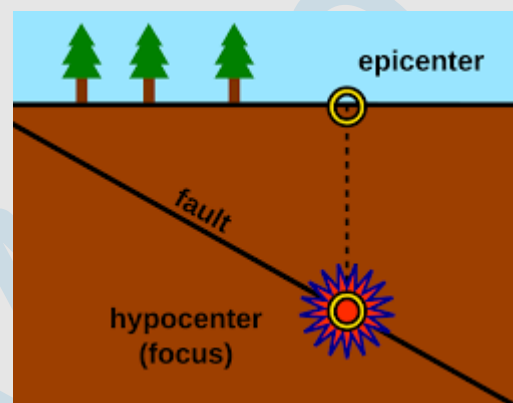
Frequent Earthquakes in Afghanistan

Afghanistan's vulnerability to frequent earthquakes can be attributed to its location above multiple fault lines, especially where the Indian and Eurasian tectonic plates converge. These interactions lead to substantial tectonic activity, contributing to frequent earthquakes in the region.
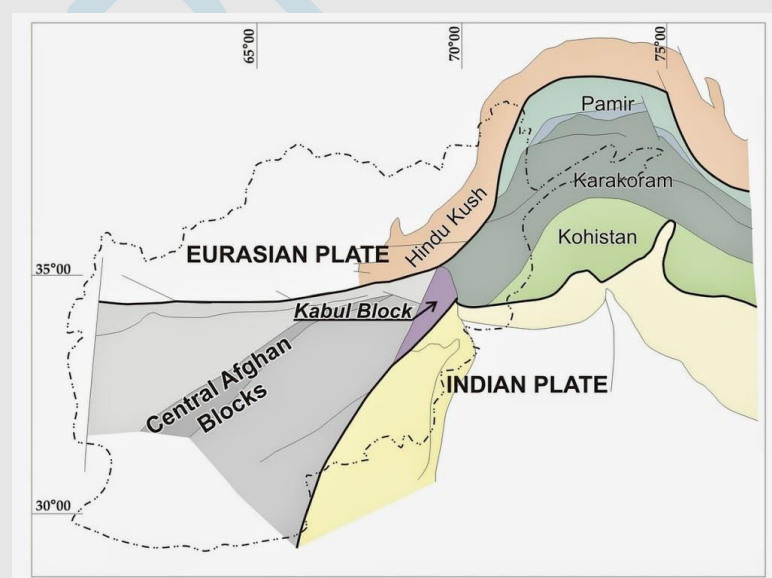
Tectonic Plate Movements

Afghanistan is situated on the Eurasian plate, with the Arabian plate subducting northward under Eurasia in the west and the Indian plate doing the same in the east. In southern Afghanistan, the Arabian and Indian plates meet, both subducting northward under the Eurasian plate. This collision, convergence, and subduction generate significant tectonic forces and earthquakes.

The Hindu Kush mountain range and the Pamir Knot are regions where these tectonic plates meet, resulting in a complex geological landscape.

Active Fault Systems

Afghanistan is crisscrossed by active fault systems such as the Chaman Fault and the Main Pamir Thrust, which serve as sources of seismic activity in the region. The constant movement and interaction of tectonic plates at these plate boundaries generate substantial tectonic stress, increasing the likelihood of earthquakes.
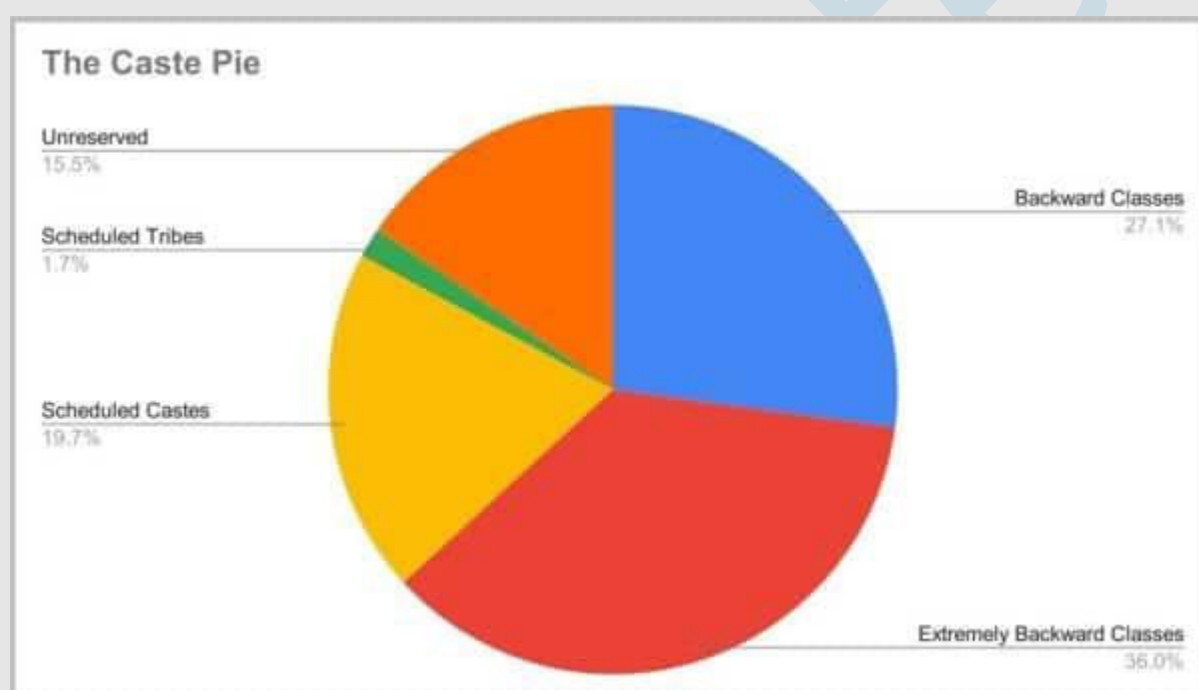

In summary, Afghanistan's geological position at the convergence of tectonic plates and the presence of numerous fault systems make it prone to frequent and powerful earthquakes. These natural phenomena result from the ongoing tectonic activity and plate interactions in the region.

Indian Society

1. Bihar Caste Census Data: Key Insights

Population Breakdown
• OBCs and EBCs: More than 63% of Bihar's population comprises Other Backward Classes (OBCs) and Extremely Backward Classes (EBCs).
• Total Population: Bihar's current population is 13,07,25,310, with OBCs making up 27% (3,54,63,936) and EBCs 36% (4,70,80,514) of the total.
• Forward Castes: The "forward" castes or "General" category constitute only 15.5% of the population.

The Caste Pie

Unreserved 15.5%	Backward Classes 27.1%
Scheduled Tribes 1.7%	
Scheduled Castes 19.7%	Extremely Backward Classes 36.0%

Scheduled Castes and Tribes
• Scheduled Castes (SCs): Approximately 20% (2.6 crore) of Bihar's population falls under the SC category.
• Scheduled Tribes (STs): STs make up just 1.6% (22 lakh) of the population.

Expected Data
• Consistent Belief: The data align with the long-standing belief that OBCs form a larger portion of the population than their 27% reservation in government jobs and educational institutions.
• Historical Context: The Mandal Commission in 1980 estimated the OBC population across India to be 52%, supporting the OBCs' claim of unequal access to government jobs.

Political Significance

• **Nitish Kumar's Strategy:** Chief Minister Nitish Kumar has strategically utilized the caste census to strengthen his political stance in Bihar and potentially play a key role in national opposition to the BJP. Nitish may use the census data to advocate for "social justice" and "development with justice" in his political campaigns.

• **Mandal 3.0:** The caste survey is expected to become a central element of Nitish's political narrative, setting it against the BJP's "Hindutva" or "kamandal" politics.

Support Across Parties

• **Bipartisan Support:** The caste census initiative received backing from all political parties in Bihar, including the BJP.

• **Demand for Nationwide Census:** In 2021, state parties, including the Bihar BJP unit, met Prime Minister Narendra Modi to demand a nationwide caste survey.

• **Implementation Process:** After unanimous agreement among nine parties, Bihar allocated Rs 500 crore from its contingency fund and employed its resources for the caste census.

Survey Timeline

• **Phases:** The census was conducted in two phases, with the first phase counting households from January 7 to January 21.

• **Halts and Court Intervention:** The second phase, gathering data on castes, religions, and economic backgrounds, commenced on April 15 but faced a halt due to legal challenges.

• **High Court Decision:** On August 1, the High Court deemed the survey "perfectly valid," allowing it to resume on August 25.

• **Data Release:** The findings of the survey have now been made public, providing valuable insights into Bihar's caste demographics.

2. Bihar Caste Survey: Understanding the Complex History of Caste Census

Introduction

The Bihar government has recently unveiled the results of its comprehensive caste survey. This data highlights that over 63% of Bihar's population consists of Other Backward Classes (OBCs) and Extremely Backward Classes (EBCs). This article explores the historical context and significance of caste census, the demand for it, and the government's stance on the matter.

What Caste Data Is Published in the Census?

Historically, Indian Censuses from 1951 to 2011 included data on Scheduled Castes and Scheduled Tribes but omitted information on other castes. Uptill 1931, caste-based data was collected. In 1941, such data was collected but not published due to World War II.

Absence of Data

In the absence of such a census, there is no proper estimate for the population of OBCs, various groups within the OBCs, and others. The Mandal Commission (report in 1980) estimated the OBC population at 52%, some other estimates have been based on National Sample Survey data, and political parties make their own estimates in states and Lok Sabha and Assembly seats during elections.

The Demand for Caste Census
The demand for a caste census has been recurrent, especially from OBC and marginalized sections. Opposition parties have been particularly vocal in pushing for it. Even Congress called for the release of Socio-Economic and Caste Census (SECC) data and the removal of the 50% reservation cap.

Government's Changing Stand
The government's position on a caste census has evolved. While in 2021, it firmly stated against caste-wise enumeration, in 2018, there were indications of data collection on OBCs. This discrepancy has raised questions.

UPA's Stance on Caste Census
In 2010, then Law Minister Veerappa Moily advocated for caste/community data collection in Census 2011. Home Minister P Chidambaram highlighted complexities, including varied state-specific OBC lists and categories, during a Lok Sabha discussion in 2011.

SECC Data and Its Fate
The SECC, conducted in 2016, excluded caste data, which was handed over to the Ministry of Social Justice and Empowerment for categorization. The status of this data remains uncertain.

Contrary View: RSS's Opposition
The RSS has opposed a caste census, stating that it goes against the vision of a casteless society envisioned by leaders like Babasaheb Ambedkar and could hinder efforts for social harmony.

Conclusion
The release of Bihar's caste survey data has reignited the debate on caste census in India. The demand for caste data continues to be a contentious issue, with varying perspectives on its implications for the nation's social fabric and policies.

3. Sarakka Tribal University in Telangana approved

Introduction: Sarakka Central Tribal University
The Union cabinet recently approved the establishment of the Sarakka Central Tribal University in Telangana, to be located in the Mulugu district with a budget of Rs 889

crore. This move fulfills a commitment made under the Andhra Pradesh Reorganisation Act, 2014, wherein both Andhra Pradesh and Telangana were to receive support for establishing tribal universities.

The Legend of Sammakka and Sarakka

Historical Background: Sammakka was married to Pagididda Raju, a feudal chief of the Kakatiya dynasty ruling the Warangal region. She had two daughters and a son: Sarakka, Nagulamma, and Jampanna, respectively.

Sammakka Saralamma Jatara: The biennial Sammakka Saralamma Jatara festival in Mulugu commemorates the 13th-century mother-daughter duo's battle against local rulers over tax impositions on the Koya tribe. The event is among the world's largest tribal gatherings.

Evolution of the Festival

Historical Footfall: Initially attended by around 2,000 Koya tribe members until 1955, the festival has grown exponentially.

A Hindu Religious Festival: The Sammakka Saralamma Jatara has transformed into a major Hindu religious festival, rivaling the Kumbh Mela in terms of devotee attendance. The festival now attracts around 1.5 crore devotees from diverse tribal and non-tribal communities, including neighboring states like Andhra Pradesh, Madhya Pradesh, Chhattisgarh, Odisha, Maharashtra, Karnataka, and Jharkhand.

Demographic Snapshot: Mulugu, a reserved Scheduled Tribes (ST) assembly seat, has a population of around 2.6 lakhs with a significant 75% ST population. Additionally, the UNESCO World Heritage Site of Ramappa Temple is located nearby.

Conclusion: Cultural Significance and Educational Investment

The Sammakka-Sarakka festival in Telangana not only holds cultural and religious importance but also serves as a catalyst for socio-economic development in the region. The establishment of the Sarakka Central Tribal University adds another layer of significance to this historical and vibrant area.

4. Baiga PVTG in Chhattisgarh Granted Habitat Rights

Introduction

The Baiga Particularly Vulnerable Tribal Group (PVTG) in Chhattisgarh has received habitat rights, following the recognition of habitat rights of Kamar PVTG's earlier. This important development affects 19 Baiga villages, encompassing 6,483 people across various districts in the state.

Understanding Habitat Rights

Habitat rights entail recognition of a community's rights over their customary territory, encompassing various aspects such as socio-cultural practices, livelihood means, ecological knowledge, and more. These rights help preserve traditional livelihoods and ecological wisdom while coordinating government initiatives for PVTG communities.

Legal Basis for Habitat Rights
Habitat rights are granted under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. The Act defines "habitat" as the area where primitive tribal groups and forest-dwelling Scheduled Tribes reside.

Protecting Habitat Rights
Habitat rights provide legal protection, allowing PVTGs to safeguard their habitat from detrimental developmental activities. Consent and consultation of the gram sabha are essential, and disputes can be escalated to the court if not resolved.

PVTG Classification
PVTGs are tribes characterized by technological backwardness, low literacy rates, stagnant or declining population growth, and subsistence-level economies. They often live in remote and challenging areas.

Recognition Across India
Out of 75 PVTGs in India, only three have received habitat rights, including Bharia in Madhya Pradesh; Kamar and now Baiga in Chhattisgarh.

PVTGs in Chhattisgarh
Chhattisgarh is home to seven PVTGs, with a combined population of 2.50 lakh, out of a total tribal population of 78.22 lakh. The central government has designated five tribes as PVTGs, while the state government recognized the other two.

Determining Habitat
The process of defining a habitat involves consultation with tribal leaders, considering their culture, traditions, and occupation. This is corroborated by various government departments to declare a habitat.

Initiating Habitat Rights in Chhattisgarh
The procedure for granting habitat rights in Chhattisgarh commenced with the Kamar tribes as a pilot project in December 2021. It is a gradual process, considering the introverted and reserved nature of PVTGs.

So far, 22 Para/Tola (hamlets) with around 2,500 people from the Kamar tribe and 6,483 people from the Baiga tribe have received habitat rights.

5. Need for Palliative care in India

Healthcare Costs and Poverty

Many Indians face financial distress due to healthcare costs, with an estimated 5.5 crore people falling below the poverty line annually because of out-of-pocket healthcare expenses.

Rising Non-Communicable Diseases

Non-communicable diseases, such as cancer, cardiac disease, renal failure, and stroke, are becoming prevalent in India, pushing more people into poverty as they require long-term treatment and check-ups.

The financial burden of continuous treatment for these diseases often goes unnoticed, leading to "financial toxicity" with risks of bankruptcy, treatment delays, and poor quality of life.

Limited Government Healthcare Spending

Only 1.35% of India's GDP is spent on government health services, leaving patients to cover most expenses, even in government hospitals where additional costs like travel and medicines are incurred.

Importance of Palliative Care

Palliative care is a branch of medicine that looks at improving the quality of life of those having life-limiting illnesses like cancers, end-stage kidney disease, debilitating brain disorders, complications of diabetes, and heart disease among others. It is different from other medical specialities as it focuses on alleviating uncontrolled symptoms of the incurable illnesses mentioned above, and preventing non-beneficial investigations, and treatments.

Comprehensive approach

Early initiation of palliative care in patients with advanced disease has shown to reduce health expenditure by up to 25%. Palliative care is provided through outpatient visits, inpatient visits, and home-based care. Home-based care further reduces the cost of seeking care as home-bound patients no longer have to travel to seek healthcare.

Palliative care takes into consideration not just the physical dimension of health but also actively looks at the social and economic realities of the patient and the family. Vocational rehabilitation and social reintegration are crucial elements of palliative care which further help the affected family and the patient by providing them with the opportunities to earn a living and live independently with dignity.

Challenges and the Need for Investment

1. Low Awareness: Despite existing for four decades, awareness of palliative care in India is low among healthcare workers and the general public.

2. Lack of Insurance Coverage: Palliative care is not covered by most insurance schemes, resulting in poor demand and access.

3. Inadequate Funding: The public health system lacks sufficient funding for palliative care, causing reliance on private non-profit organizations.

Incorporating Palliative Care into Healthcare
1. Reorganizing Funding: Reorganizing the funding mechanism for the National Program for Palliative Care is essential to ensure consistent support.

2. Savings and Benefits: Investing in palliative care not only saves money for patients but also generates goodwill for corporate hospitals and improves bed utilization. Moral Obligation

3. Prioritizing Palliative Care: Public and private healthcare providers should recognize the benefits of investing in palliative care for better quality of life, reduced financial burdens, and improved healthcare system utilization.

6. Supreme Court verdict on same-sex marriage

Why in news?
In November 2022, two same-sex couples moved the Supreme Court, arguing that their inability to marry under Indian family law amounted to a violation of their fundamental rights to equality, life and liberty, dignity, free speech and expression, etc. After a hearing that lasted 10 days, the court reserved its judgment in May 2023 — and delivered its final verdict on October 17.

This is what the five-judge Bench — with Justices S Ravindra Bhat, Hima Kohli, and P S Narasimha in the majority and Chief Justice of India D Y Chandrachud and Justice Sanjay Kishan Kaul in the minority — said on some key questions in their four separate opinions.

Is the right to marry a fundamental right?
The key issue before the court was simple: is there a right to marry under the Indian Constitution, and if there is, is the prevention of same-sex/ queer couples from being able to enjoy this right discriminatory?

Both questions were answered firmly and unanimously in the negative.

Marriage, according to the court, is an institution set up under law — and same-sex couples do not have a right to participate in it unless the law permits them to do so. The Special Marriage Act, 1954 — a legislation that was enacted to enable inter-faith

marriages, and the challenge against which formed the foundation of the hearings — was upheld in its current form, i.e., permitting marriages only between a 'man' and a 'woman'. Ultimately, the court held that there is no fundamental right to marry.
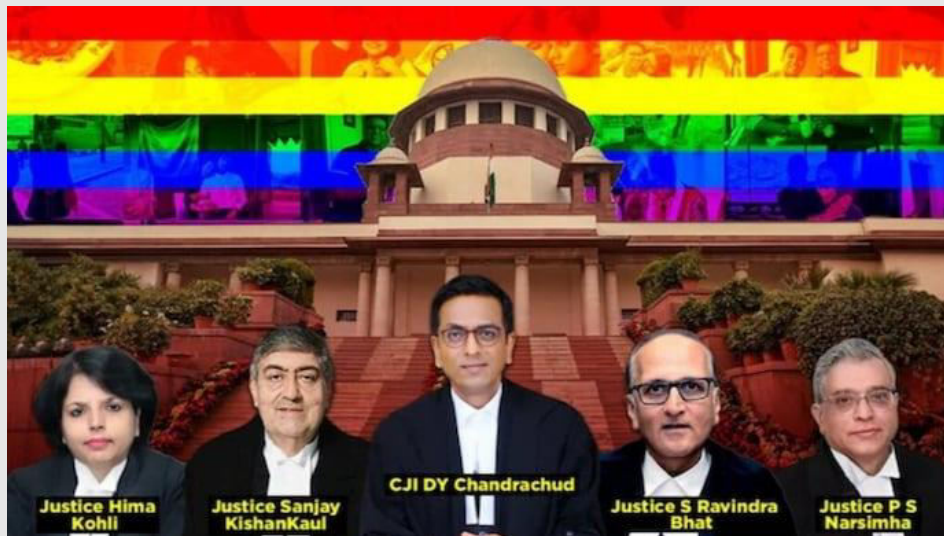
If not marriage, do queer couples have the right to enter into a 'civil union'?
Civil Union is a marriage-like setup where the couple enjoys a catena of legal rights and protections. Again, the majority answered in the negative. The court held that only an elected legislature is competent to provide such rights and protections. This is because granting same-sex couples the right to marry or enter into a union will involve changes to a vast range of "legislative architectures" and policies.

When two persons enter into a marriage or a civil union, a host of tangible and intangible benefits are made available to them in areas such as insurance, banking, adoption, succession, pension, healthcare, etc. Given the complexity involved in aligning these frameworks (which are wholly based on heterosexual unions) with the right of queer persons to marry, the court found that only an elected legislature with the ability to consult a wide range of stakeholders is competent to intervene.

Can queer couples adopt children?
One of the benefits that flows from marriage — the ability to adopt children — was specifically at issue before the court.
Since a same-sex couple cannot marry under Indian law, it follows that they cannot also adopt children as a couple. However, since the Juvenile Justice Act 2015 permits a single person to adopt a child, same-sex couples were able to adopt children by designating one of the partners as the legal parent.

In 2022, however, the Central Adoption Resource Authority (CARA) sidelined this arrangement by issuing the Adoption Regulations, which require a couple to be in a two-year stable marital relationship to be eligible for adoption. Over and above this, a

circular was also issued prohibiting a person from adopting a child if that person was in a live-in relationship. Consequently, queer couples became ineligible to adopt.

The Supreme Court held that the judiciary was ill-equipped to consider the potential impact of extending the right to jointly adopt children to queer couples.

The court shifted the burden to the executive — and encouraged it to reconsider the laws on adoption in line with the best interests and welfare of children.

Ultimately then, what has changed for queer couples?

The judgment has refused to recognise queer marriages or civil unions. However, the court stated that a queer person has the right to choose an emotional, intimate and/ or live-in partner, even if such a relationship does not amount to a marriage or civil union. This is largely a restatement of the law laid down in 'Navtej Singh Johar', where the court had decriminalised homosexuality by striking down Section 377 of the Indian Penal Code, as well as 'Puttaswamy', where it had recognised a queer person's sexual autonomy as a facet of their fundamental right to privacy.

What lies ahead?

The judgment represents a clear setback for the queer community — one that was largely unanticipated, given the Supreme Court's recent progressive jurisprudence on queer rights as well as its general openness to take on the role of the legislature in order to develop, guarantee, and enforce fundamental rights. The legislature, the wing of government tasked with translating the will of the people into law, must now take the lead in re-evaluating and improving Indian family law to make it more inclusive, gender-just, and non-discriminatory.

7. Row over Puri Jagannath Temple's Locked Treasure Room: The Long-standing Issue

Introduction

As Assembly and General elections approach in Odisha, there is a renewed demand to open the Ratna Bhandar (treasure room) of the Puri Jagannath Temple. This treasure room has remained locked for nearly four decades. Both the BJP and Congress have been actively pushing for its reopening.

The Significance of Puri Temple's Ratna Bhandar

The Ratna Bhandar is where the precious ornaments donated by devotees and erstwhile kings for the sibling deities—Lord Jagannath, Lord Balabhadra, and Goddess Subhadra—are stored. It consists of two chambers: the Bhitar Bhandar (inner chamber) and the Bahara Bhandar (outer chamber). While the outer chamber is regularly opened for rituals and festivals, the inner chamber has not been accessed for 38 years.

Why the Demand to Open It Now?

The demand to unlock the Ratna Bhandar has gained momentum due to concerns raised by the Archaeological Survey of India (ASI), which oversees the temple. ASI has called for repairs and conservation of the chamber, fearing structural damage that could endanger the precious ornaments. Devotees, temple managing committee members, and the Puri royal scion are in favor of reopening it to ensure its safety and conduct an inventory.

Historical Perspective

The last inventory of the Ratna Bhandar was conducted between May and July 1978, and though it was briefly opened in 1985, the inventory was not updated. The 1978 inventory listed gold ornaments, silver utensils, and other valuables. Some items could not be weighed during the process.

Procedure to Open the Treasure House

Opening the Ratna Bhandar requires permission from the Odisha government. An attempt was made in 2018, but the keys were missing. An envelope containing "duplicate keys of inner Ratna Bhandar" was later discovered. A judicial inquiry was initiated to investigate the key loss. The findings of this inquiry have not been publicly disclosed.

Current Developments

In August 2022, ASI once again sought permission to inspect the inner chamber, but it has not received approval. Opposition parties have accused the Odisha government of delaying tactics. In response to the growing demand, the temple managing committee recommended the Ratna Bhandar's opening during the 2024 annual Rath Yatra.

8. Kerala Blast Incident: Blast at Jehovah's Witnesses Convention

Introduction

Two people died and many were injured in a series of blasts during a Sunday prayer convention of Jehovah's Witnesses near Kochi at the Zamra International Convention and Exhibition Centre.

Perpetrator and Motivation

An estranged member of Jehovah's Witnesses claimed responsibility for the attack, citing ideological disagreements with the sect.

Jehovah's Witnesses

Jehovah's Witnesses are a Christian sect that rejects the Holy Trinity (the doctrine that God exists in three equal persons of the Father, the Son (Jesus Christ) and the Holy

Spirit) and instead worships Jehovah as the one true God. They base their beliefs solely on the words of Bible, which they see as the word of God. They don't celebrate Christmas or Easter, because these festivals are not mentioned in Bible.

Origin and Leadership
Founded by Charles Taze Russell in the 1870s, the sect is currently governed by the Governing Body of Jehovah's Witnesses in Warwick, New York.

Neutrality
Jehovah's Witnesses maintain political neutrality and avoid affiliations with other religions.

Jehovah's Witnesses in India
Jehovah's Witnesses have been in India since 1905, established an office in 1926, and obtained legal registration in 1978. They enjoy constitutional protection for practicing their faith.

Landmark Supreme Court Case
In the Bijoe Emmanuel case (1986), the Supreme Court granted protection to Jehovah's Witness children who refused to sing the National Anthem at their school, citing religious beliefs.

The Supreme Court acknowledged the sincerity of Jehovah's Witnesses' beliefs and emphasized the importance of protecting the constitutional right to religious freedom.

Bloodless Liver Transplant: In 2020, a private hospital in Bengaluru successfully performed a bloodless liver transplant on a Jehovah's Witness patient to respect their religious beliefs.

In summary, the tragic incident at the Jehovah's Witnesses convention near Kochi sheds light on the sect's unique beliefs, practices, and the legal protection of their religious freedom, as demonstrated in the Bijoe Emmanuel case.

Awards & Honours

1. Waheeda Rehman honoured Dadasaheb Phalke Award

Introduction
Veteran Bollywood actress Waheeda Rehman, aged 85, has been honored with the prestigious Dadasaheb Phalke Award for her remarkable contribution to Indian cinema. The award for the year 2021, given by the Union Ministry of Information and Broadcasting, is a recognition of her outstanding impact on the growth and development of the Indian film industry. The 2021 awards were given out this year as they were delayed due to the Covid-19 pandemic.

Waheeda Rehman's Journey
Waheeda Rehman, born on February 3, 1938, embarked on her acting career in 1955 with her debut in the Telugu film "Rojulu Marayi." Her popularity skyrocketed with the song 'Eruvako sagaro ranno chinnanna,' and she caught the attention of Guru Dutt during a celebration tour. This marked the beginning of her journey in Hindi cinema.

Influential Film Roles
Rehman's career boasts an array of influential roles. In "Pyaasa" (1957), she earned critical acclaim for her portrayal of a courtesan. She was a sought-after leading lady during the 'Golden Age of Hindi cinema' and starred in classics like "Guide" (1965) and "Sahib Bibi Aur Ghulam" (1962).

Challenging Traditional Roles
Waheeda Rehman was a trailblazer, often challenging traditional roles for women in Indian cinema. In "Guide (1965)," she played Rosie, a character who defied societal norms and walked out of her marriage with her lover who was a tour guide.

Reflection of Womanhood
Her roles in films like "Namkeen" and "Khamoshi" showcased the challenges and anxieties faced by women. She portrayed strong, self-sufficient characters who had to protect their families from hardships.

The Significance of Dadasaheb Phalke Award
The Dadasaheb Phalke Award, established in 1969, commemorates the contributions of filmmaker Dadasaheb Phalke to Indian cinema. The award is presented at the National Film Awards ceremony. It has recognized several women who have made significant contributions to the industry, including Devika Rani, Lata Mangeshkar, Asha Bhosle, and Asha Parekh.

2. Ruixiang Zhang to Receive 2023 SASTRA Ramanujan Prize

Introduction
Ruixiang Zhang, a mathematician from the University of California, Berkeley, is the recipient of the 2023 SASTRA Ramanujan Prize.

About Ruixiang Zhang
Education: Zhang pursued his initial education in China and continued his studies in the United States.
Current Role: He currently serves as an assistant professor at the University of California, Berkeley.

The SASTRA Ramanujan Prize
Origin: Established by the Shanmugha Arts, Science, Technology & Research Academy (SASTRA), located near Kumbakonam, India, the hometown of Srinivasa Ramanujan.
Purpose: The prize is of $10,000 is awarded annually to young mathematicians who have made remarkable contributions in fields aligned with Ramanujan's mathematical interests.
Age Limit: The age limit for this prestigious award is set at 32, the age at which Ramanujan himself passed away.
Award Ceremony: The prize will be presented during the International Conference in Number Theory, scheduled for December 20-22 at SASTRA University in Kumbakonam, Ramanujan's hometown.

3. Nobel Prize in Medicine 2023: Recognized the work which helped in development of Covid vaccines

Introduction
The 2023 Nobel Prize in Physiology or Medicine was awarded to scientists Katalin Kariko (from Hungary) and Drew Weissman (from USA) for their pivotal contributions to the development of mRNA vaccines. Such vaccines were also developed against Covid-19.

Traditional vaccines
Traditionally, vaccines have been developed by introducing dead or weakened viruses into the human body, so the body can develop antibodies against them. Thus, when the actual virus infects someone, their body is prepared to fight it.

As technology evolved, instead of the whole virus, just a part of the viral genetic code, began to be introduced through vaccines. But the large-scale development of such vaccines requires cell culture (growing of cells under controlled conditions) and takes time.

Need for mRNA vaccines

During the Covid-19 outbreak, time was short to fight against the deadly and fast-spreading virus. This is where mRNA technology proved crucial. This technology had been known since the 1980s, but had not been perfected enough to create vaccines at a viable scale.

How to mRNA vaccines work?
Instead of putting an inactivated virus in the body to activate an immune response, vaccines using this technology use messenger Ribonucleic Acid, or mRNA, to deliver a message to the immune system. Genetically engineered (or lab grown) mRNA can instruct cells to make the protein needed to fight a particular virus.

Contribution of Kariko and Weissman
Karikó and Weissman realised that the problem with lab-grown genetically engineered mRNA is that the body's dendritic cells [which have important functions in immune surveillance and the activation of vaccine-induced immune response] recognise them as a foreign substance, and release inflammatory signaling molecules against them.

They produced different variants of mRNA, each with unique chemical alterations in their bases, which they delivered to dendritic cells. The inflammatory response was almost abolished in some chemical alterations. The identification of these chemical alterations in mRNA helped in the development of mRNA vaccines such as Covid vaccines by Moderna and Pfizer.

4. Nobel Prize in Physics 2023: Scientists made it possible to watch movement of electrons

Introduction
In the world of atomic and subatomic particles, things happen incredibly fast, much faster than the blink of an eye. However, thanks to groundbreaking work by Nobel laureates, scientists can now capture and study these ultra-fast processes using attosecond pulses of light. This article simplifies their Nobel Prize-winning achievement.

Capturing fast events
In our everyday lives, we use cameras with high shutter-speeds to capture fast events, like a bullet hitting an apple. But at the atomic level, things happen even faster, in picoseconds (one trillionth of a second or 1×10^{-12} of a second) and femtoseconds (thousand times smaller than picoseconds or 1×10^{-15} of a second). For a long time, scientists thought femtoseconds were the limit for capturing these rapid events.

Why femtoseconds was considered limit
Light pulses, the only plausible tool to capture processes at the atomic level, cannot be made indefinitely shorter. Light consists of waves, or vibrations in the

electromagnetic field. The shortest possible pulse would have to be at least one cycle long, equivalent to its wavelength. For all sorts of light produced by laser systems, this cycle used to take at least a few femtoseconds to complete. This was longer than the sub-atomic motion that was happening in a matter of attoseconds. Scientists were therefore unable to glimpse the motion of electrons with existing technologies.

Electrons move in Attoseconds
Processes occurring within a few attoseconds (1×10^{-18} of a second or one quintillionth of a second), such as the movement of electrons within an atom, were previously beyond our observational capabilities. Attosecond pulses of light were needed to catch these ultra-fast actions.

Nobel Prize Winners
Pierre Agostini (from France), Ferenc Krausz (from Hungary), and Anne L'Huillier (from France) received the 2023 Nobel Prize in Physics for their pioneering work in generating attosecond pulses of light. Anne L'Huillier became the fifth woman to win the Physics Nobel.

Logic behind observing processes occurring in Attoseconds
To observe a process, measurements must happen faster than the process itself. Light pulses, being the tool for atomic-level observations, had their limits. However, the Nobel laureates found innovative ways, like combining different wavelengths of light, to create attosecond pulses, enabling the observation of previously hidden phenomena.

Potential applications
Scientists not only want to observe these ultra-fast events but also control them. The ability to tweak intermediate steps in processes opens doors for achieving desired outcomes in various fields.

Attosecond science has vast potential, spanning across electronics, medicine, and multiple scientific disciplines. It could have applications in cancer therapy and various other areas of research.

5. 2023 Nobel Prize on Behaviour of Nanoparticles'

Introduction: Understanding Elemental Properties
Every element possesses distinct properties based on its atomic structure, with these properties remaining consistent regardless of an element's size.

Nanoparticles' Anomalous Behavior

Over four decades ago, scientists discovered that nanoparticles exhibit behavior which is distinct from their larger counterparts. This phenomenon challenged the fundamental principles of chemistry.

Pioneers of Nanoparticles' Behaviour Research
Alexei Ekimov's Discovery (1980): Ekimov, while in the USSR, first observed the deviant behavior in Copper Chloride nanoparticles and succeeded in manufacturing them. However, his findings remained relatively unknown globally.

Louis Brus's Independent Findings: Brus, an American scientist, independently discovered similar behavior in Cadmium Sulphide nanoparticles. He also created nanoparticles with altered properties.

Moungi Bawendi's Contributions: Working with Brus initially, Bawendi developed more efficient methods for producing nanoparticles with desired properties.

Nobel Prize Recognition
In 2023, Ekimov, Brus, and Bawendi were awarded the Nobel Prize in Chemistry for their groundbreaking research, conducted several decades ago, which revolutionized the field of nanoparticles.

Applications of Nanoparticles
The research conducted by these Nobel laureates has led to the integration of nanoparticles with unique properties into modern appliances, such as television screens, computer displays, and LED lamps, as well as various applications in biochemistry and medicine.

Quantum Effects and Nanoparticles
Understanding Quantum Effects: Quantum effects govern the behavior of very small particles, including electrons, leading to emergence of unconventional properties not observed in everyday objects.

Nanoscale Confinement and Quantum Effects: When particle size is reduced to the nanoscale, electrons experience confinement in a limited space, which gives rise to quantum effects.

Quantum Dots: The Result of Quantum Effects
Ekimov and Brus harnessed these quantum effects to create nanoparticles with unique properties, naming them "quantum dots."

Distinctive Properties of Quantum Dots

One of the most notable properties of quantum dots becomes apparent when they interact with light. The size of quantum dots influences the wavelengths of light they absorb or reflect, affecting the color of the material.

Conclusion: Transformative Impact of Nanoparticle Research
The pioneering work of Ekimov, Brus, and Bawendi on nanoparticles and quantum effects has not only expanded our understanding of particle behavior but has also paved the way for practical applications across various industries.

6. Nobel Prize for Literature 2023
Norwegian Author Jon Fosse Wins 2023 Nobel Prize for Literature

Who is Jon Olav Fosse?
- Fosse writes in Norwegian Nynorsk, a less common version of Norwegian.
- He started as a novelist and later became a well-known playwright.
- His works have been translated into over 40 languages.
- He's famous for his unique way of writing about everyday life and complex human emotions.
- Some of his notable works include "I Am the Wind," "Melancholy," "Boathouse," and "The Dead Dogs."
- He's not very well-known in English-speaking countries.

7. Narges Mohammadi: The 2023 Iranian Nobel Peace Prize Winner

Introduction: Nobel Prize for Peace
The Norwegian Nobel Committee recently honored Iranian activist Narges Mohammadi with the 2023 Nobel Prize for Peace. She was recognized for her unwavering dedication to fighting for women's rights in Iran and her tireless efforts to promote human rights and freedom for all.

Early Life and Activism
Birth and Background: Born in 1972 in Iran, Narges Mohammadi's journey into activism began with the Iranian Revolution in 1979, which saw the transition of Iran to an Islamic republic.

Early Influences: Two childhood memories played a pivotal role in shaping her activism: her mother's prison visits to her brother and watching TV announcements of daily prisoner executions.

Education and Family: Mohammadi studied nuclear physics in Qazvin and met her future husband, Taghi Rahmani, who was also politically active. He was later imprisoned for 14 years in Iran and now resides in France with their two children.

Activism and Challenges

Advocacy Areas: Mohammadi has been involved in various causes, including advocating for women's rights, opposing the death penalty, and protesting harsh sentences for political activists. She has also written about these issues in local newspapers.

Professional Setbacks: While working as an engineer in Tehran, she faced dismissal at the government's behest.

Center for Human Rights Defenders: In the 2000s, she joined the Center for Human Rights Defenders in Iran, founded by lawyer Shirin Ebadi, which aimed to abolish the death penalty.

Multiple Arrests and Sentences

Judicial Confrontations: Mohammadi has had numerous encounters with the Iranian judiciary. She has been arrested 13 times, convicted five times, and sentenced to a total of 31 years in prison and 154 lashes.

Prison Activism: Even while incarcerated, she continued to organize protests against the government alongside fellow women prisoners.

'White Torture': In 2022, while briefly at home after a heart attack and surgery, she authored the book 'White Torture,' providing insights into life under solitary confinement and featuring interviews with other Iranian women who endured similar punishment.

Recognition and Awards

International Accolades: Mohammadi's advocacy work has earned her recognition and awards in the West, including the 2023 PEN/Barbey Freedom to Write Award, the 2023 UNESCO/Guillermo Cano World Press Freedom Prize, and a spot in the BBC's list of 100 inspiring and influential women from around the world in 2022.

Comparison to Nobel Laureate Shirin Ebadi

Shirin Ebadi's Nobel Prize: Narges Mohammadi follows in the footsteps of Shirin Ebadi, the first Iranian woman to win the Nobel Peace Prize. Ebadi received the honor for her efforts in promoting democracy and human rights.

Nobel Peace Prize Role: Ebadi's Nobel Peace Prize aimed to reduce tensions between the Islamic and Western worlds' following the September 11, 2001, terrorist attack on the United States.

Conclusion: A Voice for Human Rights

Narges Mohammadi's unwavering commitment to human rights, particularly women's rights, has earned her international recognition and the prestigious Nobel Peace Prize. Her activism in the face of adversity underscores the importance of individuals like her in advocating for a more just and equal world.

8. Economics Nobel 2023 for advancing understanding on women status in the workforce

2023 Nobel Prize for Economics
The Nobel Prize in Economics for 2023 was awarded Monday to Claudia Goldin, a Harvard University professor.

Goldin's pathbreaking work has shed light on the participation of women in the labour market over the past 200 years, and why the pay gap between men and women refuses to close even as many women are likely to be better educated than men in high income countries.

While her research focused on the US, her findings are applicable to many other countries.

Earlier belief
Before Goldin's book was published in 1990, data mainly from the 20th century had been published, and researchers believed that as the economy grew, so did women's labour force participation.

Goldin reached back to older data to reveal that before industrialisation, more women were likely to have been involved in economic activity related to agriculture and various cottage industries. With greater industrialisation, work was concentrated in factories, and women found it difficult to leave their homes and travel to work. This trend reversed in the early 20th century, with the growth of the services sector.

Goldin's findings
Two other factors played a crucial role in women's access to higher education and employment — marriage and the contraceptive pill.

Marriage: Goldin's work found that by the beginning of the 20th century, while around 20 per cent of women were gainfully employed, the share of married women was only five per cent. Despite an increasing demand for labour, married women were excluded from parts of the labour market.

Contraceptive pills: By the end of the 1960s, as easy-to-use contraceptive pills became more popular, women could exercise greater control over childbirth and actually plan careers and motherhood. Women also ventured beyond the services

sector, studying subjects like law, economics, and medicine. Now, women were catching up in terms of education and fields of employment.

Pay gap and parenthood
One glaring gap continues to this day — the gender-based pay gap. Till the time men and women worked in factories, where the pay depended on the day's countable output, the pay gap was not too high. It became wider when monthly pay contracts came into the picture. One factor significantly impacted how men were paid versus women — childbirth. As women had to shoulder more of the parenting responsibilities once a child was born, they were also punished for this at the work front in terms of a slower rise on the payscale.

About the Economics Nobel
A Nobel Prize in Economics was not part of Alfred Nobel's 1895 will that established the other prizes.

The prize is based on a donation received by the Nobel Foundation in 1968 from Sveriges Riksbank (Sweden's central bank), on the bank's 300th anniversary. It is formally called the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel.

Goldin is only the third woman to win this honour. In 2009, Elinor Ostrom got the award along with Oliver E Williamson, while in 2019, Esther Duflo shared it with Abhijit Banerjee and Michael Kremer.

9. Historic Achievement at Asian Games

India's overall performance
India's best-ever performance at the Hangzhou Asian Games has marked a turning point in the country's sporting history. With a total of 107 medals (28 gold, 38 silver, and 41 bronze), India has surpassed its previous record of 70 medals from Jakarta 2018.

Rank	Country	Gold	Silver	Bronze	Total
1	People's Republic of China	201	111	71	383
2	Japan	52	67	69	188
3	Republic of Korea	42	59	89	190

| 4 | India | 28 | 38 | 41 | 107 |
| 5 | Uzbekistan | 22 | 18 | 31 | 71 |

Diversity in Excellence
India's impressive medal haul showcases its growing diversity in sporting excellence. While a significant number of gold medals were earned in track and field (6), shooting (7), and archery (5), India's athletes excelled in 22 different sports.

Events such as rowing, squash, kabaddi, and men's hockey saw outstanding performances, including the country's first-ever gold medal in equestrian. New stars emerged in roller-skating, wind-surfing, wushu, and sepaktakraw. Even cricket, traditionally separate from multi-disciplinary competitions, contributed with two gold medals.

The Value of Medals
In continental games like the Asian Games, the competition can vary significantly among sports. Medals in sports like badminton and table tennis, which feature world-level competition in Asia, hold added significance. For instance, gold in men's doubles badminton, bronze in men's singles badminton, and a notable victory by Sutirtha and Ayhika Mukherjee in women's doubles table tennis over Chinese world champions are of great value.

Room for Improvement
While India's sporting achievements are remarkable, only 12 of the 28 gold medals are in events included in the Olympics. Additionally, only a few performances, such as Neeraj Chopra's remarkable javelin throw, can be considered world-class. This highlights the need for India to bridge the gap with global standards in sports.

Challenges Ahead
To continue this positive trajectory, India must address issues such as inefficient sports administrators, factionalism in sports federations, legal disputes, and the persistent problem of doping. It's essential to maintain and build upon the progress made in the world of sports.

Miscellaneous

1. The Loss of UK's Iconic Sycamore Gap Tree: Significance and Impact

Introduction
- A 300-year-old sycamore tree in England, known for its beauty and unique location, was recently felled by a teenage boy in an act of apparent vandalism.
- This incident has sparked an investigation and led to the arrest of the young perpetrator, though the motive remains unclear.

The Sycamore's Unique Location
- Iconic Setting: The sycamore tree stood in a remarkable location, nestled in a dip between two hills at a gap in the Hadrian Wall, an ancient stone structure near the England-Scotland border in Northumberland, northern England.
- Geological Origins: These gaps, or channels, were formed thousands of years ago by meltwater flowing beneath ice sheets during ancient times.

Figure 6 Sycamore Gap Tree

Cultural Significance
- Memorial Site: The tree's location held deep personal meaning for many, serving as a place where people scattered ashes, proposed, and enjoyed family picnics.
- Hollywood Fame: The sycamore was featured in the 1991 Hollywood film "Robin Hood: Prince of Thieves," making it a cultural landmark.
- Loss to Region: Its demise is mourned as a cultural loss for Northumberland, known as the most photographed spot in the Northumberland National Park.

The Sycamore Tree
- Characteristics: Sycamore trees can grow up to 35 meters tall, with leaves resembling those of maple trees.
- Origin: Native to central, eastern, and southern Europe, it was likely introduced to the UK by the Romans or during the Tudor era in the 1500s.

- **Prolific Growth:** Due to its high seed fertility, sycamore trees spread rapidly across the UK, often overshadowing native species.
- **Utility:** Sycamore wood is strong and suitable for carving, leading to its use in crafting decoratively carved wooden spoons known as "love spoons," often exchanged as romantic gestures.

UNESCO Heritage Site: The Hadrian Wall

• **Part of Larger Heritage Site:** The Hadrian Wall is a segment of the UNESCO World Heritage Site called the 'Frontiers of the Roman Empire,' found in both the UK and Germany.

• **Historical Significance:** This Roman frontier served as a protective barrier encompassing the Mediterranean world, extending from the Atlantic Coast to the Black Sea and from central Scotland to the Sahara Desert's northern fringes.

• **Hadrian's Wall:** Spanning 118 km, this wall was constructed on Emperor Hadrian's orders around AD 122, marking the northernmost boundary of the Roman province of Britannia.

• **UNESCO Recognition:** The Hadrian Wall showcases ancient Rome's military organization, defensive strategies, and geopolitical tactics, making it a significant part of world heritage.

2. NTPC Recognized in Forbes "World's Best Employers 2023" List

NTPC: The Only Indian PSU on Forbes' Prestigious List

India's largest integrated energy conglomerate, National Thermal Power Corporation Limited, has achieved recognition as one of the "World's Best Employers 2023" in Forbes' World's Best Employers list for 2023. This distinction places NTPC at the 261st position among the top 700 companies worldwide. It's worth noting that NTPC is the sole Indian public sector undertaking (PSU) to make the list.

Forbes' World's Best Employers List 2023

Forbes annually publishes the World's Best Employers List, conducting independent market research to identify the top 700 companies globally that provide an exciting working environment with a positive atmosphere, training and career advancement opportunities, employee benefits, a focus on employee well-being, and workplace diversity.

3. IOC Approves Five New Sports for LA 2028 Olympics

New Sports Approved

Cricket and four other sports namely Flag football, lacrosse, squash, and baseball-softball have been approved for the 2028 Los Angeles Games by the International Olympic Committee (IOC).

BASEBALL-SOFTBALL   LACROSSE   CRICKET   SQUASH   FLAG FOOTBALL

IOC's Inclusion Rules

IOC rules allow each host city to request the inclusion of several sports for their edition of the games. On the basis of request, the IOC Executive committee takes decision on the basis of voting.

These five sports had received unanimous approval from the IOC Executive Board, with only two "no" votes out of about 90 IOC members.

Cricket's Return

Cricket, a sport with a massive following in India and a growing global audience, returns to the Olympics after more than a century, having appeared once at the 1900 Olympics.

Cricket Format for LA 2028

The LA Games will feature a six-team Twenty20 cricket tournament for both men and women.

Objective for Cricket's Inclusion

The IOC aims to engage a new, larger Olympic audience, especially among Asian cricket fans.

Cricket's Popularity

The annual Indian Premier League (IPL) cricket tournament, valued at $8.4 billion, is one of the world's richest sports leagues, attracting top players and coaches. It features the same T20 format as the LA 2028 Olympic cricket.

India's Olympic Aspirations

India, currently hosting the 50-over Cricket World Cup, plans to bid for the 2036 Olympics.

Positive Reactions to Cricket's Inclusion
International Cricket Council Chairman Greg Barclay and former India women's cricket captain Mithali Raj express excitement for cricket's inclusion, offering players the chance to compete for an Olympic gold medal and share the sport with fans worldwide.

Exclusion of Breakdance
Breakdance, which will debut in the Paris 2024 Olympics, will not return for LA 2028.

Uncertainty in Boxing
The status of boxing at the 2028 Games remains uncertain due to disputes within the International Boxing Association (IBA). The IOC stripped the IBA of recognition due to governance and credibility concerns. Boxing has been part of every Olympics since 1920 and will feature in the upcoming Paris Games.

4. MS Swaminathan's Role in the Green Revolution: India's Path to Food Security

Introduction
The recent passing of agricultural scientist MS Swaminathan, aged 98, highlights his pivotal role in ushering in the Green Revolution, a transformative period for Indian agriculture. This article explores the challenges India faced at the time and how Swaminathan contributed to the nation's journey towards food security.

MS Swaminathan: The 'Father of the Green Revolution'
MS Swaminathan, often referred to as the 'Father of the Green Revolution,' dedicated his career to agricultural research. His contributions played a significant role in the agricultural reforms of the 1960s and 70s, which ultimately led India to achieve food security.

Early Career and Dedication to Agriculture
Swaminathan's passion for agriculture developed during a critical period in India's history—the Bengal famine of 1942-43. Inspired by Mahatma Gandhi's call for action and the devastating famine, he chose to study agriculture instead of pursuing a career in medicine. He even gave up career in Civil services, ultimately redirecting his path towards agricultural research.

He would go on to serve at a number of institutions related to the sector in both India and abroad – as an Independent Chairman of the Food and Agricultural Organisation Council (1981-85), President of the International Union for the Conservation of Nature and Natural Resources (1984-90), President of the World Wide Fund for Nature (India)

from 1989-96 and the Director General of Indian Council of Agricultural Research (ICAR), among others.

The Necessity of the Green Revolution
India's agricultural productivity was severely limited post-independence due to years of colonial rule and a lack of resources for modernization. Consequently, staple food crops had to be imported from countries like the US, highlighting the urgent need for agricultural reform.

Initiating the Green Revolution
The Green Revolution involved providing high-yielding variety seeds, improved irrigation, and fertilizers to Indian farmers in regions like Punjab, Haryana, and western Uttar Pradesh. This initiative led to a remarkable increase in crop production, particularly wheat, dramatically reducing India's dependence on food imports.

Swaminathan's Contribution
Swaminathan's research focused on enhancing crop productivity, particularly in wheat. His collaboration with American scientist Norman Borlaug resulted in the development of 'dwarf wheat' varieties, which significantly increased yields and kickstarted the "Wheat Revolution" in India.

Nobel laureate Norman Ernest Borlaug (right) and MS Swaminathan.

Challenges and Criticisms
While the Green Revolution was instrumental in achieving food sufficiency, it faced criticisms, including concerns about favoring prosperous farmers and its introduction primarily in high-productivity states. Swaminathan recognized these issues early on and emphasized the importance of balanced agricultural growth.

Legacy and Impact
He also lent his support to farmers. As the head of the National Commission on Farmers from 2004-06, he recommended that the Minimum Support Price at which farmers sell their crops to the government should be at least 50 per cent more than the weighted average cost of production.

For his contributions, Swaminathan was awarded the first World Food Prize Laureate in 1987, for "developing and spearheading the introduction of high-yielding wheat and rice varieties into India during the 1960s when that country faced the prospect of widespread famine. Wheat production doubled in just a few years, making the country self-sufficient and saving millions from extreme food deprivation.

MS Swaminathan's legacy extends beyond the Green Revolution. His dedication to agricultural research and commitment to addressing food security challenges continue to inspire future generations of scientists and policymakers in India.

5. Return of Chhatrapati Shivaji Maharaj's Wagh Nakh

Introduction
Maharashtra's Cultural Affairs Minister, Sudhir Mungantiwar, signs an MoU with the Victoria and Albert Museum in London. The MoU allows for the temporary return of Chhatrapati Shivaji Maharaj's legendary wagh nakh to Maharashtra.

What is the Wagh Nakh?

The wagh nakh, meaning 'tiger claws,' is a medieval dagger used in the Indian subcontinent. It features curved blades affixed to a glove or bar, designed for personal defense or stealth attacks.

Role of Wagh Nakh in Shivaji Maharaj's Legend
The most famous use of the wagh nakh in history comes from the story of Afzal Khan's killing by Shivaji. Khan was a general of Bijapur's Adil Shahi Sultanate. Given Afzal

Khan's success in the south, he was sent by the Sultan, with a mighty army, to subdue the Marathas**.**

Khan marched into the Konkan and demanded a meeting with Shivaji. But Shivaji smelled treachery. Thus, he went prepared to the meeting, wearing a chainmail under his robes and hiding a wagh nakh in his sleeve.

In the meeting, Khan, in the guise of embracing him, attempted to stab the Maratha leader. But Shivaji was protected by his armour and retaliated: the wagh nakh ripped out Khan's guts. Khan would eventually be beheaded by one of Shivaji's men and in the battle that followed, Shivaji's army came out as victor.

Journey of the Wagh Nakh
East India Company officer James Grant Duff brought the weapon to Britain.
The case bears an inscription describing how Shivaji used the wagh nakh to kill the Moghul General. Duff was the Company Resident (political agent) of the Satara State from 1818-22. Duff acquired this weapon, possibly from the last Maratha Prime Minister, Baji Rao II.

Why is the Wagh Nakh Returning?
The return of cultural artifacts taken during the colonial era is a growing trend globally. Museums are increasingly facing requests to return such items to their places of origin.

The return of the wagh nakh is part of this broader movement, although it will be a temporary loan from the Victoria and Albert Museum.

The Significance of the Wagh Nakh's Return
The wagh nakh's return coincides with the 350th anniversary of Shivaji's coronation and represents a symbolic gesture in acknowledging colonial history and returning culturally significant artifacts.

1. Consider the following statements about Dadasaheb Phalke Award:
1. The award was instituted in year 1969.
2. The award is presented at the National Film Awards ceremony.
3. The award is given by the Union Ministry of Information and Broadcasting.
How many of the above statements are correct?
(a) Only one
(b) Only two
(c) All three
(d) None

2. Recently, samples from asteroid Bennu have been brought to earth. The mission which brought these samples was
(a) NASA's OSIRIS-REx mission
(b) JAXA's Hayabusa mission
(c) European Space Agency Outer Space mission
(d) China's Chang'e 5 mission

3. The famous 300-year-old iconic Sycamore Gap Tree, now vandalised, was located in
(a) Saudi Arabia
(b) Denmark
(c) Norway
(d) England

4. The last caste-based census was held at national level in the year
(a) 2011
(b) 1971
(c) 1951
(d) 1941

5. How many of the following offences are punishable under Unlawful activities Prevention act?
1. Disruption of essential services
2. Introduction of counterfeit currency
3. Use of explosives to cause damage to property
(a) Only one
(b) Only two
(c) All three
(d) None

6. Narges Mohammadi, the 2023 Nobel prize winner, belongs to
(a) Saudi Arabia

(b) Iraq
(c) Iran
(d) Egypt

7. Hezbollah, a militant group, had its origin in which of the following countries?
(a) Syria
(b) Israel
(c) Yemen
(d) Lebanon

8. The Israel's Iron Dome Defense system is used primarily for the purpose of
(a) Intercepting incoming missiles and rockets
(b) Launching offensive against enemy nations
(c) Disrupting electronic equipments of enemy nations
(d) Creating physical shield between Palestine and Israel

9. Consider the following statements regarding Electoral bonds?
1. Only corporates can donate money to Political parties via these bonds.
2. The highest denomination of these bonds is Rs. 1 Lakh.
3. These bonds can also be purchased via cash without any upper limit.
How many of the above statements are incorrect?
(a) Only one
(b) Only two
(c) All three
(d) None

10. Consider the following statements pertaining to habitat rights of Particularly Vulnerable Tribal Groups (PVTG) in India:
1. Habitat rights are granted to PVTG under Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.
2. All the PVTGs across India have been conferred habitat rights.
3. The habitat rights include the right over a territory including the right to earn livelihood from the same.
How many of the above statements are correct?
(a) Only One
(b) Only Two
(c) All Three
(d) None

11. Which PSU in India has been recognised as one of the "World's Best Employers 2023" in Forbes' World's Best Employers list?
(a) NTPC
(b) NHPC

(c) SAIL
(d) BHEL

12. Which of the following statements is incorrect about Indian Ocean Rim Association (IORA)?
(a) The membership of IORA includes Asian nations, African nations and Australia.
(b) The dialogue partners of IORA include China and the US.
(c) The annual meeting of IORA is attended by Head of States and Head of governments.
(d) The Chair of IORA moves among members by way of rotation.

13. 'The Balfour Declaration' was made in the context of
(a) Autonomy to British colonies
(b) Prevent wars within America
(c) Safeguard Islam from influence of Christianity
(d) Create separate Jewish state

14. Consider the following statements regarding inclusion of Cricket in Olympics:
1. Cricket has never appeared in the Olympics.
2. Six team Twenty 20 cricket tournament has been included in Los Angeles 2028 Olympics.
3. Only men tournament will be played in 2028 Olympics.
How many of the above statements are correct?
(a) Only One
(b) Only Two
(c) All Three
(d) None

15. The 'Uluru Statement from the Heart' is related to
(a) Impact of forest fires on animals
(b) Reduction in Coral reefs
(c) Link between Climate Change and Poverty
(d) Rights of Australian Aboriginals

16. Consider the following statements about Regional Rapid Transit System (RRTS) also known as Namo Bharat:
1. It is will provide faster connectivity in National Capital Region (NCR).
2. It is based on metro railway system.
3. It is under implementation of National Capital Region Transport Corporation, a joint venture of the Central government and the governments of Delhi, Haryana, Rajasthan, and Uttar Pradesh.
How many of the above statements are correct?
(a) Only one

(b) Only two
(c) All three
(d) None

17. Which of the following is the correct ascending order of Multilateral Development Institutions in terms of lending assistance given to India?
(a) European Investment Bank, Asian Development Bank and Asian Infrastructure Investment Bank
(b) Asian Development Bank, European Investment Bank and Asian Infrastructure Investment Bank
(c) European Investment Bank, Asian Infrastructure Investment Bank and Asian Development Bank
(d) Asian Infrastructure Investment Bank, European Investment Bank and Asian Development Bank

18. What is 'Rafah Crossing'?
(a) It is the crossing which connects Crimea to Mainland Russia.
(b) It is the crossing which connects Gaza Strip to Egypt.
(c) It is the crossing which connects Afghanistan to Iran.
(d) It is the crossing which connects Jordan to West Bank.

19. Which of the following statements regarding guidelines to ensure equal distribution of medical colleges across the country is correct?
(a) States can have maximum of 100 medical education seats per million population.
(b) States will be penalised if they have less than 100 medical education seats per million population.
(c) States cannot add more seats if they fulfill the criteria of minimum of 100 medical education seats per million population.
(d) States cannot add more seats if they fulfill the criteria of minimum of 100 medical education seats per million population.

20. 'Trident', the largest Neutrino detector facility, is being constructed by
(a) USA
(b) EU
(c) China
(d) Japan

21. Consider the follwowing pairs of the names associated with our country and the people responsible for their origin:
1. Bharat: South-East Asian
2. Hindustan: Persian
3. India: Greek
How many of the above pairs are correctly matched?

(a) Only One
(b) Only Two
(c) All Three
(d) None

22. Which of the following sufi saints has stayed in Jerusalem?
(a) Nizamuddin Auliya
(b) Mu'in al-Din Chishti
(c) Kabir Das
(d) Baba Farid

23. Which of the following category of entities are primarily responsible for generating Credit Score in India?
(a) Banks
(b) Non-Banking Financial Companies
(c) Credit Information Companies
(d) Credit Rating Agencies

24. How did India react to October 2023 resolution for immediate truce in the Israel-Hamas conflict at United Nations General Assembly?
(a) Voted in Favour
(b) Voted against
(c) Abstained from vote
(d) Remained Absent

25. Carbon Nanoflorets are capable of producing unprecedented efficiency in Solar-thermal Conversion because
(a) Carbon nanoflorets can amplify solar energy before conversion into thermal energy.
(b) Carbon nanoflorets can efficiently absorb multiple frequencies of sunlight.
(c) Carbon nanoflorets can be stationed in space.
(d) Carbon nanoflorets have strong affinity to natural light.

Answer Key

1.(c)	2.(a)	3.(d)	4.(d)	5.(c)
6.(c)	7.(d)	8.(a)	9.(c)	10.(b)
11.(a)	12.(c)	13.(d)	14.(a)	15.(d)
16.(b)	17.(c)	18.(b)	19.(c)	20.(c)
21.(b)	22.(d)	23.(c)	24.(c)	25.(b)

Explanations

1. (c) All the three statements are correct.

2. (a) NASA's OSIRIS-REx mission collected samples from the asteroid Bennu, located billions of kilometers from Earth.

3. (d) The sycamore tree stood in a remarkable location, nestled in a dip between two hills at a gap in the Hadrian Wall, an ancient stone structure near the England-Scotland border in Northumberland, northern England.

4. (d) Indian Censuses from 1951 to 2011 included data on Scheduled Castes and Scheduled Tribes but omitted information on other castes. Uptill 1931, caste-based data was collected. In 1941, such data was collected but not published due to World War II.

5. (c) Option c is the correct answer. According to UAPA, terrorist act includes using explosives, causing death or damage to property, disrupting essential community services, and damaging India's monetary stability through counterfeit currency. Thus, all the three statements are correct.

6. (c) The Norwegian Nobel Committee recently honored Iranian activist Narges Mohammadi with the 2023 Nobel Prize for Peace.

7. (d) Hezbollah, also known as the 'Party of God,' is a Shiite Islamic militant organization based in Lebanon.

8. (a) The Iron Dome is a defense system used by Israel to stop rockets and missiles from reaching their targets.

9. (c) Statement 1 is incorrect: Even individuals, groups of individuals, NGOs, religious and other trusts are permitted to donate via electoral bonds without disclosing their details.
Statement 2 is incorrect: Such bonds, which are sold in multiples of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh, and Rs 1 crore.
Statement 3 is incorrect: Donor for these bonds is required to pay the amount via a cheque or a digital mechanism (cash is not allowed) to the authorised SBI branch.
Thus, all three statements are incorrect.

10. (b) Statements 1 and 3 are correct.
Statement 2 is incorrect: Out of 75 PVTGs in India, only three have received habitat rights, including Bharia in Madhya Pradesh; Kamar and now Baiga in Chhattisgarh.
Thus, only two statements are correct.

11. (a) India's largest integrated energy conglomerate, National Thermal Power Corporation Limited, has achieved recognition as one of the "World's Best Employers

2023" in Forbes' World's Best Employers list for 2023. This distinction places NTPC at the 261st position among the top 700 companies worldwide. It's worth noting that NTPC is the sole Indian public sector undertaking (PSU) to make the list.

12. (c) The apex body of IORA is the Council of Foreign Ministers that meet once a year. Thus, option (c) is incorrect.

13. (d) What possibly changed the face of West Asia forever was the Balfour Declaration of 1917, when a letter sent by a British official to a wealthy British Jew sealed the fate of lakhs of Palestinians. The British government needed Jewish support in its World War I efforts. To secure that, Foreign Secretary Arthur James Balfour backed the Zionist cause.

14. (a) Statement 1 is incorrect: Cricket was included in 1900 Olympics.
Statement 2 is correct.
Statement is incorrect: The Los Angeles Games will feature a six-team Twenty20 cricket tournament for both men and women.
Thus, only one statement is correct.

15. (d) The Uluru Statement from the Heart was the result of a years-long consultation process with Indigenous communities across Australia - known as the Uluru Dialogues - which culminated in the 2017 Uluru Summit. There, delegates settled on a model of constitutional recognition of Australians Aboriginals.

16. (b) Statement 1 is correct.
Statement 2 is incorrect: Distinguishing itself from conventional metro and railway systems, the RRTS offers increased speed and connectivity for commuters traversing longer distances across the NCR, providing enhanced comfort and frequency.
Statement 3 is correct.
Two Statements are correct. Thus, only two statements is the correct answer option.

17. (c) The European Investment Bank, established in 1958, has signed off on 22 projects in India with a cumulative value of Euro 4.5 billion.
The Beijing-headquartered Asian Infrastructure Investment Bank (AIIB), which was formed in 2016, has approved financing worth $9.9 billion in India.
The Manila-based Asian Development Bank, formed in 1969, has cumulatively committed to assistance worth $59.7 billion in India for project and technical assistance.
Thus, the correct ascending order is European Investment Bank, Asian Infrastructure Investment Bank and Asian Development Bank.

18. (b) The Rafah crossing between Egypt and Gaza is the sole route for aid to enter Gaza from outside Israel and the only non-Israeli exit.

19. (c) Option (c) is the correct answer.
In August, the National Medical Commission (NMC) introduced regulations that put a temporary halt on establishing new medical colleges and expanding existing ones in states with more than 100 medical education seats per million population. The aim is to address regional disparities in doctor availability and ensure quality education for all.

20. (c) Option (c) is the correct answer.
China is constructing the world's largest neutrino detector, known as "Trident." This detector is being constructed in the western Pacific Ocean.

21. (b) Pair 1 is incorrectly matched. Bharat has originated from within the country. Remaining 2 Pairs are correctly matched.

22. (d) Baba Farid stayed in Jerusalem and offered prayers in Al-Aqsa mosque.

23. (c) CICs are entities responsible for collecting and analyzing credit information for individuals and businesses across the country. Based on this information, a CIC calculates and generates credit scores for individuals and credit ranks for companies as per their creditworthiness and past credit history.

24. (c) The UN resolution, calling for an immediate humanitarian truce in the Israel-Hamas conflict, received 120 votes in favour and 14 against. India abstained from voting.

25. (b) Carbon nanoflorets can absorb infrared, visible light, and ultraviolet frequencies, allowing them to harness a larger portion of the solar energy spectrum compared to traditional photovoltaic materials.