DAILY CURRENT AFFAIRS

By

Mentorship India

--- SOURCES ---

THE HINDU | PIB | THE FINANCIAL EXPRESS | ET Economic Times.com | live mint | AIR | The Indian EXPRESS JOURNALISM OF COURAGE

Important News Articles

1. 10th century Kadamba inscription written in Kannada and Sanskrit found in Goa - The Hindu
2. Himachal Pradesh HC stays inclusion of Hattees on ST list - The Hindu
3. SC declines to take up plea by Indian held in Prague for 'plot' to kill Pannun - The Hindu
4. Election Commission tweaks rules for allocation of symbols to new parties - The Hindu
5. India, Nepal sign power pact, MoU in renewable energy - Indian Express
6. India to participate in the international mega science project SKA - PIB
7. New antibiotic could target drug-resistant bacterium: scientists - The Hindu
8. Researchers engineer plant cells to produce drug for cancer - The Hindu

Editorials, Gists and Explainers

9. Breaking new ground the Kerala way - The Hindu
10. Reshaped by AI - Indian Express

Quick Look

1. Indian Cyber Crime Coordination Centre (I4C)
2. Scope for Mainstreaming Ayurveda Research among Teaching professionals (SMART) 2.0 Programme
3. Swadesh Darshan 2.0 Scheme
4. Project Cheetah
5. Assisted Reproductive Technology (ART)
6. Wetland City Accreditation

Important News Articles

GS I

1. 10th century Kadamba inscription written in Kannada and Sanskrit found in Goa - The Hindu

Relevance: Indian culture will cover the salient aspects of Art Forms, literature and Architecture from ancient to modern times.

Prelims Takeaway
• Chalukyas
• Kadamba period

News:

- An inscription written in **Kannada and Sanskrit** and said to be of 10th century A.D.
- The **Kadamba period** has been discovered in the **Mahadeva temple at Cacoda in southern Goa.**

Background

- The Kadambas of Goa were the subordinates of **Chalukyas of Kalyana**.
- **Chalukyan emperor Tailapa II** appointed Kadamba Shasthadeva as mahamandaleshwar of Goa for his help in overthrowing the Rashtrakutas.
- **Kadamba Shasthadeva conquered the city of Chandavara** from the Shilaharas in 960 A.D.
- Later, he conquered the **port of Gopakapattana (present Goa).**
- **Gundayya**, the son of Talara Nevayya, may have participated in this battle, and **won the port at the cost of his life.**
- His father may have erected a memorial stone with the inscription in the **temple of Mahadev of Cacoda** to commemorate the heroic fight of his son.

The Chalukyas

- It ruled parts of **Southern and Central India** between the 6th century and the 12th century.
- There were three distinct but related Chalukya dynasties.

Badami Chalukyas

- The earliest Chalukyas with their capital at **Badami (Vatapi) in Karnataka**.
- They ruled from the mid-6th century and declined after the death of their greatest king, Pulakesin II in 642 AD.

Eastern Chalukyas

- **Emerged after the death of Pulakesin II** in Eastern Deccan with capital at Vengi.
- They ruled till the 11th century.

Western Chalukyas

- **Descendants of the Badami Chalukyas,** they emerged in the late 10th century and ruled from Kalyani.

GS II

2. Himachal Pradesh HC stays inclusion of Hattees on ST list - The Hindu

Relevance: Welfare schemes for vulnerable sections of the population by the Centre and States and the performance of these schemes; mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections.

Prelims Takeaway
• Lokur committee
• Scheduled Tribes

News:

- Days after the **Himachal Pradesh government issued directives to include Hattees in the Scheduled Tribes (ST) list**, **the Himachal Pradesh High Court issued an interim stay** on January 4, 2024,

- The court questioned the rationality of Parliament's decision and called for responses from the State and Union governments.

Court's Critique on Inclusion Criteria:
- The court highlighted concerns over the inclusion of dominant caste communities, such as Brahman and Rajput, as Hattees, stating that it treated unequals as equals.
- It emphasised that mere residence in a difficult geographical area should not entitle forward castes to claim the disadvantages faced by Scheduled Tribes.

Lack of Characteristics for Inclusion:
- The court pointed out that the Deputy Solicitor General and the Attorney General were **unable to explain how dominant caste communities satisfied** the four characteristics outlined by the **Lokur Committee**
- **Lokur committee** was formed in 1965 to set parameters for ST inclusion:
  - primitive traits
  - distinctive culture
  - shyness of contact
  - backwardness.

3. SC declines to take up plea by Indian held in Prague for 'plot' to kill Pannun - The Hindu

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

News:

Prelims Takeaway
• Vienna Convention
• United Nations

- **The Supreme Court rejected a plea by an Indian national detained in Prague** accused of conspiring to murder Khalistani activist Gurpatwant Singh Pannun.
- Justice Sanjiv Khanna emphasized that the **matter involves public international law**, and it's the **government's responsibility to address.**

Judicial Respect for International Law
- Justice Khanna stressed the importance of respecting international law and the sovereignty of courts.
- **Consular access under the Vienna Convention was acknowledged,** with the judge advising the petitioner to approach authorities if denied.

Vienna Convention on Diplomatic Relations
- The Convention was adopted on 14th April 1961 by **the United Nations Conference on Diplomatic Intercourse and Immunities** held in Vienna, Austria. India has ratified the convention.
- It entered into force on April 24, 1964, and is **nearly universally ratified, with Palau and South Sudan being the exceptions.**
- It sets out the **special rules – privileges and immunities –** which enable diplomatic missions to act without fear of coercion or harassment through enforcement of local laws and to communicate securely with their sending Governments.
- **It makes provision for:**
  - withdrawal of a mission – which may take place on grounds of economic or physical security
  - for breach of diplomatic relations which may occur in response to abuse of immunity or severe deterioration in relations between sending and receiving States.
- A "receiving State" refers to the host nation where a diplomatic mission is located.

4. Election Commission tweaks rules for allocation of symbols to new parties - The Hindu

Relevance: Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies

News:
- The Election Commission of India brought in **new rules for allocation of symbols to Registered Unrecognised Political Parties (RUPPs)**

Key Highlights
- EC making it mandatory for Political parties to furnish :
  o audited accounts of last three financial years
  o expenditure statements of last two elections
  o the signature of the authorised office-bearer of the party along with the application form for symbols.

Background
- RUPPs are either newly-registered parties or those which have not secured enough percentage of votes in the Assembly or general election to become a State party
  o or those that have never contested elections after being registered.
- Common symbols are provided to RUPPs based upon an undertaking that they would put up "at least 5% of total candidates with regard to said Legislative Assembly election of a State".
- Earlier the RUPPs were giving these details separately.
- Now these details are being made part of the format of application for common symbols.
- The EC receives the applications from RUPPs in prescribed proforma for allotment of symbols under P**rovisions of Para 10B of the Election Symbols (Reservation & Allotment) Order, 1968.**
- In September 2022, the **EC had de-listed 86 non-existent RUPPs** and declared another 253 as 'Inactive RUPPs'.

5. India, Nepal sign power pact, MoU in renewable energy - Indian Express

Relevance: India and its neighbourhood- relations.

News:
- India's External Affairs Minister is on a **two-day visit** to co-chair with his Nepalese counterpart the seventh **Nepal-India Joint Commission.**

Power Export Agreement
- Nepal and India signed a long-term agreement for the **export of 10,000 MW of power to India over the next 10 years.**
- The agreement is seen as a major breakthrough in Nepal's power sector.

Renewable Energy Cooperation
- An **MoU for cooperation in renewable energy** was signed between Nepal Electricity Authority and National Thermal Power Corporation Limited, India.
- The agreement reflects mutual efforts to enhance **collaboration in the field of renewable energy** between the two nations.

Cross-Border Transmission Lines
- **Three cross-border transmission lines** were virtually inaugurated by India's External Affairs Minister and his Nepalese counterpart.
- The transmission lines include the 132 kV Raxaul-Parwanipur, 132 kV Kushaha-Kataiya, and New Nautanwa-Mainahiya lines, completed with **India's assistance.**

Scope of Discussions
- Discussions focused on **various aspects of bilateral ties,** including

- o trade and economic relations, connectivity projects, defence and security cooperation, agriculture, energy, power, water resources, disaster management, tourism, civil aviation, people-to-people and cultural exchange, and development partnership.
- The External Affairs Minister mentioned that discussions covered the **broader spectrum of Nepal-India relations,** emphasizing cooperation in multiple sectors.

GS III

6. India to participate in the international mega science project SKA - PIB

Relevance: Achievements of Indians in science & technology; indigenization of technology and developing new technology.

News:

Prelims Takeaway
• SKA Observatory
• LIGO

- The Government of India has accorded its approval for India's participation in the international mega science project, **Square Kilometre Array (SKA), at an estimated cost of ₹ 1250 Cr.**

Key Highlights

- This approval covers funding support for the construction phase of the international **SKA Observatory (SKAO) spread over the next 7 years.**
- The project will be jointly funded by the **Department of Atomic Energy (DAE) and Department of Science and Technology (DST**), with DAE as the lead agency.
- SKA is a state of the art, mega science international facility to build the world's biggest and most sensitive radio telescope for addressing a wide variety of cutting-edge science goals.
- The SKAO, collocated in Australia (SKA-Low) and South Africa (SKA-Mid) with operational headquarters in the UK, is expected to revolutionize radio astronomy,
  - o while driving the growth of many important new state-of-the-art technologies.
  - o Subsequent to this approval, India will be signing the SKAO treaty to become a full-fledged member of the SKA Observatory
- Participation in this project will open up possibilities for **development of niche skills in Indian industry and research organisations** in different areas of next generation technologies
  - o such as modern antenna design, sophisticated cryogenic receiver systems
- The approval for India's participation in this project underlines the emphasis laid by the Government of India on basic, applied and advanced science research.
- Earlier during the year, the Government of India committed to the U.S. Department of Energy's (DOE's) Fermi National Laboratory towards:
  - o collaborative development of the Proton Improvement Plan-II Accelerator

7. New antibiotic could target drug-resistant bacterium: scientists - The Hindu

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

News:

Prelims Takeaway
• Antibiotic Zosurabalpin
• Acinetobacter baumannii

- Researchers recently identified a new class of **antibiotics** with the potential to tackle a **drug-resistant bacterium, Acinetobacter baumannii.**

Antibiotic Zosurabalpin

- Reasearchers reported the identification and analysis of the **antibiotic zosurabalpin** that can kill **Acinetobacter baumannii.**
  - o This bacterium, especially its **carbapenem-resistant strains (CRAB),** poses a significant challenge in clinical treatment.
- They identified a **tethered macrocyclic peptide (MCP)** that selectively kills A. baumannii.

- Through optimization for effectiveness and tolerability, zosurabalpin emerged as a promising drug candidate in combating antibiotic-resistant strains.

Unique Mode of Action

- Researchers highlight that zosurabalpin operates through a novel mode of action, inhibiting the **transport of lipopolysaccharide (LPS).**
- Zosurabalpin **targets a protein complex** which is crucial for **transporting LPS to the bacterial surface** to create the **outer-membrane structure** of Gram-negative bacteria..
- It disrupts the LPS transport, leading to the **accumulation of LPS** in the bacterial cell, ultimately causing the **bacterium's demise.**

Efficacy Against CRAB

- The antibiotic was **effective** against more than 100 CRAB clinical samples tested in the laboratory.
- Furthermore, it considerably **reduced the levels of bacteria** in mice with CRAB-induced pneumonia.
- It also **prevented the death of mice** with sepsis, an abnormal immune response induced by CRAB.

8. Researchers engineer plant cells to produce drug for cancer - The Hindu

Relevance: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

News:

Prelims Takeaway
• Camptothecin (CPT)
• Nathapodytes nimmoniana
• Cancer

- Researchers from IIT Madras and Mandi have made strides in **metabolically engineering plant cells** to enhance the production of the **anti-cancer drug camptothecin (CPT).**
- The allopathic medicine is produced using **Nathapodytes nimmoniana,** a native, endangered plant.

Current Challenges

- The extraction of camptothecin from Nathapodytes nimmoniana demands a **significant amount of plant material,** approx 1,000 tonnes to yield 1 tonne of CPT.
- The plant's **endangered status** prompted the **exploration of alternative sources** for this vital anti-cancer compound.

> **Camptothecin**
> - It is majorly produced in the southeast Asian region, with the plant being largely found only in China and India.
> - The Chinese variety of the plant used to extract the cell is listed as critically endangered.
> - In India the plant is a native of western ghats and there was a 20% decline in population in the last decade .

Research Development

- In 2021, IIT Madras researchers identified a **microbe** as a sustainable and high-yielding **alternative source for CPT.**
- They then developed a **genome-scale metabolic model** for N. nimmoniana plant cells using computational tools to enhance the **understanding of the plant's metabolic pathways.**

Sustainable Production Approach

- The study presents a breakthrough in **sustainable and efficient commercial production** of CPT and other medically important alkaloids.
- By **metabolically engineering plant cells,** the researchers **aim to**
  - reduce the need to cut down endangered plants
  - cater to the increasing market demand for the drug
- The platform developed for metabolic engineering could extend to **enhance the production** of various **high-value phytochemicals,** showcasing broader applications.

Editorials, Gists and Explainers

9. Breaking new ground the Kerala way - The Hindu

Relevance: poverty and developmental issues, urbanization, their problems and their remedies.
Context:

- A **new Urban Commission** recently emerged in the State of **Kerala**, marking a positive development after almost 38 years.
- The first i.e. the **National Commission on Urbanisation,** formed by former **PM Rajiv Gandhi** had Charles Correa as its head but **faced setbacks** after Gandhi's assassination.
- Despite challenges, the **74th Constitutional Amendment** led to a shift in policy, for more private initiative and **investment in urban development**

The Changing Urban Landscape	The Need for an Urban Commission
• With over 56% of the world's population residing in cities today, urbanisation has brought about significant global transformations.	• Given the complexity of urban challenges, the Urban Commission established in 1985 should be reexamined.
• The process has influenced climate change, land use, building typologies and created challenges in housing, sanitation and pollution.	• Piecemeal approaches, as seen in various missions, have proven ineffective.
• Capital accumulation is intricately linked to city development, shaping the urban landscape.	• A comprehensive understanding of urbanisation patterns, migration, settlement, and the role of information technology is crucial.
Evolution of Urban Development in India	• Governance issues, including the centralization of financial architecture, further highlight the need for a nuanced approach.
• Post-independence India witnessed two distinct periods in urban development.	**Kerala Urban Commission**
• The Nehruvian era, lasting nearly three decades, focused on a holistic city approach with centralised planning and master plans.	• The formation of the Kerala Urban Commission becomes crucial in this context.
• However, it failed miserably as it was drawn by the idea of the state as a basic instrument of capital accumulation, pushing people for migration with manufacturing as the driving force	• Comprising members with diverse expertise, the commission aims to address the challenges of urbanisation in Kerala. ○ An estimated 90% of the population of Kerala is urbanized.
• The 1990s marked the era of privatisation, with global cities becoming the model for development.	• The 12-month mandate focuses on creating a roadmap for at least 25 years of urban development.
• Master plans were handed over to large parastatals and big consultancy firms; and real estate took precedence.	• It recognizes the interconnectedness of Kerala's urban processes with global and national dynamics.
• Mission-oriented approaches like the Smart Cities Mission, replaced holistic city planning.	**Lessons for Other States**
	• While a national commission is desirable, the Kerala Urban Commission serves as a beacon for other highly urbanised states.
	• It provides a learning opportunity for the effective establishment and functioning of urban commissions in states with a significant urban population.

Conclusion
- The Kerala Urban Commission emerges as a **timely initiative,** addressing the multifaceted **challenges of urbanization** in the state.
- It also offers **valuable lessons for other states** grappling with similar urban complexities.

10. Reshaped by AI - Indian Express

Relevance: Science and Technology- developments and their applications and effects in everyday life.
Context:

- In the wake of global challenges and geopolitical tensions, an international initiative has emerged, focusing on the **governance of AI and frontier technologies.**
- It led to the Report of the High-Level Committee on Programmes and the High-Level Committee on Management joint session hosted by **UNICEF** in October 2023.
- However, the **evolving landscape** of digital sovereignty, diplomatic manoeuvres, and the multifaceted implications of AI demand nuanced considerations.

Global AI Governance Initiatives

- The UN has been at the forefront of addressing frontier technologies, particularly AI, with strategic approaches and roadmaps since 2019.
- The principles for the ethical use of AI in the United Nations system were outlined in the famous UNESCO declaration.
- The UNESCO declaration emphasised ethical principles, human rights, ecological sustainability and inclusiveness in the development and application of AI.
- The recent joint session aimed to establish a system-wide normative and operational framework for ethical AI use within the UN system.

Digital Sovereignty and Diplomacy

- The concept of digital sovereignty is gradually transforming territorial sovereignty, shaping the governance of AI.
- The interplay of territorial and digital sovereignty becomes critical in the context of corporate governance.
- The control over vast amounts of classified data influences nations and populations.
- Addressing challenges such as disinformation, misleading information and hate speech necessitates a global perspective on governance and development to ensure truth and accountability.

AI Threats to Democracy and Privacy

- AI's growing deployment raises concerns about its potential to manipulate democratic processes and threaten decisional and informational privacy.
- The engine behind Big Data Analytics and the Internet of Things, AI's primary function often involves capturing personal information.
- This leads to creating detailed behavioural profiles and influencing economic and political decisions.
- Without global, regional, and national interventions, privacy and democracy could face rapid erosion.

Digital Empires and Global Dynamics

- The ongoing digital wars between the US and China underscore the emergence of distinct digital empires with competing and collaborative elements.
  - The techno-optimistic model (complete freedom to the AI industry) of the US is driven by free-market forces
  - China's state-driven regulatory model is characterized by surveillance and control
- The EU model, emphasising human-centric digital economies and human rights, stands as an alternative.

The Uncertain Future of Technopolitics

- The clash between surveillance capitalism, digital authoritarianism and liberal democratic values remains uncertain in shaping the future of technopolitics.
- China's regulatory model, combining political control with technological success, raises global concerns, especially among developing authoritarian countries.
- The EU's human-centric approach positions itself as a potential foundation for a more equitable digital economy.

AI in Warfare

- AI's irreversible impact on warfare is evident in the use of unmanned lethal autonomous weapons systems.
- This necessitates a continuous effort to humanise AI applications in both civil and military contexts.

Conclusion

- The future trajectory of **AI governance** will play a pivotal role in determining the **ethical foundations of human engagement** in the digital era.
- The uncertain future of technopolitics calls for ongoing efforts to ensure a **balanced and inclusive digital era** that prioritises **accountability, transparency and respect for human rights.**

Quick Look

1. Indian Cyber Crime Coordination Centre (I4C)

- According to an analysis by I4C, Aadhar Enabled Payment System (AePS) frauds were 11% of the cyber financial scams that had its origin in India in 2023
- I4C is an initiative of the Ministry of Home Affairs (MHA) to combat cyber-crime in the country, in a coordinated and effective manner.
- Approved in October 2018 , it acts as a nodal point in the fight against cybercrime.
- Functions of I4C
  - o Identify the research problems/needs of LEAs and take up R&D activities in developing new technologies and forensic tools
  - o Prevent misuse of cyberspace for furthering the cause of extremist and terrorist groups
  - o Suggest amendments, if required, in cyber laws to keep pace with fast changing technologies and International cooperation
  - o Coordinate all activities related to implementation of Mutual Legal Assistance Treaties (MLAT) with other countries related to cybercrimes in consultation with the concerned nodal authority in MHA.

2. Scope for Mainstreaming Ayurveda Research among Teaching professionals (SMART) 2.0 Programme

- The Central Council for Research in Ayurvedic Sciences (CCRAS) along with National Commission for Indian System of Medicine (NCISM) recently launched 'SMART 2.0' program.
- The program promotes robust clinical studies in priority areas of Ayurveda with Ayurveda academic institutions/hospitals across the country through mutual collaboration.
- Objective: To generate tangible evidence to demonstrate efficacy and safety of Ayurveda interventions using interdisciplinary research methods and translating it into public health care.
- The study aims at safety, tolerability and adherence to Ayurveda formulations in the priority research areas of Bal Kasa, malnutrition, insufficient lactation, Abnormal Uterine Bleeding, Osteoporosis in post-menopausal women and Diabetes Mellitus (DM) II.

3. Swadesh Darshan 2.0 Scheme

- The tourism ministry has recently included Debrigarh Wildlife Sanctuary in the Swadesh Darshan 2.0 scheme.
- The Swadesh Darshan Scheme, launched in 2015 by the Ministry of Tourism, is a Central Sector Scheme..
- Objective: To develop sustainable and responsible tourism destinations in the country.
- Under the scheme, the Ministry of Tourism provides financial assistance to State governments, UT Administration or Central Agencies for development of tourism infrastructure in the country.
- Operation and Maintenance (O&M) of the projects is the responsibility of the respective State Government/UT Administration.
- The Ministry of Tourism has revamped the scheme (Swadesh Darshan 2.0) for development of sustainable and responsible tourist destinations.
- The objective for the Swadesh Darshan 2.0 scheme envisages increase in private sector investment in tourism and hospitality.

4. Project Cheetah

- Discussions to bring the Cheetah back to India were initiated in 2009 by the Wildlife Trust of India.
- Under the 'Action Plan for Reintroduction of Cheetah in India', 50 cheetahs will be brought from African countries to various national parks over 5 years.
- Most suitable site: Kuno Palpur National Park (KNP) in Madhya Pradesh because of its suitable habitat and adequate prey base.
- Kuno also provides the possibility of harbouring four of India's big cats viz. tiger, lion, leopard and Cheetah, enabling them to coexist as they have in the past.
- As part of this project, 20 Cheetahs (8 from Namibia and 12 from South Africa) were Introduced in the KNP (since last year) to establish a free-ranging population for the first time since their extinction in India 70 years ago.

5. Assisted Reproductive Technology (ART)

- ART refers to a range of techniques used to achieve pregnancy by handling sperm or egg cells outside the human body and transferring embryos into the woman's reproductive tract.
- It is regulated by Assisted Reproductive Technology (Regulation) Act 2021 in India.
- ART in India is regulated by the Indian Council of Medical Research (ICMR).
- National Guidelines for Accreditation, Supervision, and Regulation of ART Clinics were established in 2005.
- ART encompasses various procedures, including sperm donation, in-vitro fertilization (IVF), and gestational surrogacy.
- It involves handling sperm and egg cells in a laboratory setting to facilitate fertilization and embryo development.

6. Wetland City Accreditation

- The Ramsar Convention during COP12 held in the year 2015 approved a voluntary Wetland City Accreditation system.
- It recognizes cities which have taken exceptional steps to safeguard their urban wetlands.
- It also recognizes the importance of wetlands in urban and peri-urban environments and to take appropriate measures to conserve and protect these wetlands.
- This scheme aims to further promote the conservation and wise use of urban and peri-urban wetlands, as well as sustainable socio-economic benefits for local populations.
- To be formally accredited, a candidate for WCA should satisfy the standards used to implement each of the six international criteria mentioned in Operational Guidance for WCA of the Ramsar Convention on Wetlands.

Prelims Track Question

Q1. Consider the following statements regarding the Chalukyas:
1. The Chalukyas were a dynasty that ruled over parts of Southern and Central India between the 6th and 12th centuries.
2. Pulakeshin II, a notable Chalukya king, defeated Harsha, the ruler of Northern India, in a significant battle.
3. The Badami Chalukyas were succeeded by the Western Chalukyas, who later established the Kalyani Chalukya dynasty.

How many of the statements given above is/are correct?
A. Only one
B. Only two
C. All three
D. None

Q.2 Consider the following statements regarding the Hattees community:
1. This community is a historically prominent group known for their skilled craftsmanship and trade activities in ancient India.
2. Hattees are traditionally associated with the production of distinctive handwoven textiles, which gained recognition for their intricate designs.
3. The community has strong ties to maritime trade routes and played a vital role in facilitating cultural exchange between India and Southeast Asia.

How many of the statements given above is/are correct?
A. Only one
B. Only two
C. All three
D. None

Q3 Consider the following statements regarding the Vienna Convention on Diplomatic Relations:
1. The Convention on Diplomatic Relations was adopted in 1961 and is a treaty that specifically outlines rules for diplomatic immunity.
2. Diplomatic immunity, as per the Vienna Convention, extends to all individuals associated with the diplomatic mission, including family members.
3. The Convention grants the host country the right to search and seize diplomatic bags and containers under certain circumstances.
4. The Convention applies only to diplomatic missions in times of peace and has no relevance during armed conflicts or wars.

How many of the statements given above is/are incorrect?
A. Only one
B. Only two
C. Only three
D. All four

Q4. Consider the following statements regarding Registered Unrecognised Political Parties in India:
1. These Political Parties are those officially registered with the Election Commission of India but have failed to secure any seats in the Lok Sabha or State Legislative Assemblies.
2. These Political Parties are eligible for financial assistance from the Election Commission to support their election campaigns.
3. Recognition of a political party in India is solely based on its performance in the Rajya Sabha elections.
4. Registered Unrecognised Political Parties may be eligible for a reserved symbol when contesting elections, but they do not have the privilege of reserved seats.

How many of the statements given above is/are correct?
A. Only one
B. Only two
C. Only three
D. All four

Q5. Consider the following statements about India-Nepal Treaty of Peace and Friendship of 1950
1. It talks about the reciprocal treatment of Indian and Nepali citizens in the two countries, in residence, property, business and movement.
2. It excludes access to weaponry to Nepal from India.

Which of the statements given above is/are correct?
A. Only 1
B. Only 2
C. Both 1 and 2
D. Neither 1 nor 2

Q6. Consider the following statements regarding the Square Kilometre Array (SKA)
1. SKA is a radio telescope project that aims to build the world's largest and most sensitive radio telescope.
2. The SKA project is a collaboration between multiple countries, including India, China, and Australia.
3. The primary objective of the Square Kilometre Array is to observe optical wavelengths to study distant galaxies.

How many of the statements given above is/are correct?
A. Only one
B. Only two
C. All three
D. None

Q7. Consider the following statements about Zosurabalpin, seen in the news recently
1. It is a class of antibiotics with the potential to tackle a drug-resistant bacterium, Acinetobacter baumannii.
2. It operates by inhibiting the transport of lipopolysaccharide (LPS).

Which of the statements given above is/are correct?
A. Only 1

B. Only 2
C. Both 1 and 2
D. Neither 1 nor 2

Q8. The term "NexCar19" seen in the news recently is
1. Corona Variant
2. Lunar Exploration Mission
3. Flex Fuel Vehicle
4. Gene Therapy

Q9. With reference to AMRUT Mission, consider the following statements
1. It aims to ensure that every household has access to a tap with the assured supply of water and a sewerage connection.
2. The Ministry of Housing and Urban Affairs is its nodal ministry.
3. An Apex Committee comprising representatives of related Ministries and organisations supervises the Mission.

How many of the statements given above is/are correct?
A. Only one
B. Only two
C. All three
D. None

Q10. The term "AIRAWAT" seen in the news recently is associated with which of the following?
A. AI Supercomputer
B. Malware for Android
C. Intercontinental Ballistic Missile
D. Asteroid

Prelims Track Answer

Answer 1 Option C is correct
Explanation

- The Chalukyas were indeed a dynasty that ruled over parts of Southern and Central India between the 6th and 12th centuries. They had three major branches: the Badami Chalukyas, the Western Chalukyas, and the Kalyani Chalukyas. **Hence, statement 1 is correct**

- Pulakeshin II of the Chalukya dynasty defeated Harsha in the famous Battle of Narmada, establishing Chalukya dominance in the Deccan region. **Hence, statement 2 is correct**

- The Badami Chalukyas were succeeded by the Western Chalukyas, who later established the Kalyani Chalukya dynasty. The Western Chalukyas ruled over a significant part of the Deccan region. **Hence, statement 3 is correct**

Answer 2 Option D is correct
Explanation

- The term "Hattees" typically refers to a community involved in a specialized occupation, and historically, it is associated with skilled elephant trainers or handlers, rather than craftsmen or traders. **Hence, statement 1 is incorrect**

- The Hattees are not traditionally associated with the production of handwoven textiles. Instead, they are more commonly linked to activities related to elephants, such as training and handling. **Hence, statement 2 is incorrect**

- The Hattees community is not primarily known for ties to maritime trade routes. They are traditionally associated with activities related to elephants, and their historical significance lies in their role in warfare, particularly in handling elephants during battles. **Hence, statement 3 is incorrect**

Answer 3 Option A is correct
Explanation

- The Vienna Convention on Diplomatic Relations was adopted in 1961 and is indeed a treaty that outlines rules for diplomatic relations, including diplomatic immunity. **Hence, statement 1 is correct**

- Diplomatic immunity, as per the Vienna Convention, extends to all individuals associated with the diplomatic mission, including family members. This ensures the protection of diplomats and their families from legal actions in the host country. **Hence, statement 2 is correct**

- The Vienna Convention explicitly states that diplomatic bags and containers are inviolable, and the host country does not have the right to search or seize them under any circumstances. **Hence, statement 3 is incorrect**

- The Vienna Convention applies primarily to diplomatic missions in times of peace and does not provide immunity during armed conflicts or wars. In such situations, other international laws and conventions may come into play. **Hence, statement 4 is correct**

Answer 4 Option C is correct
Explanation

- Registered Unrecognised Political Parties may secure seats in Lok Sabha or State Legislative Assemblies, but they have not met the criteria to be recognized as a national or state party. **Hence, statement 1 is incorrect**

- Unlike recognized parties, Registered Unrecognised Political Parties do not receive financial assistance from the Election Commission for their election campaigns. **Hence, statement 2 is incorrect**

- The recognition of a political party in India is based on its performance in the Lok Sabha or State Legislative Assembly elections, not the Rajya Sabha elections. **Hence, statement 3 is incorrect**

- Registered Unrecognised Political Parties may be eligible for a reserved symbol when contesting elections, but they do not have the privilege of reserved seats. Reserved seats are a benefit granted to recognized parties. **Hence, statement 4 is correct**

Answer 5 Option A is correct
Explanation

- The India-Nepal Treaty of Peace and Friendship of 1950 forms the bedrock of the special relations that exist between India and Nepal.

- The treaty talks about the reciprocal treatment of Indian and Nepali citizens in the two countries, in residence, property, business and movement. **Hence, statement 1 is correct.**
- It also establishes national treatment for both Indian and Nepalese businesses (once imported, foreign goods would be treated no differently than domestic goods).
- It also gives Nepal access to weaponry from India. **Hence, statement 2 is incorrect.**

Answer 6 Option B is correct
Explanation

- The Square Kilometre Array (SKA) is indeed a radio telescope project designed to be the largest and most sensitive radio telescope in the world. It is intended to explore the universe in radio wavelengths. **Hence, statement 1 is correct**
- The SKA project is a global collaboration involving multiple countries. While India, China, and Australia are part of the collaboration, several other countries are also contributing to the project. **Hence, statement 2 is correct**
- The primary objective of the Square Kilometre Array is to observe radio wavelengths, not optical wavelengths. It aims to study a wide range of astrophysical phenomena, including the early universe, galaxy evolution, and transient events. **Hence, statement 3 is INcorrect**

Answer 7 Option C is correct
Explanation

- Researchers recently identified a new class of antibiotics Zosurabalpin with the potential to tackle a drug-resistant bacterium, Acinetobacter baumannii. **Hence, statement 1 is correct.**
- This bacterium, especially its carbapenem-resistant strains (CRAB), poses a significant challenge in clinical treatment.
- They identified a tethered macrocyclic peptide (MCP) that selectively kills A. baumannii.

- Zosurabalpin targets a protein complex which is crucial for transporting LPS to the bacterial surface to create the outer-membrane structure of Gram-negative bacteria.
- It disrupts the LPS transport, leading to the accumulation of LPS in the bacterial cell, ultimately causing the bacterium's demise. **Hence, statement 2 is correct.**

Answer 8 Option D is correct
Explanation

- NexCar19 is a type of CAR-T and gene therapy developed indigenously in India by ImmunoACT, which is a company incubated at IIT Bombay. **Hence, option D is correct.**
- It is designed to target cancer cells that carry the CD19 protein.
- This protein acts like a flag on cancer cells, which allows CAR-T cells to recognise and attach themselves to the cancer cells and start the process of elimination.

Answer 9 Option C is correct
Explanation

- The AMRUT Mission was launched in 2015
- Objective
  - To ensure that every household has access to a tap with the assured supply of water and a sewerage connection. **Hence**, statement 1 is correct.
  - To increase the amenity value of cities by developing greenery and well maintained open spaces (e.g. parks).
  - To reduce pollution by switching to public transport or constructing facilities for non-motorized transport (e.g. walking and cycling).
- AMRUT has made states equal partners in planning and implementation of projects by approval of SAAP once a year by MoHUA and states have to give project sanctions and approval at their end, therefore actualisation of cooperative federalism.
- An Apex Committee (AC), chaired by the Secretary, MoHUA and comprising representatives of related Ministries and organisations supervises the Mission. **Hence, statement 3 is correct.**
- Nodal Ministry: Housing and Urban Affairs. **Hence, statement 2 is correct.**

Answer 10 Option A is correct
Explanation

- AIRAWAT (AI Research, Analytics and knowledge Assimilation) is an AI Supercomputer installed at C-DAC Pune. **Hence, option A is correct.**
- The system is installed under the National Program on AI by the Government of India.
- It is based on the recommendations of the National Strategy for Artificial Intelligence (NSAI), which has identified areas that are hampering the growth potential of AI in India.

- It is powered by the high-performance AMD EPYC 7742 64C 2.25GHz processor, which boasts a massive 81,344 cores.
- This platform will assist in the R&D of new technologies which will in turn help in solving business and governance use cases.
- It has been ranked 75th in the world in the Top 500 Global Supercomputing List at the International Supercomputing Conference (ISC 2023) in Germany.

Mentorship
India

Our mission is crystal clear – to provide the finest UPSC mentorship and guidance available in India. We recognize that the path to success in the UPSC examination is both demanding and multifaceted. This is precisely why we have developed a comprehensive approach that goes beyond conventional coaching. Our commitment lies in fostering excellence by equipping aspirants with the necessary tools, knowledge, and unwavering support to not only excel in the examination but also in life itself.

Mentorship India represents more than just an organization; it is a community of ambitious individuals bound together by the shared objective of conquering the UPSC examination. We warmly invite you to embark on this transformative journey alongside us. Whether you are a novice taking your initial steps or a seasoned aspirant aiming for the pinnacle, Mentorship India is your dependable companion in the relentless pursuit of excellence.

+91 9999 057869
www.mentorshipindia.com

A-92, Third Floor, Hari Nagar
Delhi - 110064

@mentorship.india