



**R.C.REDDY
IAS STUDY CIRCLE**

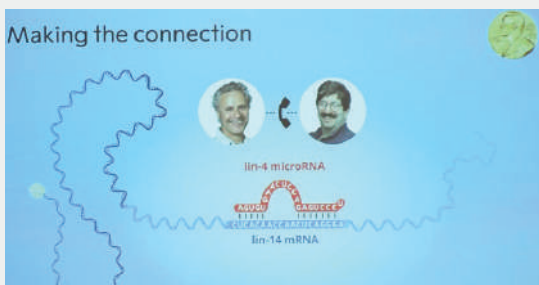
October 2024

45+ Years Director's Experience | 35+ Years Institute's History

CURRENT AFFAIRS

Prelims UPSC CSE 2025

Monthly Magazine



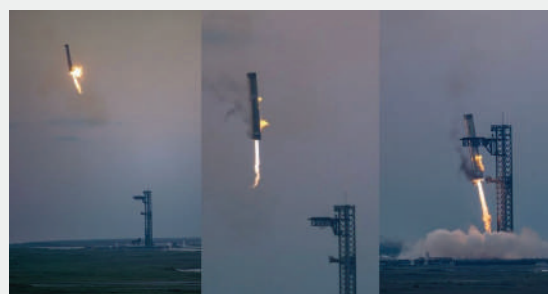
★ **EXAM ORIENTED : EXCLUSIVELY FOR PRELIMS 2025**

★ **TOPICS CHOSEN FROM MULTIPLE SOURCES**

★ **COMPREHENSIVE SUBJECT WISE TOPICS**

★ **MAP BASED CURRENT AFFAIRS TOPICS**

★ **TEST YOUR KNOWLEDGE BY TAKING OUR YEAR- LONG CA TEST SERIES**



 **040-23228513 / 27612673 / 27668513 / 9346882593 / 9573462587**

OUR BRANCHES

ASHOKNAGAR

Opp. Sub-Registrar Office, Gandhi-nagar Road, Ashoknagar cross Road, Hyderabad-500020

HIMAYATHNAGAR

Opp. Telangana Tourism Development Corporation, Near Telugu Academy, Himayathnagar, Hyderabad-500029

VISAKHAPATNAM

Vuda Complex, 2nd & 3rd floor, 2, MVP Main Rd, Sector 7, MVP Colony, Visakhapatnam, Andhra Pradesh-530017

PREFACE

Current Affairs UPSC CSE Prelims 2025

This high-quality monthly compilation of Current Affairs for Civil Services Exam Prelims 2025 is designed to help Civil Services Exam aspirants by:

1. **Saving preparation time:** Consolidates key current affairs from multiple sources for CSE Prelims.
2. **Reinforcing static concepts:** Links static concepts with current affairs
3. **Enhancing revision:** Combines important current affairs and static concepts for effective revision.

After reading this Current affairs magazine, you can test your concepts by taking our Current Affairs Test Series in Multiple Choice Question format which helps in the following ways:

Aligns with the CSE prelims exam pattern.
Aids understanding and recall by offering multiple perspectives on current affairs.
Saves time, consolidates and aids quick revision

Details of our Current Affairs Test Series are on the back cover and inside this magazine.

Our team of content developers have worked rigorously to create this high-quality compilation, and we hope that all Civil Services and other competitive exam aspirants will make the best use of it. All the Best!

R. C. Reddy IAS Study Circle
Hyderabad



**For other months issues and updates
Join our telegram channel**



Table of Contents

1. POLITY _____ (Page 1)
2. ECONOMY _____ (Page 5)
3. GEOGRAPHY _____ (Page 14)
4. ENVIRONMENT _____ (Page 26)
5. SCIENCE & TECHNOLOGY _____ (Page 38)
6. INTERNATIONAL RELATIONS _____ (Page 59)
7. ART AND CULTURE _____ (Page 62)
8. MISCELLANEOUS _____ (Page 69)



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**

POLITY

1. Overseas Citizen of India

Context:

The Consulate General of India in New York has clarified that rumours circulating on social media regarding OCIs becoming reclassified as “foreigners” are false.

Overseas Citizen of India:

- OCI was introduced by the Indian government in 2005.
- A registered OCI is granted multiple entry, multi-purpose life-long visa for visiting India.
- **They are exempted from registration with Foreign Regional Registration Officer (FRRO) or Foreign Registration Officer (FRO) for any length of stay in India.**
- **OCI cardholders can open special bank accounts in India, they can buy non-farm property and exercise ownership rights and can also apply for a driver's licence and PAN card.**
- However, they are required to seek permission or a permit to visit protected areas in India.

Eligibility Criteria

- It provides for registration as an OCI of all Persons of Indian Origin (PIOs) who were citizens of India on 26th January, 1950, or thereafter, or were eligible to become citizens of India on the said date.

A foreign national who;

- Belonged to a territory that became part of India after 15th August, 1947; or
- A child or a grandchild or a great grandchild of such a citizen; or



@RCREDDYIAS

For other months issues and updates
Join our telegram channel

- A minor child of such persons mentioned above; or
- A minor child whose both parents are citizens of India or one of the parents is a citizen of India is eligible for registration as OCI cardholder.

Who cannot be an OCI?

- An applicant is not eligible to get an OCI card if his/her parents or grandparents have ever been a citizen of Pakistan or Bangladesh.
- **Foreign military personnel either in service or retired are also not entitled for grant of OCI.**

What are OCIs not allowed to do?

- The OCI card holder is not entitled to vote; to be a member of a Legislative Assembly or of a Legislative Council or of Parliament; to hold Indian constitutional posts such as that of the President, Vice President, Judge of the Supreme Court or High Court.
- He or she cannot normally hold employment in the government.

2. Prison Manual in India

Context:

The Supreme Court declared that caste-based discrimination of prisoners, segregation of manual work among them according to caste-hierarchy and treatment of inmates from the de-notified tribes as “habitual offenders” within the four walls of jails across India were oppressive to fundamental human dignity and personality.

About:

- The Prison Manual in India serves as a crucial framework for the management and regulation of prisons across the country.
- **It is governed primarily by the Prisons Act, 1894.**
- The manual outlines the rules, procedures, and guidelines for the treatment of prisoners and the administration of correctional facilities. It emphasizes the rights of prisoners, including access to basic necessities like food, health care, and legal aid, while also mandating humane treatment and rehabilitation.
- **The state governments are responsible for the administration of prisons in India.**

3. Central Consumer Protection Authority

Context:

Ola Electric, an electric two-wheeler manufacturer, recently received a show-cause notice from the Central Consumer Protection Authority (CCPA).

About Central Consumer Protection Authority (CCPA):

- The Consumer Protection Act, 2019 was notified on August 9, 2019 and came into force on July 20, 2020. It replaced the Consumer Protection Act, 1986. Under the provisions of the Act, the CCPA was established in July 2020.
- The CCPA has powers to pass orders of discontinuation of practices that are unfair and prejudicial to consumers' interests and impose penalties in cases of false or misleading advertisements.
- It will have a Chief Commissioner as head, and only two other commissioners as members — one of whom will deal with matters relating to goods while the other will look into cases relating to services.

4. Electronic Voting Machines

Context:

The Congress party has raised concerns about the Haryana Assembly election results, questioning the integrity of Electronic Voting Machines (EVMs).

About

- The ECI has not officially responded to the allegations but stated that no complaints about EVM batteries were received during polling.
- Legal challenges to EVMs have consistently failed, and the Supreme Court recently upheld the use of EVMs, rejecting calls for a return to paper ballots.

EVM Battery Functionality:

- EVMs operate on alkaline batteries, with the control unit (CU) typically having a power pack of 7.5 or 8 volts and the Voter Verifiable Paper Audit Trail (VVPAT) unit at 22.5 volts.
- Battery levels are monitored and displayed as "High", "Medium", "Low", and "Change Battery."
- A new battery generally lasts throughout the election and counting process.

Battery Change Procedure: Batteries are checked and installed before elections, with political party representatives allowed to observe.

- In case of low battery during polling, a replacement occurs in the presence of polling agents and sector officers.

5. National or state-recognized political party

Context:

Nationalist Congress Party (NCP) founder Sharad Pawar has filed a plea in the Supreme Court, seeking a direction to restrain the Ajit Pawar faction from using the 'clock' symbol in the upcoming assembly polls in Maharashtra

About:

- A national or state-recognized political party has a reserved symbol that is not allotted to any other candidate in any constituency. This is essential to maintain the identity of recognized parties during elections.
- In case of a split within a recognized political party, the Election Commission of India (ECI) decides which faction will be recognized as the legitimate party and is entitled to use the party's reserved symbol. This is done under the provisions of the Symbols Order.
- Symbols play a crucial role in the election process, particularly because a significant portion of the population may be illiterate. Voters often identify parties by their symbols, making them essential for voting in Indian elections.

6. Prohibition of Child Marriage Act

Context:

The Supreme Court has rejected the government's plea to enforce the Prohibition of Child Marriage Act (PCMA) over personal laws, urging Parliament to consider banning child betrothals.

About Prohibition of Child Marriage Act (PCMA):

- PCMA came into force in 2006 to prevent child marriage and ensure the eradication of the practice.
- **It replaced the Child Marriage Restraint Act of 1929.**
- The primary object of the Act is to prohibit solemnization of child marriage.
- This Act is armed with enabling provisions to prohibit child marriages, provide relief to victims, and enhance punishment for those who abet, promote, or solemnize such marriages.
- As per the act, the age of marriage for boys is 21, and for girls, it is 18, and any marriage of people below this age will be considered a child marriage which is illegal, an offence, and is punishable under the law.
- Any person can report an incidence of child marriage before or after it has been solemnized.

Nodal Officer:

- **The District Collector is the Nodal Officer at the district level for the purpose of implementation of the Act.**
- He/she shall periodically review the implementation of the Act within the respective district and take all necessary measures for the proper and effective implementation of the Act.
- **Child Marriage Prohibition Officers (CMPO) are to be appointed in every state to prohibit child marriages and ensure the protection of the victims as well as prosecution of the offenders.**
- The CMPO has been empowered to provide necessary legal aid to victims of child marriage and to produce children in need of care and protection before the Child Welfare Committee or a First-Class Judicial Magistrate, where there is no Child Welfare Committee.

Petition:

- The petition to nullify the child marriage can be made in court only by the girl or boy, who are below 18 years of age at the time of marriage.

- However, a guardian along with the CMPO can file the annulment petition on behalf of the child, if they are still minors.
- **The District Court can grant nullity of marriage.** The District Court includes the Family Court, the Principal Civil Court of Original Jurisdiction, and any other civil court specified by the State Government.

Punishments:

- Child marriage is an offence punishable with hard imprisonment, or with fine or both.
- The courts can issue injunctions prohibiting solemnization of child marriages.
- The offences under the Act are cognizable and non-bailable.

Protection:

- The law provides for all support and aid, including medical aid, legal aid, counselling, and rehabilitation support for children once they are rescued.
- **It gives legal status to all children born from child marriages and makes provisions for their custody and maintenance.**
- It provides for the residence and maintenance of the female contracting party.

7. PM-YASASVI Scheme**Context:**

The Ministry of Social Justice and Empowerment has implemented the PM Young Achievers Scholarship Award Scheme for Vibrant India (PM-YASASVI).

About PM-YASASVI Scheme:

- **It is a comprehensive umbrella scheme aimed at uplifting students from Other Backward Classes (OBC), Economically Backward Classes (EBC), and Denotified Tribes (DNT) by providing them with access to quality education during their formative years.**

- It has consolidated and enhanced several earlier initiatives, including the Dr. Ambedkar Post-Matric Scholarship Scheme for EBCs and the Dr. Ambedkar Pre-Matric and Post-Matric Scholarship Scheme for DNTs, which were subsumed under this program starting from 2021-22.
- **By integrating these schemes, PM YASASVI aims to ensure a more streamlined and impactful approach to supporting the educational needs of socially and economically disadvantaged students.**
- **Objective:** The overarching goal of the scheme is to promote educational empowerment among these vulnerable groups, helping them overcome financial barriers and complete their education.
- Under this Scheme students can avail Pre-Matric Scholarship from Class 9 to 10 and Post Matric Scholarship for their higher studies at post-matriculation or post-secondary stage.

Eligibility:

- The Pre-Matric Scholarship is designed for students in classes IX and X attending government schools,
- Family income below Rs. 2.5 lakh.

Implementing Agency: Department of Social Justice and Empowerment, Ministry of Social Justice and Empowerment.

8. World Justice Project**Context:**

Recently the Rule of Law Index has been published by the World Justice Project (WJP).

About:

- It has evaluated countries based on different factors, including constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice, and criminal justice.
- India stands at 98 out of 142 countries.
- **Top Rank:** Denmark has secured first rank, followed by Norway, Finland, Sweden, and Germany in terms of law and order.

- **Worst Rank:** Pakistan has been ranked 140 among 142 countries making it the third worst country in the world.
- Mali and Nigeria are the only countries ranked lower than Pakistan.

The World Justice Project (WJP)

- It is an independent, nonpartisan, multidisciplinary organization working to create knowledge, build awareness, and stimulate action to advance the rule of law worldwide.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Cleared Prelims in 2nd attempt after taking High - Impact Prelims Revision course

and went on to secure AIR 202 in UPSC CSE 2023



“ High- Impact Prelims Revision Course for CSE 2023 Prelims was instrumental in refining my preparation for Prelims. The approach provided by Gautham sir gave me a fresh insight into Prelims preparation and on how to tackle the paper especially if it's different or unconventional”

ANUSHA PILLAY - IPS - AIR 202 (CSE 2023)

Course Start Date

**20th November
2024 >>>**

COURSEMODE- ONLINE/OFFLINE

WHATSAPP YOUR QUERIES TO



73867 15016



**Scan to Watch
Orientation Video (or)
For Course Details (or) To Enroll**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Current Affairs Test Series for CSE Prelims 2025 (offline/online)

Offline Test Locations : Himayat Nagar or Ashok Nagar Branch

13 Tests
(100 Qs Each), Total 1300 Qs
with Detailed Explanation PDFs

Covering Static Topics Based
on 13 months of CA :
(April 2024 to April 2025)

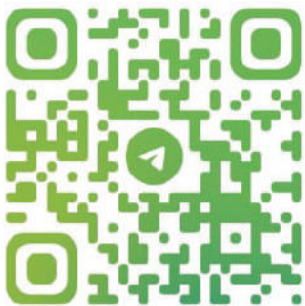
★ **Analysis by Faculty**
after each test

High - Quality MCQs

Covers Latest MCQ Patterns
based on PYQs

CURRENT AFFAIRS TEST SERIES SCHEDULE PLAN - 2024-25

S.No.	Test Name	Date of Test
1	CA April 2024	18-08-2024
2	CA May 2024	01-09-2024
3	CA June 2024	15-09-2024
4	CA July 2024	29-09-2024
5	CA August 2024	13-10-2024
6	CA September 2024	27-10-2024
7	CA October 2024	17-11-2024
8	CA November 2024	15-12-2024
9	CA December 2024	12-01-2025
10	CA January 2025	16-02-2025
11	CA February 2025	16-03-2025
12	CA March 2025	13-04-2025
13	CA April 2025-20 Days	04-05-2025



Scan to Join our Telegram
Channel for more updates



Scan for Schedule, Application
and Payment Form

WHATSAPP YOUR QUERIES TO



70756 52127

ECONOMY

1. National Mission for Edible Oils - Oil Palm (NMEO-OP)

Context:

The second day of a National Level Multi-Stakeholder Consultative Workshop on Sustainable Oil Palm Cultivation under the National Mission on Edible Oils-Oil Palm (NMEO-OP) was held recently.

About National Mission for Edible Oils - Oil Palm (NMEO-OP):

- Launched by the Government of India in August 2021, NMEO-OP targets a substantial increase in oil palm cultivation and crude palm oil production.
- It is a Centrally Sponsored Scheme with a special focus on the North east region and the Andaman and Nicobar Islands, with a focus on increasing the area and productivity of oilseeds and Oil Palm.
- Scheme Outlay: A financial outlay of Rs. 11,040 crores have been made for the scheme, out of which Rs. 8,844 crore is the Government of India share and Rs. 2,196 crore is the State share, and this includes the viability gap funding also.

Targets:

- To increase the area of oil palm to 10 lakh hectares from 3.5 lakh ha during 2019-20 by 2025-26 (an additional 6.50 lakh ha).
- To increase the Crude Palm Oil production from 0.27 lakh tonnes during 2019-20 to 11.20 lakh tonnes by 2025-26.
- Increase consumer awareness to maintain a consumption level of 19.00 kg/person/annum till 2025-26.



@RCREDDYIAS

For other months issues and updates
Join our telegram channel

The State Department of Agriculture, State Department of Horticulture, Central University, ICAR-Institutions, CDDs, SAUs, KVKs, Central Agencies/Cooperatives, Oil palm processors/ Associations, DD Kisan, AIR, DD, TV channels will be the implementing stake holders of the NMEO-Oil palm.

Features: The salient features of NMEO-OP include assistance for planting material, inputs for intercropping up to gestation period of 4 years and for maintenance, establishment of seed gardens, nurseries, micro irrigation, bore well/pump set/water harvesting structure, vermi compost units, solar pumps, harvesting tools, custom hiring centre cum harvester Groups, farmers and officers training, and for replanting of old oil palm gardens, etc.

2. India's core sectors

Context:

Output levels in India's core sectors slipped to a nine-month low in August, even as year-on-year growth slipped 1.8%, marking the first contraction in three and a half years.

About:

- The Index of Eight Core Industries (ICI) is prepared every month and released by the Office of the Economic Adviser (OEA), Department for Promotion of Industry and Internal Trade (DPIIT), and Ministry of Commerce & Industry.
- The Eight Core Industries comprise above 40 percent of the weight of items included in the Index of Industrial Production (IIP). IIP is compiled and published monthly by the Central Statistical Organisation (CSO).
- The base year for the Index of Eight Core Industries (ICI) in India is 2011-2012. The ICI is a monthly production volume index that measures the performance of eight core industries in India.

- The current weightage, of eight core industries is Petroleum Refinery Products (28.04%) > Electricity (19.85%) > Steel (17.92%) > Coal (10.33%) > Crude Oil (8.98%) > Natural Gas (6.88%) > Cement (5.37%) > Fertiliser (2.63%).

3. Monetary Policy Committee

Context:

The Central government recently appointed new monetary policy committee members with immediate effect.

About is Monetary Policy Committee (MPC):

- The MPC was setup after a Memorandum of Understanding between the government and the RBI about the conduct of the **new inflation-targeting monetary policy framework**.
- The Reserve Bank of India Act, 1934 (RBI Act) has been amended by the Finance Act, 2016 to provide for a statutory and institutionalized framework for an MPC.
- Under Section 45ZB of the amended RBI Act, 1934, the central government is empowered to constitute a six-member MPC.
- **Function:** The MPC is entrusted with the task of fixing the benchmark policy rate (repo rate) required to contain inflation within the specified target level.
- The MPC replaced the previous arrangement of Technical Advisory Committee.

Composition:

- MPC will have six members: the RBI Governor (Chairperson), the RBI Deputy Governor in charge of monetary policy, one official nominated by the RBI Board, and the remaining three members would represent the Government of India.
- The external members hold office for a period of four years.

The quorum for a meeting shall be four Members, at least one of whom shall be the Governor and, in his absence, the Deputy Governor, who is the Member of the MPC.

The MPC takes decisions based on a majority vote. In case of a tie, the RBI governor will have the second or casting vote.

The decision of the MPC would be binding on the RBI.

RBI's Monetary Policy Department (MPD) assists the MPC in formulating the monetary policy.

4. PM Internship Scheme

Context:

Recently, the Prime Minister's Internship Scheme, which was announced by the Union Finance Minister during her Budget speech, was launched.

About PM Internship Scheme:

- It will enhance youth employability in India by offering them hands-on exposure to real-world business environments.
- The scheme represents a transformative opportunity to bridge the skills gap and drive sustainable growth in India.
- **Aim: The scheme aims to provide internship opportunities to one crore youth over five years, in the top 500 companies.**
- **The pilot project will be implemented through an online portal managed by the Ministry of Corporate Affairs (MCA).**
- A monthly stipend of ₹4,500 will be provided to the interns from the central government via DBT (Direct Benefit transfer), with an additional ₹500 offset provided by the company's Corporate Social Responsibility (CSR) fund.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**

- **They will also be provided a one-time grant of Rs 6,000 upon joining and insurance coverage under PM Jeevan Jyoti Bima Yojana and PM Suraksha Bima Yojana.**

- Internship period: One year

Who is eligible for the scheme?

- Candidates aged between 21 and 24 years who are not engaged in full-time employment are eligible for the one-year internship programme.
- Internships are available to those who have passed class 10 or higher.
- Individuals from families with government jobs are excluded
- **It is not open to post-graduates.**
- A candidate who graduated from premier institutes such as IIT, IIM, or IISER, and those who have CA, or CMA qualification would not be eligible to apply for this internship.
- Anyone from a household that includes a person who earned an income of ₹8 lakh or more in 2023-24, will not be eligible.

Benefits of the scheme:

- It will provide on-job training to youth and an exposure to real-life work environments.
- The scheme will also benefit the industry by creating a pipeline of skilled, work-ready youth who can be employed post-internship both in large as well as micro, small and medium enterprises.

5. Mumbai Interbank Outright Rate

Context:

The Reserve Bank of India released a report recommending changes in methodology of the Mumbai Interbank Outright Rate (MIBOR).

About:

- The report proposes a change to a new benchmark referred to as the Secured Overnight Rupee Rate (SORR).

- This new rate is based on secured transactions in the money market, rather than unsecured interbank lending, providing more stability and reducing risks associated with it.

What is Mumbai Interbank Outright Rate (MIBOR)?

- **It was introduced by the National Stock Exchange (NSE) in 1998 as a part of efforts to develop India's interbank money market.**
- **MIBOR is meant to capture the overnight borrowing rate between banks and helps in determining the cost of borrowing for financial institutions.**
- **It serves as a benchmark for various financial instruments, such as floating rate bonds, interest rate swaps, and other debt instruments.**
- MIBOR plays a crucial role in determining the cost of capital for businesses and banks.

6. Annual Survey of Industries

Context:

The Annual Survey of Industries (ASI) for 2022-23 has been released by the Ministry of Statistics and Programme Implementation (MoSPI).

About:

- Annual Survey of Industries is conducted to provide insight into the change in composition, growth and structure of various manufacturing industries in terms of output, value added, employment, and capital formation.
- It provides valuable input to the National Accounts Statistics at national and state level.

Major Highlights:

- **Gross Value Added (GVA) grew by 7.3% in current prices in the year 2022-23 over 2021-22.**
- **Among the major states, in terms of GVA, Maharashtra ranked first followed by Gujarat, Tamil Nadu, Karnataka and Uttar Pradesh.**

- The total number of employees in manufacturing industries increased by 7.5 per cent.
- **The highest employment was recorded in factories producing food products, followed by textiles, basic metals, wearing apparel and motor vehicles, trailers and semi-trailers.**
- The main drivers of the manufacturing growth were industries related to basic metal, coke & refined petroleum products, food products, chemical and chemical products and motor vehicles.

7. Business- Ready Index

Context:

The Indian government is aligning state business readiness rankings with the upcoming World Bank's B-READY index.

About Business- Ready Index:

- The B-READY index is a successor to the Ease of Doing Business rankings, which were discontinued in 2021 due to irregularities.
- It is a ground-breaking initiative that aims to focus on quantitatively assessing the business environment across world economies.
- It envisages taking into consideration more diverse factors while arriving at the rating.
- Global financial institutions and multi-national companies will use the B-Ready framework as a benchmark to understand the regulatory and policy environment of a country.
- It will be published annually, taking into consideration three main pillars: regulatory framework, public services, and efficiency.
- The index incorporates digitalization, environmental sustainability, and gender equality into each indicator, ensuring a holistic and forward-thinking approach to business evaluation.
- It tracks ten parameters covering a firm's lifecycle from starting, operating, closing, and reorganising.
- The index will expand in three stages, covering 54 economies initially and reaching up to 180 countries by 2026.

8. Central Electricity Regulatory Commission

Context:

India's power regulator Central Electricity Regulatory Commission (CERC) recently appointed a Single Member Bench to look into aspects relating to preparedness of power managers and other stakeholders to meet the challenges arising on account of a sudden surge in power demand.

About Central Electricity Regulatory Commission (CERC):

CERC was initially constituted under the Electricity Regulatory Commissions Act, 1998 on 24th July, 1998.

- It is a statutory body functioning under sec – 76 of the Electricity Act 2003.

Composition: A Chairperson and four other members including the Chairperson, Central Electricity Authority (ex-officio Member of the Commission).

Functions:

- **To regulates the tariffs of power generating companies in India, including govt owned and private companies;**
- to regulate the inter-State transmission of electricity;
- to determine tariff for inter-State transmission of electricity;
- to issue licences to persons to function as transmission licensee and electricity trader with respect to their inter-State operations;
- Improve access to information for all stakeholders.
- to adjudicate upon disputes involving generating companies or transmission licensee
- **CERC also frames appropriate regulation for facilitating cross border trade of electricity with neighbouring countries.**



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**

9. National Cooperative Consumers' Federation of India

Context:

The National Cooperative Consumers' Federation of India under the Union Ministry of Consumer Affairs, Food and Public Distribution began selling tomatoes at a subsidised price of Rs 65 per kg in Delhi as retail prices touched Rs 120-130 at some places.

About:

- Unlike onion, which is grown thrice a year, there is only a kharif and a rabi tomato.
- Kharif tomato is grown mainly in Maharashtra, Andhra Pradesh, and Telangana; the rabi crop is grown in parts of Maharashtra and parts of Karnataka.
- Rabi tomato is transplanted in February-March and harvested after about 160 days. The kharif crop is transplanted after June-July, and transplantation can continue till September in parts of Maharashtra.

10. Non-banking financial companies

Context:

Reserve Bank of India (RBI) governor Shaktikanta Das warned of action against those non-banking financial companies (NBFCs) who are pursuing unsustainable practices to push growth.

Non-banking financial companies (NBFCs):

- It is a company registered under the Companies Act, 1956 engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority or other marketable securities.
- They are financial institutions that offer various banking services but do not have a banking license.
- Generally, these institutions are not allowed to take traditional demand deposits—readily available funds, such as those in checking or savings accounts—from the public.
- The functions of the NBFCs are managed by both the Ministry of Corporate Affairs and the Reserve Bank of India.

What is the difference between banks & NBFCs?

NBFCs lend and make investments and hence their activities are akin to that of banks; however, there are a few differences as given below:

- NBFC cannot accept demand deposits;
- NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself;
- Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs, unlike in case of banks.

11. Hyundai Motor India

Context:

Hyundai Motor India launched India's biggest IPO of Rs 27,856 crore on October 15. It was closed on Thursday with an oversubscription of 2.37 percent.

About:

- Initial Public Offerings (IPO) is a type of issue where an unlisted company raises capital by making a fresh issue of securities or offering its existing securities for sale to the public for the first time.
- An IPO is the process by which a privately held company, or a company owned by the government (Public Sector Undertakings) such as LIC, raises funds by offering shares to the public or to new investors. Following the IPO, the company is listed on the stock exchange.
- The Companies Act specifies that Securities and Exchange Board of India (SEBI), a statutory body established under the SEBI Act, 1992, is the governing authority for the IPO process in India.
- The SEBI is the primary regulatory body that governs IPOs in India. SEBI sets guidelines for eligibility criteria, and companies must meet these guidelines before requesting permission to launch an IPO.

12. 'Zero Defect and Zero Effect' initiative

Context:

The Union Minister of Commerce & Industry, during the Indian Foundation for Quality Management (IFQM) Symposium, emphasized the importance of the 'Zero Defect and Zero Effect' initiative.

'Zero Defect and Zero Effect' initiative:

- *It is an integrated and comprehensive certification system, launched in 2016 by the Ministry of MSME.*

The objective of the Zero Defect Zero Effect (ZED) scheme is to;

- Encourage and enable MSMEs for manufacturing of quality products using latest technology.
- *Encourage MSMEs to achieve higher ZED Certification levels through graded incentives.*
- *To support the "Make in India" campaign.*

13. SWIFT System

Context:

Russian envoy in India recently called for an alternative to the SWIFT system used for global payments, from which Russia was expelled after the beginning of war in Ukraine.

About SWIFT System:

It is a member-owned cooperative that provides safe and secure financial transactions for its members.

Establishment: It was founded in 1973 by 239 banks from 15 countries.

SWIFT is a network that banks use to communicate with each other securely, mainly to give instructions for transferring funds between accounts.

SWIFT is the largest and most streamlined method for international payments and settlements.

SWIFT works by assigning each financial organization a unique code with either eight or 11 characters, known as a bank identifier code, or BIC.

By standardizing communication protocols, SWIFT ensures that financial institutions can reliably conduct cross-border transactions, reducing the risks and inefficiencies associated with international banking.

Although SWIFT is crucial to global financial infrastructure, it's not a financial institution.

SWIFT does not hold or transfer assets but facilitates secure, efficient communication between member institutions. It transmits essential details such as the recipient's account information and transfer amount.

Headquartered in La Hulpe, Belgium, the system is overseen by the central banks of the G10 countries, the European Central Bank, and the National Bank of Belgium.

- Its shareholders represent around 3,500 member organisations.
- SWIFT shareholders elect a board of 25 directors who govern the organisation and oversee management of the SWIFT system.

Because membership in SWIFT allows countries to easily conduct international financial transactions, exclusion from SWIFT is an economic sanction that can be used against countries whose actions are condemned by the global community.

14. Contribution of direct taxes to total tax revenue

Context:

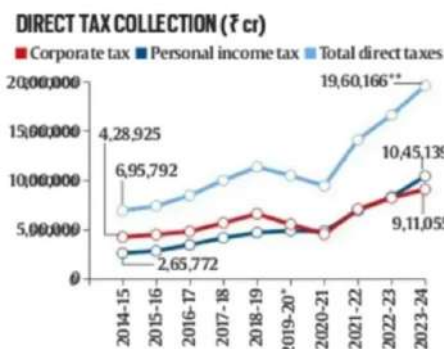
Data released by the Central Board of Direct Taxes (CBDT) under the Ministry of Finance shows contribution of direct taxes to total tax revenue climbed to 56.72 per cent in FY24, the highest in 14 years.

About:

Key Highlights of the Data

- **Direct tax-to-GDP ratio is the share of direct taxes in the overall economic output in the country.**
- Direct tax-to-GDP ratio jumped to over a two-decade high of 6.64 per cent
- *Direct tax to total tax revenue: Increased to 56.72 % from last year 54.63 %*
- *Indirect taxes to total tax revenue: Reduced to 43.28% from last year's 45.37%.*
- **State-wise Contribution in direct tax: Maharashtra (39 %) > Karnataka (12%) > Delhi (10.4%)**

- **Tax Buoyancy:** Explains the relationship between the changes in the government's tax revenue growth and the changes in Gross domestic product (GDP).
- **When a tax is buoyant the revenue increases without increasing the tax rate.**
- **Tax Buoyancy** grew to 2.12 in 2023-24 from 1.18 in the previous financial year.
- **Increase in Income tax filers:** The increase in collections was accompanied by an increase in returns filed, income tax return filers and taxpayers.
- **Income tax return filers increased to 8.09 crore in FY24 from 7.4 crore in FY23.**
- **In the assessment year 2023-24 taxpayers increased to 10.4 crore (FY23) from 9.37 crore (FY22).**



TOP 5 STATES IN FY24 (share in total direct taxes)

Maharashtra	₹7.62 lakh cr (38.8%)
Karnataka	₹2.34 lakh cr (11.9%)
Delhi	₹2.03 lakh cr (10.4%)
Tamil Nadu	₹1.27 lakh cr (6.5%)
Gujarat	₹93,300 cr (4.8%)

Income tax return filers **8.09 crore** | Direct tax-GDP ratio **6.64%**



@RCREDDYIAS

For other months issues and updates
Join our telegram channel

15. National Agricultural Cooperative Marketing Federation of India Ltd

Context:

A week after Union Agriculture Minister Shivraj Singh Chouhan's decision to assign additional charge of Managing Director, National Agricultural Cooperative Marketing Federation of India Ltd (NAFED), to an Agriculture Ministry official, the Appointments Committee of the Cabinet (ACC) entrusted charge of the post to an official of the Ministry of Cooperation.

About National Agricultural Cooperative Marketing Federation of India Ltd (NAFED):

- NAFED is an apex organisation of marketing cooperatives for agricultural produce in India.
- It was founded on 2 October 1958 to promote the trade of agricultural produce and forest resources across the nation.
- It is registered under the Multi State Co-operative Societies Act under the Ministry of Agriculture and Farmers Welfare (MoA&FW).

16. Pradhan Mantri Bhartiya Janaushadhi Pariyojana

Context:

Pradhan Mantri Bhartiya Janaushadhi Pariyojana has reached a remarkable milestone by achieving sales worth one thousand crore rupees.

About PMBJP:

- It was launched in 2008 by the Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers, Government of India.
- It aims to provide quality generic medicines at affordable prices to all, particularly the underprivileged.
- The scheme is implemented by the Pharma & Medical Bureau of India (PMBI), a registered society.

Implementation: Dedicated outlets, known as Janaushadhi Kendras, are established to offer these medicines.

- These provide generic medicines at much lesser price. The potency of these medicines is the same as compared to expensive branded medicines available in the open market.

- As of June 30, 2024, there are 12,616 operational Janaushadhi Kendras across India.

17. Livestock Census

Context:

Recently, the Centre has launched the 21st livestock census, the five-yearly exercise of counting the country's livestock.

About Livestock Census:

Conducting Body

- Department:** Department of Animal Husbandry and Dairying
- Ministry:** Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.

Frequency: Every five years

Livestock Census has been conducted across the country every 5 years since 1919.

It covers all domesticated animals and their headcounts.

18. Land Port Authority of India

Context:

Recently, the union Home Minister and Minister of Cooperation inaugurated a new Passenger Terminal Building and a Maitri Dwar in Petrapole, West Bengal built at a cost of Rs. 487 crores by the Land Port Authority of India (LPAI).

About Land Port Authority of India:

- It is an authority constituted under the Land Ports Authority Act, 2010.**
- It was constituted for development and management of facilities for cross border movement of passengers and goods at designated points along the international borders of India.
- Mandate:** It is responsible for creating, upgrading, maintaining and managing border infrastructure in India. It manages several Integrated Check Posts (ICPs) all across Borders of India.

Composition

- Chairperson and Members are appointed by the Central Government.

- Tenure:** Both Chairperson and Members have tenure for a period of five years from the date on which he assumes office and till he attains the age of sixty years, whichever is earlier.
- Functions:** It is mandated to develop, sanitize and manage the facilities for cross border movement of passengers and goods at designated points along the international borders of India.

Nodal ministry: Ministry of Home Affairs.

Key points about Petrapole:

- Petrapole is the largest land port in South Asia and it is a vital gateway for trade and commerce between India and Bangladesh.**
- It is also the eighth largest international immigration port of India, and facilitates the movement of over 23.5 lakh passengers annually between India and Bangladesh.

19. Critical minerals

Context:

India remains highly dependent on imports for minerals critical to accelerating its energy transition, with a full reliance on shipping in lithium, cobalt and nickel, according to a report released by Institute for Energy economics and financial analysis.

About:

- Critical minerals are necessary for national security, economic growth, and renewable energy.
- The development of numerous industries, such as high-tech electronics, telecommunications, transportation, and defence, depends on these.
- The Expert Committee under the Ministry of Mines has identified a set of 30 critical minerals for India.
- These are Antimony, Beryllium, Bismuth, Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, Molybdenum, Niobium, Nickel, PGE, Phosphorous, Potash, REE, Rhenium, Silicon, Strontium, Tantalum, Tellurium, Tin, Titanium, Tungsten, Vanadium, Zirconium, Selenium, and Cadmium.**

20. PM MUDRA Yojana (PMMY)

Context:

Mudra Loan Limit Increased to Rs 20 Lakh Following Budget Announcement.

About PM MUDRA Yojana (PMMY):

- MUDRA stands for Micro Units Development & Refinance Agency Ltd, providing financial inclusiveness for marginalized groups under PMMY.
- It launched on April 8, 2015, to support non-corporate, non-farm small and micro enterprises with loans up to ₹10 lakh.
- Loan Limit Increase: The loan limit was raised to ₹20 lakh in the Union Budget 2024-25, effective from October 24, 2024.
- Enhanced loans under the new limit are covered by the Credit Guarantee Fund for Micro Units (CGFMU), strengthening the government's commitment to entrepreneurship.
- **Objective:** MUDRA aims to nurture India's young entrepreneurial talent by addressing gaps in the economic ecosystem.

Loan Categories:

- **Shishu: Loans up to ₹50,000.**
- Kishore: Loans above ₹50,000 and up to ₹5 lakh.
- Tarun: Loans above ₹5 lakh and up to ₹10 lakh.
- Tarun Plus: Loans between ₹10 lakh and ₹20 lakh.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

HIGH-IMPACT REVISION

UPSC CSE **PRELIMS** 2025

(GS + CSAT + TESTS Series)

- ❖ 100+ HIR Students Cleared CSE Prelims 2024
- ❖ 40+ Questions in CSE Prelims 2024 from HIR classes and Tests



GS by
Goutham sir

**Cleared 6 CSE Prelims,
3 IFoS Prelims**



CSAT by
Surya Teja sir

**(AIR-66, UPSC IFoS) IIT,
IIM, Optional Mathematics**

Course Start Date

**20th November
2024 >>>**

COURSEMODE- ONLINE/OFFLINE

WHATSAPP YOUR QUERIES TO



73867 15016



**Scan to Watch
Orientation Video (or)
For Course Details (or) To Enroll**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Current Affairs Test Series for CSE Prelims 2025 (offline/online)

Offline Test Locations : Himayat Nagar or Ashok Nagar Branch

13 Tests
(100 Qs Each), Total 1300 Qs
with Detailed Explanation PDFs

Covering Static Topics Based
on 13 months of CA :
(April 2024 to April 2025)

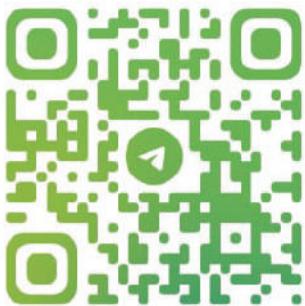
★ **Analysis by Faculty**
after each test

High - Quality MCQs

Covers Latest MCQ Patterns
based on PYQs

CURRENT AFFAIRS TEST SERIES SCHEDULE PLAN - 2024-25

S.No.	Test Name	Date of Test
1	CA April 2024	18-08-2024
2	CA May 2024	01-09-2024
3	CA June 2024	15-09-2024
4	CA July 2024	29-09-2024
5	CA August 2024	13-10-2024
6	CA September 2024	27-10-2024
7	CA October 2024	17-11-2024
8	CA November 2024	15-12-2024
9	CA December 2024	12-01-2025
10	CA January 2025	16-02-2025
11	CA February 2025	16-03-2025
12	CA March 2025	13-04-2025
13	CA April 2025-20 Days	04-05-2025



Scan to Join our Telegram
Channel for more updates



Scan for Schedule, Application
and Payment Form

WHATSAPP YOUR QUERIES TO



70756 52127

GEOGRAPHY

1. Kosi River

Context:

Several regions of Bihar are facing severe flooding due to the heavy release of water from the Kosi Barrage in Birpur, following intense rainfall.

About Kosi River:

- It is a transboundary river which flows through China, Nepal, and India.
- It is a prominent tributary of the Ganges.

Course:

- **Origin:** The river Kosi is formed by the confluence of three streams, namely the Sun Kosi, the Arun Kosi, and the Tamur Kosi, all of which have their origin in the Himalayan region of Nepal and Tibet.
- About 30 miles (48 km) north of the Indian-Nepalese frontier, the Kosi is joined by several major tributaries and breaks southward through the Siwalik Hills at the narrow Chatra Gorge.
- The Kosi River valley is bounded by steep margins that disconnect it from the Yarlung Zangbo River to the north, the Mahananda River to the east, the Gandaki to the west, and the Ganga to the south.
- Because of its great out flushing of debris, the Kosi has no permanent channel in its course through the great plain of northern India.
- It is well known for its **tendency to change course** generally in a westward direction. During the last 200 years, the river has shifted westwards for a distance of about 112 km and has laid waste large tracks of agricultural land.
- Kosi is known as the "sorrow of Bihar", as it has caused widespread human suffering in the past due to flooding and very frequent changes in course, when it flows from Nepal to Bihar.
- **Tributaries: It has seven major tributaries: Sun Koshi, Tama Koshi or Tamba Koshi, Dudh Koshi, Indravati, Likhu, Arun, and Tamore or Tamar.**

2. Mazzeh in Syria

Context:

The Syrian Observatory for Human Rights said the strikes targeted two vehicles in Damascus's upscale Mazzeh district.

About:

- **Mazzeh District is a well-known neighbourhood located in the western part of Damascus, Syria.**
- **Metula is a town located in northern Israel, near the Lebanese border.**
- **The Ogaden is a vast plateau located to the south and southeast of the Ethiopian Highlands, and is overwhelmingly inhabited by Somali people.**

3. Lake Prespa

Context:

Sub-heading (H2) According to experts, of the 450 hectares of Little Prespa Lake in Albania, at least 430 hectares have been transformed into swamps or dried up.

About Lake Prespa:

- It is one of the oldest tectonic lakes in Europe, and also the highest tectonic lake on the Balkan Peninsula.
- It lies at the junction of three major geological masses: a granite massif on the East, a karstic massif belonging to Galicica on the West, and the Suva Gora on the South.
- The region is famous for having rocks from the oldest Paleozoic form to sediments belonging to the young Neogene era.
- **It is made up of the Great Prespa Lake (Albania, Greece and the Republic of Macedonia) and Small Prespa Lake.**
- The majority of Little Prespa Lake, also known as Small Lake Prespa, sits in Greek territory, with just its southern tip crossing into Albania.

- Rising temperatures and increasingly mild winters with little snowfall and a scarcity of precipitation have battered the lake.

4. Regions in News

Context:

Switzerland and Italy have agreed to redraw a part of their national boundary, as melting Alpine glaciers shift the historically defined frontier.

Region in news	Located in
1. Zermatt region	Switzerland
2. Aosta valley	Italy
3. Kachin state	Myanmar
4. Tillaberi Region	Niger

About

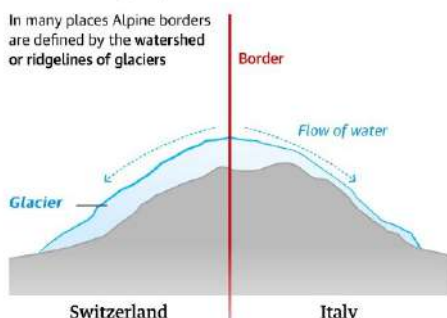
Switzerland and Italy have agreed to changes along the landmarks of Plateau Rosa, the Carrel refuge, and the Gobba di Rollin.

- In this area the Zermatt region of Switzerland meets the Aosta valley of Italy.**

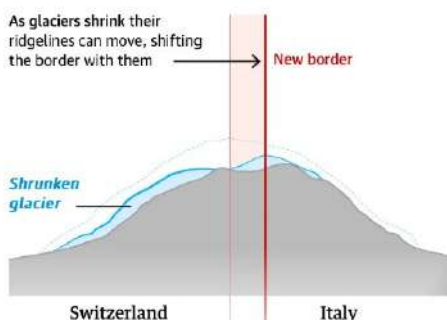
The region is home to several ski resorts that fuel the economy of both countries.

Redefining Alpine borders

In many places Alpine borders are defined by the watershed or ridgelines of glaciers



As glaciers shrink their ridgelines can move, shifting the border with them



5. Important Mountain Passes

Context:

Recently, Pilgrims had the first-ever view of the sacred Kailash peak from the Old Lipulekh pass inside the Indian territory.

Mountain Passes	Associated State
1. Debsa Pass	Himachal Pradesh
2. Lipulekh Pass	Uttarakhand
3. Goecha La	Sikkim
4. Sela pass	Arunachal Pradesh

About Lipulekh Pass:

- Location:** It is a high-altitude mountain pass located in the Kumaon region of Uttarakhand, near the trijunction of India, Nepal, and China.
- It links the Indian state of Uttarakhand with the Tibet region of China.**
- It lies at an altitude of approximately 5,334 meters (17,500 feet).
- Its elevation and strategic location make it a gateway to the higher reaches of the Himalayas.
- The Old Lipulekh pass is situated in the Vyas valley of Pithoragarh district in Uttarakhand and it carries immense religious significance.
- It is the first Indian border post opened for trade with China in 1992.
- This was followed by the opening of Shipki La Pass, Himachal Pradesh in 1994 and Nathu La Pass, Sikkim in 2006.**

Significance:

- Ancient Trade Route:** Lipulekh Pass has been utilized for centuries as a trade route, connecting the Indian subcontinent with the Tibetan plateau.
- Religious Significance:** The pass also has religious significance, being an integral part of the Kailash Mansarovar Yatra, a sacred pilgrimage for Hindus.
- Devotees undertake this arduous journey to reach Mount Kailash, considered the abode of Lord Shiva, and the nearby Mansarovar Lake.

6. Rapid intensification

Context:

Hurricane Milton went from barely hurricane strength to a dangerous Category 5 storm in less than 24 hours as it headed across the Gulf of Mexico towards Florida.

Rapid intensification (RI):

- Rapid Intensification (RI): Defined by the U.S. National Weather Service as an increase in a tropical cyclone's maximum sustained wind speed by at least 30 knots (~35 mph) within 24 hours.
- This can escalate a storm from Category 1 to Category 3 on the Saffir-Simpson scale in a short period.

Causes of Rapid Intensification:

Ocean Heat:

- Warm sea surface temperatures, especially when warm water extends into deeper layers, provide energy for storms to intensify.
- Example: In the Gulf of Mexico, sea surface temperatures were 30°C (86°F) during Hurricane Milton's intensification.

Wind Shear:

- Wind shear refers to changes in wind speed or direction with height.
- Low wind shear allows storms to organise and grow, while strong wind shear can disrupt them.

Salinity:

- Warmer sea surface temperatures and lower salinity increase moisture availability for storms, fuelling intensification.
- Lower salinity traps heat at the surface, enhancing storm strength.

Thunderstorm Activity:

- Bursts of intense thunderstorms within the cyclone can reorganise its circulation, accelerating intensification.

7. Sahara Desert

Context:

The Sahara Desert in southeastern Morocco has experienced a rare deluge of rainfall, transforming it into a blue lagoon.

About Sahara:

- Location: It stretches from the Red Sea in the east and the Mediterranean in the north to the Atlantic Ocean in the west, where the landscape gradually changes from desert to coastal plains.
- To the south it is bounded by the Sahel, a belt of semi-arid tropical savanna.
- It stretches across countries, including Algeria, Egypt, Libya, Mali, Mauritania, Morocco, Niger, Western Sahara, Sudan, Chad, and Tunisia.
- Mountains: Ahaggar Mountains, Tibesti Mountains, Air Mountains.
- Human Inhabitants: It is home to nomadic groups like the Tuareg and Berbers.
- Flora: Date palms, tamarisk, and acacia trees.
- Fauna: Gazelles, Addax (antelope), Saharan silver ant etc.

8. Godavari River

Context:

The Nashik Municipal Corporation (NMC) has planned to outsource 60 sanitary workers through a private agency to clean the Godavari River and its tributaries.

About Godavari River:

It is India's second-longest river after the Ganga and the third-largest in India, drains about 10% of India's total geographical area.



@RCREDDYIAS

For other months issues and updates
Join our telegram channel

It is also called 'Dakshina Ganga', which translates into South Ganges River.

Course:

- The origin of the Godavari River is in Brahmagiri Mountain at Trimbakeshwar in the Nashik district of Maharashtra.
- It runs for a length of about 1,465 kilometers.
- It finally empties itself into the Bay of Bengal at Narasapuram in West Godavari district, Andhra Pradesh.
- The river mainstem travels through three states: Maharashtra, Telangana, and Andhra Pradesh, while its basin includes Madhya Pradesh, Karnataka, parts of Chattisgarh, and Odisha.

It has a drainage basin of some 121,000 square miles (313,000 square km).

The basin is bounded by the Satmala hills, the Ajanta range, and the Mahadeo hills on the north, by the Eastern Ghats on the south and the east, and by the Western Ghats on the west.

The Godavari basin receives its maximum rainfall during the Southwest monsoon.

Tributaries: The principal tributaries of the river are the Pravara, the Purna, the Manjra, the Penganga, the Wardha, the Wainganga, the Pranhita (combined flow of Wainganga, Penganga, Wardha), the Indravati, the Maner, and the Sabri.

9. Jordan Valley

Context:

The Shiite militia group, The Islamic Resistance in Iraq, recently claimed responsibility for conducting two drone strikes on Israeli sites in the Jordan Valley.



@RCREDDYIAS

For other months issues and updates
Join our telegram channel



About Jordan Valley:

- It is a rift valley in the Middle East in southwestern Asia.
- A segment of the East African Rift System, the Jordan Valley is about 105 kilometres long and stretches from the Sea of Galilee in the north to the Dead Sea in the south.
- It is located along the Jordan River and along Jordan's western border with Israel and the West Bank.
- It comprises over a fifth of the territory of the West Bank.
- It drops more than 1,400 feet (430 metres) below sea level at the Dead Sea, the lowest natural point on Earth's surface.
- Its width extends about 6 miles (10 km), though it becomes narrower in some locations.
- Though the valley is sparsely populated, some communities exist, most notably the city of Jericho in the West Bank.
- The Jordan Valley holds immense religious importance for Christianity, Judaism, and Islam.

10. Location of Algeria

Context:

President Droupadi Murmu is scheduled to attend various programmes in Algeria.

**About Algeria:**

- Algeria, officially The People's Democratic Republic of Algeria
- It is a country in the Maghreb region of North Africa on the Mediterranean coast.
- It is bordered in the northeast by Tunisia, in the east by Libya and in the west by Morocco, in the southwest by Western Sahara, Mauritania, and Mali, in the southeast by Niger.

11. Nile River**Context:**

A regional partnership of 10 countries says an agreement on the equitable use of water resources from the Nile River basin has come into force despite the notable opposition of Egypt.

- The legal status of the "cooperative framework Agreement (CFA)" was formally confirmed by the African Union after South Sudan joined the treaty, the Nile Basin Initiative.
- The CFA aims to rectify historical imbalances in access to the Nile's waters and ensure that all Nile Basin countries—whether upstream or downstream—can benefit from this shared resource.

About Nile River:

- The Nile River is considered as one of the longest rivers in the world. It rises south of the Equator and flows northward through northeastern Africa to drain into the Mediterranean Sea. It has a length of about 6,650 kilometres (4,132 miles).

- The Nile basin is huge and includes parts of 11 countries. These countries are Uganda, Sudan, South Sudan, Egypt, Rwanda, Burundi, Tanzania, Kenya, Ethiopia, Democratic Republic of the Congo, and Kenya.
- The Nile is formed by three principal streams: the Blue Nile and the Atbara, which flow from the highlands of Ethiopia, and the White Nile, the headstreams of which flow into Lakes Victoria and Albert.

12. Mount Adams, Washington's largest volcano**Context:**

Mount Adams, Washington's largest volcano, has recently shown a surge in seismic activity after remaining largely dormant for thousands of years.

About:

- Mount Adams is a stratovolcano located in Washington State, United States. At 12,277 feet (3,742 meters) high and 18 miles (29 kilometres) wide, Mount Adams is the largest active volcano in Washington, surpassing Mount Rainier — the state's highest peak — by volume.
- Mount Adams lies in the middle of the Mount Adams volcanic field—a 1,250 sq.km area comprising at least 120, mostly basaltic volcanoes that form spatter and scoria cones, shield volcanoes, and some extensive lava flows.
- The most recent eruption at the site occurred sometime between 3,800 and 7,600 years ago, when humanity was still in the Stone Age.

13. Swell Waves**Context:**

Recently, the Indian National Centre for Ocean Information Services (INCOIS) in Hyderabad, has issued extensive advisories for swell waves for Andaman and Nicobar and Lakshadweep islands as well as parts of coastal areas.

About Swell Waves:

- A swell is the formation of long wavelength waves on the surface of the seas. These are composed of a series of surface gravity waves.

- Swell waves organise themselves into groups of similar heights and periods, and then travel long distances without much change.

Formation:

- **They occur not due to the local winds, but rather due to distant storms like hurricanes, or even long periods of fierce gale winds.**
- During such storms, huge energy transfer takes place from the air into the water, leading to the formation of very high waves. Such waves can travel thousands of kilometres from the storm centre until they strike shore.

Features:

- Swells have a narrower range of frequencies and directions than locally generated wind waves, because swell waves have dispersed from their generation area, have dissipated and therefore lost an amount of randomness, taking on a more defined shape and direction.
- **These waves can propagate in directions that differ from the direction of the wind, in contrast to a wind sea.**
- Their wavelengths may rarely exceed more than 150 m. Swell wavelength, also, varies from event to event. Occasionally, swells which are longer than 700 m occur as a result of the most severe storms.
- It occurs without precursors or any kind of local wind activity and as a result.

In India early warning systems like the Swell Surge Forecast System launched by the Indian National Centre for Ocean Information Services (INCOIS) in 2020 — gives forewarning seven days in advance.

14. Bushveld Igneous Complex**Context:**

Researchers recently discovered pockets of living microbes in a 2-billion-year-old rock from the Bushveld Igneous Complex in South Africa, providing insights into early life on Earth and potentially aiding the search for life on Mars.

About Bushveld Igneous Complex (BIC):

- It is the largest layered igneous intrusion within the Earth's crust.
- **It is located in northern South Africa, exposed at the edge of the Transvaal Basin.**
- It covers a pear-shaped area of over 66,000 sq.km.
- The complex varies in thickness, sometimes reaching 9 kilometres (5.6 mi) thick.
- It is renowned for containing some of the richest ore deposits.
- The complex contains the world's largest reserves of platinum-group metals (PGMs), i.e., platinum, palladium, osmium, iridium, rhodium, and ruthenium, along with vast quantities of iron, tin, chromium, titanium, and vanadium.
- BIC is divided into an eastern and western lobe, with a further northern extension. All three sections of the system were formed around the same time, about 2 billion years ago.

Formation:

- **Vast quantities of molten rock from the Earth's mantle were brought to the surface through long vertical cracks in the Earth's crust, creating the geological intrusion known as the BIC.**
- The effects of these injections of molten rock over time, combined with the crystallisation of different minerals at different temperatures, resulted in the formation of a structure rather like a layered cake consisting of distinct rock strata including three PGM-bearing layers, referred to as reefs.

15. Azores Islands**Context:**

The regional assembly of Portugal's Azores Islands approved the creation of the largest protected marine area in the North Atlantic to reach international conservation goals.

About:

- It aims to achieve the goals set by the United Nations of protecting 30% of the Earth's land and sea by 2030 under a global pact adopted last year.

- The network ensures the preservation of underwater mountain ranges and vulnerable marine ecosystems, including deep-sea corals, hydrothermal vents and marine species.

Azores Islands

- **The nine-island archipelago is an autonomous region roughly 1,500 km (932 miles) west of mainland Portugal lies in the North Atlantic Ocean and home to unique marine biodiversity.**
- The Azores are divided into three widely separated island groups: the eastern group, the central group, and the northwestern group.
- Their unstable geologic nature is indicated by numerous earthquakes and volcanic eruptions.

16. Malawi

Context:

In the final leg of her three-nation visit, President Droupadi Murmu reached Malawi marking the first-ever visit by a President of India to Malawi.

About Malawi:

- **It is a landlocked south-east African country bordered by Zambia to the west, Tanzania to the north and northeast, and Mozambique to the east, south and southwest.**
- Lake Malawi (also called Lake Nyasa), the third largest and second deepest lake in Africa, and the ninth largest in the world, was declared a UNESCO World Heritage Site in 1984. It accounts for more than one-fifth of the country's total area.
- The East African Rift Valley runs through the country from north to south. The capital, and largest city is Lilongwe.
- **The name Malawi comes from the Maravi, an old name for the Chewa people who inhabit the area. The country is nicknamed "The Warm Heart of Africa" because of the friendliness of its people.**
- **Political independence:** The country achieved full independence, as Malawi, in 1964 from the British.

- **Economy:** The country's economy is agro-based with agriculture contributing 37% of the national GDP and employing 80% of the total workforce.



17. Kameng River

Context:

An Indian Air Force (IAF) havildar and his 14-year-old son were swept away by strong currents in the Kameng River recently.

About Kameng River:

- It is one of the chief tributaries of the Brahmaputra River.
- It flows in Arunachal Pradesh and Assam.
- It is referred to as the "Jia Bharali" in Assam's higher reaches. The river is also known as the Bhareli in some areas.

Course:

- **Origin:** The river originates in the eastern Himalayan Mountains, in the Tawang district from the glacial lake below snowcapped Gori Chen Mountain at an elevation of 6,300 metres or 20,669 ft on the India-Tibet border in South Tibet.
- Then it flows through Bhalukpong Circle of West Kameng District, Arunachal Pradesh, and Sonitpur District of Assam, India.
- **It forms the boundary between East and West Kameng Districts and also the boundary between Sessa and Eaglenest sanctuaries in the westside and Pakke Tiger Reserve east side.**

- As it reaches its lower stretches, the river transforms into a braided channel and merges with the Brahmaputra at Tezpur, just east of the Kolia Bhomora Setu bridge.

The drainage basin of the Kameng River is about 11,843 sq.km.

Major Tributaries: Tippi River, Tenga River, Bichom River, and Dirang Chu River.

It is home to several ethnic communities, including the Monpa, Sherdukpen, and Aka tribes.

18. Marine Heat Wave

Context:

Researchers found that marine heat waves (MHWs) deep in oceans may be “significantly under-reported” and caused by ocean currents.

About Marine Heat Wave:

- A marine heat wave is an extreme weather event.
- It occurs when the surface temperature of a particular region of the sea rises to 3 or 4 degrees Celsius above the average temperature for at least five days.**
- MHWs can last for weeks, months or even years, according to the US government’s agency National Oceanic and Atmospheric Administration (NOAA).

Impacts

- MHWs are prolonged temperature events that can cause severe damage to marine habitats, such as impacts to coral reefs and species displacement.
- These events are becoming more frequent due to global warming, with notable occurrences off Australia's East Coast and Tasmania, as well as the northeast Pacific coast and North Atlantic.
- Higher ocean temperatures, which are associated with MHWs, can make storms like hurricanes and tropical cyclones stronger.**
- MHWs also fuel the growth of invasive alien species, which can be destructive to marine food webs.**

- When storms travel across hot oceans, they gather more water vapour and heat.
- This results in more powerful winds, heavier rainfall and more flooding when storms reach the land — meaning heightened devastation for humans.

19. Black Sea

Context:

Russia’s increased attacks on the Black Sea ports in Ukraine are delaying vital aid reaching Palestinians and stopping crucial grain supplies from being delivered to the global south, the British Prime Minister said recently.



Black Sea:

- It is a large inland sea located at the southeastern extremity of Europe.
- It is one of the marginal seas of the Atlantic Ocean.
- It is bound to the west by the Balkan Peninsula in Southeastern Europe, to the east by the Caucasus, to the north by the East European Plains, and to the south by Anatolia of Western Asia.

Bordering countries:

- The sea is bordered to the north by Russia and Ukraine, Turkey to the south, Bulgaria to the west, and Georgia to the east.**
- Romania also has an opening to the Black Sea.
- The Crimean Peninsula extends into it from the north.

- Russia has the longest coastline on the sea (2,300 km), followed by Turkey (1,329 km) and Ukraine (1,282 km).
- **It is connected with the Aegean Sea (an arm of the Mediterranean Sea) through the Bosphorus Strait, the Sea of Marmara, and the Dardanelles Strait, and with the Sea of Azov by the Kerch Strait.**

20. Caspian Sea

Context:

The Caspian Sea has been shrinking since the mid-1990s, but the rate at which it's disappearing has sped up since 2005.

About Caspian Sea:

- It is the world's largest inland body of water, covering a total surface area of about 386,400 sq.km.
- **It is located between Asia and Europe.**
- It lies to the east of the Caucasus Mountains and to the west of the vast steppe of Central Asia.
- **Bordering countries: It is bordered by Russia and Azerbaijan on the west, Kazakhstan and Turkmenistan on the north and east, and Iran on the south.**
- The sea was named for the Kaspi, ancient peoples who once lived on its western shores.

Formation:

- **Going by the definition of a sea, the Caspian Sea is a lake and not a sea, as it is an enclosed water body without any direct outlet to the ocean.**
- **However, 5.5 million years ago, it was part of the ancient Parathethys Sea (an ancient sea in the Tethys Ocean) and got landlocked as a result of tectonic uplift and sea-level fall.**
- Hence, the seafloor of the Caspian Sea is composed of oceanic basalt and not continental granite.

The composition of the water of the Caspian Sea also varies from almost fresh in the northern parts of the lake to saltier southwards.

The mean salinity of the Caspian Sea is now about one-third that of the oceans.

Three major rivers—the Volga, the Ural, and the Terek—empty into the Caspian from the north.

Baku, the capital of Azerbaijan, is the largest city on the Caspian. Another important city along the Caspian is Iran's Nowshahr.

The sea is also known for its abundance of energy resources (oil and natural gas reserves in offshore fields and onshore on the coast of the sea).

It is the source of most of the world's caviar.

21. Pong Dam

Context:

Even after five decades have passed since thousands of families were uprooted to make way for the construction of Pong Dam, the cases of 6,736 families who await rehabilitation are still pending.

Pong Dam:

- **The Pong Dam, also known as the Beas Dam, is an earth-fill embankment dam constructed on the river Beas in the wet land of Shivalik hills in the Kangra district of Himachal Pradesh.**
- The purpose of the dam is water storage for irrigation and hydroelectric power generation.
- The raised water level thus invariably created an artificial lake called the Maharana Pratap Sagar, after the great ruler of Mewar.

Mettur Dam:

- **It is one of the largest dams in India, built in 1934.**
- **Location: It is located at Mettur, District Salem in Tamil Nadu.**
- **It is constructed in a gorge, where the Kaveri River enters the plains.**

Features:

- It is a masonry gravity dam.
- The length of the dam is 1700 m with a maximum level of 120 feet and a capacity of 93.4 tmc ft.
- The dam creates Stanley Reservoir.

Indira Sagar Dam

- The Indira Sagar Dam is the largest dam in India, in terms of volume of water stored in the reservoir. It is located on the Narmada River at the town of Narmada Nagar, Punasa in the Khandwa district of Madhya Pradesh.
- The construction of the main dam started in 1992. The downstream projects of ISP are Omkareshwar, Maheshwar, and Sardar Sarovar Project.

Tehri Dam

- The Tehri Dam is a multi-purpose rock and earth-fill embankment dam on the Bhagirathi River in New Tehri, Tehri Garhwal district in Uttarakhand, India.
- With a height of 260.5 m (855 ft), it is the tallest dam in India and the 13th-tallest dam in the world. It is the primary dam of THDC India Ltd. and the Tehri hydroelectric complex. The dam begun construction in 1978 and was completed in 2006. It withholds a reservoir for irrigation, municipal water supply and the generation of 1,000 megawatts (1,300,000 hp) of hydroelectricity.

22. Tugunbulak and Tashbulak**Context:**

Archaeologists have found the remains of two medieval cities, Tugunbulak and Tashbulak, in the mountains of eastern Uzbekistan on the Silk Route.

About:

- Traditionally, the Silk Route was associated with plains and river valleys, believed to be the most accessible paths for trade.

- However, these new cities in elevated parts of Uzbekistan suggest that traders also traversed more mountainous regions.

**23. Coking Coal****Context:**

India's coking coal imports for the first six months of the current fiscal (April – September) were at a six-year-high at 29.6 million tonnes (mt) with shipments from Russia witnessing a substantial rise of over 200 per cent during this period.

About Coking Coal:

Metallurgical coal, also known as met and coking coal, is a naturally occurring sedimentary rock found within the earth's crust.

It typically contains more carbon, less ash, and less moisture than thermal coal, which is used for electricity generation.

It is an essential ingredient in the production of steel, making it one of the most widely used building materials on earth.

It is a bituminous coal with a suitable quality that allows the production of metallurgical coke, or simply named coke.

- Coke is the main product of the high-temperature carbonisation of coking coal.

- It is an essential input material in steelmaking as it is used to produce pig iron in blast furnaces, acting as the reducing agent of iron ore and as the support of the furnace charge.
- It takes around 770 kilograms of coal to make one ton of steel, with approximately 70 percent of global steel produced in basic oxygen blast furnaces.

The largest producers of coking coal were China (676 million tons in 2022-62%), Australia (169 million tons in 2022-15%), Russia (96 million tons in 2022-9%), USA (55 million tons-5%), and Canada (34 million tons-3%).

24. Gulf of Oman

Context:

Saudi Arabia and Iran have recently conducted joint naval exercises in the Sea of Oman, as relations strengthen between the long-time regional rivals.

About Gulf of Oman:

- The Gulf of Oman, also known as the Gulf of Makran, is the western extension of the Arabian Sea and lies in the Middle East.
- **It forms the only entrance to the Persian Gulf from the Indian Ocean.**
- **The Gulf connects the Arabian Sea with the Strait of Hormuz, which then empties into the Persian Gulf.**
- It was part of an ancient trade route linking the Arabian Sea to the Persian Gulf, which enabled maritime trade between civilisations of the Indian Subcontinent. The Middle East and the Mediterranean.
- **Bordering Countries: It is bordered by Pakistan and Iran in the north; by the United Arab Emirates (UAE) in the west; and by Oman in the south.**
- It is about 320 km wide at its widest point between Cape al-Hadd in Oman and the Gwadar Bay on the Iran-Pakistan border. It narrows to 35 miles (56 km) at the Strait of Hormuz.

- **The gulf is relatively shallow because of its origin as a fissure in the mountain spine now divided between Iran and Oman.**
- Some of the significant islands that are located in the Gulf of Oman include Sheytan Island, Al Fahal Island, Dimaniyat Islands, and the Sawadi Islands.
- The major international shipping ports that are situated in the Gulf of Oman include Port Sultan Qaboos Muttrah in Muscat, Oman; Chabahar Port in Iran; the Port of Fujairah; and Khor Fakkan Container Terminal in the UAE.
- Roughly one-third of the world's oil is exported via the Strait of Hormuz and the Gulf of Oman.

25. Triton Island

Context:

Recent satellite imagery reveals a significant military buildup by China on Triton Island, the closest landmass in the disputed Paracels archipelago to Vietnam.

Triton Island

- **Location: Triton Island is the southernmost island in the Paracel Islands chain in the South China Sea, situated closer to Vietnam than to other parts of China.**
- **Strategic Importance:** Triton Island is of strategic importance due to its proximity to vital shipping lanes, fisheries, and potential underwater energy reserves.
- **Conflicting Claims:** The Paracel Islands, including Triton Island, are claimed by China, Vietnam, and Taiwan.
- China asserts its claim based on the Nine-Dash Line, a demarcation on maps covering most of the South China Sea.



26. Dhamra port in Odisha

Context:

The severe cyclonic Dana was expected to make landfall close to Bhitarkanika National Park and Dhamra port in Odisha.

About:

- Dhamra river is a joint stream formed by the confluence of Brahmani and Baitarani rivers.
- It empties into the Bay of Bengal.
- Dhamra Port is located to the north of its mouth.
- Wheeler Island, a DRDO missile launch centre is located off the mouth of the Dhamra in the Bay of Bengal.
- The Bhitarkanika wildlife sanctuary, famous for its estuarine crocodiles, lies on the Dhamra estuary.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

HIGH-IMPACT REVISION

UPSC CSE PRELIMS 2025

(GS + CSAT + TESTS Series)

❖ 100+ HIR Students Cleared CSE Prelims 2024

❖ 40+ Questions in CSE Prelims 2024 from HIR classes and Tests

Course Plan

General Studies (GS)

3 components for effective revision:

Strengthen your Knowledge

- Cover High Impact areas of GS (100+ hrs)
- Memorization Techniques
- Important Current Affairs (25+ hrs)

Exam Orientation

- 25+ MCQ solving techniques for GS
- PYQ Analysis of last 15 years
- Learn to logically handle a difficult Prelims paper

Practice

- 12 GS Sectional Tests
- 1 GS Grand Test
- 5 Sectional (GS) + 3 Grand Tests (GS + CSAT) after HIR course

Course Start Date

20th November
2024 >>>

COURSEMODE- ONLINE/OFFLINE

WHATSAPP YOUR QUERIES TO



73867 15016

CSAT

3 components for effective revision:

Strengthen your Knowledge

- Cover most topics and themes (40+ hrs)
- Tools & tricks for speed and accuracy
- learn to avoid commonly made mistakes

Get Exam Orientation:

- Developing Strategy based on difficulty of the paper and candidate's strengths
- Questions and trend Analysis from PYQs
- Developing a CSAT mindset of logic and reasoning

Practice

- 4 CSAT Sectional Tests
- 1 CSAT Grand Test
- Frameworks for Test Performance analysis, revision and practice



Scan to Watch
Orientation Video (or)
For Course Details (or) To Enroll



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Current Affairs Test Series for CSE Prelims 2025 (offline/online)

Offline Test Locations : Himayat Nagar or Ashok Nagar Branch

13 Tests
(100 Qs Each), Total 1300 Qs
with Detailed Explanation PDFs

Covering Static Topics Based
on 13 months of CA :
(April 2024 to April 2025)

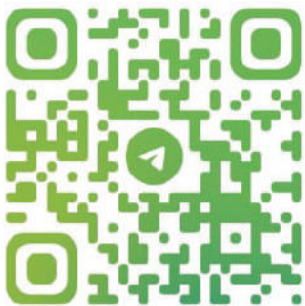
★ **Analysis by Faculty**
after each test

High - Quality MCQs

Covers Latest MCQ Patterns
based on PYQs

CURRENT AFFAIRS TEST SERIES SCHEDULE PLAN - 2024-25

S.No.	Test Name	Date of Test
1	CA April 2024	18-08-2024
2	CA May 2024	01-09-2024
3	CA June 2024	15-09-2024
4	CA July 2024	29-09-2024
5	CA August 2024	13-10-2024
6	CA September 2024	27-10-2024
7	CA October 2024	17-11-2024
8	CA November 2024	15-12-2024
9	CA December 2024	12-01-2025
10	CA January 2025	16-02-2025
11	CA February 2025	16-03-2025
12	CA March 2025	13-04-2025
13	CA April 2025-20 Days	04-05-2025



Scan to Join our Telegram
Channel for more updates



Scan for Schedule, Application
and Payment Form

WHATSAPP YOUR QUERIES TO



70756 52127

ENVIRONMENT

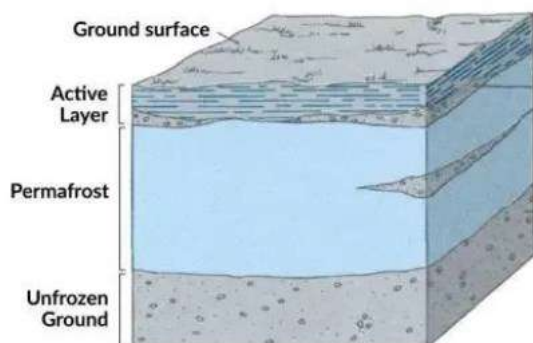
1. Permafrost

Context:

Glaciologists currently based at Himadri research station in Norway are digging deep to identify the probability of disasters due to permafrost collapse.

About:

- Permafrost is any ground that remains completely frozen—32°F (0°C) or colder—for at least two years straight.
- These permanently frozen grounds are most common in regions with high mountains and in Earth's higher latitudes—near the North and South Poles.
- Almost a quarter of the land area in the Northern Hemisphere has permafrost underneath.
- Permafrost is made of a combination of soil, rocks and sand that are held together by ice.
- The soil and ice in permafrost stay frozen all year long.
- As Earth's climate warms, the permafrost is thawing. That means the ice inside the permafrost melts, leaving behind water and soil.
- Because of the dangers, scientists are closely monitoring Earth's permafrost.



2. Honey Badger

Context:

Recently, for the first time a honey badger has been captured on camera in the Terai East Forest Division (TEFD) of Uttarakhand.

About Honey Badger:

- It is also known as the Ratel, and is related to skunks, otters, ferrets, and other badgers.
- Honey badgers are omnivorous and nocturnal mammals that belong to the weasel family.
- These creatures are known for their powerful, curved claws, which they use to dig burrows for shelter. Their diet is diverse, consisting of small animals, fruit and honey.
- They are known for their solitary nature and their ability to twist and turn to escape predators.
- **Distribution:** They are found in parts of Africa and Asia.
- Also, they have been recorded in a few other locations in India, such as Bannerghatta National Park in Karnataka, Chilika Lagoon in Odisha and Tadoba-Andhari Tiger Reserve in Maharashtra.

Ecological Significance:

- They play a vital role in maintaining ecological balance by preying on smaller animals and pests, helping to control populations and protect crops.
- They contribute to nutrient cycling by enriching the soil through their diet and waste.
- They are important indicators of ecosystem health, ensuring a diverse and thriving environment for other species.

Conservation status

- IUCN: Least Concern
- Wildlife (Protection) Act of 1972: Schedule I.

3. National Biodiversity Strategy and Action Plans Tracker

Context:

National Biodiversity Strategy and Action Plans Tracker revealed that only 10% of nations fulfil their biodiversity commitments ahead of COP16.

About National Biodiversity Strategy and Action Plans Tracker:

- *It is a new tool developed by World Wildlife Fund for Nature (WWF), monitoring the progress of countries in developing their NBSAPs that align with the goals of the Kunming-Montreal Global Biodiversity Framework (GBF).*
- **Aim:** It aims to make biodiversity policies accessible to all stakeholders, ensuring transparency and accountability as countries prepare for COP16.
- NBSAPs are crucial blueprints for countries to outline their strategies to tackle biodiversity loss and meet international targets. These plans are aimed at ensuring that nations can mobilise action and funding to help restore ecosystems and safeguard wildlife.

Key facts about Kunming-Montreal Global Biodiversity Framework:

- It was adopted during the 15th meeting of the Conference of the Parties, or COP15, to the UN Convention on Biological Diversity in December 2022.
- It aims to support the achievement of sustainable development goals and build on previous strategic plans.
- It sets a bold path towards global harmony with nature by 2050.
- In adopting the GBF, all parties' committees set national targets to implement it.

Goals and targets:

- The GBF consists of 23 targets (set for 2030) and four global goals (set for 2050) to preserve biodiversity for current and future generations.
- The targets address reducing threats to biodiversity, meeting people's needs through sustainable use and benefit-sharing, and tools and solutions for implementation and mainstreaming.

4. European Union Deforestation Regulation

Context:

Giving relief to exporters of certain products, the European Commission has proposed to extend the implementation of its deforestation regulation by one year.

About European Union Deforestation Regulation (EUDR):

- It was scheduled to commence on 30 December 2024.
- It has been introduced to limit the EU market's impact on global deforestation/forest degradation and biodiversity loss, promote deforestation-free supply chains, reduce the EU's contribution to greenhouse gases (GHG) emissions, and protect human rights and the rights of indigenous people.
- Under the EUDR, certain products for export to the European Union (EU) will have to meet new rules relating to the land on which they were produced.

Commodities targeted by the EUDR are:

- Cattle (including beef)
- Cocoa
- Wood
- Coffee
- Oil Palm
- Rubber
- Soya

It also extends to a range of relevant products derived from these commodities, such as leather, chocolate, and paper.

Exporters will need to prove that these goods/products do not originate from land where forests haven't been cut since Jan. 1, 2021, regardless of whether the deforestation was legal in the countries of origin.

They will need to provide clear evidence to EU operators and EU traders to support this.

Small businesses further down the supply chain are subject to the same obligations and retain legal responsibility if regulations are violated.

But they are not liable for due diligence for parts of their products that were already subject to review.

Failure to comply can result in financial penalties and restricted access to the EU market.

Country Benchmarking:

- The EUDR will also have a country benchmarking system. This will determine the deforestation and degradation risk of each nation.
- Nations will be classed on a 3-tier system, from low-risk to high-risk.
- A nation's risk classification will establish the level of scrutiny by the EU. This includes the proportion of consignments inspected by the relevant authorities.

5. EnviStats India 2024

Context:

The Ministry of Statistics and Programme Implementation (MoSPI) compiled and released the 7th consecutive issue of the publication "EnviStats India 2024: Environment Accounts".

About EnviStats India 2024:

- It is compiled in accordance with the SEEA (System of Environmental- Economic Accounting)
- The current publication which is seventh in series covers Energy Accounts, Ocean Accounts, Soil Nutrient Index and Biodiversity.

Highlights EnviStats India 2024:

- **There has been around 72% increase in the number and around 16% increase in area for the Total Protected Area during the period 2000 to 2023.**
- **The coverage of Mangroves, which is an important sub ecosystem of the ocean ecosystem, has increased around 8% over the years 2013 to 2021.**

- The report also includes the taxonomic faunal and floral diversity of India, the status of the Leopard and Snow leopard, information on Genetic Conservation using data from the stakeholder Ministries/agencies.
- Also, the Species Richness of International Union for Conservation of Nature (IUCN) Red List of Threatened species by taxonomic groups has been compiled using spatial datasets from IUCN.

What is the System of Environmental- Economic Accounting?

- It is an agreed international statistical standard for describing the interaction between the economy and the environment, as well as the stocks and changes in stocks of environmental assets
- It aims to integrate perspectives from other disciplines and, where relevant, provide an improved body of information for environmental economic accounts.

There are two sides of SEEA—the SEEA-Central Framework (SEEA-CF) and the SEEA-Ecosystem Accounting (SEEA-EA):

- **SEEA-Central Framework:** It focuses on the individual components of the environment that provide material and space for all economic activities.
- **SEEA-Ecosystem Accounting:** It is a complementary framework of SEEA-CF constitutes an integrated and comprehensive statistical framework for organising data about habitats and landscapes, measuring the ecosystem services, tracking changes in the ecosystem assets, and linking this information to economic and other human activity.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**

6. Black Carbon

Context:

India's potent black carbon emissions from kerosene lamps make up 10% of total residential emissions: Study

About Black Carbon:

- Black Carbon (BC) is a short-lived pollutant formed through incomplete combustion of fossil fuels, biofuels, and biomass.
- Unlike CO₂, it has a short atmospheric lifetime (days to weeks), but its warming potential is much higher.
- It causes respiratory and cardiovascular diseases due to fine particulate matter (PM_{2.5}).
- The Climate and Clean Air Coalition (CCAC), founded in 2012, is a voluntary partnership convened within the United Nations Environment Programme (UNEP). Its primary goal is to reduce emissions of short-lived climate pollutants (SLCPs), which are potent contributors to global warming and air pollution.

7. Eco-Sensitive Zones

Context:

Many leaders of both the ruling and opposition parties in Gujarat have protested against the proposed Eco-Sensitive Zones around Gir forest.

About Eco-Sensitive Zones:

- As per the National Wildlife Action Plan (2002-2016), issued by the Union Ministry of Environment, Forest and Climate Change, land within 10 km of the boundaries of national parks and wildlife sanctuaries is to be notified as eco-fragile zones or Eco-Sensitive Zones (ESZ).
- While the 10-km rule is implemented as a general principle, the extent of its application can vary.
- Areas beyond 10-km can also be notified by the Union government as ESZs, if they hold larger ecologically important "sensitive corridors".
- It acts as buffer zones around Protected Areas — national parks, wildlife sanctuaries, tiger reserves, etc. — so that the wildlife has a transition zone around them.

Significance of ESZ:

- Eco-Sensitive Zones are created as "shock absorbers" for the protected areas, to minimize the negative impact on the "fragile ecosystems" by certain human activities taking place nearby.
- These areas are meant to act as a transition zone from areas requiring higher protection to those requiring lesser protection.
- Permitted activities in ESZ: Ongoing agricultural or horticultural practices, rainwater harvesting, organic farming, among others.
- No commercial mining, stone quarrying, large hydroelectric projects, polluting industries, brick kilns, etc. are allowed in ESZ.
- Commercial establishment of hotels, resorts, small-scale non-polluting industries and the construction of civic amenities are regulated.

What makes Gir unique?

- Gir PA includes the Gir National Park, the Gir Wildlife Sanctuary, the Paniya Wildlife Sanctuary and the Mitiyala Wildlife Sanctuary, spread across the Junagadh, Amreli and Gir Somnath districts in Gujarat's Saurashtra region in its south.

8. State of Global Water Resource Report

Context:

The new annual State of the Global Climate report, published recently by the World Meteorological Organisation (WMO), found that 2023 was the hottest year on record.

About State of Global Water Resource Report:

- It is an annual report published by the World Meteorological Organization (WMO) since 2021.
- It offers a comprehensive and consistent overview of water resources worldwide.
- It is based on input from dozens of National Meteorological and Hydrological Services and other organizations and experts.

Highlights of the 2023 Report:

- The year 2023 marked the driest year for global rivers in 33 years.
- The last five consecutive years have recorded widespread below-normal conditions for river flows, with reservoir inflows following a similar pattern.
- It notes that 2023 was also the second consecutive year in which all regions in the world with glaciers reported ice loss, the year in which “glaciers suffered the largest mass loss ever registered in 50 years.
- More than 600 gigatons (Gt) of water were lost across all glaciated regions of the world.
- The report says 3.6 billion people currently face inadequate access to water at least one month a year, and this is expected to increase to more than 5 billion by 2050.
- The world is far off-track with Sustainable Development Goal 6 on water and sanitation.

9. Living Planet Report (LPR), 2024**Context:**

The recently released LPR, 2024 report said that significant ‘collective effort’ will be required over the next five years to tackle the dual climate and nature crises.

Living Planet Report (LPR), 2024:

- It is a biennial compilation of the threats faced to wildlife.
- **Released by - World Wide Fund (WWF) in collaboration with Zoological Society of London (ZSL).**
- It is provided by includes almost 35,000 population trends of 5,495 species from 1970-2020.
- Findings – There has been a 73% decline in the average size of monitored wildlife populations from 1970-2020.

The sharpest decline is reported in

- Freshwater ecosystems at 85%, followed by
- Terrestrial ecosystems at 69% and
- Marine ecosystems at 56%.

At a regional level, the fastest declines have been seen in Latin America and the Caribbean a concerning 95% decline followed by Africa (76%) and the Asia and the Pacific (60%).

Declines have been less in Europe and Central Asia (35%) and North America (39%).

In India - The report noted the decline in 3 vulture species in India.

- Bombay Natural History Society (BNHS) highlighted white-rumped vulture population has dropped by 67%, Indian vulture by 48%, and slender-billed vulture by 89% compared to their populations in 2002.

10. Plant cover across the Antarctic Peninsula**Context:**

Plant cover across the Antarctic Peninsula, a long, mountainous extension of Antarctica that points north towards South America, has increased more than 10 times over the past few decades due to rising temperatures, a new study says.

Factors contributing to the vegetation in the Antarctic:

Decrease in sea ice extent: The reduction in sea ice has led to warmer, wetter conditions in the Antarctic Peninsula, which favours the growth of vegetation.

- Warmer open seas may increase moisture availability, promoting plant life, especially mosses and lichens. Therefore, this factor contributes to the increase in vegetation.

Increase in air and ground temperatures: Rising temperatures in the Antarctic Peninsula, warming five times faster than the global average, are a key driver of vegetation growth.

- Higher temperatures create a more favourable environment for plant life to spread in regions that were previously too cold.

Enhanced soil fertility due to warmer conditions: The increase in plant life, particularly mosses, leads to the accumulation of organic matter, which helps in soil formation.

- This soil formation, though still in its early stages, provides a better environment for plant growth, supporting further greening.

11. Ganges River Dolphin

Context:

Recently an 8,000-kilometer aquatic survey was carried out by the Wildlife Institute of India (WII) for the assessment of dolphin populations.

Ganges River Dolphin (Platanista Gangetica):

- **Characteristics:** Ganges River Dolphin is essentially blind and hunts by emitting ultrasonic sounds (echolocation) waves that bounce off of fish and other prey.
- Because of the sound it produces when breathing, the animal is popularly referred to as Susu.
- **Distribution:** It is distributed in Ganges and Brahmaputra River basins of India, Nepal and Bangladesh. It can only live in freshwater.
- **Threat:** Ganges river dolphin is facing severe threats from water development projects, Pollution, hunting and death due to accidental catches in fishing gear.

Conservation status: The Ganges River dolphin is protected under

- Schedule 1 of the Indian Wildlife (Protection) Act 1972,
- Appendix 1 of the Convention on International Trade in Endangered Species (CITES) and
- Appendix 1 of the Convention on Migratory Species (CMS).
- IUCN status: Endangered

National and State Symbol: The Ganges River dolphin was designated as a national aquatic species in 2009 and as the state aquatic animal of Assam.

Indus River Dolphin (Platanista minor)

- **Characteristics:** The Indus River Dolphin is also functionally blind and relies on echolocation to navigate and find prey.
- It is commonly referred to as Bhulan in local languages.
- **Distribution:** The Indus River Dolphin is found in the Indus River system in Pakistan and a small population is present in the Beas River in India.
- **Threat:** Water diversion projects have significantly reduced its habitat range, confining populations to isolated sections of the river.

Conservation Status: Protected under Schedule I of the Indian Wildlife (Protection) Act 1972 in India.

- Appendix I of the Convention on International Trade in Endangered Species (CITES).
- Appendix I of the Convention on Migratory Species (CMS).
- IUCN status: Endangered

State Symbol: The Indus River dolphin is the state aquatic animal of Punjab.

12. National Board for Wildlife has approved five critical road projects

Context:

The National Board for Wildlife has approved five critical road projects, four of which pass through the Karakoram Wildlife Sanctuary along the Line of Actual Control, and one road to Daulat Beg Oldie.



About:

- Daulat Beg Oldie (DBO) is the country's northernmost military outpost in Ladakh and location of its highest airstrip.
- In total, 35 km of new roads leading to DBO, which runs parallel to the LAC, have been authorised.
- A key segment among these is the 7.75 km link road from DS-DBO to Saser-Brangsa-Gapshan, which will be constructed at an altitude of 17,000 ft.

Significance:

- The wildlife clearance represents a major boost for the Ministry of Defence, which is increasing its infrastructure development along the LAC.
- The current DS-DBO route, extending 255 km, runs adjacent to the LAC and remains within sight of Chinese-held territory.
- It offers an alternative for rapid troop and resource movement for operational needs, located nearly 100 km from areas controlled by China.

13. Locusts Infestation**Context:**

Plantations of farmers are severely affected by the spotted locust infestation in Kerala.

About:

Locusts are the short-horned grasshoppers with highly migratory habit.

Locusts can change from a solitary phase to a gregarious phase, where they form dense swarms that can travel hundreds of kilometres in search of food.

Only four species viz. Desert locust (*Schistocerca gregaria*), Migratory locust (*Locusta migratoria*), Bombay Locust (*Nomadacris succincta*) and Tree locust (*Anacridium sp.*) are found in India.

- The desert locust is the most important pest species in India as well as in intercontinental context.

Concern: They cause great devastation to natural and cultivated vegetation leading to national emergency of food and fodder.

14. Critically Endangered long-billed vulture**Context:**

A study published recently has highlighted that the population of the critically endangered long-billed vulture has seen a steady increase between 2015 and 2021, with the species exhibiting a 74% breeding success rate in the Mudumalai Tiger Reserve (MTR).

About:

- It is an old-World vulture native to the Asian region.
- They are also known as Indian long-billed vultures due to their comparatively longer beak.
- It is a medium-sized and bulky scavenger feeding mostly on the carcasses of dead animals.
- Females of this species are smaller than males.
- **Habitat:** They are usually found in savannas and other open habitats around villages, cities, and near cultivated areas.
- **Distribution:** These are native to India, Pakistan, and Nepal.

Conservation status

- **IUCN Red List:** Critically Endangered.

Threats: The Indian vulture has suffered a 97-99% population decrease due to poisoning caused by the veterinary drug diclofenac. This drug is toxic for vultures; it was given to working animals as it reduced joint pain and so kept them working for longer.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**

15. Convention on Biological Diversity

Context:

The 16th Conference of Parties (COP16) to the Convention on Biological Diversity (CBD) is set to begin in Cali, Colombia from 21st Oct 2024.

About Convention on Biological Diversity (CBD):

- The CBD was made available for signature on June 5, 1992, during the Rio de Janeiro Earth Summit and officially came into force on December 29, 1993.
- **Ratification:** The CBD has been ratified by 196 countries. Notably, the United States is the only UN member state that has not ratified it.
- CBD is a legally binding treaty to conserve biodiversity.
- Coverage: The CBD covers all habitats, species, and genetic resources, addressing biodiversity at various levels, including ecosystems. It also extends its scope to biotechnology-related issues.
- COP16 to be held in the Colombian city of Cali from October 21-November 1, 2024.

16. Carbon sequestration

Context:

Alt Carbon, a company based in Darjeeling, is using crushed basaltic rock from mining to enhance carbon sequestration through a process called enhanced rock weathering.

About Process:

- It is a geo-chemical method, where rocks naturally break down over time, allowing atmospheric carbon to react with minerals and form bicarbonates.
- It uses crushed basaltic rock, rich in calcium and magnesium, sourced from mining regions like Maharashtra and West Bengal, which significantly increases the surface area for weathering.

Need and Importance:

- Oceans capture about 30% of CO₂ from human activities. However, natural weathering processes are slow, taking thousands of years.
- Due to rising CO₂ levels, there's a push from governments and businesses to expedite carbon removal processes, leading to the concept of "enhanced" rock weathering.
- Enhanced rock weathering accelerates the natural process by crushing basaltic rock, increasing its surface area, and speeding up bicarbonate formation.
- The crushed basalt dust is applied to tea estates in Darjeeling, enriching the soil and enhancing carbon sequestration.
- Each tonne of sequestered carbon generates a carbon credit, which can be sold to companies for offsetting emissions.

Challenges

- There are concerns regarding the accuracy of carbon sequestration measurements across different projects, with significant variations reported in studies.

17. Nature Restoration Law

Context:

The Nature Restoration Law (NRL), which was enacted by the European Union (EU), is an inspiring model from which India can draw points to tackle its growing environmental crises.

Nature Restoration Law (NRL):

- It is a European Union (EU) law to tackle the triple crises of climate change, biodiversity loss, and environmental degradation.
- It is the first continent-wide, comprehensive law of its kind.

- It is a key element of the EU Biodiversity Strategy, which sets binding targets to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of natural disasters.
- Under the NRL, Member States will have to restore at least 20% of the EU's land and sea by 2030, including terrestrial, coastal, and freshwater, forest, agricultural, and urban areas.
- By 2050, the measures should extend to all ecosystems "requiring restoration".
- The EU NRL also targets an obligation to improve urban green spaces, contribute to free-flowing rivers by removing artificial barriers, increase pollinator populations, and contribute to the target of 3 billion additional trees throughout the EU.
- Member States must adopt "restoration plans" detailing how they intend to achieve these targets and ensure that the restored areas do not significantly deteriorate.
- While drafting these Nature Restoration Plans, Member States also need to consider socio-economic impacts and benefits and estimate the financial needs for its implementation.

18. Atlantic Meridional Overturning Circulation (AMOC)

Context:

Scientists have issued a stark warning about the potential collapse of the Atlantic Meridional Overturning Circulation (AMOC).

About:

- The collapse of the AMOC could have "devastating and irreversible" impacts, particularly on Nordic countries (Denmark, Iceland, Norway, Finland, and Sweden).
- These regions would experience extreme weather changes, including significant cooling and southward shift of tropical monsoon systems, disrupting agriculture and ecosystems globally.

Atlantic Meridional Overturning Circulation (AMOC):

- The AMOC is a large system of ocean currents.
- It is the Atlantic branch of the ocean conveyor belt or Thermohaline circulation (THC).
- THC is a part of the large-scale ocean circulation that is driven by global density gradients created by surface heat and freshwater fluxes.
- AMOC distributes heat and nutrients throughout the world's ocean basins.
- It carries warm surface waters from the tropics towards the Northern Hemisphere, where it cools and sinks.

19. Microcystin toxins

Context:

Research has shown toxins from microcystin can make animals and people sick when they come into contact with infected water of Lake Erie.

About:

- The five lakes are Superior, Michigan, Huron, Erie, and Ontario, and they are generally on or near the Canada–United States border.
- Hydrologically, Michigan and Huron are a single body of water joined at the Straits of Mackinac.
- The Great Lakes are the largest group of freshwater lakes on Earth by total area and are second-largest by total volume, containing 21% of the world's surface freshwater by volume.



20. Environmental Ship Index

Context:

Mormugao port recently became India's pioneering port to implement Green Ship Incentives under the ESI.

Environmental Ship Index (ESI):

- Environmental Ship Index (ESI) identifies seagoing ships that perform better in reducing air emissions than required by the current emission standards of the International Maritime Organization.
- The ESI evaluates the amount of nitrogen oxide (NOX), sulphur oxide (SOX) that is released by a ship and includes a reporting scheme on the greenhouse gas emission of the ship.
- The ESI is a good indication of the environmental performance of ocean-going vessels and will assist in identifying cleaner ships in a general way.
- All stakeholders in maritime transport can use the ESI as a means to improve their environmental performance and as an instrument to reach their sustainability goals.
- **Mormugao Port is India's first port to introduce Green Ship Incentives through the ESI, aligning with global efforts to reduce air emissions in shipping.**
- Mormugao Port Authority has gained global recognition by being listed as an incentive provider on the Environment Ship Index (ESI) portal, acknowledged by the International Association of Ports and Harbours (IAPH).
- This achievement highlights the port's commitment to promoting environmentally friendly practices for seagoing vessels.

Mormugao stands out in Asia alongside Japan and Oman, which also offer similar incentives.

- Harit Shrey – Is a scheme that was launched in October 2023 that offers port fee discounts based on ESI ratings of commercial ships.
- The “Harit Shrey” initiative has provided benefits to numerous vessels, encouraging eco-friendly practices.

21. Emissions Gap Report

Context:

If countries continue with their current environmental policies, it would lead to 3.1 degrees Celsius warming over pre-industrial levels, according to the recently published Emissions Gap Report 2024.

About Emissions Gap Report (EGR):

- **It is an annual report published by the United Nations Environment Programme (UNEP).**
- The EGR series tracks our progress in limiting global warming well below 2°C and pursuing 1.5°C in line with the Paris Agreement.
- Since 2010, it has provided an annual science-based assessment of the gap between estimated future global greenhouse gas (GHG) emissions if countries implement their climate mitigation pledges and where they should be to avoid the worst impacts of climate change.
- Each year, the report also highlights key opportunities to bridge the emissions gap, tackling a specific issue of interest.
- With the aim to inform the climate negotiations among UN Member States, the EGR is launched every year ahead of the UN Climate Change Conference of the Parties (COP).

22. Coral Triangle

Context:

A report released at the 16th Conference of Parties (COP16) to the Convention on Biological Diversity (CBD) highlighted alarming facts about oil and gas activities in the Coral Triangle.

About Coral Triangle:

- The Coral Triangle, often referred to as the ‘Amazon of the seas’, is a huge marine area spanning over 10 million square kilometres.
- **It includes countries like Indonesia, Malaysia, Papua New Guinea, Singapore, the Philippines, Timor-Leste, and the Solomon Islands.**

- **Significance:** This region is home to 76 per cent of the world's coral species and supports more than 120 million people who rely on its resources for their livelihoods.
- **Threats:** Unsustainable fishing practices, pollution from coastal development, and climate change-induced coral bleaching pose significant risks to the health and resilience of these ecosystems.

What are Corals?

- Corals are essentially animals, which are sessile, meaning they permanently attach themselves to the ocean floor.
- Corals share a symbiotic relationship with single-celled algae called zooxanthellae.
- The algae provide the coral with food and nutrients, which they make through photosynthesis, using the sun's light.
- They use their tiny tentacle-like hands to catch food from the water and sweep into their mouth.
- Each individual coral animal is known as a polyp and it lives in groups of hundreds to thousands of genetically identical polyps that form a 'colony'.

23. Seaweeds

Context:

The Union Government has notified the 'Guidelines for Import of Live Seaweeds into India' to bolster the development of seaweed enterprises in coastal villages.

- About:
- The guidelines aimed at facilitating import of high-quality seed materials or germplasm to help the coastal societies to find better livelihood opportunities.
- It will also help in the socio-economic upliftment of the fisher community while upholding environmental protection.
- According to ICAR, India produced only 34,000 tonnes (in 2021) of Seaweeds which is only 0.01% of the world production and 2.5% of the actual production.

What are Seaweeds?

- Seaweeds are marine algae, simple plant-like organisms that live in the sea or other bodies of water.
- They are known for their medicinal properties with manifold nutritional value.
- Seaweeds are being used for making pharmaceutical capsules for the treatment of goitre, cancer, bone-replacement therapy and cardiovascular surgeries.

What are the guidelines?

- To import live seaweed, the importers will have to submit a detailed application to the Department of Fisheries which will be reviewed by the National Committee on Introduction of Exotic Aquatic Species into Indian Waters.
- Upon approval, the Department will issue an import permit within four weeks, facilitating the import of high-quality seaweed germplasm.

24. Global Nature Conservation Index, 2024

Context:

India with an abysmal score of 45.5 (out of 100) has been ranked 176th in the Global Nature Conservation Index, 2024.

About:

- It is developed by Goldman Sonnenfeldt School of Sustainability and Climate Change at Ben-Gurion University of the Negev.
- The NCI is a data-driven analysis assessing each country's progress in balancing conservation and development.
- It is aimed at helping governments, researchers, and organisations identify concerns and enhance conservation policies for long-term biodiversity protection.

This is the first-ever edition of the index which ranks countries based on their efforts vis-a-vis four pillars:

- **Managing protected areas, addressing threats against biodiversity, nature and conservation governance, and future trends in a country's natural resource management.**
- **India with an abysmal score of 45.5 (out of 100) has been ranked 176th in the Global Nature Conservation Index, 2024.**
- India's rank at the bottom is mainly attributed to inefficient land management and rising threats to its biodiversity.
- The assessment highlighted multiple threats to India's biodiversity, including habitat loss and fragmentation caused by agriculture, urbanisation and infrastructural development, with climate change posing an additional risk.
- The top-ranking countries were Luxembourg, Estonia, and Denmark, with others including Zimbabwe and Costa Rica finding their way into the top 10.

25. Greenhouse Gas Bulletin

Context:

According to a new report by the World Meteorological Organization (WMO), greenhouse gas levels surged to a new record in 2023, rising by more than 10% in just two decades.

About Greenhouse Gas Bulletin:

- **It has been published annually since 2004 by the World Meteorological Organization.**
- It shows globally averaged surface mole fractions for carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) and compares them with the mole fractions during the previous year and with preindustrial levels.
- It also provides insights into the change in radiative forcing by long-lived GHGs (LLGHGs) and the contribution of individual gases to this increase.
- It is one of WMO's flagship publications released to inform the UN Climate Change conference (COP).

Highlights of the Bulletin:

- The globally averaged surface concentration of carbon dioxide reached 420 parts per million (ppm), methane 1934 parts per billion and nitrous oxide 336.9 parts per billion (ppb) in 2023.
- Carbon dioxide is the single most important greenhouse gas in the atmosphere related to human activities, accounting for approximately 64 per cent of the warming effect on the climate, mainly because of fossil fuel combustion and cement production,
- The long-term carbon dioxide increase is due to fossil fuel combustion, but there are year-to-year variations due to the El Nino–Southern Oscillation, which impacts photosynthetic carbon dioxide uptake, respiratory release, and fires.
- Methane is a powerful greenhouse gas which remains in the atmosphere for about a decade. Methane accounts for about 16 per cent of the warming effect of long-lived greenhouse gases.
- Nitrous oxide, an ozone depleting chemical, accounts for about 6 per cent of the radiative forcing – the warming effect on the climate -- by long-lived greenhouse gases.
- From 1990 to 2023, radiative forcing — the warming effect on our climate — by long-lived greenhouse gases increased by 51.5%, with CO₂ accounting for about 81 per cent of this increase.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Cleared Prelims in 2nd attempt after taking High - Impact Prelims Revision course

and went on to secure AIR 202 in UPSC CSE 2023



“ High- Impact Prelims Revision Course for CSE 2023 Prelims was instrumental in refining my preparation for Prelims. The approach provided by Gautham sir gave me a fresh insight into Prelims preparation and on how to tackle the paper especially if it's different or unconventional”

ANUSHA PILLAY - IPS - AIR 202 (CSE 2023)

Course Start Date

**20th November
2024 >>>**

COURSEMODE- ONLINE/OFFLINE

WHATSAPP YOUR QUERIES TO



73867 15016



**Scan to Watch
Orientation Video (or)
For Course Details (or) To Enroll**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Current Affairs Test Series for CSE Prelims 2025 (offline/online)

Offline Test Locations : Himayat Nagar or Ashok Nagar Branch

13 Tests
(100 Qs Each), Total 1300 Qs
with Detailed Explanation PDFs

Covering Static Topics Based
on 13 months of CA :
(April 2024 to April 2025)

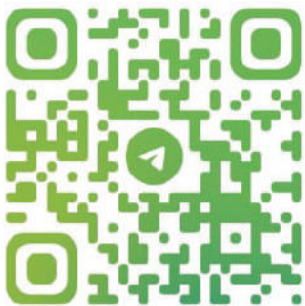
★ **Analysis by Faculty**
after each test

High - Quality MCQs

Covers Latest MCQ Patterns
based on PYQs

CURRENT AFFAIRS TEST SERIES SCHEDULE PLAN - 2024-25

S.No.	Test Name	Date of Test
1	CA April 2024	18-08-2024
2	CA May 2024	01-09-2024
3	CA June 2024	15-09-2024
4	CA July 2024	29-09-2024
5	CA August 2024	13-10-2024
6	CA September 2024	27-10-2024
7	CA October 2024	17-11-2024
8	CA November 2024	15-12-2024
9	CA December 2024	12-01-2025
10	CA January 2025	16-02-2025
11	CA February 2025	16-03-2025
12	CA March 2025	13-04-2025
13	CA April 2025-20 Days	04-05-2025



Scan to Join our Telegram
Channel for more updates



Scan for Schedule, Application
and Payment Form

WHATSAPP YOUR QUERIES TO



70756 52127

SCIENCE & TECHNOLOGY

1. Bharat Gen

Context:

"BharatGen" world's first government-funded multimodal LLM initiative launched by the Ministry of Science and Technology.

About BharatGen

- **Aim:** To revolutionize public service delivery and enhance citizen engagement by developing foundational models in language, speech, and computer vision.
- **Implementation:** By IIT Bombay under the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS)

Key Features of BharatGen:

- Multilingual and multimodal foundation models.
- Building and training based on India-centric datasets.
- Open-source platform for fostering AI research and innovation.

The project is expected to be completed by 2026, with ongoing research, development, and scaling of AI applications.

Significance:

- BharatGen will address both text and speech, ensuring representation across India's diverse linguistic landscape. By using multilingual datasets, it will capture the nuances of Indian languages, which are often underrepresented in global AI models.
- This emphasis on data sovereignty gives India greater control over its digital resources and narrative.
- BharatGen will democratize AI access across government, education, and private sectors, ensuring AI benefits all segments of society, particularly underserved Indian languages.
- BharatGen aligns with the vision of Atmanirbhar Bharat by developing AI models specifically for India. By building these technologies domestically

What are Large Language Models?

- Large language models, also known as LLMs, are very large deep learning models that are pre-trained on vast amounts of data.
- Large Language Models (LLMs) use machine learning techniques to recognize, interpret, and generate human languages or other complex data.
- Their capabilities also extend to handling structured and unstructured data, including speech, images, and other multimodal inputs, which enhances their utility in fields like customer service, healthcare, and education.

2. White Dwarf Star

Context:

A recent study using Hawaii-based telescopes, found the 1st rocky planet that is orbiting the white dwarf about 4,200 light years away from our solar system near the bulge at the centre of the Milky Way galaxy.

About:

- White Dwarf – It is the stellar core left behind after a dying star has exhausted its nuclear fuel and expelled its outer layers to form a planetary nebula.
- It is the last observable stage of evolution for low- and medium-mass stars.
- Stars having a larger mass may end their lives as black holes or neutron stars. A light year is the distance light travels in a year, about 5.9 trillion miles.
- **Conditions for formation – Stars with a mass less than 8 times the sun.**
- **Formation – It is formed when a low-mass star like our sun exhausts most of its nuclear fuel.**

- **Composition** - Compared to our sun, it has a similar carbon and oxygen mass though it is much smaller in size.

Features - It is about as massive as the Sun, yet only slightly bigger than the Earth.

- **It is one of the densest forms of matter, surpassed only by neutron stars and black holes.**
- **Temperatures** - It can exceed 100,000 Kelvin according to NASA.
- **They no longer support nuclear fusion reactions that generate energy, but they are still extremely hot.**

White Dwarfs cool over time, and it is predicted that they would ultimately form 'black dwarfs', although the Universe is likely not old enough for any black dwarfs to exist yet.

Luminosity - Despite having too high a temperature, they have a low luminosity as they're so small in size.

- Its luminosity can be used by astronomers to measure how long-ago star formation began in a particular region.

Hubble was the 1st telescope to directly observe white dwarfs in globular star clusters in 2003, which astronomers reported as the dimmest stars ever seen in a globular star cluster.

3. Five-Hundred Aperture Spherical Telescope

Context:

China has kicked off a second phase of construction to enhance the capabilities of the Five-Hundred Aperture Spherical Telescope (FAST).

About Five-Hundred Aperture Spherical Telescope (FAST):

- It is a radio telescope in China's Guizhou Province.
- It is the world's largest and **most sensitive radio telescope**, with a receiving area equivalent to 30 football fields.
- It measures 500 meters in diameter.

Scientific Goals:

- **Detect neutral hydrogen** at the edge of the universe; reconstruct the images of the early universe;

- **Discover pulsars**, establish a pulsar timing array, and participate in pulsar navigation and gravitational wave detection in the future;
- Join the International Very-Long-Baseline Interferometry Network to obtain hyperfine structures of celestial bodies;
- **Perform high resolution radio spectral survey. Detect weak space signals;**
- **Participate in the search for extraterrestrial intelligence.**

FAST uses a data system developed at ICRAR (International Centre for Radio Astronomy) in Perth, Australia, and at ESO (European Southern Observatory) to manage the huge amounts of data it generates.

4. Cruise Bharat Mission

Context:

Recently, the Union Minister of Ports, Shipping & Waterways (MoPSW) launched the 'Cruise Bharat Mission' from the Mumbai port.

About Cruise Bharat Mission:

- The central government launched the five-year Cruise Bharat Mission, aiming to boost cruise tourism in India to 1 million passengers and create 400,000 jobs by 2029.
- **The mission aims to boost cruise tourism by doubling cruise passenger traffic by 2029.**
- **The mission includes setting up of a dedicated fund, easing of cabotage regulations and financial incentives.**
- **The Ministry of Ports, Shipping, and Waterways is the nodal ministry of its implementation.**

Phased implementation:

- **Phase 1 (2024-2025):** Conduct market studies, form cruise alliances, and modernize cruise terminals.
- **Phase 2 (2025-2027):** Develop new cruise terminals and activate high-potential locations.

- **Phase 3 (2027-2029):** Integrate cruise circuits across the Indian Subcontinent.

5. Sickle Cell Disease

Context:

The pharmaceutical giant Pfizer recently announced it would voluntarily withdraw its sickle cell disease therapy, Oxbryta, from worldwide markets, owing to the emergence of clinical data that links “fatal events” to the drug.

- Inherited diseases in the list include Cystic Fibrosis, Sickle Cell Anaemia, Haemophilia, and Down Syndrome (which is caused by a genetic anomaly).
- Tuberculosis and Malaria are not inherited; they are infectious diseases.

About Sickle Cell Disease (SCD):

- It is an inherited blood disorder.
- It is marked by flawed haemoglobin.
- Haemoglobin is the molecule in red blood cells (RBCs) that carries oxygen to the tissues of the body.

How does it affect blood flow?

- Normally, RBCs are disc-shaped and flexible enough to move easily through the blood vessels.
- People with SCD have atypical hemoglobin molecules called hemoglobin S, which can distort RBCs into a sickle, or crescent, shape.
- These sickled RBCs do not bend or move easily and can block blood flow to the rest of the body.
- SCD interferes with the delivery of oxygen to the tissues.

What causes it?

- The cause of SCD is a defective gene, called a sickle cell gene.
- A person will be born with SCD only if two genes are inherited—one from the mother and one from the father.

Symptoms:

- Early stage: Extreme tiredness or fussiness from anemia, painfully swollen hands and feet, and jaundice.

- Later stage: Severe pain, anemia, organ damage, and infections.

Treatments:

- A bone marrow transplant (stem cell transplant) can cure SCD.
- However, there are treatments that can help relieve symptoms, lessen complications, and prolong life.
- Gene therapy is also being explored as another potential cure.
- The UK recently became the first country to approve gene therapy treatment for SCD.

6. Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules)

Context:

On September 20, 2024, Justice A.S. Chandurkar of the Bombay High Court declared unconstitutional an amendment made to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules).

About:

- The Ministry of Electronics and Information Technology (MeitY) is responsible for overseeing the implementation of the IT Rules, 2021.
- The intermediaries preserve information of users after deactivation or deletion of an account for 90 days.
- The maximum time limit for intermediaries to remove or disable access to unlawful content upon receiving a court order or notice from the government is 24 hours.
- Under the IT Rules, intermediaries must provide information to law enforcement agencies within 24 hours of receiving an official order or notice, not 72 hours.

7. Charon

Context:

Scientists have detected the gases carbon dioxide and hydrogen peroxide on Pluto's largest moon, 'Charon'.

About:

- Pluto and Charon are mutually tidally locked, meaning both bodies always show the same face to each other as they orbit. This is a rare phenomenon where both the planet and its moon are locked in such a way.
- Earth and Mars do not exhibit tidal locking between each other.
- Earth and Moon have a one-sided tidal lock: the Moon is tidally locked to the Earth, showing the same face to Earth, but the Earth is not locked to the Moon.
- Jupiter and Io are not mutually tidally locked; only Io is tidally locked to Jupiter, not the other way around.

Charon:

- It is the largest of Pluto's five moons, about half the size of Pluto.
- It was discovered telescopically on June 22, 1978, by James W. Christy and Robert S. Harrington at the U.S. Naval Observatory station in Flagstaff, Arizona.
- The moon was named for Charon, the ferryman of dead souls to the realm of Hades (the Greek counterpart of the Roman god Pluto) in Greek mythology.
- Its mass is more than one-tenth of Pluto's mass.
- Since, Charon is so large and massive with respect to Pluto— the two are sometimes referred to as a double dwarf planet system.
- The same surfaces of Charon and Pluto always face each other, a phenomenon called mutual tidal locking.
- In addition, Charon always shows the same hemisphere to Pluto, because (like many other moons) its rotation period is identical to its orbital period.
- Charon orbits Pluto every 6.4 Earth days.

8. Fluorescent Nano Diamonds

Context:

In a recent study published in Nature Communications, physicists from Purdue University in the U.S. reported floating fluorescent nanodiamonds (FNDs) in a high vacuum and spinning them very fast.

About

- It paves the way for FNDs multiple applications in industry, especially as sensors, and in fundamental research.

What are FNDs?

- They are nanometre-sized diamonds made of carbon nanoparticles, produced in a high temperature and high-pressure process.
- FNDs are stable under light and aren't toxic to living things, so they have many applications in high-resolution imaging, microscale temperature sensing, and correlative microscopy, among others.
- In biology, scientists use FNDs to track cells and their progeny over long periods.

9. Ceres

Context:

Researchers recently said Ceres is a very icy object that possibly was once a muddy ocean world.

About:

According to the International Astronomical Union, which sets definitions for planetary science, a dwarf planet is a celestial body that

- orbits the sun,
- has enough mass to assume a nearly round shape,



@RCREDDYIAS

For other months issues and updates
Join our telegram channel

- has not cleared the neighbourhood around its orbit and,
- cannot be satellites.

About Ceres:

- It is a dwarf planet and the largest object in the asteroid belt between Mars and Jupiter.
- It's the only dwarf planet located in the inner solar system.
- It was the first member of the asteroid belt to be discovered when Giuseppe Piazzi spotted it in 1801.
- Ceres is named for the Roman goddess of corn and harvests. The word cereal comes from the same name.
- **Called an asteroid for many years, Ceres is so much bigger and so different from its rocky neighbours that scientists classified it as a dwarf planet in 2006.**
- When NASA's Dawn arrived in 2015, Ceres became the first dwarf planet to be explored by a spacecraft.

10. Emergency Use Listing

Context:

The World Health Organization (WHO) announced that it has listed the first mpox in vitro diagnostic (IVD) under its Emergency Use Listing (EUL) procedure.

About Emergency Use Listing:

- **EUL Procedure is a risk-based procedure for assessing and listing unlicensed vaccines, therapeutics and in vitro diagnostics.**
- Its aim is to expedite the availability of these products to people affected by a public health emergency.
- This will assist interested UN procurement agencies and Member States in determining the acceptability of using specific products, based on an essential set of available quality, safety, and efficacy and performance data.

Criteria for products listing under EUL:

- The disease for which the product is intended is serious or immediately life threatening has the potential of causing an outbreak, epidemic or pandemic.
- Existing products have not been successful in eradicating the disease or preventing outbreaks.
- The product is manufactured in compliance with current Good Manufacturing Practices (GMP) in the case of medicines and vaccines and under a functional Quality Management System (QMS) in the case of IVDs.

11. Ni-kshay Poshan Yojana

Context:

The Union Health Ministry has doubled the monthly nutrition support under Ni-Kshay Poshan Yojana from the existing Rs 500 to Rs 1,000 per month for all TB patients, during treatment.

About Ni-kshay Poshan Yojana (NPY):

- NPY was launched by the Ministry of Health and Family Welfare (MoH&FW) as a centrally sponsored scheme under the National Health Mission (NHM) in April 2018.
- It is a direct benefit transfer (DBT) scheme under the National Tuberculosis Elimination Program (NTEP) in India.
- **Objective:** Provides incentives for nutritional support to tuberculosis (TB) patients.
- **Beneficiary:** All notified TB patients are beneficiaries of the scheme.

Eligibility:

- All patients with TB who are notified to the government on or after April 1, 2018, including those who are already being treated for TB, are eligible for financial incentives.
- To be eligible for the incentives, patients must be registered or notified on the NIKSHAY portal.

Benefits: Financial incentive of Rs.1000/- per month for each notified TB patient for duration for which the patient is on anti-TB treatment.

- The incentives can be distributed in Cash (only via DBT, preferably through Aadhaar enabled bank accounts) or in-kind.
- This scheme is implemented across all States and UTs in India.

12. MicroRNA

Context:

The 2024 Nobel Prize for Medicine has been awarded to scientists Victor Ambros and Gary Ruvkun for their discovery of microRNA — tiny molecules which play a crucial role in how genes function.

About microRNA:

- MicroRNAs, or miRNAs, are small, non-coding molecules of RNA.
- They are typically around 19-24 nucleotides long and play an important role in determining how much messenger RNA (mRNA), which carries genetic information, eventually gets translated into protein.

Role in human body:

- These microRNAs act as molecular switches, fine-tuning the expression of genes in different cell types and under varying conditions.
- **They regulate the production of proteins by bonding with and subsequently silencing the mRNA at an appropriate juncture. The process is called post-transcriptional gene regulation.**
- MicroRNAs help fine-tune various cellular processes like development, growth, and metabolism. Their role is essential in maintaining normal cell function, and disruptions in microRNA activity have been linked to diseases such as cancer.
- Mutations in genes coding for microRNAs have been found in humans, causing conditions such as congenital hearing loss, eye and skeletal disorders.

Significance of microRNA discovery:

- The discovery of microRNAs has provided scientists with new tools to investigate gene regulation and has significantly expanded our understanding of how genetic information is processed and utilized in living organisms.

13. Kerosene based Lamps

Context:

India's reliance on kerosene-based lamps as a secondary lighting source leads to release of 12.5 gigagrammes (Gg) per year of a potent climate pollutant called black carbon.

About:

- Kerosene based Lamps account for about 10 percent of the total residential black carbon emissions, which includes cooking, heating and lighting, according to a study published in the journal Atmospheric Pollution Research.
- **Kerosene has a lower burn rate than biomass.**
- **The emissions factors for black carbon of the Kerosene are higher than the biomass.**
- For example, emissions factors for black carbon for Kerosene lights vary between 17 g and 190 g per kg, surpassing biomass's 1-2g per kg.
- Black carbon emission factor is the amount of pollutant released in grams per kg of the fuel burnt, from different lighting devices.

14. Asteroids to meet nutritional needs

Context:

A study published in The International Journal of Astrobiology suggests that astronauts could use asteroids to meet their nutritional needs.

About:

- **Concept** - The idea is to extract and convert the carbon from space rocks into something edible.

- Principle – Asteroids share similarities with plastics regarding how microbes interact with them.
- Conversion of plastic into food - Plastic wastes are broken down into solid, gas and oil through the process of pyrolysis.
- The oil is then fed to bacteria in a bioreactor, producing a nutritious biomass.
- Microbes in meteorite – It was observed that microbes thrived on the meteorite material.

Significance:

- It addresses the limitations of the amount of dried food astronauts can carry.
- It can also help in space farming that hasn't evolved yet.
- It is reported that asteroid Bennu when broken down by microbes, even inefficiently could sustain astronauts for up to 600 years.

Challenges – Extensive toxicity testing is needed to ensure that the biomass created for astronauts is safe to eat.

15. India eliminated Trachoma**Context:**

The World Health Organisation (WHO) has declared that the Government of India has eliminated Trachoma as a public health problem.

- India has become the third country in the South-East Asia Region to achieve this milestone.

About:

- Trachoma is a disease of the eye caused by infection with the bacterium Chlamydia trachomatis. If left untreated, it can lead to irreversible blindness.
- **Transmission:** Spread through personal contact, such as hands, clothes, bedding, or contaminated hard surfaces.
- **Vector:** Flies that come into contact with discharge from the eyes or nose of an infected person can also transmit the disease.

Diseases Eliminated by India includes:

- Smallpox: It was declared eradicated globally in 1980 (India's last case was reported in 1975).
- Polio: India was declared polio-free in 2014 (India's last reported case was in 2011).
- Trachoma: Declared eliminated as a public health problem in 2017.
- Chickenpox has not been officially declared eliminated in India. It is still present, though vaccines have made it less common.

16. Ultrasound**Context:**

Scientists have developed a new technique to detect cancers by using ultrasound.

About:

- The method, using ultrasound, is used to generate high-energy waves which can break off small fragments of tissue from potentially cancerous areas.
- These fragments, in the form of droplets, are then released into the bloodstream.
- These droplets contain biomolecules such as RNA, DNA, and proteins, which serve as biomarkers, molecules specific to cancer.
- Currently cancer is diagnosed by biopsy, where a small tissue sample is extracted using a needle to confirm the presence and type of cancer through In vitro tests.

What is Ultrasound?

- Ultrasound is a type of sound wave with a frequency higher than the upper limit of human hearing, typically above 20,000 hertz (20 kHz).

Applications: Ultrasound is commonly used to;

- Examine the development of a foetus during pregnancy.
- Diagnose conditions affecting organs like the heart, liver, kidneys, and gallbladder.

- Monitor blood flow through blood vessels (Doppler ultrasound).

17. MACE Observatory

Context:

The MACE Observatory has been inaugurated recently.

About:

- The MACE telescope will observe high-energy gamma rays, contributing to global efforts to understand the most energetic phenomena in the universe, such as supernovae, black holes, and gamma-ray bursts.
- The Major Atmospheric Cherenkov Experiment (MACE) Observatory is the largest imaging Cherenkov telescope in Asia. It is located at an altitude of ~4,300 m, at Hanle, Ladakh.
- It is indigenously built by Bhabha Atomic Research Centre (BARC) with support from Electronics Corporation of India (ECIL), Hyderabad, and other Indian industry partners.

18. LUPEX Mission

Context:

Recently, the National Space Commission, India's apex body on space missions, cleared the fifth lunar mission, the Lunar Polar Exploration Mission.

About LUPEX Mission:

- It is a collaborative mission between ISRO and Japan Aerospace Exploration Agency (JAXA).
- Objective: To explore the moon's southern polar region, investigating the presence of water and other elements, potentially in the form of surface ice.
- It aims to showcase innovative surface exploration technologies. The special focus is on vehicular transport and lunar night survival.
- It features both a lander and a rover.

JAXA is responsible for developing and operating the rover, and ISRO for developing and operating the lander that will carry the rover.

- The rover will drive on its own to search for areas where water is likely to be present and sample the soil by digging into the ground with a drill.
- The plan is to acquire data by analysing the collected samples in detail with observation equipment mounted on the rover.
- The rover will be equipped with instruments for measuring the water content of regolith (lunar sand), drilling, and sampling, as well as with other world-first and world-leading technologies for the driving system and batteries.
- The rover will carry not only the instruments of ISRO and JAXA but also those of the US space agency NASA and the European Space Agency (ESA).

The mission is scheduled to launch in 2025.

19. Rice Fortification

Context:

The Union Cabinet extended the universal supply of fortified rice in all central government schemes providing free food grain under the National Food Security Act, 2021, in its present form, until December 2028.

About Rice Fortification:

- Fortification is the process of adding Fortified Rice Kernels (FRK), containing FSSAI prescribed micronutrients (Iron, Folic Acid, Vitamin B12) to normal Rice in the ratio of 1:100 (Mixing 1 Kg of FRK with 100 Kg custom milled rice).
- Fortified rice is nearly identical to traditional rice in aroma, taste, and texture. This process is done in the rice mills at the time of milling of rice.

- It is a cost effective, culturally appropriate strategy to address micronutrient deficiency in countries with high per capita rice consumption.
- **Rice Fortification is a 2-step process – (1) Production of Fortified Rice Kernels (FRK) (2) Blending of rice with FRK**

Processes used for rice is fortification:

- **Various technologies, such as coating, dusting, and 'extrusion', are available to add micronutrients to regular rice.**
- Adding micronutrient technology involves the production of fortified rice kernels (FRKs) from a mixture using an 'extruder' machine. It is considered to be the best technology for India.
- Dry rice flour is mixed with a premix of micronutrients, and water is added to this mixture, which is then passed through a twin-screw extruder with heating zones.
- Kernels similar in shape and size to rice are produced, which must "resemble the normal milled rice as closely as possible".
- The kernels are dried, cooled, and packaged. FRK has a shelf life of at least 12 months.
- The kernels are blended with regular rice to produce fortified rice. Under the Ministry's guidelines, 10 g of FRK must be blended with 1 kg of regular rice.

According to FSSAI norms, 1 kg of fortified rice will contain the following: iron (28 mg-42.5 mg), folic acid (75-125 microgram), and vitamin B-12 (0.75-1.25 microgram).



@RCREDDYIAS

For other months issues and updates
Join our telegram channel

20. Nobel Prize, 2024

Context:

The Nobel Prize, 2024 has been announced recently.

Nobel Prize	Awarded by
1. Physiology or Medicine	Karolinska Institute, Stockholm, Sweden
2. Physics	Royal Swedish Academy of Sciences, Stockholm, Sweden
3. Chemistry	Royal Swedish Academy of Sciences, Stockholm, Sweden
4. Literature	Swedish Academy

- **A Nobel Prize is a prestigious international award given to individuals or organizations annually.**
- **Founder - Alfred Nobel.**
- **Fields awarded** - Physics, Chemistry, Physiology or Medicine, Literature, Peace, and Economic Sciences.
- **Rationale** - To honour individuals who have made significant contributions that benefit humanity.
- The first set of awards were handed out in 1901, 5 years after Nobel's death.
- **A Nobel Prize cannot be awarded posthumously.**
- **Award ceremony** - Takes place annually on December 10, the anniversary of Alfred Nobel's death.
- **The award winners are also given a sum of \$1.1 million per prize.**
- Nobel prize in Peace is awarded by Committee elected by the Norwegian Parliament (Stortinget).

21. Myopia**Context:**

A recent analysis of studies across the world estimates that global incidence of myopia could exceed 740 million cases in another 25 years.

About Myopia:

- Myopia, also known as near-sightedness, is an eye condition that causes blurry distance vision.
- People who are nearsighted have more trouble seeing things that are far away (such as when driving) than things that are close up (such as when reading or using a computer).

What causes Myopia?

- For normal vision, light passes through the clear cornea at the front of the eye and is focused by the lens onto the surface of the retina, which is the lining of the back of the eye that contains light-sensing cells.
- People who are nearsighted typically have eyeballs that are too long from front to back.
- As a result, light entering the eye is focused too far forward, in front of the retina instead of on its surface.
- It is this change that causes distant objects to appear blurry.
- The longer the eyeball is, the farther forward light rays will be focused and the more severely nearsighted a person will be.
- Eye experts are still unsure of the exact cause of myopia, but believe it to be a mix of hereditary and environmental factors.
- Near-sightedness usually begins in childhood or adolescence.
- It tends to worsen with age until adulthood, when it may stop getting worse (stabilize). In some people, near-sightedness improves in later adulthood.

Symptoms: Near-sightedness can lead to squinting, eyestrain, headaches, and significant visual impairment.

Treatment:

- Glasses or contact lenses can correct myopia in children and adults.
- For adults only (with rare exceptions for children), there are several types of refractive surgeries that can also correct myopia.
- Negative (minus) powered lenses are used to correct near-sightedness.

A concave lens is used to correct myopia.

22. AstroSat**Context:**

Recently, India's AstroSat and NASA's space observatories have captured dramatic eruptions from stellar wreckage around a massive black hole.

About AstroSat:

- It is India's first dedicated multi-wavelength space observatory aimed at studying celestial sources in X-ray, optical, and UV spectral bands simultaneously.
- It was launched by the Indian launch vehicle PSLV from Satish Dhawan Space Centre, Sriharikota, on September 28, 2015.
- The spacecraft control centre at Mission Operations Complex (MOX) of ISRO Telemetry, Tracking and Command Network (ISTRAC), Bengaluru, manages the satellite during its entire mission life.
- The minimum useful life of the AstroSat mission is around 5 years.
- It carries a total of five scientific payloads enabling imaging and studying the temporal and spectral properties of galactic and extra-galactic cosmic sources in a wide range of wavelengths on a common platform.

Objectives:

- To understand high energy processes in binary star systems containing neutron stars and black holes.

- Estimate magnetic fields of neutron stars.
- Study star birth regions and high energy processes in star systems lying beyond our galaxy.
- Detect new briefly bright X-ray sources in the sky.
- Perform a limited deep-field survey of the Universe in the Ultraviolet region.

23. Synthetic Medical Image

Context:

The rise of AI-generated synthetic medical images can provide an ethical, scalable, and cost-effective solution to the medical field.

About Synthetic Medical Image:

- It is generated by AI or computer algorithms without being captured by traditional imaging devices such as MRI, CT scans, or X-rays.
- **These images are entirely constructed using mathematical models or AI techniques like generative adversarial networks (GANs), diffusion models, and autoencoders.**
- In the medical field, synthetic medical images are created in a similar way, where the AI generates entirely new medical scans or radiological images that mimic real ones but are not derived from any actual patient data.

How are these images created?

- A variational autoencoder (VAE) takes an image, compresses it into a simpler form called the latent space, and then tries to recreate the original image from that compressed version.
- The process continuously improves the image by minimising the difference between the real image and the recreated version.
- GANs involve a generator that creates synthetic images from random data and a discriminator that determines whether the image is real or synthetic.
- Both improve through competition—the generator tries to make its images more realistic, while the discriminator gets better at spotting fakes.

- Diffusion models begin with a bunch of random noise and gradually transform it into a realistic image, using a step-by-step process that slowly shapes the noise into something that resembles the images it was trained on.

These methods generate synthetic images in various fields, including healthcare and research.

24. Shale Gas

Context:

A recent study by the scientists from Birbal Sahni institution of Palaeosciences, Lucknow (BSIP) indicated significant shale gas generation potential in eastern South Karanpura coalfield in the Ramgarh district of Jharkhand.

About Shale Gas:

- Shale gas is natural gas found in shale deposits, where it is trapped in microscopic or sub microscopic pores.
- This natural gas is a mixture of naturally occurring hydrocarbon gases produced from the decomposition of organic matter (plant and animal remains).
- **Typically, shale gas consists of 70 to 90 per cent methane (CH₄), the main hydrocarbon target for exploration companies.**

How is it extracted?

- **It is extracted by a commonly known method called Hydraulic fracturing.**
- In this method deep holes are drilled down into the shale rock, followed by horizontal drilling to access more of the gas, as shale reserves are typically distributed horizontally rather than vertically.
- Fracking fluids containing sand, water and chemicals are then pumped at high pressure into the drilled holes to open up fractures in the rock, enabling the trapped gas to flow into collection wells. From there it is piped away for commercial use.

India holds promising reserves of Shale Gas & Oil resources and the following sedimentary basins are considered prospective from Shale oil and gas point of view:

- Cambay Basin, Gondwana Basin, KG Basin, Cauvery Basin, Indo-Gangetic Basin and Assam & Assam-Arakan Basin.
- The Rajasthan Basin is not typically listed among the primary basins considered prospective for shale resources.

Applications: This is the gas used for generating electricity and for domestic heating and cooking.

25. Dragon drones

Context:

A deadly new weapon has taken to the skies in the Russia-Ukraine war. Both sides have posted visuals of drones appearing to rain down fire — earning this weapon the moniker of “dragon drone”

About Dragon drones:

- Dragon drones essentially release a substance called thermite — a mixture of aluminium and iron oxide — developed a century ago to weld railroad tracks.

Working:

- When ignited (usually with the help of an electrical fuse), thermite triggers a self-sustaining reaction that is quite difficult to extinguish.
- It can burn through almost anything, from clothes to trees to military-grade vehicles, and can even burn underwater. On humans, it causes severe, possibly fatal, burns and bone damage.
- On humans, it causes severe, possibly fatal, burns and bone damage.
- Combining thermite with high-precision drones that can bypass traditional defences makes dragon drones ‘highly effective’ and ‘dangerous’

In recent time these dragon drones are believed to have been first deployed in the Russia-Ukraine war around September.

International regulation

- The use of thermite in war is not prohibited under international law.
- However, the use of such incendiary weapons against civilian targets is barred under the Convention on Certain Conventional Weapons — Cold War-era guidance issued under the auspices of the United Nations.

26. Prime Minister Early Career Research Grant

Context:

The Anusandhan National Research Foundation announced the launch of the Prime Minister Early Career Research Grant (PMECRG) and the Mission for Advancement in High-Impact Areas -Electric Vehicle (MAHA- EV) Mission.

About:

- The PMECRG invites early career researchers to join the country’s transformative journey and contribute to the advancement of India’s scientific excellence and innovation.
- The MAHA- EV Mission is designed to build a robust research and development ecosystem for Electric Vehicle (EV) components, particularly Battery Cells, Power Electronics, Machines, and Drives (PEMD) and Charging Infrastructure.
- **Significance:** Both initiatives aim to play a transformative role in bridging the gap between academic research and industrial application.

Anusandhan National Research Foundation (ANRF):

Background: ANRF has been established with the Anusandhan National Research Foundation (ANRF) 2023 Act.

The ANRF aims to seed, grow and promote research and development (R&D) and foster a culture of research and innovation throughout India’s universities, colleges, research institutions, and R&D laboratories.

ANRF will act as an apex body to provide high-level strategic direction of scientific research in the country as per recommendations of the National Education Policy (NEP).

The Science and Engineering Research Board (SERB) established by an act of Parliament in 2008 has been subsumed into ANRF.

The Department of Science and Technology (DST) is the administrative Department of NRF.

Governance: NRF is governed by a Governing Board consisting of eminent researchers and professionals across disciplines.

- **Ex-officio President of the Board: Prime Minister.**
- Ex-officio Vice-Presidents: Union Minister of Science & Technology & Union Minister of Education.

27. Europa Clipper

Context:

A SpaceX Falcon Heavy rocket carrying NASA's Europa Clipper spacecraft lifts off from Launch Complex 39A at NASA's Kennedy Space Center in Florida on Oct. 14, 2024.

About:

- **Europa Clipper is a NASA mission to study Jupiter's icy moon Europa. The mission will place a spacecraft in orbit around Jupiter in order to perform a detailed investigation of Europa.**
- **Messenger, a spacecraft by NASA was sent to map and investigate Mercury. It was launched in 2004 and entered Mercury's orbit in 2011. The mission ended in 2015.**
- **Voyager 1 and 2 were launched by NASA in 1977 to explore the outer solar system. Both the spacecraft are still operational.**
- **NASA's New Horizons spacecraft was the first spacecraft to explore Pluto up close, flying by the dwarf planet and its moons on July 14, 2015.**



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**

28. Mechazilla

Context:

Recently, SpaceX has achieved a significant milestone in space exploration by landing its Starship rocket using an innovative structure called "Mechazilla."

About Mechazilla:

- It is the nickname for the large 400-ft rocket-catching structure at SpaceX's Starbase.

Feature

- It features two enormous mechanical arms, often referred to as "chopsticks." These arms are designed to catch the Super Heavy booster in mid-air as it returns to Earth.

Working of Mechazilla:

- **Launch and Ascent:** The SpaceX Starship rocket, along with its Super Heavy booster, launches from the ground.
- **Booster Separation:** After reaching a certain altitude, the booster separates from the upper stage of the rocket.
- **Controlled Descent:** The booster begins descending back to Earth, using precision thrusters to control its path.
- **Catching the Booster:** As the booster nears the landing site, Mechazilla's giant arms move into position. The booster hovers briefly before the arms catch it, ensuring a safe and controlled landing.

Significance:

- **Reusable:** This new method of rocket recovery is far more efficient and reusable compared to traditional landing techniques.
- **Cost effective:** By catching the booster midair, SpaceX can quickly refurbish and reuse it, significantly reducing launch costs and increasing the sustainability of space missions.

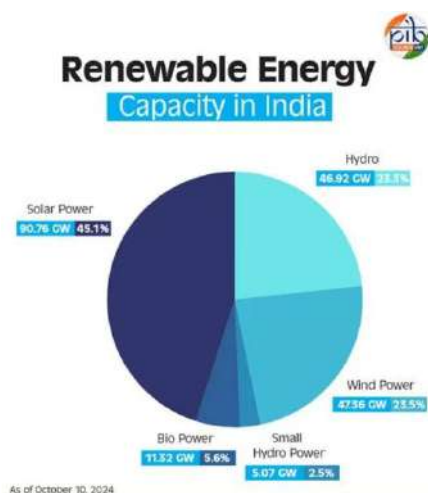
29. Total renewable energy capacity of India

Context:

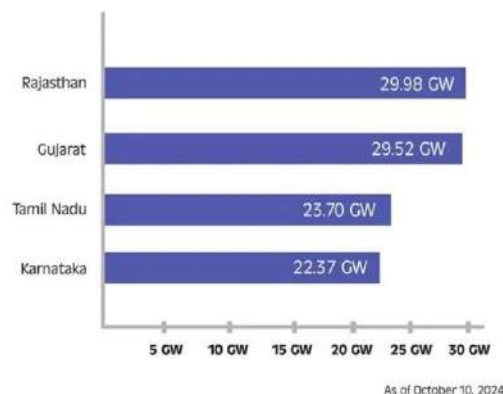
India has reached a significant milestone in its renewable energy journey, with the country's total renewable energy capacity crossing the 200 GW (gigawatt) mark as of October 10, 2024.

About:

- According to the Central Electricity Authority, the total renewable energy-based electricity generation capacity now stands at 201.45 GW. This achievement underscores India's growing commitment to clean energy and its progress in building a greener future.
- India's total electricity generation capacity has reached 452.69 GW, with renewable energy contributing a significant portion of the overall power mix. As of October 2024, renewable energy-based electricity generation capacity stands at 201.45 GW, accounting for 46.3 percent of the country's total installed capacity.
- Several states in India have emerged as leaders in renewable energy capacity, contributing significantly to the nation's progress. Rajasthan tops the list with an impressive 29.98 GW of installed renewable energy capacity, benefiting from its vast land and abundant sunlight.
- Following closely is Gujarat, which boasts a capacity of 29.52 GW, driven by its strong focus on solar and wind energy projects. Tamil Nadu ranks third with 23.70 GW, leveraging its favourable wind patterns to generate substantial energy. Karnataka rounds out the top four with a capacity of 22.37 GW, supported by a mix of solar and wind initiatives.



States Driving India's Renewable Energy Capacity



30. Drugs Technical Advisory Board

Context:

Recently, the Drugs Technical Advisory Board (DTAB) has recommended the inclusion of all antibiotics in the definition of new drugs in the New Drugs and Clinical Trial (NDCT) Rules, 2019.

About Drugs Technical Advisory Board:

- It is the highest statutory decision-making body on technical matters related to drugs in India.
- It is established as per the Drugs and Cosmetics Act, 1940.
- It is part of the Central Drugs Standard Control Organization (CDSCO).
- Function: It advises the Central Government and the State Governments on technical matters arising out of the administration of the Drugs and Cosmetics Act, of 1940 and to carry out the other functions assigned to it by this Act.
- Nodal Ministry: Ministry of Health and Family Welfare.

What is a new drug?

- According to Rule 122 E of the Drug and Cosmetic Rules 1945, a new drug can be one which has not been used in the country and has not been recognised as effective and safe by the licensing authority for the proposed claims.

- It could also be an approved drug with modified or new claims including indications, dosage, and new route of administration.
- If brought into the new drug bracket, the manufacturing, marketing, and sale of antibiotics will be documented.
- Also, the manufacturing and marketing clearance will have to be obtained from the Central government instead of State drug administration, and patients will be able to buy antibiotics only on prescription.

31. World Energy Outlook 2024

Context:

India is poised to face a higher increase in energy demand than any other country over the next decade, according to the World Energy Outlook 2024.

About World Energy Outlook 2024:

- **It is an annual report published by the International Energy Agency (IEA).**
- It is the most authoritative global source of energy analysis and projections.
- It identifies and explores the biggest trends in energy demand and supply, as well as what they mean for energy security, emissions, and economic development.

Highlights of 2024 Report:

- Projections based on current policy settings indicate that the world is entering a new energy context, marked by persistent geopolitical hazards but also an abundance of various fuels and technologies.
- This includes a surplus of oil and liquefied natural gas (LNG) expected in the second half of the 2020s, alongside a significant increase in manufacturing capacity for key clean energy technologies.
- The report finds that low-emissions energy sources are set to generate more than half of the world's electricity by 2030.
- Meanwhile, demand for coal, oil, and gas is expected to peak by the end of this decade.

- Global electricity demand growth is projected to accelerate further, adding the equivalent of Japan's annual electricity consumption to global use each year.

32. Brown dwarf

Context:

Scientists have puzzled over the object known as Gliese 229B; the first known brown dwarf discovered 30 years ago is actually twins orbiting each other.

About Brown dwarf:

- Brown dwarfs are sometimes called failed stars because they're lighter than stars, but heavier than gas giant planets.

Features:

- These objects have a size between that of a giant planet like Jupiter and that of a small star.
- Brown dwarfs accumulate material like a star, not like a planet.
- They can also have clouds made out of precipitates in their atmospheres. However, while we have water clouds on Earth, the clouds on brown dwarfs are much hotter and likely made up of hot silicate particles.
- Thus, they hold onto their lighter elements (hydrogen and helium) more effectively than planets and have a relatively low metal content.
- **They do not have enough mass for their cores to burn nuclear fuel and radiate starlight. This is why they are sometimes referred to as "failed stars."**
- **The difference between brown dwarfs and stars is that, unlike stars, brown dwarfs do not reach stable luminosities by thermonuclear fusion of normal hydrogen.**
- Both stars and brown dwarfs produce energy by fusion of deuterium (a rare isotope of hydrogen) in their first few million years.

33. Hyperuniformity

Context:

Researchers have explored the mechanism behind the emerging property of recently discovered exotic disordered state of matter, known as “hyperuniformity”.

About Hyperuniformity:

- It is a property of certain heterogeneous media in which density fluctuations in the long-wavelength range decay to zero.
- Hyperuniform disordered materials have been observed in a variety of settings, such as in quasicrystals, large-scale structures of the universe, soft and biological emulsions and colloids, etc.
- Feature: One of the most striking characteristics of such a state is that mass fluctuations are greatly suppressed as the system size grows.

Applications:

- Hyperuniform materials have distinctive characteristics that could have technological or biological applications.
- The mechanism of hyperuniformity could be used to control various physiological functions in cells, and energy-efficient photonic devices (such as photonic band-gap materials)
- It could be used for optical data transmission and communications.

34. Trojan asteroids

Context:

Scientists have finally discovered a Trojan asteroid for Saturn, thereby establishing the presence of these celestial bodies alongside all giant planets in our solar system.

Trojan asteroids:

- Trojan asteroids are a class of asteroids that occupy a stable Lagrange Point in a planet's orbit around the sun.
- These are usually found around Lagrange Point L4 or L5 points which makes them gravitationally stable.

- These are thought to be remnants of the primordial material that formed the outer planets.
- Their orbit around the sun is similar to the orbit of the planet they are associated with.
- These were discovered by German astrophotographer Max Wolf in 1906, but they were named so later.
- They have unusual orbits, remain gravitationally stable for long periods of time and studying them can provide useful insights into the evolution of the solar system.

What are Lagrange points?

- A Lagrange point is a position in space where the gravitational pull of two large masses precisely equals the centripetal force required for a small object to move with them.
- These points in space can be used by spacecraft to reduce fuel consumption needed to remain in position.
- The Lagrange points are named in honour of Italian-French mathematician Josephy-Louis Lagrange, and there are five of them: L1, L2, L3, L4, and L5.
- The L1 point of the Earth-Sun system affords an uninterrupted view of the Sun.
- It is currently home to the Solar and Heliospheric Observatory Satellite SOHO.

35. Moonlight Programme

Context:

Recently, the European Space Agency (ESA) at the International Astronautical Congress, launched its Moonlight Lunar Communications and Navigation Services (LCNS) programme.

About Moonlight Programme:

- The programme will have a constellation of about five lunar satellites (one for high data rate communications and four for navigation) that will allow accurate autonomous landings, high-speed communication, and surface mobility.

- **It is Europe's first-ever dedicated satellite constellation for telecommunication and navigation services for the Moon.**
- These satellites will reportedly enable data transfer over 2,50,000 miles or 4,00,000 kilometres between the Earth and the Moon.

The prime focus of the Moonlight programme will be to offer coverage at the Moon's South Pole.

- South Pole of moon is a key area for many missions owing to lighting conditions and the potential presence of water ice within craters that perpetually remain in the shadows.

As part of the programme, the first step will be the launch of Lunar Pathfinder, a communications relay satellite built by Surrey Satellite Technology LTD, in 2026.

The initial services of the programme will reportedly begin by the end of 2028, and the system is said to be fully operational by 2030.

The ESA is working with NASA and the Japanese space Agency JAXA on LunaNet, which is essentially a framework to standardise communication and navigation for the Moon.

36. Egypt is now malaria-free

Context:

The World Health Organization (WHO) has certified Egypt as malaria-free.

About:

- Malaria has been documented in Egypt since 4000 B.C.E., with historical genetic evidence found in mummies.
- The disease was particularly concentrated in Nile River communities due to favourable mosquito breeding conditions.

Malaria

- **Malaria is a life-threatening disease, is caused by the Plasmodium parasite and transmitted through bites from infected female Anopheles mosquitoes.**
- **It is most prevalent in tropical and subtropical regions, including sub-Saharan Africa, Southeast Asia, and South America.**

- The deadliest species is Plasmodium falciparum, but Plasmodium vivax is the most widespread.
- **After entering the human body, the parasite multiplies in the liver and then infects red blood cells**
- Symptoms: Fever, headache, chills, Fatigue, confusion, seizures, difficulty breathing, jaundice, and dark urine.

Prevention Strategies:

- **Vector Control: Key strategies include insecticide-treated nets (ITNs) and indoor residual spraying (IRS), though resistance to insecticides is emerging.**
- **R21/Matrix-M Vaccine: Recommended in October 2023, further enhancing prevention efforts.**
- **Chloroquine: Effective for P. vivax in sensitive regions, often supplemented with Primaquine to prevent relapses.**

Global and Indian Efforts:

- **Global Malaria Program:** Launched by WHO with a strategy to reduce malaria incidence and mortality by 90% by 2030.
- **E-2025 Initiative:** Aimed at halting malaria transmission in 25 countries by 2025.
- **India's National Vector-Borne Disease Control Programme (NVBDCP):** Focuses on multiple vector-borne diseases, including malaria, through integrated measures.

37. Euclid space telescope

Context:

The Euclid space telescope released an image showing an area of a mosaic on October 15.

About:

- **Euclid is a European mission, built and operated by the European Space Agency (ESA), with support from NASA's Roman Space Telescope.**

- NASA is assisting the Euclid mission by providing essential hardware for one of the spacecraft's sensors, supporting the science team, and creating a Euclid data processing centre in the United States.
- *It aims to explore the composition and evolution of the 'dark' Universe.*
- Further, it plans to uncover the great cosmic mystery of dark matter and dark energy from the Sun-Earth Lagrange point L2.

38. Bioacoustics

Context:

Bioacoustics combined with artificial intelligence (AI) can revolutionize biodiversity monitoring both on land and in aquatic settings, according to researchers.

About Bioacoustics:

- It is a cross-disciplinary science that combines biology and acoustics.
- *Usually, it refers to the investigation of sound production, dispersion, and reception in animals.*
- Bioacoustics research can include approaches whereby scientists focus on specific species and conduct fieldwork to record their vocalisations at close range.
- Alternatively, it may involve the placement of passive acoustic monitors in a set location to record audio data over a longer period of time.

In terms of conservation research, bioacoustics:

- Allows us to quickly gather in-depth information about ecosystems, including species' presence (determined by their vocalisations), rain patterns, and human activity.
- Helps us monitor threatened species, examine habitat use and migration patterns, and understand how ecosystems recover from disturbance events like logging or forest fires.
- Provides data to guide conservation planning and support the development of new conservation strategies.

39. LISA Mission

Context:

Recently, the National Aeronautics and Space Administration (NASA) revealed the first look of the prototype for six telescopes that will help LISA's three spacecraft detect gravitational waves in space.

About LISA Mission:

- *The Laser Interferometer Space Antenna (Lisa) mission is a collaborative effort between Nasa and the European Space Agency (ESA) set to launch in the mid-2030s.*
- The main objective of the mission is to detect and study gravitational waves by putting three spacecrafts into the Earth's orbit and positioning them in a triangular format with 1.6 million miles on each side.
- It will be the "first gravitational wave detector in space" and will "explore the fundamental nature of gravity and black holes". It will also probe the rate of expansion of the Universe.
- All three spacecraft will have two telescopes each. The LISA mission will use lasers to detect gravitational waves.
- The LISA mission will comprise three spacecraft. These three spacecrafts will fly in a triangular formation behind the Earth as our planet orbits the Sun.
- The spacecraft will sit in a heliocentric orbit, about 50 million km from Earth, with a distance of around 2.5 million km between each spacecraft.
- LISA will detect ripples in spacetime through subtle changes in the distances between free-floating cubes nestled within each spacecraft.
- Changes in the relative distances between these golden cubes will be tracked with extreme accuracy using laser interferometry.

40. Cybersquatting

Context:

Recently, a Delhi based developer registered the domain, 'JioHotstar,' which ignited a debate on cybersquatting.

About Cybersquatting:

- *It is an act of registering or using a domain name to profit from a trademark, corporate or personal name of an individual.*
- Usually, cybersquatting is seen as a form of extortion or even as an attempt to take over business from its rival.

Types of Cybersquatting

- **Typosquatting:** In this domain are bought with typological errors in the names of well-known brands. Examples of such misspelt domains are yajoo.com, facebok.com etc. The intention behind this act is to divert the target audience whenever they misspell a domain name.
- **Identity theft:** In cases pertaining to identity theft, the website of an already existing brand is copied with the intention of confusing the target consumer.
- **Name jacking:** It involves impersonating a well-known name/ celebrity in cyberspace. Instances of name jacking would include creating fake websites/ social media accounts with a celebrity's name.
- **Reverse cybersquatting:** It means an event whereby a person/s falsely claims a trademark as their own and falsely accuses the domain owner of cybersquatting. In essence, this act is the opposite of cybersquatting.

In India, there are no specific laws that condemn, prohibit or penalize the act of cybersquatting.

However, domain names are considered as trademarks under the Trademark Act, 1999. Hence, any person who starts using an identical/similar domain name will be held liable for trademark infringement as described under Section 29 of the Trademark Act, 1999.

41. Pandemic Fund Project

Context:

Recently, the Union Minister of Fisheries, Animal Husbandry and Dairying launched the Pandemic Fund Project on "Animal Health Security Strengthening in India for Pandemic Preparedness and Response", in New Delhi.

About Pandemic Fund Project:

- It is a \$25 Million initiative funded by the G20 Pandemic Fund.
- It is designed to enhance the country's "animal health security" by upgrading and expanding animal health laboratories and developing laboratory networks.
- *Implementation partners: The fund is to be implemented in partnership with the Asian Development Bank (ADB), the World Bank and the Food and Agriculture Organization (FAO) and to be utilised by August 2026.*
- The Fund supports the existing initiatives of the department through enhancing disease surveillance, including genomic and environmental surveillance for early warning, laboratory infrastructure development, cross-border collaboration, and will create a more integrated system for monitoring and managing "zoonotic" diseases.
- The Fund is also aimed at developing human capacity-building initiatives to enhance the skills and capabilities of animal health human resources.
- It will also be used to upgrade data management systems, and enhancing analytics capabilities will enable better risk assessment, improved decision-making and more effective communication strategies related to animal health risks.
- The project hopes to strengthen institutional capacity at both national and regional levels by supporting the development of a disaster management framework for the livestock sector.

42. Heritable Genome Editing

Context:

South Africa amends guidelines to allow genetically modified children. Heritable human genome editing has long been hotly contested, in large part because of its societal and eugenic implications.

About Heritable Genome Editing:

The heritable genome editing targets germline cells (sperm, eggs, or embryos), making the genetic changes inheritable by future generations. Somatic cell modifications, in contrast, affect only the individual and are not passed on.

CRISPR-Cas9 is one of the primary technologies used for genome editing, including potential applications in heritable genome modifications.

HHGE can be achieved through other advanced genome editing tools like Zinc-finger nucleases (ZFNs), and Transcription Activator-Like Effector Nucleases (TALENs).

Potential Applications of Heritable Genome Editing

- Disease Prevention: Targeting heritable diseases like cystic fibrosis, Huntington's disease, and sickle cell anaemia to prevent transmission and improve health outcomes.
- Advancement of Genetic Research: Enhancing knowledge of human biology, genetics, and disease mechanisms through innovative research applications.
- Assisted Reproductive Technology: Improving technologies such as in vitro fertilization (IVF), potentially leading to better success rates and healthier outcomes for embryos.
- **The Oviedo Convention, adopted by European nations, prohibits the creation of genetically modified human embryos. It does not allow the creation of genetically modified children.**
- However, South Africa's guidelines reportedly allow for the potential creation of genetically modified children, with less stringent regulations than those recommended by international bodies such as the WHO.

43. Cloud chamber at the Indian Institute of Tropical Meteorology

Context:

Towards the end of 2024, India is establishing a first-of-its-kind cloud chamber at the Indian Institute of Tropical Meteorology (IITM), Pune.

About:

- A cloud chamber resembles a closed cylindrical or tubular drum, inside which water vapour, aerosols and so are injected. Under the desired humidity and temperature inside this chamber, a cloud can develop.
- The Pune facility will allow scientists to study the seed particles that form cloud droplets or ice particles in a sustained manner.
- Many countries have basic cloud chambers, which have limited functionalities and scope to perform specific studies.
- **With Mission Mausam, however, India is building a cloud chamber with convection properties, as required to study Indian monsoon clouds.**
- **India's Cloud Chamber is part of Mission Mausam.**
- Globally, there are only a handful of convective cloud chambers.
- **Objective – To gain a better understanding of cloud physics under conditions commonly affecting Indian weather systems.**
- This knowledge can be used for strategic planning of weather modification.

Need for it – To study Cloud physics that basically involves:

- the study of cloud behaviour during normal and extreme conditions,
- Intra-particle interactions inside a cloud,
- The formation of rain droplets and ice particles,
- The influence of moisture added into the atmosphere due to cyclones or low-pressure systems and

- Interactions between different cloud layers, among others.

Uses – Scientists will have the flexibility to tailor physical and atmospheric parameters to suit environmental requirements that influence the Indian weather and climate.

Plans for the near future – Over the next 18-24 months, the Indian team will mainly focus on developing complex and highly advanced instrumentation and probes that will be deployed when the chamber is ready.

Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX) programme – Is an experiment for cloud seeding which was conducted in four phases lasting more than a decade.

R.C.REDDY
IAS STUDY CIRCLE

@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

HIGH-IMPACT REVISION

UPSC CSE **PRELIMS** 2025

(GS + CSAT + TESTS Series)

- ❖ 100+ HIR Students Cleared CSE Prelims 2024
- ❖ 40+ Questions in CSE Prelims 2024 from HIR classes and Tests



GS by
Goutham sir

**Cleared 6 CSE Prelims,
3 IFoS Prelims**



CSAT by
Surya Teja sir

**(AIR-66, UPSC IFoS) IIT,
IIM, Optional Mathematics**

Course Start Date

**20th November
2024 >>>**

COURSEMODE- ONLINE/OFFLINE

WHATSAPP YOUR QUERIES TO



73867 15016



**Scan to Watch
Orientation Video (or)
For Course Details (or) To Enroll**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Current Affairs Test Series for CSE Prelims 2025 (offline/online)

Offline Test Locations : Himayat Nagar or Ashok Nagar Branch

13 Tests
(100 Qs Each), Total 1300 Qs
with Detailed Explanation PDFs

Covering Static Topics Based
on 13 months of CA :
(April 2024 to April 2025)

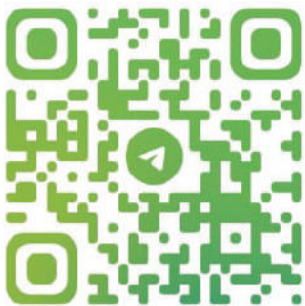
★ **Analysis by Faculty**
after each test

High - Quality MCQs

Covers Latest MCQ Patterns
based on PYQs

CURRENT AFFAIRS TEST SERIES SCHEDULE PLAN - 2024-25

S.No.	Test Name	Date of Test
1	CA April 2024	18-08-2024
2	CA May 2024	01-09-2024
3	CA June 2024	15-09-2024
4	CA July 2024	29-09-2024
5	CA August 2024	13-10-2024
6	CA September 2024	27-10-2024
7	CA October 2024	17-11-2024
8	CA November 2024	15-12-2024
9	CA December 2024	12-01-2025
10	CA January 2025	16-02-2025
11	CA February 2025	16-03-2025
12	CA March 2025	13-04-2025
13	CA April 2025-20 Days	04-05-2025



Scan to Join our Telegram
Channel for more updates



Scan for Schedule, Application
and Payment Form

WHATSAPP YOUR QUERIES TO



70756 52127

INTERNATIONAL RELATIONS

1. South Asian Association for Regional Cooperation (SAARC) Currency Swap Framework

Context:

Recently, India signed a major currency swap agreement under the South Asian Association for Regional Cooperation (SAARC) Currency Swap Framework, with the Maldives for \$750 million to help the island nation tide over its current foreign currency crunch.

About South Asian Association for Regional Cooperation (SAARC) Currency Swap Framework:

- The South Asian Association for Regional Cooperation (SAARC) Currency Swap Framework is a financial arrangement between the Reserve Bank of India (RBI) and SAARC member countries to provide financial stability and support for short-term foreign exchange needs
- **Objective: To provide a backstop line of funding for short-term foreign exchange liquidity requirements or balance of payment crises of member countries.**
- It also aims to strengthen economic ties and financial stability within the SAARC region.
- **Launched: First came into operation on November 15, 2012.**
- **The currency swap window will be available to all SAARC member countries, provided they sign bilateral agreements.**
- Under the Framework for 2024-27, a separate INR Swap Window has been introduced with various concessions for swap support in Indian Rupee.
- **The RBI will continue to offer swap arrangements in US dollar and euro under a separate window with an overall corpus of \$2 billion.**

India-Maldives:

- Signed between the Reserve Bank of India and the Maldives Monetary Authority
- Swap arrangement: \$400 million and an additional ₹3,000 crore (\$357 million).
- Availability: Available until 2027.

- It enables payments between the two countries to be made in different currencies.

2. East Asia Summit

Context:

Prime Minister Narendra Modi will visit Laos on October 10-11 to attend the 21st ASEAN-India and the 19th East Asia Summits that are being hosted by Laos.

About:

East Asia Summit:

- Established: 1950
- Headquarter: Colombo, Sri Lanka
- **India: Founding member**

SACEP – South Asia Co-operative Environment Programme

- Established: 1982
- Headquarter: Colombo, Sri Lanka
- **India: member**

Pacific Islands Forum:

- Established: 1971
- Headquarter: Suva, Fiji
- **India is not a member, associated as a Dialogue partner since 2002.**

ASEAN – Association of Southeast Asian Nations:

- Established: 1967
- Headquarter: Jakarta, Indonesia
- **India is not member, associated as a Dialogue partner in 1995.**

3. Anaconda strategy

Context:

Taiwan's navy commander recently claimed that the People's Liberation Army (PLA) is using an 'anaconda strategy' to squeeze the island nation.

About Anaconda strategy:

- It refers to a military strategy with the primary objective to suffocate the Confederacy economically and militarily, similar to how an anaconda snake coils around and asphyxiates its prey.
- It was proposed by Union General Winfield Scott during the early stages of the American Civil War.
- China's 'anaconda strategy' against Taiwan reportedly involves a mix of military manoeuvres, psychological tactics, and cyber warfare to eventually weaken Taiwan's defences. The ultimate goal appears to be to force Taiwan into submission without engaging in a full-scale invasion.
- China is encircling Taiwan by both sea and air, increasing the number of air incursions to Taiwan Strait, and employing its ships to operate around the country in what appears to be an effort to tire out Taiwan's navy and air force.
- It could be the prelude to a more violent showdown in the future.

4. United Nations Interim Force in Lebanon

Context:

Israel Defence Forces (IDF) tanks destroyed the main gate of a facility of the UN peacekeeping forces at Ramyah in south Lebanon recently, the United Nations Interim Force in Lebanon (UNIFIL) said.

About United Nations Interim Force in Lebanon (UNIFIL):

- The United Nations Interim Force in Lebanon (UNIFIL) was established by the United Nations Security Council in 1978 in response to Israel's invasion of Lebanon, specifically during the South Lebanon conflict.
- UNIFIL's mandate was expanded in 2006 after the 34-day conflict between Hezbollah and Israel to include monitoring the cessation of hostilities and supporting the deployment of Lebanese armed forces in southern Lebanon.

- The United States is not the largest contributor of troops to UNIFIL. The largest contributors are Indonesia, followed by Italy, India, Nepal, and China.

5. India & Colombia

Context:

India & Colombia have signed the Audiovisual Co-Production Agreement.



About:

A co-production is a joint venture between two or more different production companies for the purpose of producing a feature film, television/web show or series and so on.

- In the case of an international co-production, production companies from different countries (typically two to three) work together for producing content across different media platforms.
- The agreement is expected to benefit producers from both the countries in pooling their creative, artistic, technical, financial and marketing resources for the co-production.
- It will also lead to exchange of art and culture among the two countries.

Currently, India has co-production treaties with 16 countries, resulting in 29 projects over the last five years.

- Colombia is the 17th country with which India is signing a Co-Production Agreement.

6. DiGi (Digital Cooperation for Indo-Pacific Growth) Framework

Context:

The United States, Japan and South Korea on October 25, 2024 announced the launch of a new framework that furthers their collaboration with the Indian private sector to support digital infrastructure in India.

About:

- *The DiGi (Digital Cooperation for Indo-Pacific Growth) Framework is an initiative aimed at enhancing digital infrastructure and technological cooperation in the Indo-Pacific region, with India as a key partner.*
- *It is a collaboration between the United States, Japan, and the Republic of Korea (South Korea).*
- The goal is to pool resources, expertise, and strategic investments in India's digital economy. These three countries aim to work closely with India to advance shared priorities in digital infrastructure, covering sectors such as 5G, quantum technology, and e-commerce.
- Australia, however, is not listed as a partner in this specific framework.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

HIGH-IMPACT REVISION

UPSC CSE PRELIMS 2025

(GS + CSAT + TESTS Series)

❖ **100+ HIR Students Cleared CSE Prelims 2024**

❖ **40+ Questions in CSE Prelims 2024 from HIR classes and Tests**

Course Plan

General Studies (GS)

3 components for effective revision:

Strengthen your Knowledge

- Cover High Impact areas of GS (100+ hrs)
- Memorization Techniques
- Important Current Affairs (25+ hrs)

Exam Orientation

- 25+ MCQ solving techniques for GS
- PYQ Analysis of last 15 years
- Learn to logically handle a difficult Prelims paper

Practice

- 12 GS Sectional Tests
- 1 GS Grand Test
- 5 Sectional (GS) + 3 Grand Tests (GS + CSAT) after HIR course

Course Start Date

20th November 2024 >>>

COURSEMODE- ONLINE/OFFLINE

WHATSAPP YOUR QUERIES TO



73867 15016

CSAT

3 components for effective revision:

Strengthen your Knowledge

- Cover most topics and themes (40+ hrs)
- Tools & tricks for speed and accuracy
- learn to avoid commonly made mistakes

Get Exam Orientation:

- Developing Strategy based on difficulty of the paper and candidate's strengths
- Questions and trend Analysis from PYQs
- Developing a CSAT mindset of logic and reasoning

Practice

- 4 CSAT Sectional Tests
- 1 CSAT Grand Test
- Frameworks for Test Performance analysis, revision and practice



**Scan to Watch
Orientation Video (or)
For Course Details (or) To Enroll**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Current Affairs Test Series for CSE Prelims 2025 (offline/online)

Offline Test Locations : Himayat Nagar or Ashok Nagar Branch

13 Tests
(100 Qs Each), Total 1300 Qs
with Detailed Explanation PDFs

Covering Static Topics Based
on 13 months of CA :
(April 2024 to April 2025)

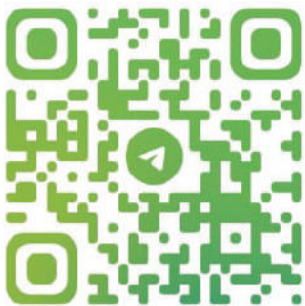
★ **Analysis by Faculty**
after each test

High - Quality MCQs

Covers Latest MCQ Patterns
based on PYQs

**CURRENT AFFAIRS TEST SERIES SCHEDULE
PLAN - 2024-25**

S.No.	Test Name	Date of Test
1	CA April 2024	18-08-2024
2	CA May 2024	01-09-2024
3	CA June 2024	15-09-2024
4	CA July 2024	29-09-2024
5	CA August 2024	13-10-2024
6	CA September 2024	27-10-2024
7	CA October 2024	17-11-2024
8	CA November 2024	15-12-2024
9	CA December 2024	12-01-2025
10	CA January 2025	16-02-2025
11	CA February 2025	16-03-2025
12	CA March 2025	13-04-2025
13	CA April 2025-20 Days	04-05-2025



Scan to Join our Telegram
Channel for more updates



Scan for Schedule, Application
and Payment Form

WHATSAPP YOUR QUERIES TO



70756 52127

ART AND CULTURE

1. Vaikom Satyagraha

Context:

The Tamil Nadu government has cleared the decks for the construction of a memorial for social reformer Periyar E.V. Ramasamy, one of the leaders of the Vaikom Satyagraha, at Arookutty in Alappuzha, Kerala.

About Vaikom Satyagraha:

- It was a social reform movement which originated and took its place at Vaikom, then part of the princely state of Travancore, in Kottayam district of Kerala, during the period of 1924-1925.
- It was the dawn of temple entry movements in India.

Background:

- The Vaikom Mahadevar Temple was the epicentre of the town, and Dalits were prohibited from entering the temple premises or even using the road that encircled the temple.
- In AICC (All India Congress Committee) meeting in Kakinada in 1923, T. K Madhavan, along with Sardar Panikkar and KP Kesava Menon, submitted a petition to the Travancore legislative council.
- The petition sought to grant the right to temple entry and worship of gods for all sections of the society, irrespective of caste, creed, and community.
- During a tour of the region by leaders like K. Kelappan, a demand was made to allow everyone to use the road, but the temple authorities refused.
- This refusal led to the commencement of Satyagraha.

The Satyagraha was led by prominent leaders such as K. Kelappan, T. K. Madhavan, and K. P. Kesava Menon, among others.

Young volunteers from all over Kerala joined the Satyagraha to fight against untouchability.

A lot of prominent political and social personalities, including Mahatma Gandhi, had a role in the satyagraha.

Mahatma Gandhi supported the movement unconditionally and visited Vaikom in 1925.

Periyar E.V. Ramasamy arrived in Vaikom on April 13, 1924, after several of the movement's leaders were jailed, and he provided crucial leadership to it.

Sree Narayana Guru also extended his support and co-operation to the Vaikom Satyagraha.

- Despite the authorities' attempts to suppress the Satyagraha, it ultimately succeeded in opening the temple roads to everyone.
- The Satyagraha came to a close on November 23, 1925, a total of 604 days after it began in March, 1924.
- In another three years, the Travancore government would order that temple roads across the state be opened to all.

2. Shyamji Krishna Varma

Context:

Prime Minister Modi paid homage to revolutionary freedom fighter Shyamji Krishna Varma on his 95th birth anniversary.

About:

- Shyamji Krishna Varma was born on 4 October, 1857 in Gujarat.
- He was an Indian revolutionary fighter, lawyer and journalist.

To promote the cause of Indian nationalism and freedom, in London he founded the;

- **Indian Home Rule Society**



@RCREDDYIAS

For other months issues and updates
Join our telegram channel

- **The India House and**
- **The Indian Sociologist** (a journal for advocating nationalist ideas).

Legacy:

- **Shyamji Krishna Varma was the first President of Bombay Arya Samaj and was deeply influenced by Dayanand Saraswati.**
- He played a role in inspiring Indian revolutionaries like Veer Savarkar, who was also associated with India House in London.
- He also served as the Divan (Prime Minister) for several princely states in India.

Shyamji Krishna Varma served as the Diwan of Junagadh State and Ratlam State in India:

Ratlam State

- Varma was appointed as Diwan by the King of Ratlam State, but was forced to retire due to ill health.

Junagadh State

- **Varma served as the Diwan of Junagadh State, but resigned in 1897 after a negative experience with a British agent.**

3. Doddalathur megalithic site**Context:**

A team of history and archaeology scholars and students from the University of Mysore have embarked on an excavation of megalithic burial sites in Chamaraajanagar district.

Doddalathur megalithic site:

- **Location: Doddalathur village, Hanur taluk, Chamaraajanagar district, Karnataka. Situated in a small valley formed by the Male Mahadeshwara Hill ranges.**
- **Discovery:** Identified by C. Krishnamurti of the Archaeological Survey of India (ASI) in 1961.
- **Period:** The site corresponds to the Iron Age, broadly placed between 1200 BC and 300 CE in South India.

- **Significance:** Contains hundreds of megalithic burials characterized by circles made of large boulders. Many burials remain intact despite agricultural expansion and land development.
- **Current excavation:** Led by a team from the University of Mysore and the Mythic Society, Bengaluru, with a focus on understanding megalithic-iron age culture and providing field training to archaeology students.

4. Lothal**Context:**

The Union Cabinet recently approved the development of the National Maritime Heritage Complex in Gujarat's Lothal.

About Lothal:

- Location: Southern city of the Indus Valley Civilization, situated in the Gulf of Khambhat, Gujarat.
- Situated along the Bhogava River, a tributary of the Sabarmati, near the Gulf of Khambhat.
- Etymology: Derived from the Gujarati words "Loth" (dead) and "thal" (mound), meaning "the mound of the dead."
- **Lothal had the world's earliest known dock.**
- This dockyard facilitated maritime trade with Mesopotamia, Egypt, and other regions.
- **UNESCO nomination: Lothal was nominated as a UNESCO World Heritage Site in April 2014, but its application is pending.**

5. Brahmi Inscription**Context:**

Recently, a Brahmi inscription was found in Dharanikota village at Amaravathi mandal in Palnadu district. The script on the inscription is written in Prakrit language and Brahmi characters of 2nd century C.E.

About Brahmi Inscription:

- The Brahmi script is the earliest writing system developed in India after the Indus script.
- It is one of the most influential writing systems; all modern Indian scripts and several hundred scripts found in Southeast and East Asia are derived from Brahmi.
- **Most examples of Brahmi found in North and Central India represent the Prakrit language.**
- **The earliest known Brahmi inscriptions are from the edicts of Ashoka, the third Mauryan emperor of Magadha who ruled most of the sub-continent between 268 and 232 BCE.**
- **Traces of the script have been discovered not just in the Gangetic plains but also in excavated sites in Tamil Nadu, Kerala and Sri Lanka, mostly on pottery shards.**
- Among the many descendant scripts of Brahmi are those of the Indo-Gangetic Plain, such as Devanagari and the Bengali and Gujarati scripts; those of the Deccan region, including the scripts for Tamil, Telugu, Malayalam, and Kannada.

6. Kalleshwar Temple**Context:**

A 13th-century stone inscription, or Veeragallu, has been recently uncovered during the renovation of the ancient Kalleshwar temple.

About Kalleshwar Temple:

- **It is a Hindu temple located in the town of Bagali in the Davangere district of Karnataka.**
- It is one of the oldest temples in the region and is dedicated to Lord Shiva.
- **The construction of the temple spans the rule of two Kannada dynasties: the Rashtrakuta Dynasty during the mid-10th century, and the Western Chalukya Empire, during the reign of founding King Tailapa II around 987 AD.**

Architecture:

- **The temple is a single shrine construction with an adjoining hall (mantapa).**
- **The temple, which faces east,** comprises a sanctum, an antechamber (or vestibule or antarala, whose tower is called the sukhanasi), that connects the sanctum to a gathering hall (sabhamantapa), which is preceded by a main hall (mukhamantapa).
- **The Shikara of the temple is a perfect example of early Cholan architecture.**
- The temple houses a large Shivalinga, which is believed to be more than a thousand years old.
- **This temple is protected as a monument of national importance by the Archaeological Survey of India.**

7. Battle of Walong**Context:**

To mark the 62nd anniversary of the iconic battle of Walong during the 1962 war with China, the Army is planning a month-long series of commemorative events.

About Battle of Walong:

- **Set during the 1962 Sino-Indian War, it occurred at the easternmost tip of Arunachal Pradesh, near the tri-junction of India, China, and Myanmar.**
- As Chinese forces launched a full-scale offensive, Indian troops were tasked with defending Walong, the only advanced landing ground in the region, a vital supply route that connected remote border posts.
- After Tawang, Walong was China's main offensive in the eastern sector during the war.
- The Chinese had overwhelming numbers on their side—an estimated 15,000 soldiers to India's 2,500, accompanied by superior weaponry and artillery.

- Yet, despite being heavily outnumbered and outgunned, Indian soldiers displayed remarkable resolve.
- The Indian Army units involved included battalions from the Kumaon Regiment, Sikh Regiment, Gorkha Rifles, Assam Rifles, and Dogra Regiment.
- Their tenacity and courage managed to hold back the Chinese advance for nearly three weeks, despite dire shortages of ammunition and supplies.
- The battle resulted in significant losses for India, with around 830 soldiers either killed, wounded, or captured.
- Yet, their defence stands as a powerful symbol of the valour and sacrifice of the Indian Army.
- It went down in history as the only Indian counterattack during the 1962 war.

8. Petra

Context:

Archaeologists have uncovered a secret tomb in Petra, Jordan, revealing 2000-year-old skeletons and a chalice resembling the Holy Grail.

About Petra:

- **It is a historic and archaeological city located in southern Jordan.**
- It was the centre of an Arab kingdom in Hellenistic and Roman times.
- Petra was established in 312 AC, which makes it around 2000 years old.
- It became the capital of the Nabateans people, an Arab tribe, who were referred to in the Bible.
- Under Nabataean rule, Petra prospered as a centre of the spice trade that involved such disparate realms as China, Egypt, Greece, and India.
- The Romans conquered Petra in 106 A.C, and they turned the territory into a Roman province of Arabia.

- During the second and third centuries, Petra continued to grow, and in the seventh century, the Romans lost the power of Petra to Islam.
- In the 12th century, Petra was once again taken by different leaders, and for a while, Petra was hidden until it was found by Swiss explorer Johann Ludwig Burckhardt in 1812.

Features:

- Many of Petra's buildings were carved directly into rocky sandstone cliffs.
- The name Petra comes from the Greek word for "rock."
- The city of Petra was built on a terrace with the Wadi Musa (the Valley of Moses) running through it east to west.
- The valley is enclosed by sandstone cliffs veined with shades of red and purple varying to pale yellow.
- Petra is home to roughly 800 tombs, therefore known as the "Royal Tombs", with the most renowned being 'The Treasury'.
- To support the ancient city's large population, its inhabitants maintained an extensive hydrological system, including dams, cisterns, rock-carved water channels, and ceramic pipes.
- Petra has also been referred to as the "Rose City" because of the colour of the stones used in its buildings.

Petra has been a UNESCO World Heritage Site since 1985.

9. Mera Hou Chongba Festival

Context:

Recently, people in Manipur celebrated the Mera Hou Chongba festival symbolizing unity amongst the indigenous people.

About Mera Hou Chongba Festival:

- It is an annual festival observed in order to strengthen the cordial bond between the indigenous communities living in hills and valley people.

- It is only a festival wherein both hills and valley indigenous communities are observed together in the State.
- This festival has been celebrated right from the time of Nongda Lairen Pakhangba in the first Century C.E.
- Every year, in the month of Mera, which falls in September/October, this festival is celebrated, in which all the village Chiefs or Khullakpas and peoples from the surrounding hill areas fully take part
- The royal palace officials share the same dias as the multiple village chiefs from communities such as Mao, Kabui, Zeme, Kom, Liangmei, and many more.
- The main function of Mera Hou Chongba festival is the exchange of gifts between the King and village Chiefs and performance of cultural show and sports.

10. Soliga tribes

Context:

The issue of clean drinking water remains a major challenge for the tribal communities in Chamarajanagar district, Karnataka, especially in the villages inhabited by the Soliga tribes.

About:

- *The Soliga, also spelt Solega, are a group of indigenous, forest-dwelling people found mostly in Tamil Nadu and Karnataka.*
- The term “Soliga” literally translates to “children of bamboo”, which reflects the tribe’s relationship with nature and their belief that they too have emerged from it.
- They reside in the peripheral forest areas near Biligiri Rangana Hills and Male Mahadeshwara Hills.
- *They are the first tribal community living inside the core area of a tiger reserve in India (Biligiri Rangaswamy Temple Tiger Reserve) to get their forest rights officially recognised by a court of law.*
- According to 2011 Census, the population of Soliga is about 33,871 in Karnataka and 5,965 in Tamil Nadu.

- Language: The Dravidian language sholaga is spoken by the Soliga. They also speak Kannada and Tamil.
- The Soligas live in single-room huts, built of bamboo and mud.
- The traditional economy of the Soliga is mostly based on shifting cultivation and collection of minor forest produce.
- **Along with adhering to Hindu customs, the Soliga people practice naturism and animism.**

11. Sri Singeeswarar Temple

Context:

A set of copper plate inscriptions with two leaves dating back to the 16th Century CE have been recently discovered at the Sri Singeeswarar temple in Tiruvallur district, Tamil Nadu.

About Sri Singeeswarar Temple:

- *It is a Hindu temple dedicated to Lord Shiva.*
- It is located at Mappedu Village near Perambakkam in Thiruvallur District of Tamil Nadu.

The temple was built by Aditya Karikalan II in the year 976 AD.

- He is the father of the great Chola emperor Rajaraja Cholan, who built the Thanjavur Big Temple.

Later, during the reign of Krishnadevaraya, his viceroy, Dalavai Ariyanadha Mudaliar, used his influence and built the Rajagopuram-Main Tower, compound wall, and 16-pillar Mandap in the year 1501.

- The Temple is built in Dravidian architecture style, and the Rajagopuram consists of 5 tiers.
- The presiding deity is called Singeeswarar. Singeeswarar is found in the form of a slightly big Shiva Lingam in the sanctum.

12. Indian Council for Cultural Relations

Context:

The Indian Council for Cultural Relations (ICCR) recently held a conference of Buddhist monks and scholars in Colombo on bequeathing Pali the status of a classical language by the Indian government.

About Indian Council for Cultural Relations (ICCR):

- It is an autonomous body under the Ministry of External Affairs, Government of India, involved in India's external cultural relations through cultural exchange with other countries and their people.
- It promotes, through its network of cultural centres, Indian culture abroad.
- ICCR was founded in 1950 by Maulana Abul Kalam Azad, independent India's first Education Minister.

Objectives:

- to actively participate in the formulation and implementation of policies and programmes pertaining to India's external cultural relations;
- to foster and strengthen cultural relations and mutual understanding between India and other countries;
- to promote cultural exchanges with other countries and people;

It administers various scholarship programs annually and awards about 3000+ scholarships under 21 different schemes to foreign students from about 180 countries.

- Amongst these 21 schemes, six are funded by ICCR from its grant, and others are administered on behalf of MEA and the Ministry of Ayush.
- The scholarships offer studies in a variety of courses from undergraduate to postdoctoral level in different leading universities and educational institutions spread all over India.

13. Sohrai painting

Context:

The Prime Minister of India gifted Sohrai painting to the Russian President during the recently held BRICS summit in Kazan.

Mural Painting Style	Associated State
1. Phad	Rajasthan
2. Kalamkari	Andhra Pradesh
3. Sohrai	Jharkhand
4. Warli	Maharashtra

About Sohrai Painting:

- It is an indigenous mural art form.
- It is also interesting to note that the word 'Sohrai' comes from soro – translating to 'to drive with a stick'.
- This art form dates back to the Meso-chalcolithic period (9000-5000 BC).
- The Isko rock shelter excavated in Barkagaon, Hazaribagh area also has rock paintings that are exactly similar to the traditional Sohrai paintings.
- Theme: It is usually based on natural elements of the universe, this includes forests, rivers, animals amongst others.
- These ancient paintings are made by tribal (Adivasi) women with the use of natural substances like charcoal, clay, or soil.
- The very primitive form of Sohrai art was in the form of cave paintings.
- It is practiced by indigenous communities, particularly in the States of Jharkhand, Bihar, Odisha, and West Bengal.
- It is the art of the women of the Kurmi, Santal, Munda, Oraon, Agaria, Ghatwal tribes.
- The region of Hazaribagh in Jharkhand that has received the GI tag for this art form.
- Sohrai paintings are distinctive for their vibrant colours, intricate patterns, and symbolic motifs;
- There is a Sohrai festival held every year, marking the harvesting season and the arrival of winter.

14. Konark Sun Temple

Context:

The Prime Minister's 'Mann Ki Baat'—through which he interacts with citizens on various issues—had recently made references to Odissi dance and Konark temple.

About Konark Sun Temple:

- Location: It is located on the coastline of Odisha in Puri district.
- Also called the Surya Devalaya, the temple is dedicated to the Hindu god Surya.
- Textual evidence indicates that Narasimha I (who reigned between 1238 and 1264) of the Eastern Ganga dynasty built the temple in 1250.
- It was designated a UNESCO World Heritage Site in 1984.

Features:

- It is a classic example of the Odisha style of architecture or Kalinga architecture.
- The temple complex has the appearance of a 100-foot-high solar chariot, with 24 wheels and pulled by six horses, all carved from stone.
- It is oriented towards the east so that the first rays of the sunrise strike the main entrance.
- The wheels of the temple are sundials, which can be used to calculate time accurately to a minute.
- Around the base of the temple, there are images of animals, foliage, warriors on horses, and other interesting structures.
- The temple also features elaborate stone carvings depicting scenes from Hindu mythology.
- The temple, built from Khondalite rocks, is also known as 'BLACK PAGODA' due to its dark colour.
- The temple remains a site of contemporary worship for Hindus, during the annual Chandrabhaga Festival, around the month of February.



@RCREDDYIAS

**For other months issues and updates
Join our telegram channel**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Cleared Prelims in 2nd attempt after taking High - Impact Prelims Revision course

and went on to secure AIR 202 in UPSC CSE 2023



“ High- Impact Prelims Revision Course for CSE 2023 Prelims was instrumental in refining my preparation for Prelims. The approach provided by Gautham sir gave me a fresh insight into Prelims preparation and on how to tackle the paper especially if it's different or unconventional”

ANUSHA PILLAY - IPS - AIR 202 (CSE 2023)

Course Start Date

**20th November
2024 >>>**

COURSEMODE- ONLINE/OFFLINE

WHATSAPP YOUR QUERIES TO



73867 15016



**Scan to Watch
Orientation Video (or)
For Course Details (or) To Enroll**



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Current Affairs Test Series for CSE Prelims 2025 (offline/online)

Offline Test Locations : Himayat Nagar or Ashok Nagar Branch

13 Tests
(100 Qs Each), Total 1300 Qs
with Detailed Explanation PDFs

Covering Static Topics Based
on 13 months of CA :
(April 2024 to April 2025)

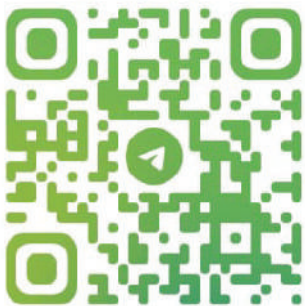
★ **Analysis by Faculty**
after each test

High - Quality MCQs

Covers Latest MCQ Patterns
based on PYQs

CURRENT AFFAIRS TEST SERIES SCHEDULE PLAN - 2024-25

S.No.	Test Name	Date of Test
1	CA April 2024	18-08-2024
2	CA May 2024	01-09-2024
3	CA June 2024	15-09-2024
4	CA July 2024	29-09-2024
5	CA August 2024	13-10-2024
6	CA September 2024	27-10-2024
7	CA October 2024	17-11-2024
8	CA November 2024	15-12-2024
9	CA December 2024	12-01-2025
10	CA January 2025	16-02-2025
11	CA February 2025	16-03-2025
12	CA March 2025	13-04-2025
13	CA April 2025-20 Days	04-05-2025



Scan to Join our Telegram
Channel for more updates



Scan for Schedule, Application
and Payment Form

WHATSAPP YOUR QUERIES TO



70756 52127

MISCELLANEOUS

1. Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DAJGUA) Scheme

Context:

PM launches Dharti Aaba Janjatiya Gram Utkarsh Abhiyan from Hazaribagh, Jharkhand recently on 2nd October 2024, birth anniversary of Mahatma Gandhi.

Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DAJGUA) Scheme:

- **Aim - Dharti Aaba Janjatiya Gram Utkarsh Abhiyan envisions saturation of critical gaps in social infrastructure, health, education, and livelihood.**
- **The scheme focuses on the Particularly Vulnerable Tribal Groups (PVTG) population.**
- **Ministry - The Ministry of Tribal Affairs.**
- **Fund** - The scheme has a total outlay of Rs.79, 156 crores (Central Share -Rs.56, 333 crore and State Share - Rs. 22,823 crore).
- **Coverage** - The Abhiyan will cover around 63,843 villages benefitting more than 5 crore tribal people in 549 districts and 2,911 blocks.
- **It spread across all tribal majority villages and aspirational blocks in 30 States/UTs.**
- **It will be implemented through 25 interventions implemented by 17-line ministries of Govt of India.**
- It will be implemented by convergence and outreach and ensures holistic and sustainable development of tribal areas and communities.

2. Co-district Initiative

Context:

Recently, the Assam government launched a new concept of "co-district" within a district administration by doing away with the existing system of civil sub-divisions.

from the Old Lipulekh pass inside the Indian territory.

About Co-district Initiative:

- **Co-districts' are smaller administrative units below the districts led by an officer of the rank of Assistant District Commissioner.**
- The objective of this first-of-its-kind initiative in the country is to take governance one step closer to people.
- It is expected to address the administrative challenges being faced by the administration in the districts.
- **The co-district commissioners will have powers and responsibilities similar to those of the district commissioners.**
- The functions that these offices are tasked with carrying out include land revenue matters, development and welfare work, excise and disaster management work.
- These will have administrative control over all departments within the co-district and have magisterial powers such as the issue of permissions for events.
- These will conduct routine administrative tasks such as the issue of ration cards, caste certificates, and sale permission of land.
- **This would expect to decentralize governance, enhance citizen-centric services, and streamline development efforts across the state.**

3. World Cotton Day

Context:

October 7 is celebrated each year as World Cotton Day.

About:

- **The idea for World Cotton Day originated from the Cotton Four nations, Burkina Faso, Benin, Chad, and Mali aiming to promote cotton by-products and their markets.**

- The first World Cotton Day (WCD) event was initiated in Geneva and observed on October 7, 2019.

Cotton Production in India:

- India is the second largest producer of cotton in the world after China.
- India accounts for 23% of the total global production.
- The Central Zone (which comprises states like Gujarat, Maharashtra, and Madhya Pradesh) are the biggest producer of cotton in India.
- Cotton cultivation requires a hot and sunny climate with an extended frost-free period. It thrives best in warm and humid conditions. The crop can be successfully cultivated in a variety of soil types, such as well-drained deep alluvial soils in the northern regions, black clayey soils of varying depths in the central region.

4. Humsafar Policy

Context:

Aimed at providing wayside amenities along national highways, Union Road Transport Minister recently launched 'Humsafar Policy.

About Humsafar Policy:

- It is a comprehensive initiative aimed at enhancing facilities along India's national highways.
- The policy seeks to improve the convenience, safety, and comfort of highway travellers by providing a wide range of services at key locations along the road network.
- Under this policy, rest stop equipped with essential amenities like clean washrooms, food courts, parking spaces, and first-aid services will be developed across major highways.
- Dedicated rooms for baby care, equipped with changing tables and other essentials, will be provided for families travelling with young children.
- It includes provisions for creating multi-utility spaces at regular intervals to cater to the diverse needs of travellers.

- These spaces will feature fuel stations, electric vehicle (EV) charging points, convenience stores, and other roadside services that are expected to reduce driver fatigue and improve overall road safety.
- Dormitories will be introduced at fuel stations to provide short-term accommodation for truck drivers, travellers, and those requiring a rest break during long-distance travel.
- Accessibility will be a key focus, with wheelchair provisions made available for differently-abled travellers.
- The initiative also aims to promote sustainability by incorporating green technologies, such as solar-powered facilities and EV infrastructure, contributing to India's environmental goals.

5. Russian traveller Afanasi Nikitin

Context:

Russian artists perform at a concert organised by the Kozhikode Corporation and the Russian House in Kozhikode to celebrate 555 years of the visit of Russian traveller Afanasi Nikitin to India.

About:

- Afanasi Nikitin, the Russian explorer who landed in India before Vasco da Gama.
- Nikitin first arrived in India in 1469, making this year the 555th anniversary of his arrival. He reached the west coast of India in 1469 and landed at the port of Cambay (Khambhat) in present-day Gujarat
- He visited the court of Bahamani sultan, Muhammad Shah III.
- His book "Voyage Beyond Three Seas" sheds light on 15th-century India.

6. Hand-in-Hand Initiative

Context:

Recently, the Food and Agricultural Organisation (FAO) Director-General opens the third Hand-in-Hand Investment Forum.

About Hand-in-Hand Initiative:

- **It was launched in 2019, is a flagship of Food and Agricultural Organisation (FAO).**
- It prioritizes countries and territories where poverty and hunger are highest, national capacities are limited, or operational difficulties are greatest due to natural or man-made crises.
- It seeks to eradicate poverty (SDG1), end hunger and malnutrition (SDG2), and reduce inequalities (SDG10) by accelerating market-based transformation of agri-food systems to raise incomes, improve nutrition, empower poor and vulnerable populations, and strengthen resilience to climate change.
- **Approach:** It uses geospatial, biophysical and socio-economic data, as well as advanced analytics to identify territories where agricultural transformation and sustainable management of forest and fisheries have the greatest potential for alleviating poverty and hunger.
- Its area of intervention includes developing value chains for priority commodities, building agro-industries and efficient water management systems, introducing digital services and precision agriculture
- **Member countries:** 72 countries have joined this Initiative.
- **India has not joined the Hand-in-Hand Initiative.**

What is FAO?

- **It is a specialized agency of the United Nations (UN) that leads international efforts to defeat hunger.**
- It is the oldest permanent specialized agency of the UN, established in October 1945.
- **Mandate:** To improve nutrition, increase agricultural productivity, raise the standard of living in rural populations, and contribute to global economic growth.
- **Members:** It currently has 194 Member States plus the European Union (member organization).
- **Headquarters:** Rome, Italy.

7. Z-Morh Project**Context:**

A Pakistan-backed Lashkar-e-Taiba, claimed responsibility for the recent terror attack on the Z-Morh Project site in J&K.

About Z-Morh Project:

- Z-Morh Tunnel is an under-construction 2-lane road tunnel between Gagangir and Sonamarg on the Srinagar-Leh Highway in Jammu and Kashmir. **The Z-Morh tunnel is part of the Zojila tunnel project.**
- The name "Z-Morh" refers to the Z-shaped road section near the construction site.
- **The tunnel will provide all-weather connectivity to Sonamarg, a famous tourist destination on the Srinagar-Leh highway.**
- The Billion Dollar tunnel project is also important for the success of the Zojila tunnel project, which is situated at an altitude of approximately 12,000 ft.

8. Public Land Protection Cell

- **Common lands are natural resources that are used collectively by a community, such as forests, pastures, ponds and wastelands.**
- Significance of common lands – They act as a resource base for non-cash, non-market economies that provides fodder, fuelwood, water, oils, fish and medicinal herbs.
- A wide variety of fruits and vegetables to the local communities.
- Various studies estimate that common lands contribute between 12 and 23% to rural household incomes.
- They also capture carbon, act as repositories of biodiversity, and relics of indigenous knowledge.
- Issues – India's common lands have been steadily declining.

- Grazing lands alone faced a 31% loss in total area between 2005 and 2015.
- Only in two states – Common lands cover 36% and 37% of the total land area of Rajasthan and Madhya Pradesh respectively.
- To ensure dignity, security and livelihoods for millions of rural people.
- Since the state courts have been inundated with public interest litigations over their encroachments.
- **In Jagpal Singh judgement, the Rajasthan High Court in 2019 and the Madhya Pradesh High Court in 2021 directed the respective state governments to establish permanent institutions known as public land protection cells (PLPCs).**
- **Public Land Protection Cell (PLPC) – These cells receive complaints on encroachments of rural common lands, follow the due process of law to resolve such disputes and restore the resources to the gram sabha or gram panchayat.**
- **PLPCs have been constituted in each district of the two states (Rajasthan and Madhya Pradesh) and are headed by the district collector.**
- These institutions are a welcome intervention when more than two-thirds of India's court litigations relate to land or property and most land conflicts relate to common lands.
- At a PLPC, communities can defend their common lands by making a direct representation and avoid navigating through the complex land legislations.
- **This reduces the need to engage professional legal assistance or pay court fees and thus allows a larger section of the population to access legal recourse at a much cheaper cost.**
- By institutionalising an alternative mechanism for dispute resolution, lengthy and costly court battles can be avoided and the judicial workload can be lowered.

9. 5th National Water Awards 2023

Context:

The Hon'ble President of India will confer the 5th National Water Awards 2023 on October 22nd 2024 at Vigyan Bhawan, New Delhi.

About:

- **The National Water Awards focus on the good work and efforts made by individuals and organizations across the country in attaining the government's vision of a Jal Samridh Bharat.**
- **The Awards were introduced in 2018 by the Ministry of Jal Shakti, and first were given in 2019.**
- The awards were presented to 38 winners in nine categories including Best State, Best District, Best Village Panchayat, Best Urban Local Body, Best Water User Association and Best Civil Society.
- **In the category of Best State, the first prize has been conferred upon Odisha, with Uttar Pradesh securing the second position, and Gujarat and Puducherry jointly securing the third position.**

Winners in best District category;

- Banda (Uttar Pradesh) from North Zone and Ganderbal (J&K) from north zone (joint winner),
- Indore (Madhya Pradesh) from west zone,
- Visakhapatnam (Andhra Pradesh) from south zone,
- Balangir (Odisha) from east zone
- Dhalai (Tripura) from the North East zone.



@RCREDDYIAS

For other months issues and updates
Join our telegram channel

10. Muriate of Potassium

Context:

With the crisis continuing in Ukraine and Gaza, experts and policymakers are concerned about further increases in the prices of the components used for making petroleum-based chemical fertilizers.

About:

Muriate of Potassium (MOP), also known as potash, is crucial for crop health as it enhances water retention, resistance to disease, and overall crop yield. However, India does not have any substantial natural reserves of potash and therefore relies entirely on imports to fulfil its MOP demand.

India imports 100% of its domestic requirement of Muriate of Potassium (MOP).

Diammonium Phosphate (DAP) is a widely used fertilizer that provides essential phosphorus and nitrogen to crops, supporting root development and crop growth. While India does produce some **DAP domestically, the production capacity is not sufficient to meet national demand, and approximately 50-60% of DAP needs are met through imports.**

Urea is the most commonly used fertilizer in India, largely due to its high nitrogen content, which is essential for plant growth. Although India has invested significantly in increasing its urea production capacity and is a major producer of urea, domestic production still does not fully meet the demand. **According to recent data, India imports about 20% of its urea requirement to bridge the gap between demand and domestic supply.**

11. Lord's Resistance Army

Context:

A court in Uganda has sentenced Lord's Resistance Army (LRA) commander Thomas Kwoyelo to 40 years in prison after a landmark war crimes trial over his role in the group's two-decade reign of violence.

Lord's Resistance Army:

- **It is a Ugandan rebel group currently operating in the border region of the Democratic Republic of the Congo (DRC), the Central African Republic (CAR), and South Sudan.**

- It was established by Joseph Kony in 1988 with the claim of restoring the honour of his ethnic Acholi people and to install a government based on his personal version of the Ten Commandments.
- It was designated as a terrorist group by the United States and prompted the first ever set of arrest warrants by the International Criminal Court (ICC) against the LRA's leader, Joseph Kony, and other top commanders.
- The group draws income from elephant ivory, gold, and diamonds and has received support from the Government of Sudan since 1994.
- It was designated as a terrorist group by the United States and prompted the first ever set of arrest warrants by the International Criminal Court (ICC) against the LRA's leader, Joseph Kony, and other top commanders.
- The group draws income from elephant ivory, gold, and diamonds and has received support from the Government of Sudan since 1994.

12. U.S. presidential and Congressional elections

Context:

The total expenditure for U.S. presidential and Congressional elections in 2024 is estimated at around U.S. \$16 billion (equivalent to ₹1,36,000 crores).

About:

- **The limit for the expenditure of Elections in India is set, from time to time, by the Election Commission (EC).**
- The election expenditure limit for candidates is Rs 95 lakh per Lok Sabha constituency in larger States and Rs 75 lakh in smaller States.
- The election expenditure limit for the Legislative Assemblies is Rs 40 lakh and Rs 28 lakh for larger and smaller States respectively.
- **There are no limits on the expenditure of political parties during elections.**

- **The Indrajit Gupta Committee (1998) and the Law Commission report (1999) have advocated for State funding of elections.**
- Challenges – Elections across the world democracies have become very expensive.
- Such increased expenditure that is met primarily through large donations creates an unholy nexus between the elected representatives and donors who seek favours.
- This acts as an entry barrier into electoral politics for many well-meaning citizens.
- In India, candidates from all major political parties breach the election expenditure limits by a wide margin.

13. National Commission for Indian System of Medicine

Context:

Recently, the National Commission for Indian System of Medicine (NCISM) conducted a workshop for drafting the Ayurveda Process Handbook at the NCISM office.

About National Commission for Indian System of Medicine:

- **It is the statutory body constituted under NCISM Act, 2020.**
- An Act to provide for a medical education system that improves access to quality and affordable medical education, ensures availability of adequate and high-quality medical professionals of Indian System of Medicine in all parts of the country.
- **Composition: It consists of 29 members, appointed by the central government.**
- A Search Committee will recommend names to the central government for the post of Chairperson, part time members, and presidents of the four autonomous boards set up under the NCISM.

Functions:

- **Framing policies for regulating medical institutions and medical professionals of Indian System of Medicine.**

- Assessing the requirements of healthcare related human resources and infrastructure.
- Ensuring compliance by the State Medical Councils of Indian System of Medicine of the regulations made under the Bill.
- Ensuring coordination among the autonomous boards.

14. Mission Amrit Sarovar

Context:

Recently, the Prime Minister of India said that over 60,000 Amrit Sarovars were constructed across villages leaving behind a legacy for future generations.

About Mission Amrit Sarovar:

- **It was launched on 24th April, 2022 with the resolve to build 75 Amrit Sarovars during the 75th year of independence as a part of Azadi Ka Amrit Mahotsav.**
- It helps to overcome the water crisis in rural areas of the country.
- **Every Amrit Sarovar will have a pondage area of at least 1 acre with a water holding capacity of about 10,000 cubic metres.**
- It focuses on water conservation, people's participation and proper utilization of soil excavated from the water bodies to boost infrastructure projects.

This Mission has been launched with a whole of Government Approach which involves 6 Ministries/Department namely:

- Dept of Rural Development, Department of land resources, Department of Drinking Water and Sanitation, Department of Water resources, Ministry of Panchayati Raj, Ministry of Forest, Environment and Climate changes.

There is no separate financial allocation for Mission Amrit Sarovar.

Bhaskar acharya National Institute for Space Application and Geo-informatics (BISAG-N) has been engaged as technical partner for the Mission.



R.C. REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

HIGH-IMPACT REVISION

UPSC CSE PRELIMS 2025

(GS + CSAT + TESTS Series)

❖ 100+ HIR Students Cleared CSE Prelims 2024

❖ 40+ Questions in CSE Prelims 2024 from HIR classes and Tests

Course Plan

General Studies (GS)

3 components for effective revision:

Strengthen your Knowledge

- Cover High Impact areas of GS (100+ hrs)
- Memorization Techniques
- Important Current Affairs (25+ hrs)

Exam Orientation

- 25+ MCQ solving techniques for GS
- PYQ Analysis of last 15 years
- Learn to logically handle a difficult Prelims paper

Practice

- 12 GS Sectional Tests
- 1 GS Grand Test
- 5 Sectional (GS) + 3 Grand Tests (GS + CSAT) after HIR course

Course Start Date

20th November
2024 >>>

COURSEMODE- ONLINE/OFFLINE

WHATSAPP YOUR QUERIES TO



73867 15016

CSAT

3 components for effective revision:

Strengthen your Knowledge

- Cover most topics and themes (40+ hrs)
- Tools & tricks for speed and accuracy
- learn to avoid commonly made mistakes

Get Exam Orientation:

- Developing Strategy based on difficulty of the paper and candidate's strengths
- Questions and trend Analysis from PYQs
- Developing a CSAT mindset of logic and reasoning

Practice

- 4 CSAT Sectional Tests
- 1 CSAT Grand Test
- Frameworks for Test Performance analysis, revision and practice



Scan to Watch
Orientation Video (or)
For Course Details (or) To Enroll



R.C.REDDY
IAS STUDY CIRCLE

45+ Years Director's Experience | 35+ Years Institute's History

Current Affairs Test Series for CSE Prelims 2025 (offline/online)

Offline Test Locations : Himayat Nagar or Ashok Nagar Branch

13 Tests
(100 Qs Each), Total 1300 Qs
with Detailed Explanation PDFs

Covering Static Topics Based
on 13 months of CA :
(April 2024 to April 2025)

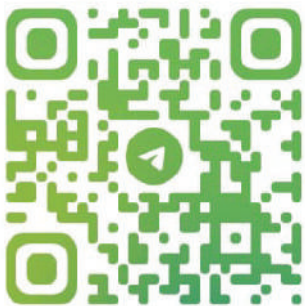
★ **Analysis by Faculty**
after each test

High - Quality MCQs

Covers Latest MCQ Patterns
based on PYQs

CURRENT AFFAIRS TEST SERIES SCHEDULE PLAN - 2024-25

S.No.	Test Name	Date of Test
1	CA April 2024	18-08-2024
2	CA May 2024	01-09-2024
3	CA June 2024	15-09-2024
4	CA July 2024	29-09-2024
5	CA August 2024	13-10-2024
6	CA September 2024	27-10-2024
7	CA October 2024	17-11-2024
8	CA November 2024	15-12-2024
9	CA December 2024	12-01-2025
10	CA January 2025	16-02-2025
11	CA February 2025	16-03-2025
12	CA March 2025	13-04-2025
13	CA April 2025-20 Days	04-05-2025



Scan to Join our Telegram
Channel for more updates



Scan for Schedule, Application
and Payment Form

WHATSAPP YOUR QUERIES TO



70756 52127