

CURRENT AFFAIRS National and International

The Complete Coverage of All Important Events

OCT-NOV

2023



HIGHLIGHTS

- EDAKKAL CAVES
- BRU REFUGEES
- GLACIAL LAKE OUTBURST FLOOD (GLOF)
- PM ANUSUCHIT JAATI ABHUYDAY YOJANA
- WINTER ACTION PLAN TO ADDRESS AIR
- POLLUTION IN DELHI-NCR

PMAJAY



OCTOBER-NOVEMBER 2023

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Inside the Pages

MAIN ATTRACTION

- National Affairs
- International Affairs
- Economy & Banking
- State Affairs
- Science & Technology
- Space Technology
- Defence & Security
- Health & Nutrition
- Sports Panorama



CURRENT AFFAIRS



Sources:

The Hindu | The Indian Express | The Economic Times | Press Information Bureau PIB News | PRS (Recent Bills and their analysis) | CPCB | NDMA | IDSA: Institute for Defense Studies and Analysis (For in-depth IR and Internal Security articles) unesco World Heritage Convention | BBC | NCERTs All standard reference books.

Yojna IAS Current Affairs Monthly Magazine covers a wide range of topics that overlaps with the CORE subjects.

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FOREWORD

Dear Aspirants,

Every one of you dreams and desires something to accomplish. Nobody can stop you from dreaming. Dreams are the only objective we all have and don't work until we do. Every new day, you dream of motivating yourself for a new purpose of improving your life. Preparing and nourishing the mind. Vanishing the failed person within us. Discard the obstacles, doubts and justifications. And that's how victory will arrive at you. One should realize the most achieving regions in the preliminary and main IAS examination. One should know which editions must be read and which books must be prevented. To achieve an IAS position with the least effort, candidates must be discreet.

This Exclusive Book has been prepared and compiled keeping in mind the needs of dedicated Aspirants looking for a Focused and Intensive Career.

Yojna IAS thrives on being the best step an Aspirant takes towards Their goal of becoming a Civil Servant.

Yojna IAS- Our Dedicated and Committed team has prepared this informative Book just for your better understanding. We know that Conceptual Clarity is necessary to clear any Competitive Examination. With the help of this Book, you can remove your doubts quickly. This Book has some excellent Information.

The Book has been arranged in a deeply chronological and story-like manner to make for an exciting reading and easy retention.

We Wish you Good Luck, Keep Believing in Yourself, and if you are well prepared, you will Succeed.

Team of Yojna IAS

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MONTHLY CURRENT AFFAIRS

CONTENTS

General Studies –1

(Indian Heritage and Culture, History and Geography of the World and Society)

1.	BIHAR CASTE CENSUS SURVEY		1 - 4
2.	SIR SAYYID AHMAD KHAN		4 - 6
3.	UNWTO BEST TOURISM VILLAGES	2	6 - 8
4.	EDAKKAL CAVES		8 - 10
5.	CALDERA		10 - 11
6.	CIRCULAR MIGRATION		11 - 14
7.	BRU REFUGEES		14 - 15

General Studies -2

(Governance, Constitution, Polity, Social Justice & International Relations)

8.	AGAMAS	17 - 18
9.	ANTI-POLYGAMY LAW	19 - 22
	CENTRAL UNIVERSITIES (AMENDMENT) BILL, 2023	22 - 23
11.	PUSA-44	23 - 25
12.	COMPREHENSIVE NUCLEAR TEST BAN TREATY (CTBT)	25 - 28
13.	CANCER IN INDIA	28 - 30
14.	NOBEL IN ECONOMIC SCIENCES	30 - 32
15.	DIGITAL INDIA ACT (DIA)	32 - 34
16.	GLOBAL GENDER GAP INDEX	34 - 36
17.	MERA YUVA BHARAT	36 - 37
18.	INTENSIFIED MISSION INDRADHANUSH 5.0	38 - 39
19.	SPECIAL LEAVE PETITION	40 - 41
20.	INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES (IIPS)	41 - 43
21.	GAZA STRIP AND RAFAH BORDER	44 - 46
22.	DELHI-MEERUT REGIONAL RAPID TRANSIT SYSTEM (RRTS)	46 - 47
23.	YUVA SANGAM	47 - 49

	MANUAL SCAVENGING PM ANUSUCHIT JAATI ABHUYDAY YOJANA	49 - 51 51 - 53
	APAAR ID	53 - 55
27.	BOND YIELD	56 - 57
28.	SATELLITE INTERNET	57 - 59

General Studies -3

(Technology, Economic Development, Biodiversity, Security & Disaster Management)

29.	WINTER ACTION PLAN TO ADDRESS AIR POLLUTION IN DELHI-NCR	61 - 63
30.	KARMAN LINE	63 - 65
31.	IPBES INVASIVE ALIEN SPECIES ASSESSMENT	65 - 67
32.	GLACIAL LAKE OUTBURST FLOOD (GLOF)	68 - 70
33.	DOMESTIC CARD SCHEME AGREEMENT	70 - 72
34.	GANGETIC RIVER DOLPHIN	72 - 75
35.	GLOBAL HYDROGEN REVIEW 2023	75 - 77
36.	NOBEL PEACE PRIZE 2023	77 - 79
37.	NOBEL PEACE PRIZE 2023 GREEN CREDIT PROGRAM ANGEL TAX ON START-UPS GLOBAL MARITIME INDIA SUMMIT 2023	80 - 82
38.	ANGEL TAX ON START-UPS	82 - 84
39.	GLOBAL MARITIME INDIA SUMMIT 2023	84 - 86
40.	WHITE PHOSPHORUS BANNERGHATTA NATIONAL PARK	87 - 89
41.	BANNERGHATTA NATIONAL PARK	89 - 90
42.	ESIM	90 - 92
43.	RCS – UDAN (UDE DESH KA AAM NAGRIK)	92 - 96
44.	REFERENCE FUEL	96 - 97
	REFERENCE FUEL	

General Studies –1 Heritago and T

(Indian Heritage and Culture, History and Geography of the World and Society)

BIHAR CASTE CENSUS SURVEY

This article covers "Daily Current Affairs" and the topic details "Bihar Caste Census Survey". This topic has relevance in the "Social Issues" section of the UPSC CSE exam.

FOR PRELIMS:

What are Findings of Bihar Caste Census Survey?

For MAINS: GS1: Social Issues

WHY IN THE NEWS?

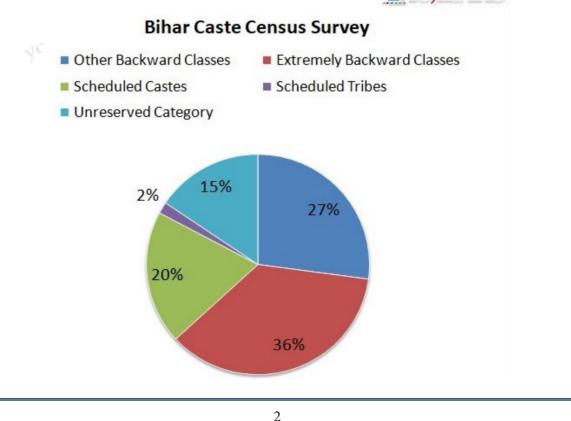
The Bihar government has released the results of its caste survey amid political parties' efforts to secure the OBC vote in the upcoming elections.

Key Findings of Bihar Caste Census Survey

- **Total Population:** According to the survey, Bihar's population has been recorded as 13,07,25,310, surpassing the 10.41 crore figure recorded in the 2011 census.
- **Religious Distribution:** Hindus comprise 81.99% of Bihar's population, while Muslims constitute 17.72%. The remaining population of Buddhists, Christians, Sikhs, Jains, and other religious groups is relatively small.
- **Backward Classes:** Other Backward Classes (OBCs) and Extremely Backward Classes (EBCs) form more than 63% of Bihar's population. EBCs, comprising 36.01% of the population, represent the most significant social group in the state, while OBCs account for 27.12%.
- Scheduled Castes: Scheduled Castes (SCs) comprise 19.65% of Bihar's population.
- **Scheduled Tribes:** Scheduled Tribes (STs) constitute 1.68% of the population, with a significant portion of the tribal population migrating to Jharkhand after the state's division in 2000.

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• **Unreserved Category:** The "unreserved" category represents 15.52% of Bihar's population.



IMPLICATIONS FROM BIHAR CASTE SURVEY:

OBC Population in Line with Expectations: •

- It is widely believed that the OBC population would exceed 27%, which aligns with the level of 0 reservation these castes receive.
- The Mandal Commission, in its 1980 report, had estimated the OBC population in the country to 0 be around 52%.
- **Demand for Reevaluation of OBC Quota:**
- The Bihar caste survey's findings, indicating a 10% increase in the OBC population compared to 0 the 1931 census, are likely to strengthen the demand for reevaluating the OBC quota.
- Considering their population size, OBC groups have long argued that the so-called forward castes 0 have disproportionately benefitted from government job reservations.
- **Impact on Political Landscape:** ٠
- This caste survey holds significant political significance for the Bihar government, enabling them 0 to maintain their relevance in state politics and emerge as a leading voice in national opposition.
- The Bihar government will use the survey data to advocate for "social justice" and "development 0 with justice" as key rallying points.
- Push for Nationwide Caste Census and OBC Quota: ٠
- The survey's results are expected to energise the opposition's campaign for a nationwide caste 0 census and an OBC quota within the 33% reservation for women in the Lok Sabha and state legislative assemblies. ो सफलता

CHALLENGES FOR BIHAR CASTE SURVEY:

- Legal Challenges: ٠
- The petitions argue that it violates the Supreme Court's privacy judgement and exceeds the leg-0 islative competence of the state government.
- They claim it is a census disguised as a survey, which can only be conducted by the central gov-0 ernment under the Census Act 1948.
- **Ouota Ceiling Debate:** ٠
- The survey is expected to reopen the debate on the 50% reservation ceiling set by the Supreme 0 Court in the Indra Sawhney vs. Union of India case.
- The court had established the 50% limit, which can only be exceeded in exceptional circum-0 stances.
- However, recent judgments have questioned the validity of certain quota limits, such as striking 0 down a Maharashtra law providing reservation to the Maratha community and upholding the 10% EWS quota in a 3:2 majority decision.

Sources:

What the Bihar caste survey data says (indianexpress.com)

Q1. With reference to reservations, consider the following statements:

- The Mandal Commission estimated the OBC population in the country to be around 52%. 1.
- 2. The OBC population in Bihar is in line with expectations, with 43% of the total population.

Which of the statements given above is/are correct?

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

Answer: (a)

- Q2. Discuss the key findings of the recent Bihar caste survey and their implications for the state's political landscape.
- Q3. Assess the potential consequences of reopening the debate on the 50% reservation ceiling as per the Supreme Court's ruling in the Indra Sawhney vs. Union of India case.

SIR SAYYID AHMAD KHAN

This article covers "Daily Current Affairs" and the topic details "Sir Sayyid Ahmad Khan". This topic has relevance in the "History and Culture" section of the UPSC CSE exam.

FOR PRELIMS:

About Sir Sayyid Ahmad Khan and his contributions

FOR MAINS:

GS1: Modern History

WHY IN THE NEWS?

• The enactment of the Women's Reservation Bill coincided with the 125th birth anniversary of Sir Syed Ahmad Khan, renowned for his efforts in advocating social reforms within the Muslim community.

ABOUT SIR SAYYID AHMAD KHAN

Sir Sayyid Ahmad Khan (born October 17, 1817, — March 27, 1898) was a Muslim educator, jurist, and author, founder of the Anglo-Mohammedan Oriental College at Aligarh, Uttar Pradesh, and the primary driving factor that sparked the resurgence of Indian Islam during the late 19th century.



Sir Sayyid Ahmad Khan

HIS POLITICAL CONTRIBUTIONS: Vision for Progress:

- Sir Syed was known for his vision of advancing his community and modernising the nation.
- He was the first Indian Muslim to lay the intellectual and institutional groundwork for Muslim

modernisation in South Asia.

Literary Endeavors:

- He commenced his literary journey at 23, authoring the notable work "Monuments of the Great" (Athar Assanadid) in 1847, which explored the antiquities of Delhi.
- Political Approach:
- Sir Syed, a prominent Muslim politician of his time, approached the Indian independence movement cautiously, urging Muslims to serve the British Raj faithfully.
- Simultaneously, he critiqued certain aspects of British policy and advocated for reforms.

Education for Muslims:

- Sir Syed Ahmed Khan was dedicated to improving the educational opportunities for his fellow Muslims.
- He recognised the need to dispel British rulers' misconceptions about Muslims.
- His essay "Essay on the Causes of the Indian Revolt" demonstrated that various factors, not solely Muslims, contributed to the 1857 rebellion.

HIS EDUCATIONAL CONTRIBUTION

Educational Reformer:

- Syed Ahmad Khan fought against superstitions and ignorance in Indian Muslim society, recognising their hindrance to progress.
- He advocated for modern scientific education.

Founding Modern Schools:

- In 1859, he established the Gulshan School, one of the first religious schools with scientific education.
- The Victoria School in Ghazipur followed in 1863, emphasising modern education.

Promoting Interfaith Relations:

- Syed Ahmad Khan worked on fostering strong interfaith relations between Islam and Christianity. **Translation Society and Scientific Society:**
- His Translation Society (1862) translated scientific European works into Hindi and Urdu, evolving into the Scientific Society of Aligarh.
- It aimed to promote modern education and Western scientific knowledge among Indian Muslims.

Urdu Language Advocate:

- In the Hindi-Urdu language controversy in 1867, he championed Urdu as the lingua franca in the United Provinces, opposing Hindi as a second official language.
- He also promoted Urdu through his writings.

Educational Vision in England:

• Inspired by the Renaissance culture during his England trip 1869, he aspired to create a "Muslim Cambridge."

Journal and University:

- In 1870, he launched "Tahzib-al-Akhlaq" (Social Reformer) to drive reforms and modern awareness.
- He founded the Muhammadan Anglo-Oriental College in 1875, later becoming the Aligarh Muslim University in 1920.

HIS VIEWS ON WOMEN EMPOWERMENT:

Initial Beliefs:

- Initially, he held conservative views, advocating for women's education that focused on familial duties.
- He believed that educating women might hinder their primary purpose in life, which he saw as marriage.

Revised Perspective:

- However, after observing the freedom European women enjoyed, his perspective changed.
- He believed the rejection of women's education within the Muslim community contributed to its decline.

Advocate for Women's Education:

- Despite his initial conservatism, Sir Syed strongly supported women's right to education.
- He took positions distinct from other Muslim scholars on divorce and women's rights and vehemently opposed domestic violence against women.

Impact:

• His efforts significantly influenced India's education system, emphasising democratising education and aligning it with European standards.

Sources:

Sir Syed Ahmed Khan's 125th birth anniversary: His record on women's rights

01. With reference to Sir Syed Ahmed Khan, consider the following statements:

- 1. He laid the intellectual groundwork for Muslim modernisation in South Asia.
- 2. He urged Muslims to serve the British Raj faithfully, avoiding the freedom movement.

Which of the statements given above is/are correct? योजना हे तो सफलता है

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None
- Answer: (c)

O2. Consider the following :

- 1. Tahzib-al-Akhlaq
- 2. Causes of the Indian Revolt
- 3. Athar Assanadid
- 4. Mirat-u- Akbar

How many of the abovementioned are literary works of Sir Syed Ahmed Khan?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four
- Answer: (c)
- Q3. Analyse Sir Syed Ahmad Khan's contribution to the socio-religious reform movement in **19th-century India.**

UNWTO BEST TOURISM VILLAGES

This article covers "Daily Current Affairs", and the topic details "UNWTO Best Tourism Villages". This topic has relevance in the "Current Events" section of the UPSC CSE exam.

GS 1: Indian Heritage and Culture

FOR PRELIMS:

Which are Best Tourism Villages 2023? What is the United Nations World Tourism Organization (UNWTO)?

WHY IN THE NEWS?

Dhordo, a village located in Gujarat, has gained global acclaim by earning a spot in the roster of the top 54 tourism villages recognised by the World Tourism Organization (UNWTO).

BEST TOURISM VILLAGES

- The United Nations World Tourism Organization (UNWTO) introduced this initiative as a • component of its broader Tourism for Rural Development Programme.
- The program's primary mission is to promote development and inclusivity in rural regions, address • depopulation challenges, promote innovation and the integration of value chains through tourism, and advocate for sustainable practices.
- The recognition bestowed by this accolade is reserved for villages at the forefront of revitalising rural areas, safeguarding landscapes, preserving cultural diversity, upholding local values, and nurturing culinary traditions.
- UNWTO assesses the villages based on nine fundamental criteria, encompassing aspects such as
 - 1. Cultural and Natural Resources
 - म, हे तो सफलता है 2. Promotion and Conservation of Cultural Resources,
 - 3. Economic Sustainability.
 - 4. Social Sustainability,
 - 5. Environmental Sustainability,
 - 6. Tourism Development and Value Chain Integration,
 - 7. Governance and Prioritization of Tourism,
 - 8. Infrastructure and Connectivity,
 - 9. Health, Safety, and Security
- These criteria collectively guarantee that the recognised villages are picturesque destinations and places where the local culture and environment are safeguarded and where tourism contributes to the well-being of the entire community.

United Nations World Tourism Organization (UNWTO)

- The United Nations World Tourism Organization (UNWTO) is a specialised agency of the United • Nations headquartered in Madrid, Spain.
- Mission: To promote responsible, sustainable, and globally accessible tourism. •
- UNWTO is an international platform where governments, tourism entities, and stakeholders convene to discuss and coordinate tourism-related policies and initiatives.
- It is the primary international body dedicated to advancing tourism as a catalyst for economic growth, inclusive development, and environmental sustainability.
- The organisation's key priorities include:
 - Integrating tourism into the global agenda 0
 - Advocating for sustainable tourism development 0
 - Nurturing knowledge, education, and capacity building
 - Enhancing competitiveness within the tourism sector 0
 - Amplifying tourism's role in reducing poverty and fostering development
 - Establishing partnerships
- UNWTO comprises 159 Member States, 6 Associate Members, 2 Observers, and more than 500 Affiliate Members.
- The General Assembly serves as the highest authority within the organisation.

- The Executive Council oversees the execution of decisions and recommendations made by the General Assembly.
- Publications
 - UNWTO Annual Report
 - UNWTO World Tourism Barometer
 - Knowledge Network Issues Paper Series
 - Visa Openness Report

SOURCES:

As Gujarat's Dhordo village gets UNWTO recognition, PM Modi says it showcases India's tourism potential – The Hindu

ते सफलता

Q1. With reference to Best Tourism Villages, consider the following statements:

- 1. Best Tourism Villages are recognised by the UN World Tourism Organization.
- 2. Dhordo, which is a village located in Rajasthan, has been awarded the Best Tourism Village in India.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None
- Answer: (a)

Q2. Consider the following with reference to the UN World Tourism Organization.

- 1. The United Nations World Tourism Organization (UNWTO) is a principal organ of the United Nations.
- 2. It is headquartered in Madrid, Spain.
- 3. It publishes the World Tourism Barometer and Visa Openness Report.

How many of the abovementioned statements are correct?

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

EDAKKAL CAVES

This article covers "Daily Current Affairs" and the topic details " Edakkal Caves". This topic has relevance in the Art and Culture section of the UPSC CSE exam.

GS 1: Art and Culture

WHY IN THE NEWS?

Kerala Tourism has initiated a project worth ₹2.9 crore to enhance public facilities around the Edakkal Caves in Wayanad.

ABOUT EDAKKAL CAVES

The Edakkal Caves, located in the Wayanad district of Kerala on Ambukutty Mala, a prominent hill in

the region, hold great historical and cultural significance. These caves are not your typical caves but rather natural clefts, rifts, or rock shelters formed when a piece of rock split away from the main hill. It was discovered in 1890 by British police official Fred Fawcett.

SIGNIFICANCE OF THE EDAKKAL CAVES:

- Historical Significance: The caves are historically significant due to their proximity to an ancient trade route connecting the high mountains of Mysore to the ports of the Malabar Coast.
- Pictorial Writings: Inside the Edakkal Caves, one can find pictorial writings that date back to at least 6,000 BCE during the Neolithic period.
- Unique Stone Age Carvings: The Stone Age carvings found in these caves are rare and represent the only known examples from South India, belonging to the Mesolithic era.
- Cultural Significance: The petroglyphs found in the caves include depictions of human and animal figures, tools used by humans, and enigmatic symbols that are yet to be deciphered. These artworks indicate a rich cultural and historical heritage.
- Indus Valley Connection: Some of the paintings found in the Edakkal Caves, particularly those depicting a "man with a jar cup," have led to speculation about a possible connection to the Indus Valley civilization.



SOURCE:

Pre-historic rock art site in Wayanad cries for conservation – The Hindu

Q.1 Edakkal Caves, recently seen in the news are situated in:

- 1. Tamil Nadu
- 2. Kerala
- 3. Andhra Pradesh
- 4. Karnataka
- **ANSWER: B**

Q.2 Consider the following statements about Edakkal Caves:

- 1. It was discovered in 1890 by Fred Fawcett.
- 2. Inside the caves, pictorial writings dating back to at least 6,000 BCE during the Neolithic period can be found.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

Q.3 Discuss the historical and cultural significance of cave architecture in India, with a focus on notable cave complexes and their contributions to art, religion, and the preservation of ancient heritage

CALDERA

This article covers "Daily Current Affairs" and the topic details "Caldera". This topic has relevance in the Geography section of the UPSC CSE exam.

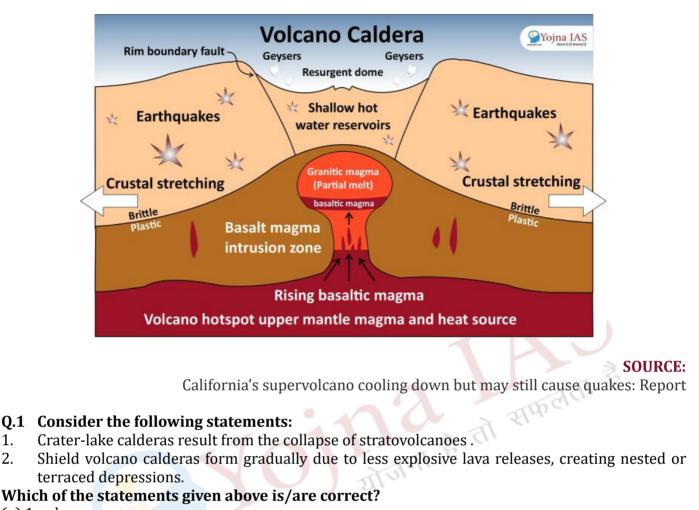
GS 1: Caldera

WHY IN THE NEWS?

Scientists at the California Institute of Technology (Caltech) have detected over 2,000 earthquakes occurring in the Long Valley Caldera in recent years.

ABOUT LONG VALLEY CALDERA:

- The Long Valley Caldera is a dormant supervolcano situated in the Eastern Sierra Nevada Mountains of California, USA. It was formed approximately 760,000 years ago by a super-eruption that expelled about 140 cubic miles of magma. This eruption blanketed much of east-central California with hot ash, which was even carried as far as what is now Nebraska.
- Since 1978, the caldera has been experiencing regular earthquake swarms, leading to concerns that it may be at risk of erupting again. Despite its dormant status, the ongoing seismic activity serves as a reminder of the caldera's volatile past and potential future.
- **Caldera definition**: A caldera is a large, bowl-shaped depression formed by the collapse of a volcano after a massive eruption. It is the most destructive type of volcanic eruption. Calderas may have uneven shapes due to different rates of collapse.
- **Caldera types**: There are three main types of calderas, based on their formation and characteristics. They are:
 - **Crater-lake calderas**: These are formed by the collapse of a stratovolcano after a Plinian eruption, which is very explosive and releases huge amounts of lava, ash, and rocks. These calderas often fill with water, forming lakes.
 - Shield volcano calderas: These are formed by the gradual subsidence of a shield volcano due to the periodic release of lava. This is less explosive and produces fountains of lava. These calderas have nested or terraced shapes, rather than a single large depression.
 - **Resurgent calderas**: These are the largest and rarest type of calderas, formed by the widespread collapse of vast magma chambers due to extremely destructive eruptions called pyroclastic sheet flows. These eruptions have not occurred in historic times. These calderas may rise again due to magma pressure, forming domes or islands.



(a) 1 only

1.

2.

- (b) 2 only
- (c) Both 1 and 2
- ojnaias.com (d) Neither 1 nor 2
- **ANSWER: C**
- 0.2 Discuss the correlation between the distribution of volcanoes and earthquake belts. How do tectonic plate boundaries play a pivotal role in shaping these patterns?

CIRCULAR MIGRATION

This article covers "Daily Current Affairs" and the topic details "Circular Migration". This topic has relevance in the "Social Issues" section of the UPSC CSE exam.

FOR PRELIMS:

WHAT IS CIRCULAR MIGRATION?

FOR MAINS: GS1: Human Geography

GS3: Economy

WHY IN THE NEWS?

The concept of circular migration is gaining prominence in discussions on human mobility, particularly in the context of India's internal migration patterns.

DEFINITION OF CIRCULAR MIGRATION:

- Circular migration is a form of human mobility characterised by repeated, temporary movements of individuals or groups between their origin and a destination, often driven by economic opportunities or seasonal employment.
- It involves multiple entries into the destination area, temporary residence, and the freedom of movement between the origin and destination regions.

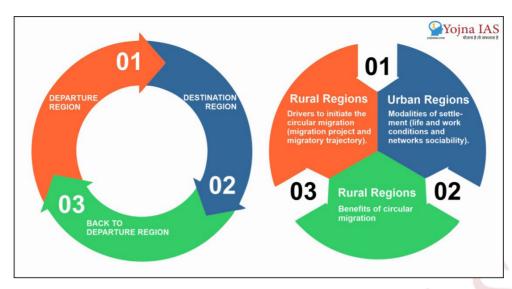
IMPACTS OF CIRCULAR MIGRATION:

- Economic Impact:
- **Positive Economic Contribution:** Circular migration can positively impact the economies of the origin and destination regions. Migrants often send remittances back to their home communities, which can boost local economies and improve living standards for their families.
- **Labour Market Flexibility:** In destination areas, circular migrants can help fill low-skilled, labour-intensive job vacancies, contributing to economic growth and labour gaps.
- **Cyclical Economic Patterns:** The cyclical nature of circular migration aligns with the ebb and flow of demand for labour, making it a flexible workforce solution.
- Social Impact:
- **Community Development:** Remittances from circular migrants can improve infrastructure and access to education and healthcare in their home communities.
- **Cultural Exchange:** Circular migration fosters cultural exchange and diversity as individuals from diverse backgrounds interact in origin and destination areas.
- **Challenges for Families:** Separation from family members due to circular migration can have social and emotional implications, including challenges in maintaining family ties.
- Labour Rights and Welfare:
- **Exploitation and Precarity**: Circular migrants are sometimes vulnerable to exploitation and precarious working conditions, particularly in host regions where they may lack legal protections.
- Access to Services: Access to social services and healthcare for circular migrants can be limited, leading to health disparities.

CIRCULAR MIGRATION WITHIN INDIA:

- In India, internal circular migration involves the movement of people within the country, primarily from rural areas to urban centres, driven by employment opportunities. This phenomenon has specific implications:
- Economic Implications in India:
- **Increased Employment:** Circular migration has led to a significant increase in employment opportunities, especially in the construction, manufacturing, and services sectors.
- **Wage Disparities:** Circular migrants earn higher wages in urban areas than their rural counterparts, improving household welfare through remittances.
- Challenges Faced by Circular Migrants in India:
- **Precarious Work:** Jobs taken by circular migrants tend to be seasonal and irregular, causing economic insecurity.
- **Exploitation**: Language barriers and reliance on middlemen can lead to exploitation and unsafe working conditions.
- Urban Infrastructure Strain: Crowded circular migrants into urban areas can strain infrastruc-

ture and services.



WAY AHEAD:

- **Policy Reforms:** Implement and enforce labour laws and protections to prevent exploitation and ensure fair treatment of circular migrants.
- **Skill Development:** Invest in skill development programs to enhance the employability of circular migrants and reduce their vulnerability in the labour market.
- **Infrastructure Development:** Improve urban infrastructure to accommodate the growing population of circular migrants.
- **Family Support:** Develop support systems for families affected by circular migration, such as counselling and social services.
- **Data Collection and Research:** Conduct research better to understand the patterns and dynamics of circular migration, enabling evidence-based policy decisions.
- **Cross-State Collaboration:** Encourage collaboration between origin and destination states to ensure the welfare and rights of circular migrants are protected.
- **Public Awareness:** Raise awareness among both host communities and circular migrants about their respective rights, responsibilities, and contributions.

Effective management of circular migration can harness its economic potential while addressing the social and welfare concerns associated with this dynamic form of human mobility.

Sources: Circular migration: looking at both sides of the debate - The Hindu

Q1. Which of the statements given below correctly explains Circular Migration?

- (a) Circular migration is a term used to describe the circular movement of migratory birds from one location to another.
- (b) It is a form of permanent relocation where individuals or groups move once from their origin to a destination and stay there indefinitely.
- (c) It refers to the migration of individuals in a circular shape, forming a circular pattern of movement across different countries or regions.
- (d) Circular migration involves repeated, temporary moves between origin and destination, often for economic or seasonal reasons.

Answer: (d)

Q2. Define circular migration and discuss its significance in the context of India's internal mi-

gration patterns.

Q3. Discuss the policy reforms and measures required to address the issues associated with circular migration in India and ensure the welfare of circular migrants.

BRU REFUGEES

This article covers "Daily Current Affairs" and the topic details "Bru refugees". This topic has relevance in the "Social Issues" section of the UPSC CSE exam.

FOR PRELIMS:

Who are Bru refugees?

FOR MAINS:

GS1: Society

WHY IN THE NEWS?

For the first time, Bru refugees will not vote in Mizoram elections since they have been permanently settled in Tripura through a Central government-sponsored program.

BRU TRIBE

- The Brus, also known as Reangs, are an indigenous community primarily residing in Northeast India, notably in **Tripura**, **Mizoram**, and **Assam**.
- In Tripura, they hold the status of a **Particularly Vulnerable Tribal Group (PVTG)**, a designation by the government for tribes facing heightened vulnerability within the tribal community.
- The Brus speak the Reang dialect of the Kokborok language, which is locally referred to as Kau Bru.
- Their Hojagiri folk dance is well-known all over the world. 'Buisu' is the most famous festival of the Reang tribes.

Particularly Vulnerable Tribal Group (PVTG)

- PVTG is a classification designed to identify tribal communities with heightened vulnerability within the broader tribal population.
- These groups exhibit specific characteristics, including:
 - Pre-Agricultural Technology
 - Stagnant or Declining Population
 - Extremely Low Literacy
 - Subsistence Economy
- These communities often reside in remote areas with limited infrastructure and administrative support.
- As of 2011, there are 75 PVTGs dispersed across 18 states and one Union Territory in India.

BRU-REANG REFUGEE CRISIS

• The crisis dates back to the late 1990s when violence and ethnic tensions between the Bru and

the majority Mizos led to the displacement of thousands of Bru people from Mizoram state.

- The Bru-Reang Refugee Crisis has fueled since 1997, with over 40,000 Brus taking refuge in six camps in northern Tripura's Kanchanpur sub-division following ethnic violence in neighbouring Mizoram.
- These refugee camps were initially intended to be temporary, but due to the protracted nature of the crisis, the displaced population has remained in these camps for over two decades.

Rehabilitation of Brus

- In June 2018, leaders of the Bru camps agreed with the Centre and the two state governments to enable repatriation to Mizoram. However, many camp residents rejected the terms of the agreement, citing concerns about their safety in Mizoram.
- Subsequently, a quadripartite agreement was inked in January 2020, involving the Centre, the state governments of Tripura and Mizoram, and representatives of the Bru-Reang community. This agreement was designed to facilitate the permanent settlement of Bru refugees in Tripura.
- According to the terms of this pact, each refugee family is entitled to receive a designated plot of land, a fixed deposit of Rs. 4 lakh, complimentary rations, and a monthly stipend of Rs. 5,000 for two years. Additionally, each family will receive Rs. 1.5 lakh for the construction of their houses.

Sources: For the first time, Bru refugees to have no participation in Mizoram Assembly polls – The Hindu

Q1. With reference to Bru Tribe, consider the following statements:

- 1. They are an indigenous tribe primarily residing in Tripura, Mizoram, and Assam.
- 2. Bihu is the most famous festival of the Reang tribes.
- 3. The recent agreement facilitated the permanent settlement of Bru refugees in Mizoram.

Which of the statements given above is/are NOT correct?

(a) 1 and 2 only

- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (b)

Q2. Consider the following:

- 1. Post- Agricultural Technology
- 2. Stagnant or Increasing Population
- 3. Extremely Low Literacy
- 4. Subsistence Economy

How many of the characteristics of a Particularly Vulnerable Tribal Group (PVTG) are mentioned above?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four
- Answer: (b)

General Studies -2

(Governance, Constitution, Polity, Social Justice δ International Relations)

AGAMAS

This article covers "Daily Current Affairs" and the topic details "Agamas". This topic has relevance in the Governance section of the UPSC CSE exam.

For Prelims: *About Agamas?*

FOR MAINS:

GS 2: Governance About Reforms in the Agamanic System? Challenges to reforms?

WHY IN THE NEWS?

The Supreme Court has ordered the status quo on the appointment of archakas (priests) in Agamic temples in Tamil Nadu.

ABOUT REFORMS IN THE AGAMANIC SYSTEM:

The Srirangam Koil Miras Kainkaryaparagal Matrum Athanai Sarntha Koilgalin Miraskain-karyaparargalin Nalasangam, an association of archakas, has raised concerns and legal challenges against reforms introduced by the Tamil Nadu government. These reforms are perceived as an attempt to alter the hereditary system of appointing archakas (temple priests) in Agama temples. This article explores the key details of this issue and the significance of Agamas in Hindu practices.

CHALLENGES TO REFORMS:

- **Petition for Quashing Government Orders:** The petitioners seek the quashing of the state government's orders and letters that enable individuals trained in Agama Sastra, regardless of their caste and gender, to assume priesthood.
- **Allegations of Unlawful Appointments:** The petitioners argue that the state government is unlawfully trying to appoint non-believers as archakas, which they view as a violation of religious rights protected under the Constitution.
- **Importance of Agama Knowledge:** The petitioners contend that the knowledge of Agamas, which hold significant religious practices, cannot be acquired through the government's one-year certificate course. Instead, it requires years of rigorous training under learned Gurus.

HISTORICAL BACKGROUND:

- **1971 Amendment:** The DMK government amended the Tamil Nadu Hindu Religious & Charitable Endowment (HR & CE) Act in 1971 to abolish the hereditary appointment of priests and allow individuals from all castes to become priests.
- **2006 Declaration:** In 2006, the government declared that all qualified individuals were eligible to be priests.
- **Supreme Court Intervention**: In 2015, the Supreme Court overturned the 2006 declaration, emphasizing the importance of adhering to Agama Sastras while ensuring that constitutional rights were not violated.
- **Madras High Court Ruling:** In 2009, the Madras High Court ruled in favor of a woman priest facing opposition from male priests, highlighting the need to eliminate gender bias from temples in accordance with constitutional mandates.

- **Guruvayoor Devaswom Case:** The Supreme Court upheld the appointment of non-believers to temple trust boards in 2004.
- **N Adithayan Case:** In 2002, the Supreme Court ruled that no custom pre-existing the Constitution could exclude non-Brahmins from performing puja in temples if they were trained and qualified.

SIGNIFICANCE OF AGAMAS:

- Description of Agamas: Agamas are a collection of Tantric literature and scriptures of Hindu schools, covering cosmology, philosophy, meditation, yoga, mantras, temple construction, deity worship, and ways to attain desires. They are in Tamil and Sanskrit.
- Main Branches: Agamas are categorized into three main branches: Shaiva, Vaishnava, and Shakta.
- Origin and Chronology: The origin and chronology of Agamas are unclear, with some being Vedic and others non-Vedic.

The challenges to reforms in appointing temple priests in Tamil Nadu highlight the complex interplay between tradition, religious rights, and constitutional mandates. The Agamas play a central role in temple practices and are subject to interpretation in the context of evolving societal norms and legal considerations.

Source:

https://indianexpress.com/article/explained/explained-culture/in-sccase-on-agama-the-contested-history-of-temple-priesthood-8962227/

Q.1 With reference to the Agamas in Hindu practices, consider the following statements:

- 1. Agamas were written exclusively in Tamil language.
- 2. The three main branches of Agama texts are Shaiva, Vaishnava, and Shakta.
- 3. The government in Tamil Nadu has allowed individuals from all castes to become temple priests.

Which of the statements given above is/are correct?

(a) 1 and 2 only

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

ANSWER: B

Q.2 Agama are related to which of the following religion:

- (a) Jainism
- (b) Buddhism
- (c) Hinduism
- (d) Sikhism
- **ANSWER: C**
- Q.3 Discuss the tensions between the principles of equality and non-interference in religious matters in the context of the appointment of temple priests in Tamil Nadu. How can a balance be struck between ensuring equality and respecting religious autonomy?

ANTI-POLYGAMY LAW

This article covers "Daily Current Affairs" and the topic details "Anti-Polygamy Law". The topic "Anti-Polygamy Law" has relevance in the Governance section of the UPSC CSE exam.

For Prelims: *About Polygamy?*

FOR MAINS:

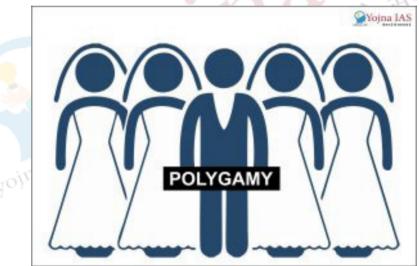
GS 2: Governance Is Polygamy Criminalized in India? Problems associated with Polygamy?

WHY IN THE NEWS:

The government of Assam has formed a three-member committee tasked with drafting a law to abolish polygamy.

ABOUT POLYGAMY:

Polygamy is a marital practice characterized by the act or custom of maintaining multiple spouses simultaneously. It is observed in various regions and communities worldwide, with varying prevalence rates.



POLYGAMY IN INDIA:

- **National Trends**: Government data reveals that polygamy cases in India decreased from 1.9 percent in 2005-06 to 1.4 percent in 2019-20, indicating a declining trend over the years.
- **Regional Disparities:** Polygamy rates vary across different states and regions within India.
- **North Eastern States:** The northeastern states of Meghalaya exhibit a higher prevalence, with a rate of 6.1 percent, while Tripura follows closely with a rate of 2 percent.
- **Other States:** Polygamy continues to be practiced in states like Bihar, Jharkhand, West Bengal, and Odisha, predominantly among specific caste groups.
- **Religious Dimensions:** In Tamil Nadu, Telangana, Andhra Pradesh, and Chhattisgarh, polygamy is more commonly observed among the Muslim community than among Hindus.
- **Assam's Scenario:** Polygamy is prevalent in specific regions of Assam, primarily in the Barak Valley and areas like Hojai and Jamunamukh. Notably, its prevalence is relatively low among educated classes and is not as widespread among the local Muslim population in these areas.

IS POLYGAMY CRIMINALIZED IN INDIA:

• IPC Provisions: The Indian Penal Code (IPC) criminalizes polygamy, specifically under Sections 494 and 495. These sections make it illegal to marry someone while already being married to another person.

POLYGAMY UNDER HINDU LAW

• **Hindu Marriage Act:** The Hindu Marriage Act, enacted on May 18, 1955, explicitly abolished and criminalized polygamy among Hindus. It mandated monogamy as the only option for Hindus, declaring polygamous marriages as void. A Hindu spouse cannot remarry until the first marriage is terminated, either through divorce or the death of one spouse. This provision also extends to Buddhists, Jains, and Sikhs, who are considered Hindus under this law.

POLYGAMY UNDER OTHER RELIGIOUS LAWS IN INDIA

• **Christian and Parsi Communities**: Polygamy was abolished among Christians through the Christian Marriage Act of 1872 and among Parsis through the Parsi Marriage and Divorce Act of 1936.

POLYGAMY UNDER MUSLIM PERSONAL LAW

• **Muslim Personal Law:** Unlike Hindu personal law, Muslim personal law does not outlaw polygamy. Under the 'Muslim Personal Law Application Act (Shariat) of 1937, as interpreted by the All India Muslim Personal Law Board, Muslim men can marry and maintain up to four wives concurrently. Such relationships are legally recognized under Muslim personal law. However, this allowance does not extend to Muslim women, who are not permitted to marry more than one individual.

GLOBAL PERSPECTIVES ON POLYGAMY

• **Global Practice:** Polygamy is illegal and criminalized in many countries worldwide, including Europe and the US, as well as China, Australia, and others. However, it remains permissible and legal exclusively for Muslims in nations such as India, Singapore, and Malaysia. Additionally, polygamy continues to be recognized and practiced in countries like Algeria, Egypt, and Cameroon.

PROBLEMS ASSOCIATED WITH POLYGAMY:

FORCED MARRIAGES

- Lack of Choice: In regions where polygamy is prevalent, women may be coerced or forced into marriages they do not desire. This lack of agency in choosing a spouse can have severe consequences for their well-being and autonomy.
- **Gender Bias in Laws:** Legal frameworks that permit polygamy often favor men, as seen in some parts of West Africa where Sharia Law allows men to have multiple wives while restricting women from having multiple husbands.

NOT A RELIGIOUS DUTY

• **Misconception:** Contrary to some beliefs, polygamy is not universally considered a religious duty or religious conduct. Courts and religious authorities have frequently clarified that it is not inherently required by any faith.

POWER IMBALANCE & MENTAL HEALTH

- **Psychological Effects:** Research in psychology has shown that polygamous relationships, particularly polygynous setups where one man has multiple wives, can lead to power imbalances and detrimental effects on women.
- **Mental Health Impact:** Women in polygynous relationships are more likely to suffer from mental health issues, including higher levels of anxiety, depression, and reduced life and marital satisfaction.

PHYSICAL, EMOTIONAL, AND SEXUAL ABUSE

• **Abuse Link:** Studies indicate a connection between polygamy and various forms of abuse, including physical, emotional, and sexual abuse. This can lead to negative emotional experiences for mothers in polygamous families, such as loneliness, despair, anger, powerlessness, and sadness.

EFFECTS ON CHILDREN

• Adverse Impact on Children: The stressful nature of polygamous marriages, along with potential conflicts among family members, can create an environment that is less conducive to the well-being and healthy development of children.

WAY FORWARD

- The United Nations Human Rights Committee suggests that regions where polygamy persists should take steps to eliminate it. This is because polygamy is seen as a violation of women's dignity and a constraint on their freedom of choice.
- It is essential to address and reconsider the legal status of practices like polygamy, triple talaq, and nikah halala, as they are not only outdated but also detrimental to the well-being of Muslim women. These laws need to be questioned and eventually discarded.

SOURCE:

https://www.thehindu.com/news/national/other-states/assam-government-formsthree-member-panel-to-draft-anti-polygamy-law/article67266965.ece

Q.1 Consider the following statements regarding polygamy in India:

- 1. The Hindu Marriage Act of 2005 prohibits Hindus to have multiple spouses.
- 2. Muslim personal law in India permits both men and women to have multiple spouses.

Which of the statements given above is/are correct?

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

ANSWER: D

Q.2 Consider the following statements regarding polygamy in India:

- 1. There is a blanket ban on polygamy in India for all religions
- 2. There is no separate law for Buddhists, Jains, and Sikhs for prohibition of Polygamy.
- 3. The Indian Penal Code (IPC) criminalizes polygamy.

How many of the above statement/s is/are correct?

- (a) Only one
- (b) Only two
- (c) All three

Q.3 Discuss the social, legal, and psychological implications of polygamy in contemporary society.Provide your insights on the need for reform and potential measures to address the associated issues.

CENTRAL UNIVERSITIES (AMENDMENT) BILL, 2023

This article covers "Daily Current Affairs" and the topic details "Central Universities (Amendment) Bill, 2023". This topic has relevance in the Governance section of the UPSC CSE exam.

GS 2: Governance

WHY IN THE NEWS?

The union cabinet has approved the creation of a Central Tribal University in Telangana by amending the Central Universities Act, 2009.

OVERVIEW:

The Union Cabinet, chaired by the Prime Minister, has approved the introduction of the Central Universities (Amendment) Bill, 2023, which aims to further amend the Central Universities Act, 2009. This amendment is intended to facilitate the establishment of the **Sammakka Sarakka Central Trib**al University in Mulugu District. This move is in accordance with the provisions outlined in the Thirteenth Schedule to the Andhra Pradesh Re-organisation Act, 2014.

OBJECTIVES OF THE NEW UNIVERSITY:

The primary objectives of the Sammakka Sarakka Central Tribal University are as follows:

- Increase access to higher education in the State.
- Improve the quality of higher education.
- Promote avenues of higher education.
- Advanced knowledge of tribal art, culture, and traditional knowledge systems.
- Benefit the tribal population in the State by providing instructional and research facilities.

CENTRAL UNIVERSITIES (AMENDMENT) BILL, 2022:

The Central Universities (Amendment) Bill, 2022, introduced in the Lok Sabha on August 1, 2022, includes several key features:

- **Establishment of Gati Shakti Vishwavidyalaya:** The Bill aims to convert the National Rail and Transportation Institute in Vadodara, currently a deemed university, into the Gati Shakti Vishwavidyalaya, which will become a central university. The Vishwavidyalaya will be sponsored and funded by the central government through the Ministry of Railways.
- **Scope of Education:** Gati Shakti Vishwavidyalaya will focus on providing quality teaching, research, and skill development in disciplines related to transportation, technology, and management. Additionally, it may establish centers both in India and abroad if needed. The establishment of this university addresses the requirement for trained talent in the transportation sector.

• **Appointment of a New Vice-Chancellor:** The existing Vice-Chancellor of the National Rail and Transportation Institute will hold office for either six months from the date of the Act's notification or until a new Vice-Chancellor for Gati Shakti Vishwavidyalaya is appointed, whichever occurs earlier.

SOURCE:

https://www.financialexpress.com/jobs-career/education-union-cabinet-approves-central-tribal-university-in-telangana-fulfilling-ap-reorganisation-act-2014-3263483/

- Q.1 Which of the following statements is correct regarding the Central Universities (Amendment) Bill, 2023?
- (a) The bill aims to establish a new central university dedicated to technology and transportation in Vadodara.
- (b) The bill seeks to further amend the Central Universities Act, 2009, to create a tribal university in Telangana state.
- (c) The bill proposes the conversion of state universities into central universities across India.
- (d) The bill primarily focuses on enhancing funding for existing central universities.

ANSWER: B

- Q.2 What is the main objective of the Central Universities (Amendment) Bill, 2022, which was introduced in Lok Sabha?
- (a) To establish a new central university dedicated to agriculture research.
- (b) To convert the National Rail and Transportation Institute into a central university.
- (c) To increase the funding for existing central universities.
- (d) To promote the establishment of state-level universities across India

ANSWER: B

Q.3 In a rapidly evolving world, the role of higher education institutions is pivotal in addressing contemporary challenge

PUSA-44

This article covers "Daily Current Affairs" and the topic details "PUSA-44". This topic has relevance in the "Economy" section of the UPSC CSE exam.

For Prelims: What is PUSA 44?

For MAINS: *GS2: Economy*

WHY IN THE NEWS?

Punjab's Chief Minister has recently announced the decision to ban the cultivation of the PUSA-44 paddy variety, effective from the next agricultural year.

ABOUT PUSA-44 PADDY VARIETY:

• PUSA-44 is a paddy variety **developed by the Indian Council of Agricultural Research (ICAR)** in Delhi in 1993.

- Over the years, it gained immense popularity among farmers in Punjab, covering approximately 70% to 80% of the total paddy cultivation area by the end of the 2010s.
- However, in 2018, the Punjab government reduced its cultivation area to 18% of the total paddy acreage.
- Yet, last year, it saw a rebound, accounting for 22% of the total paddy cultivation area.
- Farmers cultivating PUSA-44 have claimed **significantly higher yields** than other paddy varieties.
- They report yields ranging from 85 to 100 mann (equivalent to **34 to 40 quintals**) per acre, while other varieties typically yield an average of 28 to 30 quintals per acre.

REASONS BEHIND THE BAN:

The decision to ban the cultivation of PUSA-44 is primarily driven by several pressing concerns:

- **Long Duration:** PUSA-44 is a long-duration variety, taking approximately 160 days to mature. This extended growth period is about 35 to 40 days longer than other paddy varieties, necessitating 5 to 6 additional irrigation cycles.
- **Groundwater Depletion:** Punjab is grappling with severe groundwater depletion. The government aims to conserve approximately one month's worth of irrigation water by promoting short-duration paddy varieties.
- **Continuous Expansion:** The cultivation area dedicated to paddy, already a water-intensive crop, continues to expand in Punjab.
- **Dark Zones**: A significant portion of the state's agricultural development blocks have been classified as 'dark zones,' indicating a higher rate of groundwater depletion than recharge.
- **Stubble Burning:** The cultivation of PUSA-44 exacerbates the longstanding issue of stubble burning in Punjab, contributing to severe air pollution in northern India during the winter months.
- **Stubble Generation:** PUSA varieties, including PUSA-44, generate around 2% more stubble than shorter-duration varieties, which poses a significant concern when cultivated extensively.

ABOUT INDIAN COUNCIL OF AGRICULTURAL RESEARCH (ICAR):

- The ICAR was established in 1930 and served as the apex body responsible for coordinating, guiding, and managing research and education in the field of agriculture throughout India.
- It operates under the Department of Agricultural Research and Education within the Ministry of Agriculture and Farmers Welfare.
- ICAR is headquartered in New Delhi.

KEY ACHIEVEMENTS OF ICAR:

- Developed and released high-yielding varieties of seeds for major crops such as rice, wheat, maize, sorghum, and pearl millet.
- Improved crop production technologies such as irrigation, fertilisation, and pest management.
- Developed new breeds of livestock, such as cows, buffaloes, sheep, and goats, with high milk and meat production potential.
- Played a major role in the Green Revolution, which helped India to achieve self-sufficiency in food production.
- Established a network of 101 research institutes, 71 agricultural universities, and 623 KVKs spread across the country.
- Provides funding to agricultural universities and KVKs for conducting research and education programs.
- Offers scholarships and fellowships to students pursuing higher education in agriculture and allied sciences.

Sources:

Why Punjab wants to ban the cultivation of PUSA-44 paddy variety | Ex-

plained News - The Indian Express

Q1. Which of the following options correctly describes PUSA-44?

- (a) A capsule made from fungi strains that speed up the decomposition of paddy straw
- (b) A new variety of Rice recently developed by International Rice Research Institute
- (c) A paddy variety developed by the Indian Council of Agricultural Research (ICAR) in 1990s
- (d) None of the above

Answer: (c)

Q2. Consider the following:

- 1. Takes a long time to mature
- 2. Generates more stubble compared to other varieties
- 3. Gives more yield compared to others
- 4. Leads to groundwater depletion

How many of the above are reasons to ban the cultivation of PUSA 44?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four

Answer: (c)

Q3. Analyse this issue's socio-economic, environmental, and agricultural aspects and propose sustainable strategies to address the pressing concerns regarding the issue of groundwater depletion in Punjab- Haryana Region.

COMPREHENSIVE NUCLEAR TEST BAN TREATY (CTBT)

This article covers "Daily Current Affairs" and the topic details "Comprehensive Nuclear Test Ban Treaty (CTBT)". This topic has relevance in the International Relations section of the UPSC CSE exam.

FOR PRELIMS:

About CTBT?

FOR MAINS:

GS 2: International Relations Impact of the CTBT on Nuclear Testing?

WHY IN THE NEWS?

One day after suggesting the possibility of Russia withdrawing its ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT), President Vladimir Putin has clarified that Russia's intention is not to resume nuclear testing but rather to bring itself in line with the United States for the sake of parity.

ABOUT CTBT:

The Comprehensive Nuclear Test Ban Treaty (CTBT) is a significant international agreement aimed at

prohibiting all nuclear explosions, whether conducted for military or peaceful purposes. The United Nations General Assembly endorsed and accepted it in the year 1996. However, despite its adoption, the treaty has not yet entered into force, primarily due to the requirement for specific countries to ratify it.

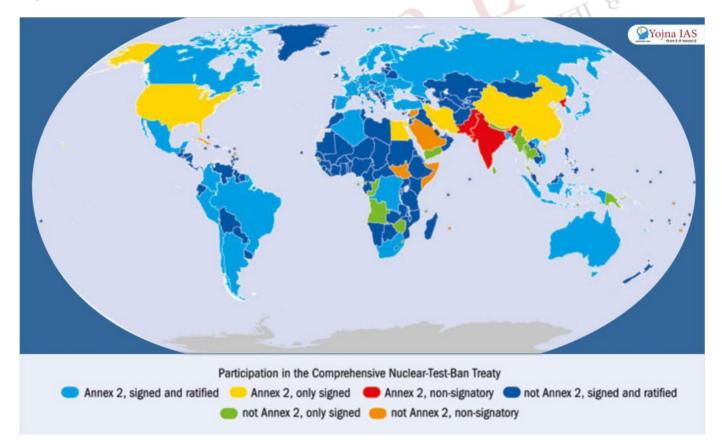
RATIFICATION STATUS

While some countries, including Russia, have ratified the CTBT, others, such as the United States and India, have not done so. Ratification is the process through which a nation formally indicates its consent to be bound by a treaty.

KEY COUNTRIES YET TO RATIFY

The Treaty will become legally binding once all 44 States listed in Annex 2 to the Treaty have ratified it. These States possessed nuclear facilities when the Treaty was negotiated and adopted. Eight of these countries have not yet ratified the treaty. These key countries are India, China, Egypt, Iran, Israel, North Korea, Pakistan and the United States

The CTBT's effectiveness in curbing nuclear testing worldwide hinges on the participation and ratification of these key nations. Until they formally ratify the treaty, its comprehensive ban on nuclear explosions remains unenforceable.



The Origins and Evolution of the Comprehensive Nuclear Test Ban Treaty (CTBT)

The genesis of the Comprehensive Nuclear Test Ban Treaty (CTBT) can be traced back to the early years of the nuclear age and the subsequent global concerns regarding nuclear testing. Here's a chronological overview:

• Emergence of Nuclear Testing (1940s): The United States conducted the world's first

successful nuclear weapons test in July 1945. Subsequently, the Soviet Union conducted its first nuclear test in 1949, sparking a prolonged arms race between the two superpowers.

- **Proliferation of Nuclear Tests (1945-1996):** Between 1945 and 1996, more than 2,000 nuclear tests were conducted worldwide. The United States conducted 1,032 tests, and the Soviet Union conducted 715. Other nuclear-armed nations, such as Britain (45 tests), France (210 tests), and China (45 tests), also contributed to this proliferation.
- **Concerns and Fallout (1950s-1960s):** The radioactive fallout from these nuclear tests raised global concerns and condemnation. In response, efforts were made to restrict nuclear testing:
 - **Limited Nuclear Test-Ban Treaty (LTBT) 1963:** This treaty prohibited nuclear testing in the atmosphere, outer space, and underwater. However, underground tests were still permitted.
 - **Threshold Test Ban Treaty (TTBT) Late 1960s:** The U.S. and Soviet Union signed TTBT, which established a "threshold" by banning tests that would produce a yield exceeding 150 kilotons (equivalent to 150,000 tons of TNT).
- **The CTBT (1990s):** Following the end of the Cold War around 1990 and the dissolution of the Soviet Union, geopolitical tensions decreased. Leveraging this change, the United Nations adopted the Comprehensive Nuclear Test Ban Treaty (CTBT).
- The CTBT aimed to curtail nuclear proliferation, prevent the development of new nuclear weapons, and contribute to disarmament efforts. However, its entry into force and full implementation have been contingent on the ratification by key nuclear-armed states, as mentioned earlier.

IMPACT OF THE CTBT ON NUCLEAR TESTING

While the Comprehensive Nuclear Test Ban Treaty (CTBT) was designed to halt nuclear testing globally, its effectiveness in achieving this goal has been limited. Despite the CTBT's adoption in 1996, a number of nuclear tests have occurred since then. Here is a summary:

POST-CTBT NUCLEAR TESTING

- Since the CTBT's adoption:
- o India conducted two nuclear tests in 1998.
- o Pakistan also conducted two nuclear tests in 1998.
- o North Korea conducted nuclear tests in 2006, 2009, 2013, 2016 (twice), and 2017.
- In contrast, several nuclear-armed states refrained from conducting nuclear tests:
 - The United States last conducted a nuclear test in 1992.
 - o China and France last conducted nuclear tests in 1996.
 - The Soviet Union conducted its last nuclear test in 1990, and its successor state, Russia, has not conducted a nuclear test.
- It's important to note that while these countries have refrained from conducting nuclear tests, the CTBT has not entered into force due to the non-ratification by key nuclear technology holder states, as previously mentioned. Consequently, the treaty's ability to completely eliminate nuclear testing remains unfulfilled, and the occurrence of some nuclear tests post-CTBT adoption underscores this challenge.

Source: <u>What is the the Comprehensive Nuclear</u> <u>Test Ban Treaty (CTBT)? (indianexpress.com)</u>

- Q.1 Consider the following statements regarding the Comprehensive Nuclear Test Ban Treaty (CTBT):
- 1. The CTBT was adopted by the United Nations General Assembly in 1996.

2. It bans all forms of nuclear testing including for peaceful purposes

Which of the statements given above is/are correct?

(a) 1 only (b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

ANSWER: C

- Q.2 Consider the following statements regarding the Comprehensive Nuclear Test Ban Treaty (CTBT):
- 1. The CTBT was negotiated and adopted during the Cold War era.
- 2. The CTBT has entered into force, and all nuclear-armed nations are signatories.
- 3. Key countries such as India and Pakistan have ratified the CTBT.

How many of the above statement/s is/are correct?

(a) Only one

(b) Only two

(c) All three

(d) None

ANSWER: D

Q.3 Analytically evaluate the role of the Comprehensive Nuclear Test Ban Treaty (CTBT) in preventing nuclear proliferation and promoting international security.

CANCER IN INDIA

This article covers "Daily Current Affairs" and the topic details "Cancer in India". This topic has relevance in the "Social Issues" section of the UPSC CSE exam.

For Prelims:

What is the status of Cancer in India?

FOR MAINS:

GS2: Social Issues

WHY IN THE NEWS?

Due to the limited success in several Indian districts in effectively implementing cancer screening as per Health Ministry guidelines, the Indian Council of Medical Research (ICMR) is preparing to introduce corrective actions.

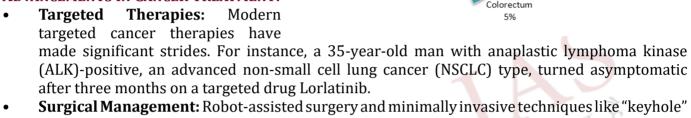
UNDERSTANDING CANCER:

- Cancer is a condition characterised by the uncontrolled growth and spreading of specific cells within the body. It can begin anywhere in the body, consisting of trillions of cells.
- Usually, cells grow, divide, and replace old ones in a structured manner. However, sometimes, this process goes awry, causing abnormal cells to multiply and form tumours, which can be cancerous.

CANCER IN INDIA:

- Cancer is a significant public health • concern in India, ranking third globally in incidence after China and the United States.
- It's projected that India will see a . significant 57.5% increase in cancer cases between 2020 and 2040. according to the Global Cancer Observatory.

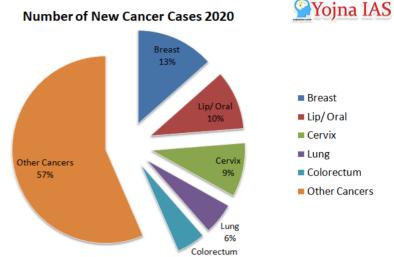
ADVANCEMENTS IN CANCER TREATMENT:



- surgery have emerged as noteworthy innovations in cancer treatment. In the past couple of years, there has been a notable rise in the adoption of onco-robotics or robotic onco-surgery in India. This advancement has significantly enhanced surgical precision and led to a substantial reduction in recovery time.
- Medical Management: In the last 5-7 years, there have been major advances in radiation, immunotherapy, and targeted therapy. Advanced radiotherapy techniques, such as intensitymodulated radiotherapy (IMRT) and image-guided radiotherapy (IGRT), have greatly improved cancer treatment in India.
- **Immunotherapy:** This type of cancer treatment helps your immune system fight cancer. It is a • significant area of cancer research. Immunotherapy, in some instances, is referred to as biologic therapy or biotherapy.
- **Chemotherapy:** It is a cancer treatment that employs medications to eliminate cancer cells. .
- **Radiation Therapy:** This type of cancer treatment uses high doses of radiation to kill cancer cells and shrink tumours.

REDUCING CANCER MORTALITY IN INDIA:

- Preventing Tobacco-Related Cancers: Tobacco is the leading identified cause of cancer, responsible for around 40 to 50% of cancers in men and about 20% in women. Preventing tobacco consumption could significantly decrease cancer incidence.
- **Early Detection:** Most cancer-related deaths occur in individuals younger than 70 years. Early . detection is crucial for effective cancer management.
- Improving Access to Healthcare Resources: Rural areas, in particular, face a shortage of . healthcare resources. Enhancing access to healthcare could help lower cancer mortality.
- Raising Awareness and Providing Education: There is a lack of awareness and a social stigma associated with cancer. Increasing awareness and educating the public about cancer could facilitate early detection and treatment.
- Making Treatment Affordable: Cancer treatment can be costly. Ensuring more affordable . treatment options could alleviate the financial burden of cancer.
- **Promoting a Healthy Lifestyle:** Dietary habits, inadequate physical activity, and alcohol



consumption are risk factors for various types of cancer. Promoting a healthy lifestyle could help prevent these cancers.

Advancing Research: The significant variation in cancer rates in India suggests the existence of • other risk factors or causative agents that are yet to be discovered. Further research could help identify these factors and develop strategies to address them.

Sources:

ICMR project to accelerate cancer screening at district level - The Hindu

Q1. With reference to cancer, consider the following statements:

- Cancer is an ailment in which certain cells within the body undergo uncontrolled growth and 1. spread to other areas.
- 2. India is the world's second-highest country for cancer cases after China.
- Oral cancer has the highest incidence in India, followed by Cervical Cancer. 3.

Which of the statements given above is/are NOT correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (a)

Q2. Which of the following is the primary purpose of immunotherapy in cancer treatment?

- (a) Reducing recovery time of the patient
- योजना है (b) Enhancing surgical precision in cancer surgeries
- (c) Helping the immune system fight cancer
- (d) Using high doses of radiation

Answer: (c)

O3. Discuss the key factors contributing to the rising incidence of cancer in India and the strategies that can be employed to address this pressing issue. voinaias

NOBEL IN ECONOMIC SCIENCES

This article covers "Daily Current Affairs" and the topic details "Nobel in Economic Sciences". This topic has relevance in the "Economy" section of the UPSC CSE exam.

FOR PRELIMS:

Nobel in Economic Sciences 2023?

FOR MAINS: GS2: Economy

WHY IN THE NEWS?

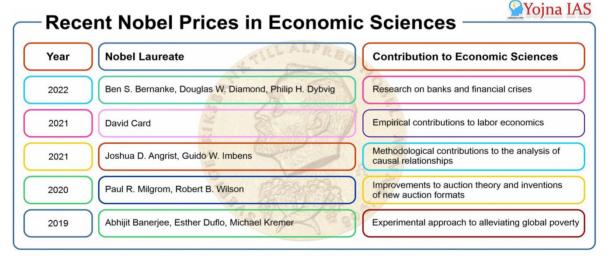
Harvard University professor **Claudia Goldin** has been honoured with the 2023 Nobel Prize in Economics for her research that has deepened our comprehension of the gender disparity in the job market.

ABOUT THE NEWS:

- Claudia Goldin's **extensive research spanning 200 years reveals that, despite women achieving higher education levels than men, the gender pay gap persists** and has not consistently narrowed.
- This trend raises concerns about women's labour force participation rates, which had declined since the 1990s when the U.S. led the world.
- Claudia Goldin has explored the historical shifts in women's roles in the workforce and the enduring gender pay gap. Her research underscores the influence of societal norms and individual perceptions on women's career choices and income disparities.
- She has explained **how changes in birth control and expectations have affected the gender pay gap**, which began to close in the 1980s but has since plateaued.
- **Her research overcame data challenges** stemming from historical gaps in labour market records, particularly concerning women. Goldin had to search archives and employ creative methods to fill these gaps.

NOBEL MEMORIAL PRIZE IN ECONOMIC SCIENCES,

- The Nobel Memorial Prize in Economic Sciences, officially named **The Sveriges Riksbank Prize** in Economic Sciences in Memory of Alfred Nobel, is an annual award sponsored by Sweden's central bank, Sveriges Riksbank.
- It is granted by the Royal Swedish Academy of Sciences to outstanding researchers in the realm of economic sciences.
- **Established in 1969,** the prize follows the same principles as the original Nobel Prizes, which have been awarded since 1901.
- This esteemed award acknowledges individuals who have made significant contributions to the field of economics, whether in theory or through empirical research.
- Their work spans various areas within economics, including macroeconomics, microeconomics, econometrics, and economic development.



Sources: 2023 Nobel Prize in Economic Sciences awarded to U.S. economist Claudia Goldin – The Hindu

- **Q1.** With reference to the Nobel Prize in Economics, consider the following statements:
- 1. Claudia Goldin has been honoured with the 2023 Nobel Prize in Economics for her research on gender disparity in the job market.

- 2. According to her research, despite women achieving higher education levels than men, the gender pay gap persists.
- 3. In the last 200 years, the gender pay gap has been consistently narrowed.

Which of the statements given above is/are correct?

(a) 1 and 2 only

- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (a)

Q2. Consider the following:

1	Ben S. Bernanke	Research on banks and financial crises		
2	Joshua D. Angrist	Experimental approach to alleviating global poverty		
3	Abhijit Banerjee	Methodological contributions to the analysis of causal relationships		
How many of the pairs are correctly matched?				
(a) Only one				

(b) Only two

(c) All three

(d) None

Answer: (a)

Q3. Discuss the global gender pay gap and its socio-economic implications. Analyse the factors contributing to this disparity and evaluate the effectiveness of policies and initiatives in addressing this issue.

DIGITAL INDIA ACT (DIA)

This article covers "Daily Current Affairs" and the topic details "Digital India Act". This topic has relevance in the Governance section of the UPSC CSE exam.

For Prelims:

About the Digital India ?

FOR MAINS:

GS 2: Governance Rationale for the Legislation?

WHY IN THE NEWS?

The recent unveiling of the Digital India Act 2023 (DIA) signifies a noteworthy stride in setting up a modern legal framework for India's expanding digital landscape. The initiative, led by the Ministry of Electronics and Information Technology (MEITY), demonstrates a proactive stance in governing and molding the nation's digital destiny.

DIGITAL INDIA BILL

The Digital India Act Bill (DIA) is a comprehensive legislative framework comprising four essential components:

1. Digital Personal Data Protection Bill

- 2. **DIA Rules**
- 3. National Data Governance Policy
- Amendments to the Indian Penal Code 4.

RATIONALE FOR THE LEGISLATION

- India, boasting 850 million internet users, stands as the world's largest digitally connected democracy. However, the existing Information Technology Act, designed for a pre-digital era, lacks provisions to safeguard user rights, establish trust, ensure cybersecurity, and counter contemporary cyber threats.
- The surge in cybercrimes, the spread of disinformation, and concerns regarding privacy underscore the imperative need for updated legislation.

GOALS OF THE DIGITAL INDIA BILL

The Digital India Bill seeks to accomplish the following objectives:

- **Evolvable Digital Law:** Establishing a flexible legal framework that can adapt to evolving technological trends.
- Adjudicatory Mechanism: Providing an accessible mechanism for resolving online civil and • criminal offenses.
- **Principles and Rules-based Approach:** Developing a legislative structure based on overarching तो सफलता governing principles.

KEY COMPONENTS OF THE DIA

The Digital India Bill comprises several critical components:

- **Open Internet:** Promoting choice, competition, diversity, fair market access, and facilitating ease of doing business while preventing the concentration of power.
- **Online Safety and Trust:** Safeguarding users against cyber threats, addressing issues such • as revenge porn, defamation, cyberbullying, and moderating fake news. The bill advocates for digital rights and protects minors.
- **KYC Requirements:** Mandating Know Your Customer (KYC) for privacy-invading devices like ٠ spy camera glasses.
- Monetization Rules: Revamping rules related to platform and user-generated content to align them with the provisions of the Digital India Bill.

KEY FEATURE:

- Revisiting the Concept of Safe Harbour: In the realm of cyberspace, a significant aspect currently under reconsideration by the government pertains to the 'safe harbour' principle.
- **Understanding Safe Harbour:** The 'safe harbour' principle is rooted in the idea that internet 'intermediaries' should not be held accountable for content posted on their platforms by third parties. This principle, in essence, grants social media platforms immunity from legal liability regarding user-generated content.
- Evolution of Safe Harbour: In recent years, the 'safe harbour' concept has faced restrictions and modifications due to regulations such as the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021. These rules mandate that platforms must remove content when instructed by the government or when compelled to do so by law.
- Q.1 Consider the following statements regarding the Digital India Bill (DIA) and the concept of 'Safe Harbour':

- 1. The 'Safe Harbour' principle holds internet intermediaries responsible for content posted by third parties on their platforms.
- One key component of the Digital India Bill is mandating KYC for privacy-invading devices. 2.

Which of the statements given above is/are correct?

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

ANSWER: D

Q.3 Examine the significance of the Digital India Act (DIA) 2023 in the context of India's digital transformation. Analyze the potential impact of this legislation on various stakeholders

GLOBAL GENDER GAP INDEX

This article covers "Daily Current Affairs" and the topic details "Global Gender Gap Index". This .uer सफलता topic has relevance in the Social Justice section of the UPSC CSE exam.

FOR PRELIMS:

About the Global Gender Gap Index?

FOR MAINS:

GS 2: Social Justice *Key Findings from the Global Gender Gap Index 2023 Report?* Status of South Asia and India in the Global Gender Gap Index (2023)?

WHY IN THE NEWS?

The Global Gender Gap Index is an annual report introduced by the World Economic Forum in 2006. It serves as a critical tool to assess and track the state and evolution of gender parity worldwide, highlighting areas where gender gaps persist.

Key Findings from the Global Gender Gap Index 2023 Report:

Progress Towards Full Gender Parity:

The report states that no country has yet achieved complete gender parity, emphasizing that there is still work to be done.

Top-Performing Country:

Iceland has consistently secured the top position for the 14th year in a row, with a score of 91.2%. It is the sole country to successfully bridge more than 90% of its gender gap.

Gender Gap Progress Across Dimensions:

- The report measures gender gaps in four main dimensions: Health and Survival, Educational • Attainment, Economic Participation and Opportunity, and Political Empowerment.
- The health and Survival gender gap has closed by 96%, the Educational Attainment gap by 95.2%, the Economic Participation and Opportunity gap by 60.1%, and the Political Empowerment gap by 22.1%.

Projections for Closing Gender Gaps:

The analysis suggests that the time required to close gender gaps varies across dimensions. The

Political Empowerment gender gap is projected to take 162 years to close, while the Economic Participation and Opportunity gender gap is estimated to require 169 years. In contrast, the Educational Attainment gender gap is expected to be resolved within 16 years.

Challenges in Achieving Gender Parity in the Labor Market:

- Achieving gender parity in the labor market remains a significant challenge. Women's participation in the global labor market has seen a decline in recent years, and substantial disparities persist in various aspects of economic opportunity.
- Despite women returning to the workforce at higher rates than men, gender gaps still exist, especially in leadership roles.

STATUS OF SOUTH ASIA AND INDIA IN THE GLOBAL GENDER GAP INDEX (2023)

India's Rank and Progress:

- In the Gender Gap Report of 2023 by the World Economic Forum (WEF), India was ranked 127 among 146 countries, showing an improvement of eight places from the previous year's ranking.
- India's rank in 2022 was 135, indicating that it has made progress by 1.4 percentage points, moving towards its 2020 gender parity levels.

Gender Gap in India:

- The report indicates that India has closed 64.3% of the overall gender gap, with notable achievements in educational parity.
- India has reached parity in enrollment across all levels of education, which is a significant advancement.

Economic Participation and Opportunity:

• However, in economic participation and opportunity, India has achieved only 36.7% parity. This dimension remains a substantial challenge for gender equality.

WAGES AND INCOME PARITY:

• While there has been some improvement in wage and income parity, the representation of women in senior positions and technical roles has slightly decreased since the previous report.

Political Empowerment:

• India has a 25.3% parity in political empowerment, and women make up 15.1% of Members of Parliament (MPs).

Local Governance Representation:

• Among 117 countries with data available since 2017, India is among 18 nations where women's representation in local governance exceeds 40%, standing at 44.4%.

Sex Ratio Improvement:

- India has seen a 1.9 percentage point improvement in the sex ratio at birth, contributing to increased gender parity after more than a decade.
- India's sex ratio at birth, while improving, is slightly lower than top-scoring countries, standing at 92.7% compared to the leading countries with 94.4% gender parity at birth.

The Global Gender Gap Index reveals that India has made notable progress in certain areas of gender parity but continues to face challenges, especially in economic participation and opportunity. The report underscores the importance of ongoing efforts to close gender gaps, empower women politically, and ensure greater representation in decision-making roles.

Source:

https://www.thehindu.com/news/national/india-climbseight-places-to-127-in-global-gender-index-says-wef-report/ article66994156.ece

- **0.1** Which organization is responsible for providing the rankings in the 'Global Gender Gap Index' for countries worldwide?
- World Economic Forum (a)
- (b) UN Human Rights Council
- (c) UN Women
- (d) UNDP

ANSWER: A

0.2 Gender equality is not just a goal in itself but a catalyst for achieving sustainable development." Elaborate.

MERA YUVA BHARAT

This article covers "Daily Current Affairs" and the topic details "Mera Yuva Bharat". This topic has गोजना है तो सफलता है relevance in the Government Policies section of the UPSC CSE exam.

FOR PRELIMS:

Mera Yuva Bharat

FOR MAINS:

- **General Studies-02**
- **Government Policies and Plans** •

WHY IN THE NEWS?

Recently, the Union Cabinet chaired by the Prime Minister approved the setting up of an autonomous body named ;Mera Yuva Bharat (MY India).

KEY POINTS: yojnaias. Purpos

Purpose-

It seeks to serve as an all-encompassing technology-driven mechanism for youth development and youth-led development, as well as to realize youth aspirations by granting them equal access and creating a developed India across all facets of government.

Age group targeted:

Young people between the ages of 15 and 29 will benefit from it, according to the National Youth Policy's definition of ; The target audience for program elements created especially for teenagers will be people between the age group of 10-19 years.

Approach:

- It will involve youth, and the principles of a whole of government approach; (activities supported by all branches of government) will serve as a guide for their empowerment.
- The primary objective of Mera Yuva Bharat (MY Bharat) is to make it a whole of Government • platform for youth development. Under the new arrangement, with access to resources & amp; connection to opportunities, youth would become community change agents and nation builders allowing them to act as the Yuva Setu between the Government and the citizens. It seeks to

harness the immense youth energy for nation-building. Mera Yuva Bharat Need:

- In order to engage youth and empower them in a rapidly changing world characterised by highvelocity communications, social media, new digital opportunities, and emerging technologies, the government has decided to establish an overarching enabling mechanism in the form of a new Autonomous Body, namely Mera Yuva Bharat (MY Bharat) Expected impact
- Under the new system, youth will become community change agents and nation builders thanks to access to resources and opportunities, allowing them to act as young people's liaisons between the public and the government.
- Improve the leadership skills through experiential learning by shifting from isolated physical interaction to programmatic skills
- Communities will have leaders and social innovators if they invest more in youth as active forces for development. Young people will be able to participate in development as ;active drivers; as opposed to just passive recipients; if there is a focus on youth-led development.
- It aims to better synchronize community needs and aspirations for young people
- In addition, it will bring in increased efficiency through a combination of current programs and serve as a one-stop shop for youth and ministries.

Source: PIB

Preliminary Exam Questions-

Q.1 Consider the following statements regarding Mera Yuva Bharat:

- 1. Recently, approved the setting up of an autonomous body named Mera Yuva Bharat(MY INDIA) under the chairmanship of the Defence Minister
- 2. In line with the definition of youth: given in the National Youth Policy, youth in the age group of 15-29 years will benefit from it.

Which of the above statements is/are correct?

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2
- Answer B

Q-2. With reference to Mera Yuva Bharat, consider the following statements:

- 1. It aims to act as a comprehensive enabling mechanism driven by technology for youth development and youth-led development
- 2. It will engage the youth and their empowerment will be guided by the principles of whole government approach (activities supported from all sections of government).
- 3. The main goal of My India is to make it a holistic government platform for youth development.

Which of the above statements is/are correct?

- a) Only 1 and 2
- b) Only 2 and 3
- c) Only 3

d) All of the above.

Answer: (D)

Main Exam Question-

Q.03- Examine the significance of, Mera Yuva Bharat youth will be able to be community change agents and nation builders due to access to resources and opportunities

INTENSIFIED MISSION INDRADHANUSH 5.0

This article covers "Daily Current Affairs" and the topic details "Intensified Mission Indradhanush 5.0". This topic has relevance in the "Social Issues" section of the UPSC CSE exam.

FOR PRELIMS:

What is Intensified Mission Indradhanush 5.0? What is Mission Indradhanush?

For MAINS: *GS2: Social Issues*

WHY IN THE NEWS?

Intensified Mission Indradhanush (IMI 5.0), the national immunisation campaign, is set to conclude all three rounds on October 14, 2023.

INTENSIFIED MISSION INDRADHANUSH (IMI 5.0)

- Intensified Mission Indradhanush (IMI 5.0) is a nationwide immunisation campaign launched by the Government of India in 2023.
- It is the fifth phase of the Mission Indradhanush initiative, which was launched in 2014 with the aim of increasing full immunisation coverage among children in India.
- **Aim:** To ensure that routine immunisation services reach children and pregnant women who have previously missed or dropped out of vaccination programs.
- Objectives of IMI 5.0:
- to enhance immunisation coverage for all vaccines provided under the Universal Immunization Programme (UIP) as per the National Immunization Schedule (NIS).
- focus on improving Measles and Rubella vaccination coverage to eliminate Measles and Rubella by 2023.
- to use the U-WIN digital platform for routine immunisation in pilot mode across all districts in the country.

ABOUT MISSION INDRADHANUSH

- Mission Indradhanush was initiated by the Government of India on December 25, 2014, under the Ministry of Health and Family Welfare.
- This mission primarily focuses on enhancing Routine Immunization coverage in the country and striving to achieve a comprehensive immunisation rate of 90% across India by 2022.
- The mission is designed to provide vaccination against **eight vaccine-preventable diseases nationally.**
- These include Diphtheria, Whooping Cough, Tetanus, Polio, Measles, severe Childhood Tuberculosis, Hepatitis B, and diseases like meningitis & pneumonia caused by Haemophilus influenza type B.
- The mission addresses Rotavirus Diarrhea and Japanese Encephalitis in specific states and districts.

Don't Forget, Vaccination Your baby must gett	MISSION RADHANUSH	Nojna IAS
Disease	Infection agent	Туре
Diphtheria	Corynebacterium diphtheriae	Bacteria
Whooping cough	Bordetella pertussis	Bacteria
Tetanus	Clostridium tetani	Bacteria
Polio	Poliovirus	Virus
Measles	Measles virus	Virus
Severe Childhood Tuberculosis	Mycobacterium tuberculosis	Bacteria
Hepatitis B	Hepatitis B virus	Virus
Meningitis & pneumonia	Haemophilus influenzae type B	Bacteria
Rotavirus Diarrhea	Rotavirus	Virus
Japanese Encephalitis	Japanese encephalitis virus	Virus

Sources: Press Information Bureau (pib.gov.in)

Q1. With reference to Mission Indradhanush, consider the following statements:

- 1. It aims to reach 100% of the children and pregnant women by 2022.
- 2. The mission aims to offer immunisation against seven diseases that can be prevented through vaccination on a nationwide scale.
- 3. The Intensified Mission Indradhanush (IMI 5.0) focuses on improving Measles and Rubella vaccination coverage to eliminate Measles and Rubella by 2023.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (b)

Q2. Consider the following:

- 1. Tetanus Virus
- 2. Polio Virus
- 3. Measles Bacteria
- 4. Severe Childhood Tuberculosis Bacteria

How many of the abovementioned pairs are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four
- Answer: (b)

Q3. Discuss the significance and objectives of Mission Indradhanush in the context of India's vaccination programs. Analyze the challenges and impact of immunisation efforts.

SPECIAL LEAVE PETITION

This article covers "Daily Current Affairs" and the topic details "Special Leave Petition". This topic has relevance in the Polity and Governance section of the UPSC CSE exam.

GS 2: Polity and Governance

WHY IN THE NEWS?

The Supreme Court has granted early listing for a special leave petition that challenges the Delhi High Court's dismissal of petitions filed by NewsClick founder Prabir Purkayastha and the human resources head, Amir Chakraborty. These petitions pertained to their arrest by the Delhi Police under the stringent Unlawful Activities Prevention Act (UAPA).

BACKGROUND:

The Supreme Court of India highlighted an issue regarding Special Leave Petitions (SLPs) in criminal cases, which frequently lack vital information, including information about the accused, charges, and the trial's progress. Recognizing the deficiency of essential details in these appeals, the Supreme Court underscored the necessity for the establishment of new regulations aimed at ensuring that all requisite information is included in SLPs. This measure would help avoid unwarranted delays and enhance the efficiency of the legal process.

SPECIAL LEAVE PETITION OF THE SUPREME COURT:

Granting Special Leave: According to Article 136 of the Indian Constitution, the Supreme Court holds the discretionary power to grant special leave to appeal from any judgment, decree, determination, sentence, or order issued by any court or tribunal within the territory of India. This discretionary authority allows the Supreme Court to decide whether to accept or reject a requested Special Leave in any given case.

Exclusion of Armed Forces Matters: Notably, this provision does not apply to judgments, determinations, sentences, or orders issued by any court or tribunal established under laws related to the Armed Forces.

Inter-State Water Dispute (ISWD) Tribunal: When discussing Special Leave Petitions (SLPs), it's essential to consider their relationship with judgments from Inter-State Water Dispute (ISWD) Tribunals. The Inter-State Water Disputes Act of 1956, along with Article 262(2) of the Constitution, explicitly excludes the Supreme Court from hearing or deciding appeals against the decisions of ISWD Tribunals.

However, Article 136's reference to "any court or tribunal in the territory of India" raises questions about its applicability to ISWD Tribunals. The Supreme Court has argued that remedies provided under Article 136, which includes Special Leave Petitions, are constitutional rights. Therefore, there are potential avenues for circumventing this exclusion, primarily through Articles 32, 131, and 136 of the Constitution.

Constitutional Remedies: Article 32 of the Constitution provides constitutional remedies through writs like Habeas Corpus, Mandamus, Prohibition, Certiorari, and Quo Warranto to safeguard fundamental rights.

Original Jurisdiction: Article 131 grants the Supreme Court original jurisdiction in matters involving disputes between the Center and the States or inter-State disputes, addressing such issues in a comprehensive manner.

Source:

https://www.thehindu.com/news/national/cji-agrees-to-look-into-newsclick-founders-plea-forearly-listing-of-his-petition-against-arrest-remand/article67425863.ece

Q.1 Consider the following statements regarding Special Leave Petitions (SLPs) in India:

- 1. SLPs are primarily filed in the High Courts of India.
- 2. SLPs can only be filed by government authorities and public servants.
- 3. The Supreme Court of India has the discretionary power to decide whether to grant or deny permission for an SLP.

How many of the above statement/s is/are correct?

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

ANSWER: A

Q.2 Consider the following statements regarding Special Leave Petitions (SLPs) in India:

- 1. SLPs are filed directly in the Supreme Court of India.
- ्ट. सफलता सफलता 2. SLPs can be filed only on constitutional matters and not on any other legal issues.
- 3. The grant of permission for an SLP is a matter of right for the petitioner.

How many of the above statement/s is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **ANSWER: B**

Q.3 Examine the discretionary powers of the Supreme Court of India in deciding Special Leave Petitions (SLPs) and the impact of such discretion on the Indian legal system.

INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES (IIPS)

This article covers "Daily Current Affairs" and the topic details "International Institute for Population Sciences (IIPS)". This topic has relevance in the "International Relations" section of the UPSC CSE exam.

FOR PRELIMS:

What is International Institute for Population Sciences (IIPS)? What is United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)?

FOR MAINS:

GS2: International Relations GS2: Social Issues

WHY IN THE NEWS?

The Indian government recently lifted the suspension of K.S. James, the International Institute for

Population Sciences (IIPS) director, and accepted his resignation.

INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES (IIPS)

- The International Institute for Population Sciences (IIPS) has a rich history dating to its establishment in July 1956 in Mumbai.
- Initially known as the **Demographic Training and Research Centre (DTRC)**, it was founded through collaborative efforts between the **Sir Dorabji Tata Trust**, the Government of India, and the United Nations.
- Its primary mission is to serve as a **regional Institute for Training and Research in Population Studies for the ESCAP region**, which encompasses a significant part of the world's population.
- In 1985, the institute underwent a significant transformation and was re-designated as the International Institute for Population Sciences, reflecting its expanding role and commitment to academic activities.
- It was granted the status of a '**Deemed to be University**' on August 14, 1985, under Section 3 of the UGC Act, 1956, by the Ministry of Human Resource Development, Government of India.
- The administrative control of the IIPS falls under the **Ministry of Health and Family Welfare**, signifying its importance in public health and family planning.

IIPS AS ESCAP REGIONAL CENTRE

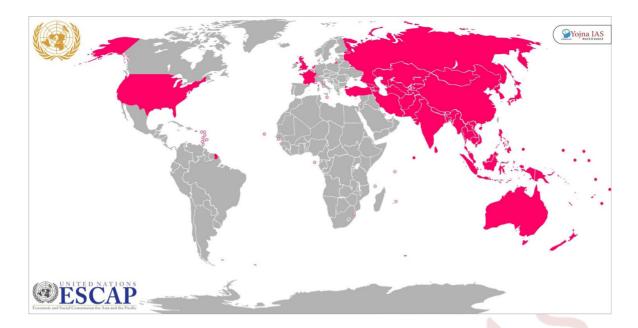
- IIPS holds a unique and pioneering position among all the regional population centres. It was the first such centre established and has continued to be a vital resource for addressing population-related challenges.
- Furthermore, it serves a much larger population than other regional centres, contributing significantly to demographic research, education, and policymaking.

REPORTS BY IIPS

- Over the years, the institute has played a crucial role in conducting various national-level surveys, including the **National Family Health Survey (NFHS)**, **District Level Household Survey (DLHS)**, Assessment of National Rural Health Mission (NRHM), **YOUTH in India Project**, and many others.
- These surveys have been instrumental in gathering essential demographic and health data, enabling evidence-based decision-making and policy formulation in India.

ABOUT UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC (UNESCAP)

- The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), or ESCAP, is **one of the five regional commissions under the jurisdiction of the United Nations Economic and Social Council (ECOSOC)**.
- Established on 28 March 1947 as the United Nations Economic Commission for Asia and the Far East (ECAFE), it was renamed to ESCAP on 1 August 1974.
- ESCAP is the largest regional intergovernmental platform with 53 Member States and 9 associate members, **covering a region with 4.1 billion people, or two-thirds of the world's population.**
- ESCAP's mission is to promote cooperation among countries in Asia and the Pacific for inclusive and sustainable development.
- It addresses various challenges through projects, technical assistance, and capacity building in areas like economic policy, trade, transport, social development, environment, technology, disaster risk reduction, statistics, sub-regional development, and energy.
- Notably, ESCAP's membership includes countries in Asia and the Pacific, France, the Netherlands, the United Kingdom, and the United States.



Sources:

Centre revokes IIPS Director's suspension two months after he resigned – The Hindu

Q1. Which of the following reports are published by/ in collaboration with the International Institute for Population Sciences (IIPS):

गोजना

- National Family Health Survey (NFHS) 1.
- 2. District Level Household Survey (DLHS)
- Periodic Labour Force Survey (PFLS) 3.

Select the correct code from the options given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (d) All of the above **Answer: (a)**

Q2. Consider the following statements regarding the United Nations Economic and Social **Commission for Asia and the Pacific (UNESCAP):**

- It is one of the regional bodies of the United Nations Educational, Scientific and Cultural 1. Organization (UNESCO).
- 2. ESCAP covers more than two-thirds of the global population.
- 3. It includes membership from countries such as France, the United Kingdom, and the Netherlands.

How many of the abovementioned statements are correct?

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

GAZA STRIP AND RAFAH BORDER

This article covers "Daily Current Affairs" and the topic details "Gaza Strip and Rafah Border". This topic has relevance in the "Geography" section of the UPSC CSE exam.

FOR PRELIMS:

Where is Gaza Strip? Where is Rafah Border?

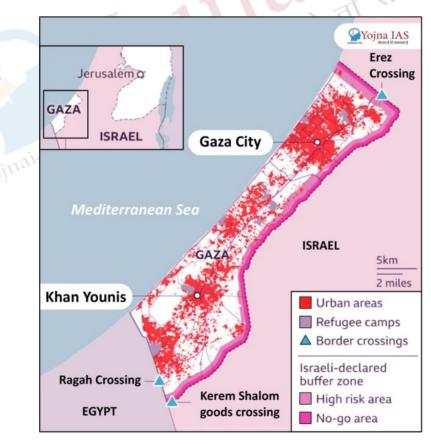
For MAINS: GS2: International Relations

WHY IN THE NEWS?

The Gaza Strip has witnessed intense airstrikes for over a week following Israel's response to an unprecedented terror attack by the Palestinian militant group Hamas on October 7th.

GAZA STRIP OVERVIEW

- The Gaza Strip is a 140-square-mile (363 square km) territory along the Mediterranean Sea, positioned northeast of the Sinai Peninsula.
- It's densely populated but not officially recognised as part of any country.
- The region's population growth is among the highest globally, with nearly half in refugee camps.
- In 2017, it had a population of 1,899,291; in 2023, the estimated population is 2,226,544.



HISTORICAL CONTEXT

• **1947 UN Partition Plan:** The Gaza Strip is one of two Palestinian territories, stemming from the UN's 1947 "Partition Plan for Palestine." It became a point of contention after Israel's creation in

1948 and the Arab-Israeli war.

- **Israeli Occupation:** After the 1967 Six-Day War, Israel took control of Gaza and the West Bank. The United Nations classifies Israel as an occupying state in Palestinian territories.
- **Hamas Control:** In 2006, Hamas won elections in Gaza and has maintained political control. Hamas, designated a terrorist organisation by the U.S., seeks an independent Islamic state but doesn't recognise Israel.

BLOCKADE AND HUMANITARIAN CRISIS

- **Longstanding Blockade:** Since 2007, Israel has maintained an air, land, and sea blockade on Gaza, often called the "world's largest open-air prison." Palestinian movement is heavily restricted.
- **Economic Hardship:** The Gaza Strip's economy has been severely impacted by restrictions on the movement of people, leading to an unemployment rate exceeding 40%. Over 60% of Gazans face food insecurity, and around 80% rely on international aid.
- **Worsening Conditions:** Following Hamas' terror attack on October 7, Israel imposed a total siege, further cutting off vital supplies such as food, water, and electricity, pushing Gaza to the brink. The UN warned of water shortages and a fragile healthcare system

Recent Developments

- **Escalating Conflict:** Ongoing conflict between Israel and Gaza, along with Israeli airstrikes, has killed thousands of Palestinians over the years, resulting in displacement and destruction.
- **Humanitarian Consequences:** Recent hostilities have caused mass evacuations, impacting the population's well-being. The UN described movement on this scale as impossible without severe humanitarian repercussions.
- **Criticism on Both Sides:** The UN has condemned both Hamas' terror attacks and Israel's attacks on Palestinian civilians, as well as the tightening of the blockade.

RAFAH BORDER CROSSING

- The Rafah Border Crossing is the only closing point between Egypt and the Gaza Strip.
- It gained significance due to Israel's complete blockade of Gaza.
- Egypt administers this crossing, providing a route that bypasses Israeli territory.
- This passage is vital for direct humanitarian aid access to Gaza from outside Israel.
- Recently, a deal between the US and Egypt was announced to reopen this border crossing, enabling aid to reach Palestine.

Sources:

Palestinians report heavy shelling in south Gaza towns where civilians are seeking refuge – The Hindu

Q1. With reference Gaza Strip, consider the following statements:

- 1. The Gaza Strip is a territory located south of the Sinai Peninsula along the Mediterranean Sea.
- 2. It is officially recognised as part of Israel but contested by the state of Palestine.
- 3. Hamas has political control over the Gaza.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 and 3 only

(c) 3 only

(d) None

Answer: (c)

Q2. Consider the following: **Border Crossings - Countries/ Regions** San Ysidro – US – Canada 1.

- 2. Panmuniom – North Korea- South Korea
- 3. Rafah – Gaza- Israel
- 4. Allenby Bridge - West Bank - Jordan

How many of the abovementioned pairs are correct?

RRTS

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four
- Answer: (b)

DELHI-MEERUT REGIONAL RAPID TRANSIT SYSTEM (RRTS)

This article covers "Daily Current Affairs" and the topic details " Delhi-Meerut Regional Rapid Transit System (RRTS)". This topic has relevance in the Infrastructure section of the UPSC CSE हे तो सफलती exam.

FOR MAINS:

GS 2: Infrastructure

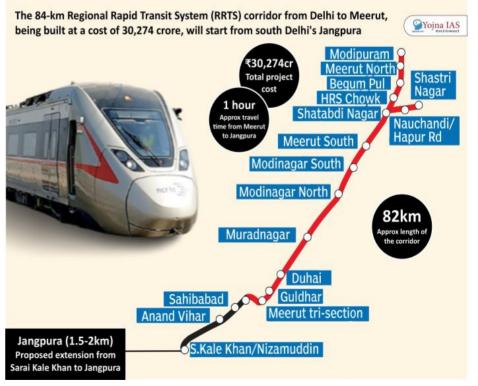
WHY IN THE NEWS?

In a recent development, the Prime Minister has officially launched the Delhi-Meerut Regional Rapid Transit System (RRTS), known as 'RapidX,' featuring contemporary conveniences and comprehensive infrastructure.

- **Delhi-Meerut** Stretch:
- \rightarrow The RapidX (Also Known as NaMo Bharat) Train is slated to operate on a 17-kilometer segment of the Delhi-Meerut Regional Rapid Transit System (RRTS).
- \rightarrow The overall length of the RRTS extends to 84 kilometers.
- \rightarrow The RapidX Train is anticipated to maintain an average speed of 100 kilometers per hour.

STATIONS AND ROUTE:

 \rightarrow The train will halt at five stations, each adorned with



turquoise and beige colors: Sahibabad, Ghaziabad, Guldhar, Duhai, and Duhai Depot.

 \rightarrow This stretch is part of the larger 82-kilometer Delhi-Meerut corridor.

TRAIN COMPOSITION:

- \rightarrow The RapidX Train comprises five standard coaches, with one dedicated to women, along with a premium coach.
- \rightarrow Passengers can purchase QR code-based paper tickets using currency notes, bank cards, or the unified payments interface (UPI) at station ticket counters or ticket vending machines (TVMs).

Key Features of the RapidX Train

- → **Platform Screen Doors (PSDs):** Each station is equipped with platform screen doors integrated with the train doors and signaling systems.
- **Safety Mechanism:** The train's departure from the station is contingent on ensuring that both the main doors and PSDs are securely closed.
- Manual Door Locks: Notably, all doors on the train incorporate unique manual locks that passengers can engage to open the doors at a station should they fail to open automatically.

Source:

PM flags off first train of Delhi-Meerut RRTS service – The Hindu

Q.1Regarding the 'RapidX' train and the Delhi-Meerut RRTS, Consider the following statements:

- 1. The 'RapidX' train is expected to maintain an average speed of 200 kilometers per hour.
- 2. Passengers can purchase paper tickets using currency notes, bank cards, and UPI at station ticket counters, but QR codes are not yet accepted.

र्योजना Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

ANSWER: C

Q.2 Explain the pivotal role of modern rapid transit systems in promoting sustainable urban development, reducing congestion, and fostering economic growth in metropolitan regions.

YUVA SANGAM

This article covers "Daily Current Affairs", and the topic details "Yuva Sangam". This topic has relevance in the "Polity and Governance" section of the UPSC CSE exam.

FOR PRELIMS:

What is Yuva Sangam? What is Ek Bharat Shreshtha Bharat?

FOR MAINS:

GS2: Polity and Governance Important Government Schemes and Policies

WHY IN THE NEWS?

The registration portal for Phase III of Yuva Sangam, an Ek Bharat Shreshtha Bharat (EBSB) compo-

nent, has been recently launched.

ABOUT YUVA SANGAM:

- Yuva Sangam is an initiative by the Government of India to **strengthen connections among young individuals from different States/Union Territories** of India.
- **Eligibility:** Youth in the age group of 18-30 years, including students, NSS (National Service Scheme)/NYKS (Nehru Yuva Kendra Sangathan) volunteers, employed/self-employed individuals, etc.
- This initiative, launched under EBSB, draws inspiration from the National Education Policy (NEP) 2020.
- Its core focus is experiential learning and firsthand exposure to India's rich diversity.
- Yuva Sangam is an ongoing cultural exchange that celebrates diversity by offering participants immersive experiences covering various aspects of life, natural landscapes, developmental milestones, recent achievements, and youth connections in the host state.
- Phase III of Yuva Sangam involves twenty distinguished institutions across India, with participants from these Higher Education Institutions (HEIs) visiting 22 states and Union Territories.

EK BHARAT SHRESHTHA BHARAT

- Ek Bharat Shreshtha Bharat is an initiative launched by the Indian Government to foster mutual understanding and connections among the diverse states and union territories in India.
- Prime Minister Narendra Modi announced this program on October 31, 2015, during the 140th birth anniversary of Sardar Vallabhbhai Patel.
- The **Department of Higher Education**, **Ministry of Education**, implements the scheme.
- The primary objectives of this program are as follows:
- To **celebrate India's unity in diversity** and preserve and strengthen the traditional emotional bonds that connect the people of our nation.
- To facilitate interactions and encourage mutual understanding between the residents of different states and union territories through a concept known as state/UT pairing.
- Each state or union territory is paired with another every year, promoting reciprocal interactions among the people. This exchange is expected to enhance understanding and foster stronger bonds, ultimately reinforcing the unity and integrity of India.

SOURCES:

pib.gov.in/PressReleaseIframePage.aspx?PRID=1968709

Q1. With reference to Yuva Sangam, consider the following statements:

- 1. It is a component of the Mera Gaon Meri Dharohar program.
- 2. It aims to strengthen connections among young individuals from different States/Union Territories.
- 3. The program draws inspiration from the National Education Policy (NEP) 2020.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (b)

Q2. Consider the following statements with reference to Ek Bharat Shrestha Bharat Scheme:

- 1. The Scheme aims to foster mutual understanding among the diverse states in India.
- 2. The Ministry of Culture implements the scheme.

3. Every year, each state/ union territory is paired with another state/ UT for promoting peoplepeople interactions.

How many of the abovementioned statements are correct?

(a) Only one

(b) Only two

(c) All three

(d) None

Answer: (b)

Q3. Discuss the concept of regionalism in India and examine the government's initiatives to address and manage regional disparities.

MANUAL SCAVENGING

This article covers "Daily Current Affairs" and the topic details "Manual Scavenging". This topic has relevance in the Social Issues section of the UPSC CSE exam.

GS 2: Social Issues

WHY IN THE NEWS?

The Supreme Court has issued a series of directives to both the central and state governments, with the aim of entirely eliminating manual scavenging. Furthermore, the court has called for an increase in compensation in situations of fatality or injury.

BACKGROUND:

- The court acknowledged the petition filed in 2020, bringing to its attention the pressing issue of fatalities in sewers, despite the practice being legally banned.
- The practice of manual scavenging was prohibited through the enactment of the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993, and the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013.
- The court initiated proceedings against various government entities, including the Ministry of Social Justice and Empowerment, the National Commission for Scheduled Castes, and the National Commission for Scheduled Tribes.

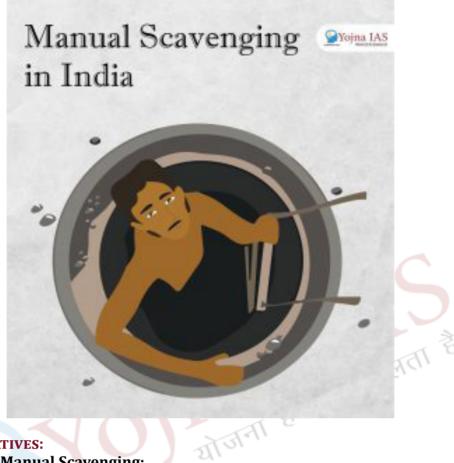
SAFAI KARAMCHARI ANDOLAN AND OTHERS VS. UNION OF INDIA:

- In a landmark case, the Supreme Court reinforced the ban on manual scavenging and issued directives for the rehabilitation of individuals, both traditionally and otherwise, engaged in this hazardous practice. The judgment emphasized that rehabilitation should be founded on principles of justice and transformation.
- The judgment underscored the necessity for rehabilitation that aligns with principles of justice and transformation. Moreover, it emphasized that individuals liberated from manual scavenging should not face unnecessary obstacles in obtaining what is rightfully theirs under the law.

DEFINITION OF MANUAL SCAVENGING:

• Manual scavenging involves the manual removal of human and animal waste from dry toilets, followed by its transportation and disposal. According to the "Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 (MS Act, 2013)," it encompasses tasks like manually cleaning, carrying, disposing of, or handling human excreta in insanitary latrines. This practice was officially banned by the anti-manual scavenging Act in 1993 and further reinforced

in 2013, making it illegal since December 2013.



GOVERNMENT INITIATIVES:

Prohibition of Manual Scavenging:

- The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, not only prohibits the construction or maintenance of unhygienic toilets but also forbids the employment of individuals in cleaning sewer pipes and swimming pools through hazardous manual methods.
- The Act also outlines measures to rehabilitate individuals identified by municipalities as service providers in this context.
- Constitutional Rights:
- Article 21 of the Constitution guarantees the 'Right to Life' and 'Right to Dignity,' reinforcing the government's obligation to eradicate the dehumanizing practice of manual scavenging.
- Swachhta Abhiyan App:
- The government has developed the Swachhta Abhiyan App to identify and geotag data related to insanitary latrines and manual scavengers. The primary objective is to replace insanitary latrines with sanitary ones and ensure the rehabilitation of manual scavengers, thereby affording them a life of dignity.

THE WAY FORWARD

- **Accurate Assessment:** Nation should conduct comprehensive assessments to accurately determine the number of workers involved in hazardous tasks like cleaning toxic waste.
- **Empowering Local Authorities:** Prioritizing the elimination of manual scavenging under initiatives like the Swachh Bharat Mission and utilizing the available funds for smart cities and urban development can effectively address the issue of manual scavenging.
- **Social Sensitization:** Addressing the deeply entrenched issue of social stigma and discrimination against manual scavengers is crucial. This requires a concerted effort to raise awareness and understanding about the reasons behind the continued inclusion of manual scavenging in the

societal hierarchy.

o **Stringent Legislation:** Enacting and enforcing stringent laws that impose a legal obligation on state organs to provide proper sanitation services can help safeguard the rights of these workers. Such legislation would ensure that their rights are not violated and that they are not subjected to hazardous practices.

SOURCE:

https://www.msn.com/en-in/news/other/put-a-totalstop-to-manual-scavenging-supreme-court/ar-AA1iAmxl

Q.1 Consider the following statements about Manual scavenging:

- 1. Manual scavenging was officially prohibited by the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 1993.
- 2. Swachhta Abhiyan App identifies and geotags data related to insanitary latrines and manual scavengers.

Which of the statements given above is/are correct?

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

ANSWER: C

Q.2 Discuss the socio-economic and human rights challenges associated with manual scavenging in India, and evaluate the effectiveness of government initiatives and legislation in eradicating this degrading practice.

PM ANUSUCHIT JAATI ABHUYDAY YOJANA

This article covers "Daily Current Affairs" and the topic details "Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM-AJAY)". This topic has relevance in the "Polity and Governance" section of the UPSC CSE exam.

FOR PRELIMS:

What is Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM-AJAY)?

FOR MAINS:

- GS2: Polity and Governance
- Welfare schemes for vulnerable sections by the Centre and States and the performance of these schemes

WHY IN THE NEWS?

In the current financial year, 1260 villages became Adarsh Grams, and nine new hostels were approved for construction under Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM-AJAY).

PRADHAN MANTRI ANUSUCHIT JAATI ABHUYDAY YOJANA (PM-AJAY)

• The Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM-AJAY) is a comprehensive program

initiated in 2021-22, encompassing the merger of three centrally sponsored schemes:

- 1. Pradhan Mantri Adarsh Gram Yojana (PMAGY)
- 2. Special Central Assistance to Scheduled Castes Sub Plan (SCA to SCSP)
- 3. Babu Jagjivan Ram Chhatrawas Yojana (BJRCY)
- This integrated scheme aims to uplift Scheduled Caste (SC) communities by generating additional employment opportunities through skill development, income-generating projects, and various initiatives.
- The Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM-AJAY) is implemented by the Ministry of Social Justice and Empowerment.

KEY OBJECTIVES OF PM- AJAY:

- Reducing poverty within SC communities. •
- Creating additional employment opportunities through skill development and income-generating • schemes.
- Enhancing socio-economic indicators. •
- Ensuring adequate infrastructure in SC-dominant villages. •
- Elevating the living standards and livelihood security of SC families. •
- Promoting education and addressing maternal and infant mortality. •
- Eliminating malnutrition, particularly among children and women. •

COMPONENTS OF PM- AJAY:

- Development of SC Dominated Villages (Adarsh Gram) •
- सफलता The primary goal of this component is the integrated development of SC-majority villages.
 - It includes providing essential infrastructure and improving socio-economic indicators to eliminate disparities between SC and non-SC populations.
- Grants-in-Aid for District/State-level Projects •
 - This component focuses on the socio-economic betterment of SCs and may encompass the following types of projects:
 - Comprehensive Livelihood Projects: Projects that create sustainable income opportunities for 0 SCs.
 - 0 Skill Development: Skill development courses and infrastructure as per government norms.
 - Grants for Creation/Acquisition of Assets: Financial assistance for asset creation needed for livelihood generation.
 - Infrastructure Development: Enhancing infrastructure related to projects, including hostels and residential schools.

Special Provisions for Allocation of Resources

- Economically Viable Projects for SC Women Up to 15%
- Infrastructure Development Up to 30%
- Skill Development At least 10%
- Promotion of SC women cooperatives involved in producing and marketing consumer goods and services.
- **Construction of Hostels**
 - This component focuses on constructing hostels in top-ranked higher educational institutions and schools funded by the central, state, or union territory governments.

01. With reference to Pradhan Mantri Anusuchit Jaati Abhuvday Yojana (PM-AJAY), consider the following statements:

- 1. PM AJAY is a central sector scheme.
- 2. It is being implemented by the Ministry of Tribal Affairs.
- 3. This integrated scheme aims to uplift Scheduled Tribes (ST) communities.

Which of the statements given above is/are correct?

(a) 1 and 2 only

- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (d)

O2. Consider the following:

- 1. Development of Villages
- 2. Skill Development
- 3. Infrastructure Development
- 4. Construction of Hostels
- 5. Scholarships to Meritorious Students

How many of the above are components/ sub-components of Pradhan Mantri Anusuchit Jaati .an सफला Abhuvdav Yojana?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) Only four
- Answer: (d)
- Q3. Discuss the various welfare schemes for Scheduled Caste (SC) communities in India. Analyse the key challenges and achievements in the implementation of these schemes. yojnaias.cor

APAAR ID

This article covers "Daily Current Affairs" and the topic details "APAAR ID". This topic has relevance in the "Social Issues" section of the UPSC CSE exam.

FOR PRELIMS: What is APAAR ID?

FOR MAINS: GS2: Social Issues?

WHY IN THE NEWS?

The government has introduced a new student identification card called the Automated Permanent Academic Account Registry (APAAR) ID as part of the 'One Nation, One Student ID' program, which aligns with the recently implemented National Education Policy of 2020.

AUTOMATED PERMANENT ACADEMIC ACCOUNT REGISTRY ID

APAAR, the Automated Permanent Academic Account Registry, introduces an exclusive identifi-

cation system for all Indian students from childhood.

- Each student is allocated a **lifelong APAAR ID**, simplifying the monitoring of their educational journey from **pre-primary education to higher studies**.
- APAAR is **a portal to Digilocker**, a digital platform where students can securely preserve vital documents and achievements, including exam results and report cards.
- This digital repository facilitates easy access and utilisation of documents for future educational pursuits or employment.



PURPOSE OF APAAR

- **Efficiency and Accessibility:** APAAR's core purpose is to enhance education by streamlining processes and eliminating the need for physical document handling, aligning with the National Education Policy 2020.
- **Monitoring Educational Data:** APAAR facilitates positive change by enabling state governments to monitor educational metrics, equipping them with the resources needed to enhance their performance.
- **Anti-Fraud Measures:** APAAR safeguards against fraudulent and duplicate educational certificates, providing a singular, reliable reference point for educational institutions. Only authorised sources can deposit credits, ensuring record authenticity and integrity.

WORKING OF APAAR ID

- **Unique ID:** Each person possesses a distinct APAAR ID linked to the **Academic Bank Credit (ABC)**, a digital repository storing educational credits.
- **Comprehensive Storage:** Students can securely preserve formal and informal certificates and achievements. Authorised institutions provide digital certification and storage.
- **Seamless Transfers:** When a student changes schools, sharing the APAAR ID instantly migrates all ABC data to the new institution, eliminating physical document and certificate transfers.

APAAR ID REGISTRATION PROCESS

• Data Input: Students provide essential details like name, age, date of birth, gender, and a pho-

tograph.

- **Aadhar Verification:** Data is verified using the Aadhar number solely for matching name and date of birth; it isn't shared during registration.
- **Consent Option:** Students share their Aadhar number and demographic data with the Ministry of Education by signing a consent form.
- Minors' Consent: Parental consent is needed for minors, enabling the use of their Aadhar number for UIDAI authentication.
- Voluntary Registration: Registering for an APAAR ID is voluntary, not mandatory.

CONCERNS REGARDING APAAR

- **Privacy Apprehensions:** Parents and students express concerns about sharing their Aadhar details, fearing potential data leaks to external entities.
- Data Control: Students can discontinue sharing their data with the mentioned entities at any time, with data processing ceasing upon withdrawal of consent. However, previously processed personal data remains unaffected even if consent is revoked.
- The government assures that information shared by students will remain confidential and won't 0 be disclosed to third parties except for authorised educational entities and recruitment agencies.

SOURCES:

One nation, One Student ID' initiative (indianexpress.com)

01. With reference to the APAAR ID , consider the following statements:

- APAAR stands for Automated Performance Academic Account Registry. 1.
- 2. Under APAAR, each student is allocated a lifelong ID monitoring their educational journey from pre-primary education to higher studies.

Which of the statements given above is/are correct?

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

Answer: (b)

yojnaias.com Q2. Consider the following statements:

- APAAR ID aligns with the recently implemented National Education Policy of 2020. 1.
- APAAR enables governments to monitor educational metrics to undertake policy interventions. 2.
- 3. APAAR ID will be linked to the Academic Bank Credit (ABC)
- Registering for the ID is mandatory for new students. 4.

How many of the abovementioned statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four
- Answer: (c)

Q3. Discuss the significance of the APAAR (Automated Permanent Academic Account Registry) ID system in the context of the education sector.

BOND YIELD

This article covers "Daily Current Affairs" and the topic details "Bond Yield". This topic has relevance in the Economy section of the UPSC CSE exam.

FOR PRELIMS:

About Bond Yield? Factors Affecting Bond Demand and Market Price?

FOR MAINS:

GS 2: Economy Impact of Bond Yield Hardening:?

WHY IN THE NEWS?

The yield on 10-year U.S. government bonds, which serves as a global benchmark for asset prices, has climbed to 5.02 percent. This marks its highest level since July 2007.

ABOUT BOND YIELD:

- Bonds are financial instruments issued by governments and corporations to raise funds. The initial value at which a bond is issued is its face value, while its value in the secondary market is referred to as the market value.
- **Bond Yield:** Bond yield represents the return that an investor receives on their investment in a specific bond. The yield is influenced by the bond's current market value.
- When the market value of a bond rises above its face value (the initial price at issuance), the rate of return for investors in the secondary market decreases. This situation is commonly referred to as a "softening of bond yields."
- Conversely, if the market value of a bond falls below its face value, the rate of return for investors in the secondary market increases. This is often described as a "hardening of bond yields."

FACTORS AFFECTING BOND DEMAND AND MARKET PRICE:

Decreases Demand	Increases Demand
Market Price of the Bond Decreases	Market Price of the Bond Increases
Bond Yield Increases (Yield Hardening)	Bond Yield Decreases (Yield Softening)
Reasons: Increased Inflation, Sale of G-secs by the central bank under open market operations, Increased borrowings by the government (In- creased fiscal deficit)	Reasons: Deflationary trends in the economy, Purchase of G-secs by the Central bank under open market operations, Reduced borrow- ings by the government
Loss to the Bond Holder	No Loss to the Bond Holder

Impact of Bond Yield Hardening:

- Loss to Banks: Commercial banks in India, which hold a significant amount of government securities (g-secs) for statutory liquidity ratio (SLR) requirements and liquidity adjustment facility (LAF) purposes, incur losses when bond yields rise. This is due to the inverse relationship between bond prices and yields, forcing banks to book these losses.
- Loss to Mutual Funds: Mutual funds, which also hold substantial amounts of g-secs, experience similar losses when bond yields increase.
- Increased Cost of Borrowings: A higher yield on G-secs means that the government must offer higher interest rates on new borrowings. Corporates may also need to raise interest rates on their bonds in response to rising bond yields in the market. Indian banks, following long-term G-sec rates to determine lending rates, may increase their lending rates as well.

Impact on Equity Market: Rising bond yields increase the opportunity cost of investing in equities, making equities less attractive for investors.

SOURCE:

https://indianexpress.com/article/explained/explained-economics/us-bond-yield-whyrising-explained-8997263/

0.1 Consider the following statements about bonds and bond vields:

- The face value of a bond is its market value. 1.
- 2. Bonds are issued only by governments.
- Bond yield is influenced by the bond's current market value. 3.

How many of the above statement/s is/are correct?

(a) Only one

- (b) Only two
- (c) All three

(d) None

ANSWER: A

Q.2 Consider the following statements about bond yields:

- "Softening of bond yields" occurs when the market value of a bond falls below its face value. 1.
- 2. "Hardening of bond yields" happens when the market value of a bond rises above its face value. योजना हे तो

Which of the statements given above is/are correct?

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

ANSWER: D

Q.3 Examine the role of the bond market as a vital component of the global financial system.

SATELLITE INTERNET

This article covers "Daily Current Affairs" and the topic details "Satellite Internet". This topic has relevance in the "Science and Technology" section of the UPSC CSE exam.

FOR PRELIMS:

What is Satellite internet and its uses?

FOR MAINS:

GS2: Science and Technology

WHY IN THE NEWS?

Recently, Reliance Jio made a significant announcement, showcasing India's first satellite-powered gigabit internet service. This breakthrough technology has the potential to deliver high-speed internet to remote and hard-to-reach regions within the country.

SATELLITE INTERNET

- Satellite internet technology is a form of internet access provided through communication satellites orbiting the Earth.
- It allows users to connect to the internet without relying on traditional terrestrial methods like cable or fibre optic connections.

WORKING OF SATELLITE INTERNET

- An internet service provider (ISP) deploys satellites into orbit around the Earth.
- The ISP then relies on a signal transmitted through one of these satellites in either low-Earth or high-Earth orbit. A strategically placed receiver dish, situated with an unobstructed view of the sky, captures this signal.
- To establish a functional internet connection, a modem is connected to this receiver dish, translating the incoming signal.
- Traditional high-speed satellite internet methods often involve constellations of low-Earth orbit (LEO) satellites, which orbit the Earth at altitudes ranging from 250 to 2,000 kilometres.
- Communication between these satellites and the Earth takes place through the transmission of radio waves.

ADVANTAGES:

- Global Coverage: Satellite internet is not restricted by geographical barriers, making it an ideal solution for remote and rural areas where traditional broadband connections are unavailable.
- High Speed: While it may not match the speeds of fibre-optic or cable internet, satellite technology can deliver significantly faster internet than dial-up or DSL connections.
- Quick Deployment: Satellite internet can be deployed relatively quickly, making it a valuable solution in emergencies and for businesses in need of rapid connectivity.
- Redundancy: It can serve as a backup or redundant internet connection for businesses, ensuring connectivity even when terrestrial networks fail.

CHALLENGES AND LIMITATIONS:

- Latency: Due to the long distance data must travel between the Earth and satellites, satellite internet experiences higher latency than terrestrial connections, making it less suitable for time-sensitive applications like online gaming or Video conferencing.
- Cost: Satellite internet services are more expensive than traditional broadband, often involving equipment and installation costs.
- Data Caps: Many satellite internet plans come with data usage restrictions, which can be a limiting factor for heavy internet users.
- Weather Interference: Adverse weather conditions, such as heavy rain or snow, can disrupt satellite signals, leading to connectivity issues.

More about the news:

- At the recent India Mobile Congress, Reliance Jio unveiled its latest technological innovation, JioSpaceFiber.
- This advanced satellite internet technology, developed in partnership with SES, a Luxembourg-based satellite communications company, harnesses medium Earth orbit (MEO) satellites to provide internet connectivity.
- SES's O3v and o3b mPOWER networks form the foundation of this groundbreaking initiative, claiming to offer internet services comparable to traditional fibre connections from space.

Sources: Reliance Jio demonstrates its satellite-based gigabit internet in India | Technology News – The Indian Express

- Q1. With reference to Satellite Internet Technology, consider the following statements:
- It allows users to connect to the internet without relying on cable or fibre optic connec-1. tions.
- Communication between these satellites and the Earth takes place through the transmis-2. sion of infra-red waves.
- Which of the statements given above is/are correct?
- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None
- Answer: (a)
- **Q2.** Consider the following:
- **Global Coverage** 1.
- 2. Faster internet than broadband
- 3. **Ouick deployment**
- No effect of weather conditions 4.

गोजना है तो सफलता How many of the abovementioned are advantages of Satellite Internet?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four
- Answer: (b)
- Q3. Discuss the significance and challenges of satellite internet technology with reference to India's recent development in this field. yojnaias.com

General Studies -3

(Technology, Economic Development, Biodiversity, Security & Disaster Management)

WINTER ACTION PLAN TO ADDRESS AIR POLLUTION IN DELHI-NCR

This article covers "Daily Current Affairs", and the topic details "Winter Action Plan to Address Air Pollution in Delhi-NCR". This topic has relevance in the "Environment and Ecology" section of the UPSC CSE exam.

FOR PRELIMS:

What are the reasons behind Delhi Pollution? What is Winter Action Plan to Address Air Pollution in Delhi-NCR?

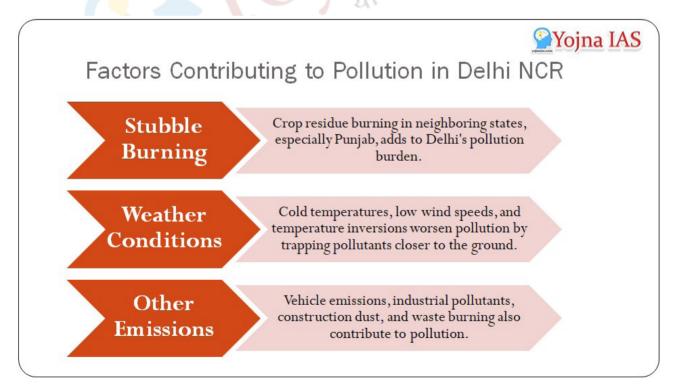
For MAINS: *GS3: Environment and Ecology*

WHY IN THE NEWS?

Chief Minister of UT of Delhi recently announced the winter action plan to address air pollution in Delhi. This plan aims to combat the persistently high pollution levels in the national capital during winter.

NEED FOR WINTER ACTION PLAN:

- **Worsening Air Quality:** Delhi experiences severe air pollution during winters, primarily due to stubble burning, industrial emissions, vehicular pollution, and unfavourable weather conditions that lead to the trapping of pollutants.
- **Health Concerns:** The high levels of air pollution in Delhi have detrimental effects on public health, leading to various respiratory and cardiovascular diseases. It is crucial to take immediate action to safeguard the well-being of the people.



PREVIOUS MEASURES AND ACTIONS:

• **Dust Pollution Control:** Strictly enforcing dust pollution norms at construction sites to minimise particulate matter emissions.

- **Anti-smog Guns:** Deployment of anti-smog guns to suppress dust and particulate matter in the air.
- **Mechanised Sweeping:** Mechanized sweeping of roads to reduce the accumulation of dust and pollutants.
- **Pollution Under Control (PUC) Certificates:** Checking and enforcing PUC certificates for vehicles to minimise vehicular emissions.
- **Air Pollution Hotspots:** Focused action and monitoring at 13 air pollution hotspots in Delhi to target high pollution areas, such as Anand Vihar and Jahangirpuri.

THE 15-POINT ACTION PLAN:

- 1. Over 10 million trees are to be planted, including 5.2 million by the Delhi government.
- 2. Implementation monitoring of garbage burning ban with 611 teams.
- 3. Awareness campaigns promoting the "Red light on, Gaadi off" initiative.
- 4. Prohibition of fireworks.
- 5. Implementation of the Graded Response Action Plan (GRAP).
- 6. Identification of 13 pollution hotspots.
- 7. Deployment of 82 mechanical road-sweeping machines to control dust.
- 8. Establishment of a green war room for surveillance purposes.
- 9. Introduction of the Green Delhi app for citizens to report pollution-causing activities.
- 10. Application of PUSA bio-decomposer on 5,000 hectares of farmland to prevent stubble burning.
- 11. Deployment of 530 water sprinklers to minimise dust pollution.
- 12. Formation of 385 teams to conduct pollution certificate checks and prevent the operation of vehicles that exceed the allowed age.
- 13. Publicising alternate routes for 90 identified high-traffic roads.
- 14. Creation of war rooms and establishment of 13 special teams to address pollution hotspots.
- 15. Deployment of 298 smog guns on Delhi roads during the winter season.

OTHER MEASURES:

- **Delhi Electric Vehicles (EV) Policy:** The Chief Minister Government of the National Capital Territory of Delhi launched the Delhi EV policy in 2020 to make Delhi pollution-free and establish it as the EV capital of India.
- **Bio-decomposers:** The Indian Agricultural Research Institute, Pusa, has developed bio-decomposers, a microbial liquid spray. When sprayed onto paddy stubble, it breaks it down, allowing easy absorption into the soil. This helps farmers avoid burning the stubble.
- **Ban on Firecrackers:** To reduce the spread of harmful particulate matter, the government has imposed a complete ban on the sale, storage, production, and bursting of firecrackers for the third consecutive year.
- **Closure of Badarpur Power Plant:** The old and polluting Badarpur coal-fired power plant in the southeastern outskirts of Delhi has been permanently shut down by the Delhi government to reduce pollution.
- Automatic Emission Measurement Stations: The Central Pollution Control Board (CPCB) has mandated that highly polluting industrial plants install automatic emission measurement stations. These stations will provide real-time data to the CPCB to better enforce pollution rules.

Sources:

Delhi CM unveils 15-point winter pollution plan | Delhi News - The Indian Express

Q1. How many of the following are factors contributing to winter pollution in Delhi-NCR:

- 1. Emissions from vehicles
- 2. Stubble Burning
- 3. High wind speeds
- 4. Construction dust

Select the correct codes from the codes given below:

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four

Answer: (c)

Q2. Consider the following:

- 1. The Indian Council of Agricultural Research (ICAR) has formulated a microbial liquid spray called bio-decomposers to prevent stubble burning.
- 2. Deploying anti-smog guns aids in the suppression of dust and particulate matter present in the air.
- 3. The CAQM has mandated that highly polluting industrial plants install automatic emission measurement stations.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- Answer: (a)
- Q3. Discuss the causes and consequences of winter pollution in Delhi. Analyse the measures taken by the government and suggest additional strategies to mitigate the issue.

तो सफलता

KARMAN LINE

This article covers "Daily Current Affairs" and the topic details"Karman Line". This topic has relevance in the Science and technology section of the UPSC CSE exam.

FOR MAINS:

GS 3: Science and technology

WHY IN THE NEWS?

The Karman Line is an essential concept in defining the boundary between Earth's atmosphere and space.

KARMAN LINE:

- The Karman Line is an imaginary boundary 100 km above sea level.
- It serves as the demarcation between Earth's atmosphere and outer space.
- It was established in the 1960s by the Fédération Aéronautique Internationale (FAI), a record-keeping body.

• While not universally accepted, a majority of countries and space organizations recognize the Karman Line as a significant boundary.

QUALIFICATION AS AN ASTRONAUT:

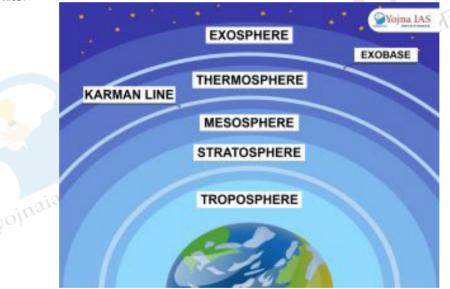
• Crossing the Karman Line is the criteria for an individual to be officially recognized as an astronaut.

REGULATION OF AIRSPACE:

- The Karman Line plays a crucial role in regulating airspace.
- It signifies the altitude beyond which conventional aircraft cannot operate.
- Aircraft venturing beyond this boundary require propulsion systems to overcome Earth's gravitational pull.

INTERNATIONAL GOVERNANCE:

- The Karman Line also has legal implications, differentiating airspace that a country can claim jurisdiction over from the realm of space.
- Similar to international waters, space beyond the Karman Line is governed by international agreements.



Source:

https://www.thehindu.com/sci-tech/science/karman-line-where-space-begins/article67368859. ece

Q.1 Regarding the Karman Line recently seen in the news, consider the following statements:

- 1. It is a boundary that separates national airspace from outer space.
- 2. It is the imaginary line at which an aircraft needs to reach orbital velocity to stay in flight.
- 3. It is the boundary beyond which no aircraft can fly as the atmosphere becomes too thin.

How many of the above statement/s is/are correct?

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

ANSWER: A

Q.2 The weaponization of space poses multifaceted challenges with far-reaching implications for international security, global stability, and outer space governance. Analyze

IPBES INVASIVE ALIEN SPECIES ASSESSMENT

This article covers "Daily Current Affairs" and the topic details "IPBES Invasive Alien Species Assessment". The topic "IPBES Invasive Alien Species Assessment" has relevance in the "Ecology and Environment" section of the UPSC CSE exam.

FOR PRELIMS:

What are Invasive Alien Species? What is IPBES?

FOR MAINS: GS3: Ecology and Environment

WHY IN THE NEWS?

The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) recently released a report on Invasive Alien Species.

INVASIVE ALIEN SPECIES

- An invasive species is one that is **not indigenous to a specific area and has a negative impact on the environment, economy, or human health**. Invasive species can be intentionally or unintentionally introduced into a new area.
- Invasive species establish themselves in an environment by outcompeting native wildlife, causing infrastructure damage, and endangering human health and livelihoods.

INTERGOVERNMENTAL PLATFORM ON BIODIVERSITY AND ECOSYSTEM SERVICES (IPBES)

- IPBES, also known as the "IPCC for biodiversity," is an independent intergovernmental body with over 140 member governments.
- It was established by governments in 2012 to provide policymakers with objective scientific assessments of the state of knowledge regarding the planet's biodiversity, ecosystems, and the contributions they make to people, as well as the tools and methods for protecting and using these vital natural assets in a sustainable manner.
- It is not a United Nations organisation. However, the United Nations Environment Programme (UNEP) provides secretariat services to IPBES at the request of the IPBES Plenary and with the authorization of the UNEP Governing Council in 2013.

Assessment Report on Invasive Alien Species and their Control

- According to the report, **human activities have introduced approximately 37,000 alien spe-cies,** encompassing both plants and animals, to various regions and biomes worldwide.
- Among these, there are over **3,500 invasive alien species**, which have played a significant role in **causing 60% of documented global extinctions** in both plant and animal species.
- The report also highlights that **invasive alien species rank among the top five primary drivers**

of biodiversity loss on a global scale.

- The report underscores that the proliferation of alien species has been an ongoing trend for centuries across all regions. However, it is now accelerating at an unprecedented pace, primarily due to increased human mobility, trade, and the expansion of the global economy.
- Notably, roughly **6% of introduced plant species**, **22% of introduced invertebrates**, **14% of introduced vertebrates**, and **11% of introduced microbes** are recognized as **invasive**, posing substantial threats to both natural ecosystems and human well-being.
- This comprehensive study, conducted over a four-year period, involved the collaboration of 86 leading experts hailing from 49 countries. Their research drew upon a vast body of knowledge, encompassing more than 13,000 references.

MAJOR INVASIVE SPECIES

- The water hyacinth is the most common invasive alien species on land in the world.
- Lantana, a flowering shrub, and the **black rat** are the second and third most common species on the planet.



- The **brown rat and house mouse** are two other common invasive alien species.
- The **Caribbean false mussel** devastates Kerala's important fishery resources by eradicating native clams and oysters.
- Malaria, Zika, and West Nile Fever are spread by invasive species such as **Aedes albopictus and Aedes aegyptii.**



METHODS TO CONTROL INVASIVE SPECIES

- **Physical removal:** This involves physically removing the invasive species from the environment. This can be done by hand, using tools such as traps or nets, or by using herbicides or pesticides.
- **Biological control:** This includes using natural predators or parasites to control the invasive species. This can be a more sustainable approach than physical removal, but it can also be more difficult to implement.

- **Genetic control:** It involves introducing genes into the invasive species that will make them sterile or less competitive. This is a new and experimental approach, but it has the potential to be very effective.
- **Cultural control:** It includes changing the way that people interact with the environment to make it less hospitable to invasive species. This can include things like changing farming practices, cleaning up waste, and controlling the spread of invasive species through trade.

Way Forward

- Minimising the risks and costs associated with their negative impacts while capturing the social and economic benefits possible through responsible management.
- Regulating the trade and movement of invasive alien species is the most effective way to prevent their introduction and spread.
- Once an invasive species arrives in a new area, it is possible to limit their negative impacts through early detection, monitoring, and rapid eradication

Sources:

Biodiversity loss: 37,000 'alien species' introduced by human activities, says report | India News – The Indian Express

Q1. With reference to Invasive species, consider the following statements:

- 1. Invasive species are only those who are unintentionally introduced into a new area.
- 2. Invasive species lead to infrastructure damage as well as endangering human health and livelihoods.
- 3. The invasive alien species are one of the primary drivers of biodiversity loss.

Which of the statements given above is/are NOT correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None
- Answer: (a)

Q2. Consider the following :

- 1. Black Rat
- 2. Kondana Rat
- 3. Caribbean false mussel
- 4. Komodo dragon

How many of the abovementioned species are invasive species?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four
- Answer: (b)
- Q3. Discuss the significance of regulating the trade and movement of invasive alien species as a strategy for biodiversity conservation and ecosystem protection. Elaborate on the challenges associated in this regard.

GLACIAL LAKE OUTBURST FLOOD (GLOF)

This article covers "Daily Current Affairs" and the topic details "Glacial Lake Outburst Flood (GLOF)". This topic has relevance in the "Disaster Management" section of the UPSC CSE exam.

FOR PRELIMS:

What is Glacial Lake Outburst Flood (GLOF)?

FOR MAINS: GS3: Disaster Management

WHY IN THE NEWS?

The South Lhonak Lake in Sikkim burst recently, causing flash floods in North Sikkim. This glacial lake, formed by the melting Lhonak glacier, has seen notable changes.

ABOUT GLACIAL LAKE OUTBURST FLOOD (GLOF)

- Glacial lakes are unique water bodies closely associated with melting glaciers. Due to their unstable nature, these lakes can pose significant risks to the environment and human settlements.
- When a glacial lake experiences a sudden release of water, it results in a phenomenon known as a Glacial Lake Outburst Flood (GLOF). सफलता

GLACIAL LAKES: POTENTIAL TIME BOMBS

- Glacial lakes, such as the South Lhonak Lake, can take various forms, including sitting in front of, on top of, or beneath a melting glacier. These bodies of water tend to expand over time as glaciers melt, making them increasingly hazardous.
- The main reason for this danger is that glacial lakes are typically dammed by unstable materials • like ice and sediment composed of loose rocks and debris.
- When the boundary around these glacial lakes gives way, it can rapidly discharge immense vol-• umes of water cascading down the mountain slopes.
- This sudden deluge can potentially cause extensive flooding in downstream areas, thereby earning the name "Glacial Lake Outburst Flood" or GLOF.

TRIGGERS FOR GLOF

GLOF events are not solely the result of natural glacial meltwater dynamics. Various factors can trigger these devastating floods. Among the most prominent triggers are:

- Earthquakes: Seismic activity can disrupt the fragile balance around glacial lakes, leading to • their sudden release of water. This can result in catastrophic flooding downstream.
- **Extreme Rainfall:** Intense and prolonged rainfall in the region can contribute to the rapid ex-• pansion of glacial lakes, increasing the risk of a GLOF event.
- Ice Avalanches: In regions where glacial lakes are often nestled in steep, mountainous terrain, • ice avalanches can directly impact the lakes. When these avalanches displace water within the lakes, it can overflow natural dams and cause downstream flooding.

The 2013 Uttarakhand Disaster

- In 2013, the Kedarnath region in Uttarakhand, India, witnessed a devastating natural disaster. Flash floods, coupled with a GLOF event triggered by the Chorabari Tal glacial lake, claimed the lives of thousands of people.
- This tragic incident serves as a stark reminder of the potential dangers of glacial lakes and the importance of understanding and monitoring them in vulnerable regions.

MORE ABOUT SOUTH LHONAK LAKE GLOF

- **Flash Floods Due to Heavy Rain:** The South Lhonak Lake's outburst was triggered by heavy and relentless rainfall in the region, leading to flash flooding.
- **Impact on Teesta River and Districts:** The lake's outburst raised Teesta River's water levels, flooding four districts: Mangan, Gangtok, Pakyong, and Namchi. This event highlights the downstream vulnerability to glacial lake outburst floods (GLOFs).
- **Monitoring and Environmental Changes:** The Central Water Commission monitors the South Lhonak Lake as one of eleven large glacial lakes. Notable environmental changes include:
- **Glacial Retreat:** Over 29 years, the Lhonak glacier has shrunk from 6.4 km to 5.1 km, revealing the impact of climate change.
- **Growing Lake:** Starting at 0.17 sq km in 1977, the Lhonak lake expanded to 0.78 sq km in 2002 and 1.35 sq km in 2019. Recent growth, observed from September 17 to 28, added roughly 5 hectares or around 3% to its size.

NDMA GUIDELINES ON RISK MITIGATION OF GLOF:

- **Identifying and Mapping Dangerous Lakes:** Guidelines recommend identifying and mapping high-risk glacial lakes using field observations, historical data, and landscape features to assess potential hazards.
- **Structural Measures:** Preventing glacial dam breaches involves controlled breaching, water pumping, or siphoning to reduce lake water volume, reducing the risk of GLOFs.
- **Early Warning Systems:** Installing sensors and monitoring equipment helps detect changes in water levels and temperature, enabling timely alerts and evacuation plans for at-risk communities.
- **Capacity Building:** Enhancing the readiness of local communities and authorities through training in risk assessment, response planning, and search and rescue operations is vital for GLOF preparedness.
- **Public Awareness:** Creating awareness among vulnerable communities about GLOF risks and safety measures through engagement programs and information campaigns is essential.
- **Research and Monitoring:** Continuous research and monitoring of environmental changes, glacial retreats, and new lake formations improve understanding and prediction of potential GLOF events, aiding mitigation efforts.

Sources:

At least seven dead as glacial lake bursts in Sikkim – The Hindu

- Q1. With reference to the Glacial Lake Outburst Flood (GLOF), consider the following statements:
- 1. Glacial lakes are typically dammed by stable materials like ice and sediment composed of loose rocks and debris.
- 2. Seismic activity can disrupt the fragile balance around glacial lakes, leading to their sudden re-

lease of water.

3. Intense and prolonged rainfall in the region can contribute to the rapid expansion of glacial lakes, increasing the risk of a GLOF event.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

Answer: (b)

Q2. Consider the following:

- 1. Destruction of property and infrastructure
- 2. Spread of diseases
- 3. Creation of new glacial lakes
- 4. Improved irrigation systems

How many of the above are not correct potential consequences of a GLOF?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All Four
- Answer: (c)
- Q3. Explain the concept of Glacial Lake Outburst Flood (GLOF). Discuss the guidelines provided by the National Disaster Management Authority (NDMA) to mitigate Glacial Lake Outburst Floods (GLOFs) risks.

DOMESTIC CARD SCHEME AGREEMENT

This article covers "Daily Current Affairs" and the topic details "Domestic Card Scheme Agreement". This topic has relevance in the Economy section of the UPSC CSE exam.

FOR PRELIMS:

About National Payments Corporation of India (NPCI)? About RuPay?

FOR MAINS:

GS 3: Economy Overview of the Agreement?

WHY IN THE NEWS?

International Payments Limited (NIPL) has recently forged a strategic partnership with Al Etihad Payments (AEP) to collaborate on the implementation of a Domestic Card Scheme (DCS) in the United Arab Emirates (UAE).

Overview of the Agreement:

• Under this agreement, National Payments Corporation of India International (NIPL) and the UAE's Authority of Electronic Payment Systems (AEP) will collaborate to develop, implement,

and operate the United Arab Emirates' (UAE) national domestic card scheme (DCS).

- The primary objective of the DCS is to facilitate the expansion of e-commerce and digital transactions within the UAE. Additionally, it aims to enhance financial inclusion, support the UAE's digitalization initiatives, diversify payment options, reduce transaction costs, and bolster the UAE's global competitiveness in the payments sector.
- This partnership aligns seamlessly with NIPL's mission, which is to leverage its knowledge and expertise to assist other nations in establishing efficient and secure payment systems.
- The DCS solution is founded on several key principles, including sovereignty, rapid market entry, innovation, digitalization, and strategic independence. NIPL's comprehensive DCS solution encompasses a RuPay card stack and supplementary services such as fraud monitoring and analytics.
- Moreover, NIPL will play a pivotal role in assisting AEP in formulating the operational regulations for their domestic card scheme.

NOTE: NIPL is a wholly-owned subsidiary of the National Payments Corporation of India (NPCI).

ABOUT NATIONAL PAYMENTS CORPORATION OF INDIA (NPCI)

- The National Payments Corporation of India (NPCI) serves as the central entity responsible for managing and overseeing retail payment and settlement systems in India. This vital organization was established as a collaborative effort between the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA) under the framework of the Payment and Settlement Systems Act of 2007.
- Recognizing the indispensable role that NPCI plays in the Indian financial landscape, it was established as a "Not for Profit" Company in accordance with the provisions of Section 25 of the Companies Act, 1956 (now Section 8 of the Companies Act, 2013). NPCI operates with the primary objective of furnishing essential infrastructure to the entire banking sector in India, supporting both physical and electronic payment and settlement systems. Its mission is to create a robust and secure Payment & Settlement Infrastructure in the country, ensuring the efficient functioning of these critical financial processes.

ABOUT RUPAY:

- RuPay stands as an indigenous, highly secure, and widely accepted card payment network originating from India. RuPay cards are versatile, offering debit, credit, and prepaid functionalities.
- As of the present, over 750 million RuPay cards are in circulation, representing over 60% of all cards issued in India. Remarkably, every second Indian possesses a RuPay card.
- These cards are distributed across the entire spectrum of banking institutions, including public sector, private sector, and smaller banks.

Source:

https://www.msn.com/en-in/news/world/npci-to-sign-pact-with-aletihad-payments/ar-AA1hGPSY

- Q.1 Consider the following statements regarding the National Payments Corporation of India (NPCI) :
- 1. NPCI is a for-profit organization established by the Indian government to oversee retail payments.
- 2. The organization was established through a joint initiative of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA).

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only

(c) Both 1 and 2(d) Neither 1 nor 2ANSWER: C

Q.2 Consider the following statements regarding RuPay cards:

- 1. RuPay cards are limited to debit and credit propositions, excluding prepaid cards.
- 2. RuPay cards are only issued by public sector banks in India.

Which of the statements given above is/are correct?

(a) 1 only

- (b) 2 only(c) Both 1 and 2
- (d) Neither 1 nor 2
- ANSWER: D
- Q.3 Examine the role and significance of indigenous payment networks, such as RuPay, within the Indian financial ecosystem. Assess the impact of these systems on financial inclusion, digital transformation, and the overall security of financial transactions in the country.

GANGETIC RIVER DOLPHIN

This article covers "Daily Current Affairs" and the topic details "Gangetic River Dolphin". This topic has relevance in the "Environment and Ecology" section of the UPSC CSE exam.

FOR PRELIMS:

What are the characteristics of Gangetic River Dolphin?

FOR MAINS:

GS3: Environment and Ecology

WHY IN THE NEWS?

A recent report from scientists and researchers discloses that 19 Gangetic river dolphins were successfully saved from the irrigation canals within the Ganga-Ghagra basin in Uttar Pradesh from 2013 to 2020.

ABOUT GANGETIC RIVER DOLPHIN

- The Ganges River Dolphin (*Platanista gangetica*), is a toothed whale belonging to the Platanistidae family. These dolphins represent one of the Earth's ancient species, sharing this distinction with certain types of turtles, crocodiles, and sharks.
- The discovery of the Ganges river dolphin dates back to the year 1801. It is India's National Aquatic Animal.

HABITAT:

- Ganges River Dolphins predominantly inhabit the freshwaters of Ganges, Brahmaputra, and Meghna rivers, spanning across the regions of India, Bangladesh, and Nepal.
- They have adapted well to these river systems' murky and swiftly flowing waters.

DISTINCTIVE APPEARANCE:

- Gangetic River Dolphins are renowned for their unique physical traits. They possess a lengthy, slender beak and a hump on their back, setting them apart from other river dolphins.
- Their colouring typically leans towards greyish-brown, lacking the conventional dorsal fin observed in marine dolphins.

ECHOLOCATION:

- Gangetic River Dolphins employ echolocation to navigate and locate prey in the turbid waters like their dolphin counterparts.
- They emit sound waves that bounce off objects, returning to them and assisting in creating a mental map of their surroundings.

National Aquatic Animal "The Gangetic Dolphin"

Status

IUCN status Endangered

ACTS/CONVENTIONS

Schedule I of Wildlife Protection

Act, 1972. Project Dolphin on lines of Project Tiger (by MOEFCC)

Yoina IAS

CHARACTERISTICS

An adult dolphin could weigh between 70 kg and 90 kg. The breeding season of the Gangetic dolphin extends from January to June.

GEOGRAPHICAL SPREAD

Ganga-Brahmaputra-Meghna and Karnaphuli-Sangu river systems. Vikramshila Ganges Dolphin Sanctuary.

DIET:

- Their diet mainly consists of various fish species found in freshwater rivers.
- Gangetic River Dolphins are skilled hunters and use their sharp teeth to capture and consume their prey.



REPRODUCTION:

• These dolphins have a slow reproductive rate, with females giving birth to a single calf every 2-3 years. The gestation period lasts for around 9-10 months.

CONSERVATION STATUS:

- According to the International Union for Conservation of Nature (**IUCN**), the Gangetic River Dolphin holds an **endangered** status.
- It is legally protected under **Schedule 1** of the **Wildlife (Protection) Act 1972.**
- It is listed in **Appendix 1** of both the Convention on International Trade in Endangered Species **(CITES)** and the Convention on Migratory Species **(CMS)**.

CHALLENGES:

- The construction of over 50 dams and various irrigation projects has fragmented Ganges river dolphin populations, isolating them into distinct groups.
- This isolation increases the risk of inbreeding and heightens their vulnerability to additional

threats as they cannot migrate to new areas.

Their population has declined due to various threats, including habitat degradation, pollution. • and accidental entanglement in fishing nets.

INITIATIVES FOR CONSERVATION:

Project Dolphin: 0

- Initiated in 2020 by the Prime Minister, Project Dolphin focuses on preserving Ganges river \rightarrow dolphins and the riverine ecosystem.
- The Ministry of Environment, Forests, and Climate Change, India, financially supports the project. \rightarrow
- It systematically monitors the species' status and potential threats to develop and implement a \rightarrow conservation action plan.

Wildlife Institute of India: 0

- Since 2016, the Wildlife Institute of India has been actively involved in developing a Conservation \rightarrow Action Plan for the Gangetic River Dolphins through their Species Conservation Programs, funded by CAMPA.
- The plan from 2022 to 2047 has been formulated to ensure the well-being of the river dolphin \rightarrow and aquatic habitats.

Protected Areas: •

Important habitats of the Gangetic river dolphin along the Ganges river have been designated • सफलता Protected Areas, such as the Vikramshila Dolphin Sanctuary in Bihar.

Sources:

https://www.thehindu.com/sci-tech/energy-and-environment/19dolphins-rescued-alive-from-canals-of-ganga-ghagra-basin-says-study/ article67392753.ece

Q1. With reference to the Gangetic River Dolphin, consider the following statements:

- 1. They are only found in freshwater river systems.
- 2. Unlike the Dolphins, these Gangetic River dolphins cannot navigate and locate prey in turbid waters.
- 3. Being vegetarian, their diet mainly consists of various plant species found in freshwater rivers.

Which of the statements given above is/are NOT correct?

- (a) 1 and 2 only (a)
- (b) 2 and 3 only
- (c) 3 only

(d) None

Answer: (b)

Q2. Consider the following with reference to Gangetic River Dolphins:

- Dolphins are one of the oldest creatures in the world. 1.
- 2. Vikramshila Dolphin Sanctuary in Uttar Pradesh has been designated a protected area for these dolphins.

Which of the abovementioned statements is correct?

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

Answer: (a)

Q3. Discuss the challenges facing the conservation of the Gangetic River Dolphin and the initiatives aimed at addressing these challenges, highlighting their importance and effectiveness in ensuring the survival of this endangered species.

GLOBAL HYDROGEN REVIEW 2023

This article covers "Daily Current Affairs" and the Topic details "Green Hydrogen". This Topic has relevance in the Science and Technology section of the UPSC CSE exam.

FOR PRELIMS:

About Green Hydrogen? About IEA?

FOR MAINS:

GS 3: Science and Technology Green Hydrogen Initiatives in India?

WHY IN THE NEWS?

As per the 2023 Global Hydrogen Review published by the International Energy Agency (IEA), even though there is growing global political backing, green hydrogen represents a mere fraction, accounting for less than 1% of both hydrogen production and utilization worldwide.

GREEN HYDROGEN:

- Green hydrogen is a colorless, odorless, tasteless, non-toxic, and highly combustible gas.
- Hydrogen, as an element, is the lightest, simplest, and most abundant substance in the universe.

PRODUCTION OF GREEN HYDROGEN

- Green hydrogen is generated through a process called electrolysis. It involves using renewable energy sources such as solar, wind, or hydropower to split water molecules into hydrogen and oxygen.
- FUTURE POWER PLANT
- Hydrogen is not naturally found in its pure form in the environment; it typically exists in compounds, including water, biomass, and hydrocarbons.
- Various methods have been developed to extract hydrogen from these compounds. These methods can be categorized into conventional and renewable technologies based on the raw materials and energy sources used.

GREEN HYDROGEN INITIATIVES IN INDIA

Paris Agreement Commitment

• Under the Paris Agreement, India is committed to reducing its greenhouse gas emissions by 33-

35% from the 2005 levels.

• The agreement aims to limit global warming to below 2°C compared to pre-industrial levels.

Net-Zero Economy Pledge

- At the 2021 Conference of Parties in Glasgow, India reaffirmed its commitment to transition from a fossil-dependent economy to a net-zero economy by 2070.
- This transition emphasizes reducing carbon emissions and environmental impact.

Green Hydrogen as an Alternative Fuel

- India's government has recognized the potential of green hydrogen as a key element in achieving energy independence by 2047.
- The goal is to position India as a global hub for green hydrogen production and a significant hydrogen exporter.

Ambitious Non-Fossil Energy Capacity

- India has initiated the production of green hydrogen as part of its strategy to expand non-fossil energy capacity.
- The target is to achieve 500 gigawatts of non-fossil energy capacity by 2030.

Pioneering Green Hydrogen Pilot Plant

- In April 2022, the public sector Oil India Limited (OIL) established India's first green hydrogen pilot plant.
- The plant, located at the Jorhat pump station in eastern Assam, produces 99.99% pure green hydrogen.
- It is powered by a 500 KW solar plant and has an initial capacity to generate 10 kg of hydrogen per day, with plans to scale production to 30 kg per day.

THE INTERNATIONAL ENERGY AGENCY (IEA):

- The International Energy Agency (IEA) is an autonomous intergovernmental organization.
- It was established in 1974 by developed countries, operating under the umbrella of the Organization for Economic Co-operation and Development (OECD).
- The IEA was founded in response to the oil embargo, a pivotal event in the energy sector.

Membership and Engagement

- The IEA is composed of 30 member countries, and it also has eight associate nations.
- Additionally, four countries Chile, Colombia, Israel, and Lithuania are currently seeking full membership in the organization.
- India joined the IEA as an Associate member in March 2017, but it had been engaging with the IEA well before formal association.

WORLD ENERGY OUTLOOK REPORT

- The IEA annually releases the "World Energy Outlook" report, which is a significant publication in the energy sector.
- This report provides valuable insights and projections into global energy trends and challenges.

MAIN FOCUS AREAS

- The IEA's activities are guided by four main areas of focus:
 - **Energy Security:** Ensuring a stable and reliable supply of energy to member and associate countries.
 - o **Economic Development:** Promoting policies and strategies that support economic growth in

the energy sector.

- o **Environmental Awareness:** Advocating for environmentally sustainable energy practices and technologies.
- o **Global Engagement:** Collaborating with nations and organizations worldwide to address energy-related challenges on a global scale.

0.1 Consider the following statements about the International Energy Agency (IEA):

- 1. The IEA releases the "World Energy Outlook" report
- 2. It operates as an autonomous intergovernmental organization under the United Nations.
- 3. India is a full member of the IEA.

How many of the above statement/s is/are correct?

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

ANSWER: A

Q.2 Consider the following statements about Green Hydrogen:

- 1. It is considered green when produced using renewable energy sources like wind or solar power through a process called electrolysis.
- 2. Green Hydrogen is primarily used for electricity generation and is not suitable for other applications.
- 3. India has recently become the largest global producer of Green Hydrogen. योजना हे तो

How many of the above statement/s is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **ANSWER:** A
- 0.3 Green Hydrogen is gaining global attention as a key element in the transition towards a sustainable energy future. Analyze the potential of Green Hydrogen in mitigating India's energy and environmental challenges.

NOBEL PEACE PRIZE 2023

This article covers "Daily Current Affairs" and the topic details "Nobel Peace Prize 2023". This topic has relevance in the "Awards and Recognitions" section of the UPSC CSE exam.

FOR PRELIMS:

What is Nobel Peace Prize? Winners of Nobel Peace Prizes

FOR MAINS:

GS3: Essay: Women Centered Issues

WHY IN THE NEWS?

Iranian activist Narges Mohammadi was honored with the Nobel Peace Prize for her unwavering commitment to challenging the oppression of women in Iran and her relentless advocacy for human rights and freedom.

ABOUT NARGES MOHAMMADI

- Early Life and Roots of Activism
 - Born in Iran in 1972, Narges Mohammadi hails from a family with a deep-rooted history of political activism.
 - Their involvement in the Iranian Revolution of 1979, which led to the establishing an Islamic republic, set the stage for her activism.
 - Two pivotal childhood experiences deeply influenced Mohammadi's journey: her mother's regular visits to her imprisoned brother and daily television reports of executed prisoners.
- Path to Activism
 - From an early age, Narges Mohammadi actively engaged in various causes, including advocating for women's rights in Iran and protesting against the death penalty and severe sentences for political demonstrators.
- She worked as an engineer in Tehran but was eventually dismissed due to government directives.
- Champion of Human Rights
 - In the 2000s, she joined the Center for Human Rights Defenders in Iran, founded by the renowned Iranian lawyer Shirin Ebadi, with a mission to abolish the death penalty.
 - Shirin Ebadi received the Nobel Peace Prize in 2003 for her human rights advocacy in Iran.
- Multiple Confrontations with the Law
 - Narges Mohammadi's path was fraught with arrests and imprisonments. She faced her first arrest in 2011 and encountered the Iranian judiciary multiple times.
 - She has been convicted five times, arrested 13 times, sentenced to 31 years in prison, and subjected to 154 lashes.
 - In 2023, additional judicial cases were initiated against her, potentially resulting in more convictions.
 - Even while incarcerated, she organised protests with fellow women prisoners, taking a bold stand against the Iranian government.
 - In 2022, she authored a book, 'White Torture,' chronicling her experiences in solitary confinement and featuring interviews with other Iranian women who had endured similar ordeals.
- Recognition and Awards
 - Narges Mohammadi received notable accolades in the West for her activism, including the 2023 PEN/Barbey Freedom to Write Award and the 2023 UNESCO/Guillermo Cano World Press Freedom Prize.
 - In 2022, she was featured in the BBC's list of 100 inspiring and influential women worldwide.

About the Nobel Peace Prize 2023

- Established in the will of Alfred Nobel, the Nobel Peace Prize is one of five esteemed Nobel Prizes.
- Since its inception in 1901, it has been awarded annually (with occasional exceptions) to individuals or organisations that have made significant contributions to peace, international fraternity, and the reduction or elimination of standing armies.
- The Nobel Peace Prize is awarded by a five-member committee chosen by the Norwegian Parliament.

RECENT NOBEL PEACE PRIZES

Year	Laureate(s)	Country	Reason
2023	Narges Mohammadi	Iran	For her fight against the oppression of women in Iran and her fight to promote human rights and freedom for all.
2022	Ales Bialiatski, Memorial, and Center for Civil Liberties	Belarus, Russia, and Ukraine	For their promotion of the right to criticize power and protect the fundamental rights of citizens.
2021	Maria Ressa and Dmitry Muratov	Philippines and Russia	For their efforts to safeguard freedom of expression, which is a precondition for democracy and peace.
2020	World Food Programme	International	For its efforts to combat hunger and improve food security.
2019	Abiy Ahmed Ali	Ethiopia	For his efforts to achieve peace and international cooperation, particularly for his decisive initiative to resolve the border conflict with Eritrea.

Sources:

Nobel Prize for Peace: Who is Narges Mohammadi, the

Arb-

Iranian woman awarded this year?

Yojna IAS

Q1. With reference to the Nobel Peace Prize, consider the following statements:

- 1. The Nobel Peace Prize is awarded annually.
- 2. The Swedish Government awards it in memory of Alfred Nobel.

Which of the statements given above is/are correct?

- (c) Both 1 and 2 joinnaias.com (d) None

Answer: (a)

Q2. Consider the following with reference to Nobel Peace Prize:

- 1. Narges Mohammadi was awarded the Nobel Peace Prize for her fight against the oppression of women in Iraq and her fight to promote human rights and freedom for all.
- 2. For its efforts to combat hunger and improve food security, the World Food Programme was awarded a Nobel Peace in 2020.
- 3. Abiy Ahmed Ali has been lauded for his initiative to resolve the border conflict between Ethiopia and Eritrea.

How many of the abovementioned statements are correct?

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

Answer: (b)

GREEN CREDIT PROGRAM

This article covers "Daily Current Affairs" and the topic details "Green Credit Program". This topic has relevance in the "Environment and Ecology" section of the UPSC CSE exam.

FOR PRELIMS:

What is the Green Credit Program?

FOR MAINS:

GS3: Environment and Ecology Initiatives for conservation of environment

WHY IN THE NEWS?

The government has launched a unique program that enables individuals or organisations to accumulate Green Credits and trade them on a specialised exchange.

GREEN CREDIT PROGRAM

- Green Credit represents a form of incentive for activities that positively impact the environment.
- The Environment, Forest, and Climate Change Ministry is initiating a national-level Green Credit program, which utilises a competitive, market-based approach to incentivise environmental actions by various stakeholders.
- This program is a voluntary initiative as a follow-up to the 'LiFE' (Lifestyle for Environment) campaign.
- An inter-ministerial Steering Committee backs the GCP for its governance.
- It designates The Indian Council of Forestry Research and Education (ICFRE) as the GCP Administrator entrusted with program implementation, management, monitoring, and operations.



PROGRAM SCOPE:

The Green Credit program encompasses eight activities:

- Tree Plantation: Aimed at expanding the green cover across the nation.
- Water Management: Focused on promoting water conservation, harvesting, and efficient water use, including wastewater treatment and reuse.

- Sustainable Agriculture: Encouraging natural and regenerative agricultural practices, along with land restoration, to enhance productivity, soil health, and nutritional value of food produced.
- Waste Management: Promoting sustainable and improved waste management practices, encompassing collection, segregation, and environmentally sound disposal.
- Air Pollution Reduction: Encouraging measures to reduce air pollution and other pollution abatement activities.
- Mangrove Conservation and Restoration: Aimed at the mangrove ecosystems conservation and restoration.

GREEN CREDIT PROCEDURE:

- Registration: Individuals or entities register their environmental activities on the program's website.
- Verification: A designated agency verifies registered activities, with self-verification for small projects.
- Calculation: Green Credit calculation factors in resource needs, scale, scope, size, and relevant parameters for environmental impact.
- Certification: The Administrator issues Green Credit certificates after a positive verification.

OBJECTIVES OF THE PROGRAM:

- The Green Credit program operates on a market-based mechanism designed to stimulate positive environmental actions.
- It generates tradable Green Credits, which can be exchanged on a domestic market platform.
- The program encourages industries, companies, and various entities to fulfil their existing obligations under current laws.
- It also motivates these stakeholders to undertake voluntary environmental measures by generating or purchasing their Green Credits.

DISTINCTION FROM CARBON CREDITS:

- The Green Credit program operates separately from the Carbon Credit Trading Scheme, 2023, established under the Energy Conservation Act, 2001.
- An environmental activity that generates Green Credits may also receive carbon credits under the Carbon Credit Trading Scheme. However, **Green Credits obtained for fulfilling legal obligations under current laws are not tradable.**

Sources:

Govt launches Green Credit to incentivise eco-friendly actions

Q1. With reference to the Green Credit Program, consider the following statements:

- 1. It is a type of loan provided to businesses and individuals to support investments in green technologies and renewable energy projects.
- 2. The Ministry of Environment, Forest, and Climate Change is launching a nationwide Green Credit initiative.
- 3. The Forest Survey of India has been designated as the GCP Administrator.

Which of the statements above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 2 only

(d) 3 only

Answer: (c)

Q2. Consider the following:

- 1. Tree plantation
- 2. Water management
- 3. Monoculture type of agriculture
- 4. Waste management
- 5. Renewable energy plants
- 6. Mangrove conservation and restoration.

How many of the activities mentioned above are not part of the Green Credit Program?

(a) Only one

- (b) Only two
- (c) Only three
- (d) All Four
- Answer: (b)

Q3. Explain the concept of the Green Credit Program and its significance in promoting environmentally friendly actions.

ANGEL TAX ON START-UPS

This article covers "Daily Current Affairs" and the topic details "Angel Tax on Start-ups". This topic has relevance in the Economy section of the UPSC CSE exam.

Updated Provisions for Angel Tax and Start-ups? Central Board of Direct Taxes (2007)

FOR MAINS:

GS 3: Economy Provisions Related to Angel Tax Under Finance Act 2023?

WHY IN THE NEWS?

In response to notices sent to start-ups, the Central Board of Direct Taxes (CBDT) has issued a directive instructing its officers not to conduct scrutiny of angel tax provisions for start-ups that have received recognition from the Department for Promotion of Industry and Internal Trade (DPIIT).

BACKGROUND

- Previously, angel tax only applied to investments made by "resident investors." The Finance Act • of 2023 extended angel tax to non-resident investors, effective from April 1, 2023.
- In response to this change, the tax department issued a directive to its field officials. The directive • instructed officials not to conduct verifications for recognized start-ups in cases related to Section 56(2)(viib) of the Income-tax Act.
- Section 56(2)(viib) of the Income-tax Act has been amended in the Finance Act of 2023 to include • non-resident investors under the angel tax levy. This section is relevant to the taxation of unlisted companies, including start-ups, when they receive equity investments exceeding the face value.
- The primary goal of this amendment is to prevent the generation of undisclosed or unaccounted • money.

UPDATED PROVISIONS FOR ANGEL TAX AND START-UPS:

The directive from the CBDT states that start-up firms acknowledged by the DPIIT (Department •

for Promotion of Industry and Internal Trade) will not be subject to scrutiny concerning the revised angel tax provisions.

DPIIT-Recognized Start-ups:

- DPIIT-Recognized Start-ups meet specific criteria set by the Department, including factors related to innovation, scalability, and employment generation.
- Recognition by DPIIT provides various benefits and exemptions, including relief from certain taxes and compliance requirements.

PROCEDURE FOR ASSESSMENT OF START-UPS OUTLINED:

- For start-up companies solely under scrutiny for section 56(2)(viib) of the Income-tax Act, Assessing Officers will not verify this issue during proceedings under section 143(2) or 147/143(2) of the Act.
- The contentions of recognized start-ups on this matter will be summarily accepted.

EXCLUSION OF SECTION 56(2)(VIIB) DURING MULTI-ISSUE SCRUTINY:

• In cases where start-up companies are under scrutiny for multiple issues, including section 56(2)(viib), this specific section will not be pursued during the assessment proceedings for such start-up companies.

PROVISIONS RELATED TO ANGEL TAX UNDER FINANCE ACT 2023:

- Amendment of Section 56(2)(viib): The Finance Act 2023 brought about an amendment to Section 56(2)(viib) to expand the scope of 'angel tax' provisions. This modification included foreign investors in the taxation of start-up funding.
- **Exemption for Recognized Start-ups:** Start-up companies recognized by DPIIT were granted an exemption from the angel tax. This exemption spared them from the tax liability associated with angel tax.
- **Final Valuation Rules for Investors:** The Finance Ministry introduced final valuation rules applicable to both resident and non-resident investors in unlisted companies. These rules involved valuation methods such as the Discounted Cash Flow (DCF) method.
- **Exemption for Investors from Certain Countries:** Angel tax exemptions were extended to investors from 21 countries. However, some countries like Singapore, Netherlands, and Mauritius were excluded from these exemptions.

CENTRAL BOARD OF DIRECT TAXES (CBDT):

- CBDT operates as a statutory authority in accordance with the Central Board of Revenue Act, 1963.
- CBDT is a component of the Department of Revenue, situated within the Ministry of Finance.

FUNCTIONS:

- Formulation of Policies: CBDT is responsible for the formulation of policies related to direct taxes.
- Levy and Collection: It deals with matters concerning the levy and collection of direct taxes.
- Supervision: CBDT supervises the overall functioning of the Income Tax Department.

POLICY PROPOSALS:

- CBDT has the authority to propose legislative changes in direct tax enactments.
- It also suggests modifications in tax rates and the structure of taxation, aligning them with the government's policies.

STRUCTURE:

• The CBDT is headed by a Chairman.

- **Members:** It comprises six members, all of whom serve as ex-officio Special Secretaries to the Government of India. These members include:
 - Member (Income Tax) 0
 - Member (Legislation and Computerization) 0
 - Member (Revenue) 0
 - Member (Personnel & Vigilance) 0
 - Member (Investigation) 0
 - Member (Audit & Judicial) 0

Source:

Angel tax for start-ups: What CBDT has clarified after scrutiny notices | **Explained News – The Indian Express**

0.1 Consider the following statements regarding the Central Board of Direct Taxes (CBDT):

- CBDT operates as a statutory authority. 1.
- The Chairman of CBDT is also designated as the Special Secretary to the Government of India. 2.

Which of the statements given above is/are correct?

(a) 1 only

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

ANSWER: C

- सफलता है Q.2 Regarding the updated provisions for angel tax and start-ups, which of the following statements:
- 1. DPIIT-recognized start-ups are not subject to scrutiny related to the revised angel tax provisions.
- 2. DPIIT recognition primarily depends on a start-up's ability to generate high profits.

Which of the statements given above is/are correct?

- (a) 1 only

- (d) Neither 1 nor 2 ANSWEP: 1
- 0.3 Discuss the recent provisions introduced by the CBDT (Central Board of Direct Taxes) regarding angel tax and their impact on start-ups in India. How do these provisions aim to encourage innovation and ease the taxation burden on the start-up ecosystem?

GLOBAL MARITIME INDIA SUMMIT 2023

This article covers "Daily Current Affairs" and the topic details "Global Maritime India Summit 2023". This topic has relevance in the "Economy" section of the UPSC CSE exam.

FOR PRELIMS:

What is Global Maritime India Summit 2023? What is Blue Economy?

FOR MAINS:

GS3: Economy

WHY IN THE NEWS?

The Global Maritime India Summit 2023 was recently inaugurated by Prime Minister Narendra Modi.

GLOBAL MARITIME INDIA SUMMIT 2023

- During the event, he unveiled the 'Amrit Kaal Vision 2047,' a blueprint for the Indian maritime blue economy.
- The Prime Minister also laid the foundation stone for projects worth over Rs 23,000 crores and dedicated several initiatives in the maritime sector.
- He emphasised India's growing role in the world economy and highlighted the importance of reliable global supply chains.
- He outlined the government's vision for ports and maritime infrastructure, bringing transformational changes, including improved logistics, increased employment opportunities, and sustainability.
- The Prime Minister emphasised India's commitment to "Make in India Make for the world" and the importance of the Blue Economy for a greener planet.
- He also mentioned the growth of maritime tourism and India's aim to become a global cruise hub through state-of-the-art infrastructure.
- The summit is a prime opportunity to attract investments in India's maritime sector.
- In 2016, Mumbai hosted the inaugural Maritime India summit, followed by a virtual second summit in 2021.
- The 2023 summit is set to feature participation from Ministers representing various countries, spanning Europe, Africa, South America, and Asia (including Central Asia, the Middle East, and the BIMSTEC region).

BLUE ECONOMY

- The blue economy refers to **the sustainable use and management of ocean resources** for economic **growth**, improved **livelihoods**, and the preservation of the health of **marine ecosystems**.
- It encompasses various economic sectors and activities that utilise or contribute to the oceans, seas, and coasts.
- The concept of the blue economy recognises the importance of the oceans and their resources in supporting human well-being and economic development.
- It encompasses traditional sectors such as fisheries, aquaculture, and maritime transport, as well as emerging activities like coastal renewable energy, marine ecosystem services, seabed mining, and bioprospecting.



SIGNIFICANCE OF BLUE ECONOMY FOR INDIA

- **Economic Opportunities:** India's blue economy contributes **4% to its GDP** and plays a pivotal role in transportation, providing vital economic prospects.
- Employment Generation: The blue economy offers jobs to millions, with fisheries employing

16 million and shipping witnessing a 35% increase in Indian seafarers.

- Coastal States: Coastal states like Andhra Pradesh, Tamil Nadu, and Kerala heavily rely on the blue economy for livelihoods.
- **Marine Tourism:** Coastal tourism. especially in states like Kerala. Tamil Nadu, and Karnataka. • contributes significantly to local economies, with approximately **23% of total employment.**
- **Skill Development:** Evolving sectors like fisheries and shipping necessitate skill development, particularly in response to climate change and shifting environmental conditions.
- **Emerging Sectors:** New opportunities in offshore wind energy, marine biology, and biotechnology demand investments, technological support, and skill development for full realisation.
- Sustainability: Balancing economic growth and environmental conservation is paramount for the long-term success of India's blue economy.

Sources: Press Information Bureau (pib.gov.in)

01. With reference to the Global Maritime India Summit, consider the following statements:

- 1. The inaugural Global Maritime India Summit was held in October 2023 in Mumbai.
- 2. During the summit, the Indian government unveiled 'Amrit Kaal Vision 2047,' a blueprint for the योजना है तो सफलता Indian maritime blue economy.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None
- Answer: (b)

Q2. Consider the following:

- 1. The blue economy is linked with the sustainable use and management of ocean resources for economic growth.
- 2. It also involves a focus on the livelihoods of the local community and the health of marine ecosystems.
- 3. Seabed mining, aquaculture and bioprospecting are some of the activities under blue economy.

How many of the abovementioned statements are correct?

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

Answer: (c)

Q3. Discuss the concept of the blue economy and evaluate its significance for India in the context of becoming one of the top three economies in the world.

WHITE PHOSPHORUS

This article covers "Daily Current Affairs" and the topic details "White phosphorus". This topic has relevance in the Science and technology section of the UPSC CSE exam.

FOR PRELIMS:

About White Phosphorus?

FOR MAINS:

GS 3: Science and technology Historical Use in Warfare?

WHY IN THE NEWS?

Amnesty International and Human Rights Watch, prominent global human rights organizations, have leveled allegations against the Israel Defense Forces (IDF) for the alleged utilization of white phosphorus munitions in the regions of Gaza and Lebanon.

ABOUT WHITE PHOSPHORUS

White phosphorus is an extremely reactive and waxy solid characterized by its translucent appearance and a distinctive, pungent odor reminiscent of garlic. It is an element denoted by the chemical symbol 'P' and holds the atomic number 15.

CHEMICAL PROPERTIES:

- Allotropes: White phosphorus exists in different allotropes and is the most reactive and least stable among all the elemental forms of phosphorus.
- Solubility: It is insoluble in water but soluble in organic solvents.
- Pyrophoric Nature: White phosphorus readily catches fire when exposed to air.

INDUSTRIAL APPLICATIONS:

• White phosphorus is used in various industrial applications, such as in the manufacturing of phosphoric acid, phosphorus trichloride, and other organic phosphorus compounds.

MILITARY APPLICATIONS:

• In military contexts, white phosphorus has been used in various ways, including in incendiary weapons, smoke screens, and tracer ammunition, primarily due to its pyrophoric properties.

RISKS AND HAZARDS:

Exposure to white phosphorus can lead to severe health hazards, which can be summarized as follows:

- Skin Injuries: Contact with white phosphorus can result in burns, necrosis, and other serious skin injuries.
- Systemic Toxicity: Ingesting or inhaling white phosphorus can cause systemic toxicity.
- Respiratory Damage: The combustion of white phosphorus produces phosphorus pentoxide, which, when inhaled, can damage the respiratory system.

REGULATIONS AND CONTROL:

- White phosphorus is subject to strict regulations due to its potential misuse as a weapon and associated health risks.
- International humanitarian law governs its use in warfare to prevent unnecessary harm to civilians and the environment.
- The United Nations in 1972 labeled incendiary weapons, including white phosphorus, as causing horrific and indiscriminate harm, leading to resolutions condemning their use.
- The 1980 international agreement established Protocol III, which restricts the use of incendiary

weapons that cause excessive harm to civilians and their property.

Environmental Impact:

- The use of white phosphorus in warfare and industry can lead to environmental contamination and long-term ecological damage, impacting soil and water quality.
- Mitigation efforts focus on proper disposal, containment, and the development of alternative technologies to reduce its environmental impact.

ALTERNATIVE TECHNOLOGIES AND SUBSTITUTES:

- Ongoing research and development efforts are centered on finding safer and more environmentally friendly alternatives to white phosphorus in various applications.
- Exploration of alternative materials and technologies is underway to replace white phosphorus in military and industrial contexts, with a specific emphasis on enhancing safety and sustainability.

HISTORICAL USE IN WARFARE:

- White phosphorus has a :historical usage in warfare, with instances dating back to the 1800s when it was utilized by Irish nationalists against British forces, referred to as "Fenian fire." During both World Wars, the British army employed white phosphorus as a weapon.
- The United States used white phosphorus during the Iraq War, notably in the city of Fallujah.
- Allegations of the use of white phosphorus by the Israeli Defense Forces (IDF) in conflicts like the 2006 Lebanon War and the 2008-09 Gaza War have sparked international attention and condemnation.
- The Syrian government, led by Bashar Al-Assad, faced accusations of deploying white phosphorus during the Syrian crisis.
- More recently, the Russian Army was accused of using white phosphorus in the conflict with Ukraine.

Source:

https://www.financialexpress.com/business/defence-reports-ofconcern-the-use-of-white-phosphorus-in-conflict-zones-3267531/

Q.1 Consider the following statements about White Phosphorous:

- 1. White phosphorus is highly reactive and characterized by a pungent garlic-like odor.
- 2. White phosphorus is soluble in water but insoluble in organic solvents.
- Which of the statements given above is/are correct?
- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2

(d) Neither 1 nor 2

ANSWER: C

Q.2 Consider the following statements about White Phosphorous:

- 1. In military applications, white phosphorus is used primarily due to its non-pyrophoric properties.
- 2. Exposure to white phosphorus can lead to skin injuries but poses no risks of systemic toxicity or respiratory damage.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- ANSWER: B

Q.3 Explore the ethical and humanitarian concerns raised by the use of white phosphorus in modern conflicts, taking into consideration case studies from recent events.

BANNERGHATTA NATIONAL PARK

This article covers "Daily Current Affairs" and the topic details "Bannerghatta National Park". This topic has relevance in the Environment section of the UPSC CSE exam.

GS 3: Environment

WHY IN THE NEWS?

The Central Empowered Committee (CEC), established by the Supreme Court, has instructed the office of Karnataka's chief secretary to provide a response concerning the encroachment within the eco-sensitive zone (ESZ) of the Bannerghatta National Park.

ABOUT BANNERGHATTA NATIONAL PARK:

Bannerghatta National Park, located in the state of Karnataka near Bangalore, has a rich history and diverse wildlife. It was established in 1940 and gained the status of a national park in 1974. Situated within the Anekal range of mountains, this park serves as a vital habitat for elephants and plays a crucial role as a wildlife corridor, connecting the BR Hills and Sathyamangalam forest regions.

Key Information about Bannerghatta National Park:

- Location: Bannerghatta National Park is situated approximately 22 kilometers to the south of Bangalore, Karnataka. It is nestled in the picturesque Anekal range of mountains.
- Buffer Zone Controversy: The park's buffer zone, also known as the Eco-Sensitive Zone (ESZ), was originally declared to be 268.96 square kilometers. However, a recent proposal has led to a reduction in the buffer zone size to 169 square kilometers. This decision has faced criticism from wildlife activists who are concerned about its potential impact on the park's ecosystem.
- Total Area: The national park covers a vast area of 65,127.5 acres.
- Adjacent Reserves: The Talli reserve forest is located in the southeast direction of Bannerghatta National Park, while the Bilikal forest lies to its south.
- Bannerghatta Biological Park: In 2002, a portion of the national park was designated as a zoological garden, now known as Bannerghatta Biological Park. This section serves as a conservation and education center.
- Butterfly Enclosure: A notable addition to the Bannerghatta Biological Park in 2006 was the inauguration of a butterfly enclosure, which offers visitors the opportunity to observe various butterfly species in a controlled environment.
- Flora: The park encompasses diverse ecosystems, including scrub-type or dry deciduous forests, southern tropical moist mixed forests, and southern tropical dry deciduous forests.
- Fauna: Bannerghatta National Park is home to a wide variety of wildlife, including elephants, Chital (spotted deer), Striped Hyena, Barking Deer, Peafowl, Porcupine, Grey Jungle Fowl, crocodiles, Partridges, tortoises, various butterfly species, pythons, and many other species.



SOURCE:

Bannerghatta National Park encroachment: Supreme Court committee seeks Karnataka govt's response | Bangalore News – The Indian Express

0.1 Consider the following statements:

- 1. Bannerghatta National Park is situated in Karnataka.
- 2. Bannerghatta National Park is located in the Anekal mountains range.

Which of the statements given above is/are correct?

- (a) 1 only
- (c) Both 1 and 2 mass com (d) Neither 1

ANSWER: C

Q.2 Bannerghatta National Park in Karnataka, India, is not only a biodiverse haven but also a center of ecological discussions. Discuss?

ESIM

This article covers "Daily Current Affairs" and the topic details "eSIM". This topic has relevance in the "Science and Technology" section of the UPSC CSE exam.

FOR PRELIMS:

What is SIM? What is eSIM?

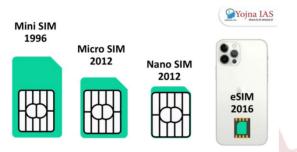
FOR MAINS: *GS3: Science and Technology*

WHY IN THE NEWS?

Marking a new era, tech industry leaders such as Apple with its iPhones, Google's Pixel series, and Samsung have incorporated eSIM capability into their products.

BACKGROUND INFORMATION: SIM

- A 'SIM,' short for 'subscriber identification module,' is an integrated circuit or microchip that identifies a subscriber within a particular network.
- This SIM card is a small, removable card used in mobile phones and other cellular devices.
- It contains essential information that identifies the device to the mobile network, including a unique serial number (IMSI), the mobile network's information, and a secure element for authentication.
- **SIM cards adhere to the ISO/IEC 7816 International Standard** maintained by the International Organization for Standardization and the International Electrotechnical Commission.



WHAT IS ESIM?

• An eSIM, short for "embedded SIM," is a digital SIM card built into a mobile device instead of a physical removable card like a traditional SIM card.

सफलता

• eSIM technology allows users to activate and switch between mobile networks and plans without needing a physical SIM card replacement.

Key features and characteristics of eSIMs include:

- **Embedded Nature:** eSIMs are integrated into the device during manufacturing and cannot be removed or replaced by the user. This design saves physical space in the device.
- **Remote Provisioning:** eSIMs can be remotely provisioned or activated by the user or mobile service provider. This means users can choose their mobile plan and network by downloading the necessary data to the eSIM, eliminating the need for a physical card.
- **Multiple Profiles:** Many eSIM-enabled devices can store multiple profiles, allowing users to switch between different mobile service providers or plans directly on the device without changing the SIM Card.
- **Compatibility:** eSIM technology is becoming more widespread and is supported by various mobile carriers and device manufacturers, making it easier for users to use eSIM functionality.
- **International Roaming:** eSIMs are particularly useful for international travellers. Users can add or switch to a local carrier's plan while travelling, avoiding expensive international roaming fees.
- **Environmental Impact:** The reduction of physical SIM cards can reduce e-waste and the environmental impact associated with manufacturing and disposing plastic SIM cards.

Key challenges associated with eSIM technology:

- **Interoperability:** Varying standards can cause compatibility issues between carriers and devices. eSIM interoperability means an eSIM's ability to work with multiple carriers.
- **Security:** eSIMs require strong security measures to protect against data breaches and software attacks like eSIM swapping.
- **Regulation:** Developing regulatory frameworks for eSIM technology is a complex task that

involves balancing innovation and consumer protection.

- Limited eSIM Adoption: Not all carriers have embraced eSIM technology, especially when • serving localised audiences.
- Support and Monitoring Challenges: IoT adopters have cited a lack of technical support and monitoring tools as a significant challenge.
- Data Privacy Concerns: eSIM technology theoretically allows network operators to track sub-• scriber data, including activity within apps on the device.
- **User Digital Literacy:** In some countries, like the United States, subscribers can self-program eSIMs. This may be challenging for individuals with low digital literacy, including elderly users.

SOURCES:

How do SIM cards work? | Explained – The Hindu

Q1. With reference to SIM, consider the following statements:

- SIM stands for 'Service Information Module' and is an integrated circuit or microchip that iden-1. tifies a subscriber within a particular network.
- Currently, SIM Cards are used only in mobile phones. 2.

Which of the statements given above is/are correct? योजना है तो सफलता

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

02. Consider the following:

- 1. Saves physical space in the device
- Store multiple profiles 2.
- Useful for travellers 3.
- 4. Universal Compatibility
- **Unparalleled Security** 5.

How many of the above are advantages of eSIM technology?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) Only four
- Answer: (c)
- Q3. Discuss key features and and challenges of eSIM technology on the mobile telecommunications industry and its users.

RCS – UDAN (UDE DESH KA AAM NAGRIK)

This article covers "Daily Current Affairs" and the topic details "RCS – UDAN (Ude Desh Ka Aam *Nagrik)". This topic has relevance in the "Economy" section of the UPSC CSE exam.*

FOR PRELIMS: What is RCS - UDAN?

FOR MAINS:

GS3: Economy Infrastructure: Airports

WHY IN THE NEWS?

The Government of India's Regional Connectivity Scheme (RCS) – UDAN (Ude Desh Ka Aam Nagrik), has achieved a significant milestone in the country's aviation sector by celebrating six successful years in 2023.

RCS - UDAN (UDE DESH KA AAM NAGRIK)

- The Ude Desh Ka Aam Naagrik (UDAN) was introduced as a pivotal element of India's National Civil Aviation Policy (NCAP) in 2016 by the Ministry of Civil Aviation (MoCA).
- Objective: To establish economically sustainable and profitable flight services on regional routes, making air travel affordable for the general public, even in smaller towns.
- The scheme is designed to extend connectivity to airports in India that are either underserved or underserved.
- Underserved airports have no more than one daily flight, while unserved airports have no flight operations.
- UDAN's evolution has seen it progress from UDAN 1.0 to UDAN 5.2, with each iteration addressing specific challenges and requirements.

UDAN Version	Key Highlights		
UDAN 1.0	 5 airline companies awarded 128 flight routes to 70 airports, including 36 newly operational airports 		
UDAN 2.0	Introduction of 73 underserved and unserved airports, including helipad connectivity		
UDAN 3.0	 Inclusion of Tourism Routes in coordination with the Ministry of Tourism Introduction of seaplanes for connecting Water Aerodromes Expansion of the scheme to encompass various routes in the North-East Region 		
UDAN 4.0	 Focus on enhancing connectivity in the North-Eastern regions, hilly states, and islands Incorporation of helicopter and seaplane operations 		
UDAN 5.1	 Creation of opportunities for helicopter routes and expansion of prospects for helicopter operators Increased Viability Gap Funding (VGF) and reduced airfare caps 		
UDAN 5.2 (Ongoing)	 Aims to improve connectivity in remote and regional areas, with a particular emphasis on smaller aircraft (less than 20 seats) 		

RCS-UDAN'S IMPACT ON AVIATION INDUSTRY:

- Expanded Fleet: RCS-UDAN has diversified the aircraft fleet serving RCS routes, including Airbus, Boeing, ATR, DHC, Embraer, and Tecnam models. Indian carriers have ordered over 1,000 aircraft for the next decade, significantly expanding the nation's fleet.
- Tourism Promotion: RCS-UDAN not only offers last-mile connectivity but also boosts tourism. It has introduced tourism routes, especially in the Northeast, and expanded helicopter services in hilly regions, stimulating tourism, hospitality, and local economic growth.
- Connectivity: RCS-UDAN has connected 30 States/Union Territories with 75 operational airports, including eight in the Northeast. Several airports, like Darbhanga, Hubli, Kannur, and Mysuru, have become self-sustaining with non-RCS commercial flights, enhancing connectivity and regional development.
- Airlines Growth: Four new airlines have opened in the past six years, promoting a sustainable aviation business model.
- Diverse Aircraft Demand: The scheme's expansion has fueled demand for various aircraft types, from helicopters and seaplanes to propeller and jet planes.

CHALLENGES FACED BY THE RCS-UDAN:

- Infrastructural Constraints: In remote areas, inadequate airport infrastructure requires significant upgrades to facilitate air travel.
- High Operating Costs: Operating in remote regions involves elevated costs that can affect the profitability of airline services.
- Airfare Caps: Airfare caps can restrict airline revenue, potentially discouraging services on specific routes.
- Commercial Viability: Certain routes do not exhibit the necessary demand for airlines to operate profitably, even with subsidies.
- Route Cessation: Several RCS routes have ceased operations, sparking concerns about the scheme's sustainability.

NATIONAL CIVIL AVIATION POLICY (NCAP) 2016

• THE NATIONAL CIVIL AVIATION POLICY (NCAP) 2016 IS A COMPREHENSIVE FRAMEWORK TO DEVELOP INDIA'S CIVIL AVIATION SECTOR.

VISION:

- NCAP 2016 envisions creating an ecosystem to make air travel affordable for the masses, with a target of 30 crore domestic ticketing by 2022 and 50 crore by 2027.
- It also aims to increase international ticketing to 20 crore by 2027.

MISSION:

 The mission of NCAP is to ensure safe, secure, affordable, and sustainable air travel for passengers and cargo transportation, providing access to various parts of India and the world.

OBJECTIVES:

- NCAP AIMS TO ESTABLISH AN INTEGRATED ECOSYSTEM TO DRIVE SUBSTANTIAL GROWTH IN THE CIVIL AVIATION SECTOR, BOOST TOURISM, GENERATE EMPLOYMENT, AND PROMOTE BALANCED REGIONAL DEVELOPMENT.
- It also prioritises the safety, security, and sustainability of the aviation industry through the use of

technology and effective monitoring.

Імраст:

- THE GROWTH IN AVIATION IS EXPECTED TO HAVE A SIGNIFICANT MULTIPLIER EFFECT, LEADING TO INCREASED INVESTMENTS, TOURISM, AND EMPLOYMENT OPPORTUNITIES, ESPECIALLY FOR UNSKILLED AND SEMI-SKILLED WORKERS.
- This policy marks a step toward positioning India as a global hub for civil aviation by 2022.

UDAN has enhanced air connectivity to remote regions, stimulated airline growth, and boosted tourism in India's aviation industry. However, challenges related to commercial viability and airline sustainability remain. To ensure sustained air connectivity in smaller areas, collaboration among the government, industry stakeholders, and local authorities is vital. Key focus areas should include infrastructure, subsidies, operations, and awareness.

Sources:

Minister of Civil Aviation and accessible air travel for all

Q1. With reference to Ude Desh Ka Aam Naagrik (UDAN), consider the following statements:

- 1. The UDAN scheme has been implemented by the Ministry of Civil Aviation.
- 2. It aims to establish economically sustainable and profitable flight services on regional routes. योजना हे तो

Which of the statements given above is/are correct?

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

Answer: (c)

Q2. Consider the following statements with reference to UDAN:

- 1. The UDAN Scheme is based on India's National Civil Aviation Policy (NCAP) 2016.
- 2. It also incorporates helicopter and seaplane operations to improve connectivity.
- 3. The scheme aims to extend connectivity to airports in India that have no more than ten daily flights.

How many of the statements are correct?

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

Answer: (b)

Q3. Examine the Regional Connectivity Scheme (RCS) – Ude Desh Ka Aam Nagrik (UDAN) in the context of India's National Civil Aviation Policy (NCAP) 2016.

REFERENCE FUEL

This article covers "Daily Current Affairs" and the topic details "Reference fuel". This topic has relevance in the Science and Technology section of the UPSC CSE exam.

FOR PRELIMS:

About Reference fuel?

FOR MAINS:

GS 3: Science and Technology Key Differences in Fuel Quality?

WHY IN THE NEWS?

India has commenced the production of 'reference' petrol and diesel, entering an exclusive group of nations manufacturing this highly specialized fuel essential for automobile testing.

ABOUT REFERENCE FUEL:

Reference fuels are specialized, high-quality gasoline and diesel products designed for the precise calibration and testing of automobiles by both automotive original equipment manufacturers (OEMs) and organizations involved in automotive testing and certification. These fuels are essential for various vehicle testing purposes, ensuring that the fuel used meets strict quality and performance standards.

Key Differences in Fuel Quality

- One of the primary distinctions between reference fuels and regular or premium fuels is the octane number, a crucial factor in determining fuel performance. Here's a breakdown of the key differences:
- •
- Regular Fuel: Regular gasoline typically has an octane number of 87. This is the standard fuel available at most gas stations and is suitable for everyday use in most vehicles.
- Premium Fuel: Premium gasoline is of higher quality, featuring an octane number of 91. It offers improved engine performance and is often recommended for high-performance and luxury vehicles.
- Reference Grade Fuel: Reference grade fuel is of the highest quality, boasting an octane number of 97. This elevated octane rating ensures precise and consistent testing results in vehicle performance evaluations.

STRINGENT SPECIFICATIONS

Reference fuels are subject to strict government regulations, which outline a wide range of specifications that must be met. These specifications include:

- Cetane Number: Important for diesel fuel, as it affects ignition quality.
- Flash Point: The temperature at which the fuel can ignite.
- Viscosity: A measure of the fuel's resistance to flow.
- Sulfur Content: Controlling sulfur levels is crucial for reducing emissions.
- Water Content: Excess water can be detrimental to the engine.
- Hydrogen Purity: Ensuring the fuel's purity for accurate testing.
- Acid Number: Monitoring acidity to prevent corrosion and engine damage.

Property	Octane Number	Cetane Number
Definition	A measure of a gasoline's resistance to knocking or pinging in spark-ignition engines. Higher octane numbers indicate a greater resistance to knocking.	A measure of a diesel fuel's ignition quality, indicating how easily it ignites under compression. Higher cetane numbers suggest better ignition quality.
Fuel Type	Applicable to gasoline, which is used in spark-ignition engines.	Applicable to diesel fuel, which is used in compression-ignition engines.
Number Range	Typically, octane numbers for gasoline range from 87 (regular) to 91+ (premium).	Cetane numbers for diesel fuel generally range from 40 to 55 or higher.
Effect on Engine	Higher octane numbers prevent knocking in gasoline engines, allowing for higher compression ratios and improved performance.	Higher cetane numbers result in better ignition and smoother combustion in diesel engines, reducing noise and emissions.
Performance	High-octane gasoline is often used in high-performance and sports cars to maximize engine power and efficiency.	High-cetane diesel fuel is preferred in diesel engines for better cold starts, reduced emissions, and improved fuel efficiency.
Knock Resistance	A higher octane number indicates better resistance to engine knock or detonation, which can damage the engine.	A higher cetane number signifies quicker, smoother ignition and combustion, reducing engine noise.
Engine Type	Octane numbers are relevant for spark- ignition (gasoline) engines found in most passenger vehicles.	Cetane numbers are relevant for compression- ignition (diesel) engines commonly used in trucks and some passenger cars.

ABOUT OCTANE AND CETANE

SOURCE:

reference fuel: India begins producing 'reference' fuel, joins select league of nations – The Economic Times (indiatimes.com)

yojnaias.com Q.1 Regarding the octane and cetane numbers, consider the following statements:

- 1. The octane number measures the ignition quality of diesel fuel.
- 2. A higher cetane number indicates better resistance to knocking in gasoline engines.
- Which of the statements given above is/are correct?
- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- ANSWER: D

Q.2 Which of the following best describes the purpose of reference fuels in the automotive industry?

- (a) Ensuring precise calibration and testing of automobiles
- (b) Developing new fuel formulations
- (c) Regulating fuel prices in the market
- (d) Monitoring engine oil quality

ANSWER: A



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