

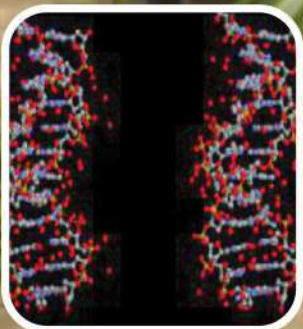
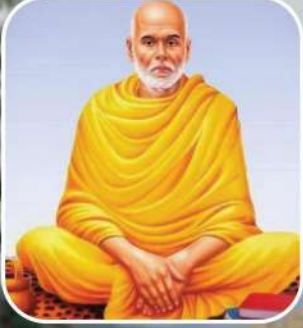


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SEPTEMBER-2023

போட்டித்தேர்விற்கான மாத இதழ்



- **Sri Narayana Guru Jeyanti**
- **Shaheed Bhagat Singh Birth Anniversary**
- **DNA NANO Ball Strategy**
- **Elephant Corridor**
- **Bhoj Wetland**



TNPSC தேர்வுகளில் வெற்றி பெறுவதற்கான முக்கிய ஆலோசனைகள்...

1. தேர்வுகளில் வெற்றி பெறுவதற்காக சாத்தியமாகக் கூடிய கால அட்டவணையை முதலில் தயாரித்து, அதை உறுதியாகப் பின்பற்ற வேண்டும்.
2. TNPSC தேர்வுக்கான பாடத்திட்டம் என்ன என்பதை முழுமையாக அறிந்துகொண்டு, அதில் எந்தப் பகுதியையும் விடாமல் படிக்க வேண்டும்.
3. முதன்மை ஆதாரங்கள் அல்லது நூல்களில் இருந்து **தரமான குறிப்புகளைத் தயாரித்து** வைத்துக்கொள்ள வேண்டும்.
4. TNPSC தேர்வு எழுதுவதற்கான அறிவுத் திறனை அடுத்த நிலைக்கு மேம்படுத்த எஸ்.சி.இ.ஆர்.டி (SCERT) எனப்படும் மாநிலக் கல்வியல் ஆராய்ச்சி மற்றும் பயிற்சி நிறுவனக்குழு தயாரிக்கும் பாட நூல்களில் இருந்து அவற்றின் அடிப்படைத் தத்துவத்தை புரிந்துகொள்ள வேண்டியது மிகவும் முக்கியமாகும்.
5. பாடங்களில் இருந்து எவ்வாறு வினாக்கள் எழுப்பப்படும் என்பதை அறிந்து கொள்வதற்காக அவற்றின் தத்துவங்கள், உண்மைகள் போன்றவற்றை தேர்வுக்கானக் கோணத்தில் இருந்து புரிந்துகொள்ள வேண்டும்.
6. முந்தைய ஆண்டின் வினாக்களை நன்றாகப் படித்து, அவற்றை ஆய்வு செய்ய வேண்டும்.
7. அத்தியாயங்கள் வாரியாகவும், பாடங்கள் வாரியாகவும் பயிற்சித் தேர்வுகளை எழுதிப் பார்க்க வேண்டும். அவ்வாறு செய்வதன் மூலம் உண்மையான தேர்வு எவ்வாறு இருக்கும் என்பது குறித்த அனுபவம் நமக்குக் கிடைப்பதுடன், **தவறுகளைத் திருத்திக் கொண்டு** மேம்படுத்திக் கொள்ளவும் முடியும்.
8. கடந்த ஆண்டுக்கான பொது அறிவு வினாத்தாள்களுக்கு விடை அளிக்க முயற்சி செய்ய வேண்டும். **உங்களின் பலவீனம் என்ன என்பதை தெரிந்து கொள்ள** அது உதவும். நீங்கள் எந்த அளவிற்குத் தேர்வுக்கு தயாராக இருக்கிறீர்கள்? உங்களின் அறிவுத் திறன், விடை அளிக்கும் வேகம், துல்லியம் ஆகியவற்றை அளவிடுவதற்கும் இது உதவும்.
9. பாடங்களை ஒருமுறையாவது திருப்புதல் **செய்து பார்ப்பது கட்டாயம் ஆகும்.**
10. அனைத்துப் பாடங்களையும் ஒருமுறை திருப்புதல் செய்து பார்ப்பதும், தயார் செய்து வைக்கப்பட்டுள்ள குறிப்புகளை மூன்றாவது முறையில் படித்துப் பார்ப்பதும் சிறப்பாகும்.
11. தேர்வுக்கு முந்தைய ஒரு மாதத்தில் புதிய பாடங்களைப் படித்து ஆராய ஒருபோதும் முயற்சி செய்ய வேண்டாம். அந்த ஒரு மாதமும் ஏற்கனவே படித்த பாடங்களைத் திருப்புதல் செய்து பார்ப்பதற்கு மட்டுமே ஒதுக்கப்பட வேண்டும். அந்த ஒரு மாதம் முழுவதும் திருப்புதல், திருப்புதல், திருப்புதல் என்பதே மந்திரமாக இருக்க வேண்டும்.
12. **செய்திகளையும், நாட்டு நடப்புகளையும் தொடர்ச்சியாகப் படித்து வரவேண்டும்.** பாடங்களையும், தேசிய மற்றும் சர்வதேச நிகழ்வுகளையும் நன்கு அறிந்துகொள்ள வேண்டும்.
13. **அடுத்த நாள் தேர்வு நடக்க இருப்பதாகக் கருதிக் கொண்டு** அதற்கேற்ற வகையில் தேர்வுக்குத் தயாராகுவதற்கான உத்தி வகுக்கப்பட வேண்டும். அந்த அளவுக்கான தயாரிப்பு அவசியமாகும்.
14. ஒவ்வொரு நாளும் **உறங்கச் செல்வதற்கு முன் அந்த நாள் முழுவதும் படித்த பாடங்களை ஒருமுறை நினைவுபடுத்திக் கொள்ள வேண்டும்.** அது உங்களின் நினைவுத் திறனை வலுப்படுத்தும்.
15. முதல்நிலைத் தேர்வுக்கான பொது அறிவு முதல் தாளுக்கான தயாரிப்பு முதன்மைத் தேர்வையும் மனதில் கொண்டு தொடரப்பட வேண்டும்.



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INDEX

I. Profile of State

- Rajasthan..... 11

II. National Symbol

- National Calender 13

III. Eminent Person's and Places, Sports, Book, Awards

1. Eminent Person's and Places

- Ustad Ali ZakiHader 15
- AcharyaVinobaBhave 15
- Lan Wilmut, Creator of Dolly the Sheep, Passes Away at 79 15
- ISRO scientist Valarmathi..... 15
- Scientist Mylswamy Annadurai 16

2. Sports

- Golden Globe Race 16
- Novak Djokovic Wins 24th Grand Slam Title at US Open 2023 16
- Hangzhou 2022 Asian Games 16
- Leander Paes in International Hall of Fame 17
- U.S Open Tennis 2023 18
- India's top chess player..... 18
- Durand Cup 2032 18

3. Book

- A Comic Book by NCERT & UNESCO 18

4. Awards

- R. Ravi Kannan Wins Ramon Magsaysay Award 2023..... 19

- National Teachers' Award 2023	19
- SwachhVayuSurvekshan 2023 and NCAP	20
- Shanti SwarupBhatnagar Awards 2022	21
- Announcement of New Science Awards	22
- DadasahebPhalke Award conferred on WaheedaRehman.....	23
- 2018 - Everyone is a Hero.....	23
- PradhanMantriRashtriyaBalPuraskar.....	23
- Kalaignar Semmozhi award.....	24
- IG Nobel Prize 2023	24

IV HISTORY - Historical Events

- Nataraja Artistry of Lord Shiva	25
- Santiniketan Becomes India's 41st World Heritage Site	25
- SreeNarayana Guru Jayanti	26
- Shaheed Bhagat Singh Birth Anniversary.....	26

V. Polity - Political Parties and Political system in India

- Offspring of Void/voidable Marriages Entitled to Ancestral Property	27
- Simultaneous elections	27
- Uncertainty of Andhra Pradesh students' Local Quota	28
- India, that is Bharat: The Ongoing Debate.....	28
- Forest Conservation and Tribal Rights in Northeast India.....	29
- Delhi High Court Orders on Service Charge	29
- Maratha Quota	30
- BIS Promoting Indian Standards at Village Level.....	31
- National Judicial Data Grid.....	31
- Foreigners' Tribunals	32
- President of India Inaugurates NeVA.....	32
- CJI Unveils Transparent Approach for SC Judge Appointments.....	32
- Debate over the Words Socialist and Secular in Constitution	32
- Women's Reservation Bill 2023.....	33
- Supreme Court to Revisit Legislative Immunity on Bribery.....	34

- SC Calls for Stronger Discipline Mechanism for TV News Channels 35
- ECI Clarifies Aadhaar Linkage with Electoral Roll is Voluntary 35
- Delimitation Concerns in Women's Reservation Bill, 2023 36

VI. Public Awareness and General Administration

- Adopt a Heritage 2.0 and e-Permission Portal 37
- Vidya Samiksha Kendras 37
- Disability Certificate for Sickle Cell Patients 38
- Ayushman Bhav Campaign 38
- Operation Sajag 39
- Expediting the Enrolment of Children in Schools 39
- India's Digital Public Infrastructure: A Global Model 39
- Ministry of Tourism Launched 'Travel for Life' 40
- FSSAI Prohibits Use of Newspapers for Food Storing 40
- President Calls for Protecting Farmers' Rights and Traditional Seed Varieties 40
- Sandes App 40
- State of Food Security and Nutrition in the World (SOFI) 2023 41
- State of Working India 2023 41
- India Ageing Report 2023 42
- Times Higher Education World University Rankings 2024 43
- Status of Educational Empowerment Schemes for Religious Minorities in India 43
- National Medical Commission 44
- GI tag for Salem sago 45

VII. Welfare Oriented Schemes and their Utility (Central Government & State Government)

- 6th Rashtriya Poshan Maah 45
- Aatmanirbhar Bharat Rozgar Yojana (ABRY) 45
- Nine Years of Pradhan Mantri Jan Dhan Yojana 46
- Malaviya Mission: Teacher Training Program for Higher Education 46
- Integrating Personalised Adaptive Learning into DIKSHA Platform 46
- Viability Gap Funding Scheme for Battery Energy Storage Systems 46
- National Ayush Mission 47

- New Education Policy in West Bengal.....	47
- Expansion of PM UjjawalaYojana	47
- Skill India Digital.....	48
- PM Vishwakarma Scheme	48
- AI Chatbot for PM-KISAN Scheme.....	48
- Tracking Newborn Immunization in U.P.....	49
- Scheme for Remission of Duties and Taxes on Exported Products.....	49
- Rashtriya VayoshriYojana	50
- PM Gati Shakti	50

VIII. Geography - Geographical marks

- Super Blue Moon	50
- Electricity's Surge in Indian Irrigation: MIC 6th Edition Report	51
- Climate Change and Food Security	51
- Initiatives for Agriculture.....	51
- Mobile Application and Web Portal for General	52
- Crop Estimation Survey (GCES).....	52
- KaobalGali-Mushkoh Valley.....	52
- Climate Change and Indian Dairy Sector	53

IX. Environment

- State of the Rhino 2023	53
- Flora Fauna and 'Funga'	54
- Red Sand Boa	54
- Marine Sand Extraction	54
- Bird-Like Dinosaur: Fujianvenatorprodigiosus.....	55
- WhiteSambar in Cauvery Wildlife Sanctuary.....	55
- E-Waste Management in India	55
- 2nd Berlin Forum on Chemicals and Sustainability	56
- Bhoj Wetland	56
- Climate Change and Food Security.....	56
- Global Stocktake Report	57

- Marine Light Pollution.....	57
- Strongest Earthquakes in History.....	58
- Leopard Sterilisation	58
- Yashobhoomi	58
- 29th World Ozone Day.....	59
- Samudra Prahari's Deployment to ASEAN.....	59
- Elephant Corridors	59
- Joint Call to Action for Forests Towards 2030	59
- Agumbe's Rainfall Dominance Wanes as New Rain Gauges Emerge.....	60
- New Fish Species Discovered	60
- Combing Operations held in Mukurthi National Park.....	60
- First Green Hydrogen Fuel Cell Bus.....	60
- Bolson Tortoise	61
- Gujarat Bans Conocarpus Plants.....	61
- Pangolin's Hidden Diversity.....	61
- Fish resistant to marine heatwaves	61
- Omega Blocking.....	62
- Study on Joshimath Sinking	62

X. Economy - Economy, Socio Economic Issues)

1. Economy

- Green Ammonia Import through VOC Port.....	63
- Role of UPI in Shaping Foreign Policy	63
- India's Fiscal Deficit	64
- Indian Economy and Impossible Trinity	64
- Central Bank Digital Currency	64
- One-Hour Trade Settlement	65
- India's first ever UPI-ATM.....	65
- Measurement of Unemployment In India	65
- Safeguarding the Global Financial Ecosystem.....	66
- India to Enable Cross-Border Bill Payments for UK NRIs.....	66

- Economic Insights Beyond GDP: ICOR	66
- Cotton Production in India	67
- RBI to Discontinue I-CRR	67
- Gresham's Law and Currency Exchange Rate	68
- Ponzi Scheme.....	68
- RBI Directs Banks to Return Documents Within 30 Days of Loan Repayment	68
- India's Outward and Inward Investment Trends	69
- Funding Challenges for Indian Space Start-Ups	69
- BimaSugam.....	69
- Government Grants OverRs. 256 Crore in Relief to MSMEs Amid Pandemic.....	70

2. Socio Economic Issues

- Shifting Trends in Online News Consumption.....	70
- National Mission for Clean Ganga.....	70

XI. 1. Science & Technology

- Electrified Flex Fuel Vehicle.....	71
- CSIR PRIMA ET11and Simplified Tractor Testing Process	71
- Indigenously Developed Electric Nuclear Power Reactor.....	72
- Prayan Rover Completes Tasks and Enters Sleep Mode.....	72
- Aditya-L1 Mission	73
- New Method to Determine Hubble Constant.....	73
- UIDAI Drives Aadhaar Innovation at Global Fintech Festival	74
- The Bottleneck in Human Evolution.....	74
- Advanced Biodegradable Nanocomposite Film.....	74
- String of Pearls Supernova	75
- Lab Grown Human Embryo Model	75
- Enhancing Mosquito Control through Genetic Engineering.....	76
- Nipah Virus.....	77
- Natural Polyphenols to Combat Alzheimer's Disease.....	77
- NavIC Integration in Smartphones.....	78
- Biohacking.....	78

- String Technology and its Impact on Lithium Production.....	78
- Fostering Ethical AI	79
- DNA Nanoball Strategy	79
- First Green Hydrogen Fuel Cell Bus.....	79
- Hybrid Seeds.....	80
- Geospatial Intelligence.....	80
- Juno.....	80

2. Diseases

- Karnataka Takes Steps to Address Dementia	81
- Natural Polyphenols to Combat Alzheimer's Disease	81
- Global Impact of Lead Exposure on Cardiovascular Health	81
- Global Report on Hypertension	82
- Vibrio Vulnificus Infection.....	82
- Women, Power and Cancer: Lancet.....	83

XII. Defence

- Diving Support Craft (DSC) Project.....	83
- IAF's Trishul Exercise Tests Western Air Command's Readiness	83
- BRIGHT STAR-23	84
- 21st Edition of India-France Bilateral Naval Exercise 'VARUNA'.....	84
- Defence Minister Inaugurates 90 Border Infrastructure Projects Across India	84
- Operation Polo	84
- India-Malaysia Defence Cooperation Committee Meeting	85
- SIMBEX 2023.....	85
- Maiden India, Indonesia, and Australia Trilateral Maritime Exercise.....	85

XIII. InterNational

- India's Interests in Africa's RE Potential	86
- Coup in Gabon.....	86
- Israeli PM Proposes Fiber Optic Link from Asia and the Middle East to Europe.....	86
- Ministry of Tourism and UNWTO Unveil G20 Tourism and SDG Dashboard.....	87
- Hong Kong's Top Court Rules to Recognise Same-Sex Partnerships.....	87

- ASEAN Denies Myanmar's Chairmanship for 2026	87
- Indonesia Seeks US Trade Talks for Critical Minerals	87
- Indian President to Inaugurate Asia Pacific Human Rights Conference	88
- ADB Regional Conference	88
- 20th ASEAN-India Summit	88
- 18th East Asia Summit	89
- Konark Wheel Shines at G-20 Summit Venue.....	89
- Strengthening India-Saudi Arabia Strategic Partnership.....	90
- South Korea and Quad	91
- India-Middle East-Europe Corridor	91
- The Khalistan shadow on India-Canada Ties	91
- Indian Visa Service Suspended in Canada	92
- Asia Pacific Forum on Human Rights	92
- China's Geopolitical Initiatives in Nepal.....	92

XIV. Miscellaneous

- World Organ Donation Day	93
- WHO's Gujarat Declaration	93
- World EV Day.....	93
- World Duchenne Muscular Dystrophy Day.....	94
- Hindi Diwas	94
- Hyderabad Liberation Day.....	94
- International Coastal Clean-up (ICC) Day, 2023	95
- Patient Safety Rights Charter of WHO	95
- ParyushanParv, A jain Festival	95
- International Day of Sign Languages 2023	96
- World Coffee Conference 2023	96



I. Profile of State

Rajasthan

Introduction

- Rajasthan is located in north-western India, bounded on the west and northwest by Pakistan and shares domestic borders with the states of Punjab, Haryana, Uttar Pradesh, Madhya Pradesh and Gujarat. With a land area of 342,239 sq km, Rajasthan is the largest state in India geographically.⁸ The

- state is divided into 33 districts and comprises nine regions – Ajmer State, Hadoti, Dhundhar, Gorwar, Shekhawati, Mewar, Marwar, Vagad and Mewat.⁹
- The western part of Rajasthan is relatively dry and infertile. Rajasthan is home to the Thar Desert, also known as the Great Indian Desert, and the Chambal River, which is solely responsible for the water supply in the region.¹⁰ Jaipur,

Udaipur, Kota and Ajmer are known as the four smart cities in Rajasthan.¹¹

Demographic Profile

- In 2011, the population in Rajasthan was 68.5 million. The population grew 21.2 percent from the 56.5 million recorded in 2001. The population of males outnumbered that of females: in 2011, the gender ratio was 0.928 female to one male.¹² In the same year, the state had a literacy rate of 66.1 percent, work participation rate of 43.6 percent and a population density of 200 persons per sq km.¹³



Agriculture

- Agriculture is an important sector in Rajasthan. It forms the backbone of the state's economy and is a significant contributor to the GSDP. The state has been implementing several programmes to ensure growth in agricultural production and to provide better living conditions to the population who engage in agricultural and allied activities. Rajasthan is the highest producer of mus-

tard, gram and bajra (millet) in India.16

Renewable energy

- Two key factors that contribute to Rajasthan's favourable solar energy production are its high level of solar radiation and large tracts of relatively flat and undeveloped land.19 As at April 2021, 13,344.49 megawatt (MW) of Rajasthan's total installed power generation capacity was contributed by thermal, 1,939.19 MW by hydro and 10,244.50 MW by renewable energy. 20

The state bird of Rajasthan

- The Godawan or Great Indian Bustard is the state bird of Rajasthan. It is a bird that is commonly found in the Indian subcontinent. The bustard has distinct features such as a horizontal body with long legs. Often, its appearance is compared to that of an ostrich.



- This state bird of Rajasthan is one of the heaviest birds that can fly. This species is now critically endangered as they have drastically reduced in number over the years.

The state animal of Rajasthan

- Camel (genus Camelus) is the

state animal of Rajasthan. It is one of the huge-hoofed animals native to dry Africa and Asia. They are known for their capacity to go for long periods without drinking water. People also use their milk, meat, wool and hide.



- Another state animal of Rajasthan is the Chinkara.
- The Chinkara is a type of gazelle found in southern Asia. Their summer coat is a reddish-buff colour with smooth, glossy fur, and in the winter, their coat lightens and turns virtually white.

The state tree of Rajasthan

- The Khejri (Prosopis Cineraria) is

the state tree of Rajasthan. It is also known as the Indian desert golden tree. In Rajasthan, the dried pods of Khejri are eaten as a vegetable and the leaves are used as a medicine to treat various ailments.



The state game of Rajasthan

- Rajasthan's state sport is basketball. Basketball is a sport in which two teams with five players each compete on a rectangular court, usually indoors, against each other. Each team tries to score by flinging the ball into the opponent's basket, a horizontal hoop and net erected above the ground.

Date of Formation	November 1, 1956
State capital	Jaipur
Governor	kalrajmishra
Chief Minister	Ashok Gehlot
Parliamentary constituency	25
Population density	201 per sq. km
Official language	Hindi

Literacy rate	67.68%
Male literacy rate	76.28%
Female literacy rate	51.18%
Rivers	Beas, Chambal, Banas, Luni
Minerals	Zinc, mica, copper, gypsum, silver, magnesite, petroleum
Industries	Textiles, woollen, sugar, cement, glass, zinc smelters
Airports	Jaipur, Jodhpur, Udaipur
Forests and national parks	Sariska Tiger Reserve, Keoladeo Ghana NP, Ranthambore NP, Dhawa WS

used to calculate days of holy significance.

Significance

- The calendar Reforms committee set up by the Government of India adopted the saka calendar as the National calendar in 1957.
- After correcting some local mistakes, the committee worked to align the astronomical data and unify the use of this calendar.
- According to the Gregorian calendar it was first used on march 22, 1957 while according to the saka samvat, it was first used on chaitral, 1879.
- It was chosen as India's national calendar to harmonize the use of 30 various types of calendars in the country at the time.
- It is a Julian calendar era that corresponds to the year 78.
- It is also known as the mahasakkarat Era or shalivahana Saka Era.
- The Saka Era commemorates the king shalivahana's major military victories.
- The kannada work udbhatakavya by somaraja provided the earliest evidence of a connection between king shalivahana and the saka Era.
- Indonesian Hindus in Bali and

II. National Symbol

National Calender

- The National Calendar of india is based on the saka calendar. which is used as the country's official civil calendar.
- The saka samvat, a historic hindu calendar that was eventually established as the "Indian National Calendar" in 1957 began during the saka Era.
- The Saka Era is thought to have been founded by king shalivahana of the shatavahana dynasty.
- The saka calendar has 365 days and 12 months, similar to the structure of the gregorian calendar.
- Chaitra the first month of the

saka samvat, begins on march 22, which corresponds to march 21 during the leap year.

National calender of India

- The National calendar of india is based on the saka calendar, which is used as the country's official civil calendar.
- It is used in news broad casts by all India Radio, calendars and communication papers released under the Jurisdiction of the government of India as well as by publication in the official Gazette.
- Saka Samvat was the original name of the saka calendar, which is a Hindu calendar.
- In the Hindu religion, it is also

Java utilize the saka calendar as well.

- This calendar is used in conjunction with the Gregorian calendar by the Indian Gazette.

Types of calendar in India

- The word calendar comes from the Roman word calends or kalends, which refers to a method of dividing time into specific periods for the sake of civic life.
- A country's national calendar has a deep connection to its historical period and contains a golden period within it.

There are four types of Calenders used in India

1. Vikram Samvat
2. Saka Samvat
3. Hijri calendar
4. Gregorian calendar

Vikran Samvat

- The vikram era began 56 years before christian era, in around 56 BC, and is still in effect in almost all of india except the bengal region.
- According to historians, king vikranaditya of Ujjain established this era to commemorate his victory over the saka rulers.
- It is a lunar calendar based on the Hindu calendar of ancient times.
- The vikram era begins with kartika as the first month in most parts of Indian territory.
- Each month is divided into two

halves (fortnights) - the bright and dark halves.

- To compensate for the 11 - day difference with the solar year, vikram samvat has 13 months after a cycle of every 3 years and every 5 years, with an extra month added known as Adhik - Masa.
- Vikram Samvat's zero year 56 BE.

Saka Samvat

- In 78 AD, king shalivahan instituted this calender form, it was also known as the saka era because shalivahan belonged to this tribe.
- It year zero begins near the 78th vernal equinox.
- The saka calendar begins on march 22nd every year except in gregorian leap years when it begins on march 21st.

- Asakayearismadeupof365days.

Hijri Calendar

- This calendar was created in Arabic.
- Previously known as Amulfil the term Hijri or hejira was coined after the death of prophet mohammed to commemorates his hijrah or Journey from mecca to medina, which occured in the 52nd year of his life, in 622 A.D. This year was designated as the Hijri era's zero years.
- This calendar has a lunar year

that is divided into 12 months and has 354 days in a year.

- During the reign of the muslim rulers in india, this calendar was adopted.
- Muharram the first month, during which no business or travel is permitted.
- Four of the twelve months are considered sacred, the first, seventh, eleventh and twelfth.
- This calendar is used by muslims all across the world to determine the right days to observe Ramadan, perform Haji, and celebrate other islamic festivals.

Gregorian calendar

- This calendar is based on the birthday of christianity's founder, Jesus christ.
- This calendar is the most widely used in the world, and it is named after pope gregory XIII.
- The civil calendar is based on the Gregorian calendar.
- It was first used in 1582.
- It replaced the earlier Julian calendar because the Julian calendar had a leap year calculation error. There are 365.25 days in the Julian year.
- The dates of the national calendar and the dates of the Gregorian calendar are inextricably linked.
- Along with the Gregorian calendar, this calendar was established on march 22, 1957.

III. Eminent Person's and Places, Sports, Awards

1. Eminent Person's and Places

Ustad Ali ZakiHader

- Renowned RudraVeena exponent, Ustad Ali ZakiHader, a disciple of UstadAsad Ali Khan, was the last exponent of the Khandarbani style of the Jaipur Beenkargharana of Dhruvad.
- The Khandarbani style of the Jaipur Beenkargharana of Dhruvad is a musical tradition that originated in the 18th century by ShahajiSaheb.
- RudraVeena is a traditional stringed instrument that originates from North India. Crafted from materials like teak wood, metal, pumpkin, and bamboo, it has a distinctive appearance with two large gourd resonators placed beneath a tubular wooden body.

AcharyaVinobaBhave

- Recently, the Prime Minister of India paid homage to AcharyaVinobaBhave on his birth anniversary.
- VinayakNarahariBhave was born on September 11, 1895, in Gagode, Bombay Presidency (Maharashtra).
- VinobaBhave was a prominent nonviolence activist, freedom fighter, social reformer, and spiritual teacher who followed Mahatma Gandhi's principles of non-violence and equality.

- He was the inaugural recipient of the international Ramon Magsaysay Award for Community Leadership in 1958 and posthumously received the Bharat Ratna in 1983.
- He actively participated in the non-cooperation movement and encouraged the use of Khadi.



- Vinoba worked to eradicate social inequalities and championed the cause of Harijans (Dalits). He initiated the Sarvodaya movement, which included the Bhoodan (Gift of the Land) Movement.

Ian Wilmut, Creator of Dolly the Sheep, Passes Away at 79

- Ian Wilmut, the renowned cloning pioneer responsible for the groundbreaking creation of Dolly the Sheep in 1996, has recently passed away at the age of 79.
- In 1996, the birth of Dolly, a cloned sheep at the Roslin Institute in Scotland, rocked the world, sparking both excitement and fear about the possibilities of cloning technology.

- This achievement marked the first time mature adult cells were induced to mimic newly fertilized embryo cells, resulting in the birth of a genetically identical animal, later named Dolly.



- Wilmut's legacy extends beyond Dolly, as his work paved the way for advancements in regenerative medicine.

ISRO scientist Valarmathi

- Valarmathi, the scientist and voice behind the Indian Space Research Organisation's (ISRO) launch countdowns, passed away.
- She voiced the launch of India's first successful mission, Chandrayaan-3, which became her final one.
- In 2015, former Chief Minister Jayalalithaa presented the first APJ Abdul Kalam award to N. Valarmathi.
- She led the team that

successfully launched Radar Imaging Satellite RISAT-1 in 2012.

Scientist Mylswamy Annadurai

- The scientist Mylswamy Annadurai has joined the Board of Directors of SS Innovations.
- He is also called the 'Moon Man of India' for his contribu-

Golden Globe Race

- Abhilash Tomy, former Commander in the Indian Navy who became the first Indian to go around the world on a sailboat solo has now attained another record of completing a solo circumnavigation when he made podium finish at the Golden Globe Race (GGR), 2022.
 - He is currently working with the Indian Space Research Organisation (ISRO) on its manned space mission, Gaganyaan, advising on recovery of astronauts at sea.
 - He is working to assist in the recovery of astronauts once the capsule splashes into the sea on return.
- The Golden Globe Race is a non-stop, solo, unassisted yacht race around the world which was held for the first time in 1968-69.

tions to ISRO's Chandrayaan -1 mission.

- He would be the Director of SS Innovations Pvt Ltd and the global firm SS Innovations International Inc.
- He was bestowed with the Padmashri award in 2016.
- He has also received the Rajyotsava Prashasti award for

2. Sports

- The second edition of the race was held 50 years later, in 2018.
- The sailing is along a stipulated route, rounding the three great capes, the Cape of Good Hope in South Africa, Cape Leeuwin in Australia and Cape Horn in Chile.

Novak Djokovic Wins 24th Grand Slam Title at US Open 2023

- Novak Djokovic of Serbia wins his 24th Grand Slam title at the US Open 2023, defeating Daniil Medvedev of Russia. Djokovic moved ahead of Serena Williams to claim the record for the most major singles titles won in the Open era.
- Grand Slam tournaments, also called majors, are the four most important annual tennis events.
- The Grand Slam itinerary consists of the Australian Open in mid-January, the French Open

science in 2008 from the Government of Karnataka.

- In 2019, Dr. Annadurai assumed the role of Vice President for the Tamil Nadu State Council for Science and Technology.
- Additionally, he was nominated as the Chairman of the Board of Governors for the National Design and Research Forum.

from around late May to early June, Wimbledon in June–July, and the US Open in August–September.

- The Australian and United States tournaments are played on hard courts, the French on clay, and Wimbledon on grass.

Hangzhou 2022 Asian Games

- In a year that witnessed India's national football team achieving remarkable success in the SAFF Cup 2023, the sport finds itself caught in a contentious club versus country-debate.
- The dispute between Indian Super League (ISL) clubs and the All India Football Federation (AIFF) has escalated regarding player availability, and a cloud of uncertainty looms over the composition of the upcoming Asian Games squad.
- The 19th Asian Games will take place in Hangzhou, China, from 23rd September 2023 to

8th October 2023, which was originally scheduled to be held in 2022 and was postponed due to the Covid-19 pandemic.

About:

- The Asian Games is the biggest sports competition in Asia, held once every four years. They are organized by the Olympic Council of Asia (OCA).
- The symbol for the Asian Games is the rising sun with interlocking rings.
- It is recognised by the International Olympic Committee.

Background and Inauguration:

- After the Second World War, many Asian countries gained independence and Guru Dutt-Sondhi, a member of the Indian International Olympic Committee, proposed the idea of Asian Games as a sporting event, where all Asian nations can be represented.
- The first-ever Asian Games were held in New Delhi in 1951.

Regulation:

- Asian Games were regulated by the Asian Games Federation from 1951 to 1978. Since 1982, Olympic Council of Asia regulates the Asian Games.

India as a Host:

- India is a founder member of Asian Games and also the host of the first Asian Games.
- The 9th edition of the Asian

Games was also held in New Delhi in November and December 1982.

- Appu, the Indian elephant, was the first mascot to be used for the Asian Games.

19th Asian Games Hangzhou, China:

- A total of 40 sports and 61 disciplines will take center stage across 54 competition venues in Hangzhou and five co-host cities.
- Competitions in archery, artistic swimming, boxing, breaking, hockey, modern pentathlon, sailing, tennis, and water polo will also serve as Olympic qualifiers, with Paris 2024 quota spots available in those nine sports.
- The mascots of the 19th Asian Games are a group of robots named: Chenchen, Congcong, Lianlian.
- The torch of the 19th Asian Games is named "Eternal Flame". The design was inspired by the Liangzhu Culture of ancient Chinese Civilisation
- Esports and Breaking (Breakdance) are scheduled to make their inaugural appearances as recognized and official sporting events.

What are Esports and Breaking?

- Esports (Electronic Sports) is a competitive sport where gamers use their physical and mental abilities to compete

in various games in a virtual, electronic environment.

- Example: League of Legends, Overwatch, Fortnite, DOTA 2.
- Breaking: Breaking is a style of street dancing that incorporates coordination, acrobatic and intricate body movements, style, and aesthetics.
- It evolved from the hip hop movement during the early 1970s and is the most widely known of all hip hop dance styles.
- Note: The 20th Asian Games are to be held in Nagoya, Japan in 2026.

What is AIFF?

- AIFF is the governing body for the football associations in India.
- It was formed on 23th June 1937 after representatives from six regional football associations met at the Army Headquarters in Shimla, India.
- In 1948, one year after independence the AIFF gained affiliation with FIFA.
- AIFF runs both the national teams as well as the various league and club level competitions throughout the country.

Leander Paes in International Hall of Fame

- Recently, Leander Paes, a multiple Grand Slam winner, is the first Asian man nominated for the International Tennis Hall of Fame (ITHF) in the player category for the Class of 2024.
- Li Na, a Chinese player, was the

first Asian player nominated to the ITHF in 2019.

- Vijay Amritraj, a former Indian player, was also nominated in the contributor category.
- Leander Paes has won 18 Grand Slam titles in doubles and mixed doubles and was a former doubles world No. 1.
- The International Tennis Hall of Fame (ITHF) is a prestigious institution and museum dedicated to the sport of tennis. Located in Newport, Rhode Island, United States, it serves as the official hall of fame for tennis and celebrates the history, achievements, and contributions of outstanding individuals and organizations to the sport of tennis.

U.S. Open Tennis 2023

- The Former US Open champion Stan Wawrinka became the oldest man to win a match at the tournament since 40-year-old Jimmy Connors in 1992.
- The 50th anniversary of the

U.S. Open becomes the first sporting event to offer equal prize money to female and male competitors celebrated recently.

- The 79-year-old tennis player Billie Jean King, as the defending U.S. Open champion in 1973 rallied her fellow women players to threaten a boycott of that year's tournament unless women got the same pay as men.
- It was announced that summer that the men's and women's U.S. Open champions would each receive \$25,000.
- It would take 34 years before all the other Grand Slam events followed suit.
- This year the U.S. Open winners will each receive \$3 million.

India's top chess player

- Grandmaster D. Gukesh has replaced Viswanathan Anand as India's top chess player after more than three decades.
- Anand has been India's No.1 since July 1986.

3. Books

A Comic Book by NCERT & UNESCO

- The Ministry of Education, unveiled a new comic book, "Let's Move Forward", developed jointly by NCERT and UNESCO in New Delhi.
- This partnership marks a step towards advancing the objectives of the School Health and Wellness Programme (SHWP).

- It was launched in 2018 as part of the Ayushman Bharat campaign and jointly administered by the MoE and the MoHFW.
- The aim is to provide health education, prevent diseases, and improve access to health services.
- The comic covers information related to the 11 thematic components (emotional well-being,

- The 17-year-old Chennai Grandmaster moved ahead of Anand to be ranked No.8 in the world.
- Gukesh's entry into the top 10 of the FIDE rating list marks a significant milestone.
- He has climbed three places in the rating list since August 1.

Durand cup 2023

- Mohun Bagan Super Giant take the cup for the 17th time in the event.
- A total of 24 teams, four more than last year, took part in the month-long competition.
- It is started in 1888, the Durand Cup is the oldest football competition in India and Asia.
- It's also the third-oldest in the world.



- The 2023 edition was the 132nd edition of the tournament.

interpersonal relationships, gender equality, nutrition and health, prevention of substance abuse, promoting healthy lifestyles, reproductive health, internet safety, and more) of the SHWP.

- It is accessible in multiple languages; Hindi, English, Assamese, Bengali, Gujarati, Kannada, Malayalam, Marathi, Odia, Tamil, and Telugu.

4. Awards

R. Ravi Kannan Wins Ramon Magsaysay Award 2023

- Recently, Surgical oncologist Padma Shri Dr R. Ravi Kannan, Director of the Cachar Cancer Hospital and Research Centre (CCHRC) in Assam, received the prestigious Ramon Magsaysay Award for 2023.
- He won the award for revolutionising the treatment of cancer in Assam through his people-centered and pro-poor programmes (offering free treatment, food, lodging, and employment for caregivers).

About the Ramon Magsaysay Award

- Established in 1957 as Asia's highest honour and premier prize.
- The award is presented annually on August 31st, which coincides with the birthday of Ramon Magsaysay, the third president of the Republic of the Philippines, who inspired its creation.
- Awardees are presented with a certificate, a medallion with an embossed image of Ramon Magsaysay and a cash prize.
- The award is internationally recognised as the Nobel Prize counterpart of Asia.

Categories of Recognition:

- The award initially featured six

categories, including "Government Service", "Public Service", "Community Leadership", "Journalism, Literature, and Creative Communication Arts", "Peace and International Understanding", and "Emergent Leadership".

National Teachers' Award 2023

- Recently, the Prime Minister of India interacted with the winners of the National Teachers' Award 2023 on the eve of Teachers' Day.
- The purpose of the National Teachers' Award is to celebrate the unique contribution of some of the finest teachers in the country and to honour those teachers who, through their commitment, have not only improved the quality of education but also enriched the lives of their students.
- The awards are conferred by the President of India on 5th September.
- The awards consist of a silver medal, a certificate and a cash prize of Rs. 50,000.
- This year, the scope of the award has been expanded from including teachers selected by the Department of School Education & Literacy to now also including teachers selected by Department of Higher Education and Ministry of Skill Development.

Teacher's Day Celebrated in India

- Teachers' Day, celebrated annually on 5th September since 1962, honours the contributions of educators, including teachers, researchers, and professors in India.
- Dr. Sarvepalli Radhakrishnan, the President of India at the time, suggested observing his birthday as Teachers' Day in response to students' requests for celebration.

About Radhakrishnan:

- Birth: He was born into a Telugu family in Tiruttani town of Tamil Nadu, on 5th September, 1888.
- Academics: He studied philosophy at Christian College, Madras, and later became a professor at Madras Presidency College and the University of Mysore.
- Employment: He served as the first Vice-President of India from 1952 to 1962 and the second President of India from 1962 to 1967.
 - He was also the Ambassador of India to the Soviet Union from 1949 to 1952. He was the fourth Vice-Chancellor of Banaras Hindu University from 1939 to 1948.
- Recognition: In 1984, he was posthumously (after death) awarded the Bharat Ratna.
- Notable Works: Reign of

Religion in Contemporary Philosophy, Philosophy of Rabindranath Tagore, The Hindu View of Life, Kalki or the Future of Civilisation, An Idealist View of Life, The Religion We Need, India and China, and Gautama the Buddha. EMRS Principal Honored with National Teachers' Award 2023

- Union Minister for Tribal Affairs felicitated Dr. Yashpal Singh, Principal of Eklavya Model Residential School (EMRS) Bhopal, Madhya Pradesh, who received the prestigious National Teachers' Award for 2023.
- The EMRS scheme, initiated in 1997-98, aimed to establish residential schools that offer free education to Scheduled Tribe children from class VI to XII in remote corners.
 - The scheme is being implemented by the Ministry of Tribal Affairs, Government of India.



SwachhVayuSurvekshan 2023 and NCAP

- Recently, the awards for

SwachhVayuSurvekshan (Clean Air Survey) 2023 were announced. The survey was conducted by the Central Pollution Control Board (CPCB).

Note:

- Every year, the International Day of Clean Air for Blue Skies is celebrated on 7 September to raise awareness and facilitate actions to improve air quality.
 - It was declared so by the United Nations General Assembly (UNGA) in 2019.
- Theme for 4th International Day of Clean Air for Blue Skies (SwachhVayuDiwas 2023) - "Together for Clean Air."

What are the Key Findings about the SVS 2023?

- About:
 - SwachhVayuSurvekshan (SVS) is a new initiative by the Ministry of Environment, Forest and Climate Change (MoEFCC) to rank cities on the basis of air quality and implementation of activities approved under the city action plan (NCAP) in 131 non-attainment cities.
 - Cities are declared non-attainment if over a 5-year period they consistently do not meet the NAAQS for PM10 or NO2.
 - The categorisation of cities has been based on the 2011 population census.
- Criteria: The cities were assessed on eight major points:

- Control of biomass
- Municipal solid waste burning
- Road dust
- Dust from construction and demolition waste
- Vehicular emissions
- Industrial emissions
- Public awareness
- improvement in PM10 concentration

Performance:

- Top 3 cities under 1st category (million plus population): Indore followed by Agra and Thane.
 - Worst Performers: Madurai (46), Howrah (45) and Jamshedpur (44)
 - Bhopal ranked 5th and Delhi ranked 9th
- Top 3 cities under 2nd category (3-10 lakhs population): Amravati followed by Moradabad and Guntur.
 - Worst Performers: Jammu (38), Guwahati (37) and Jalandhar (36)
- Top 3 cities under 3rd category (<3 lakhs population): Parwanoo followed by Kala Amb and Angul.
 - Worst Performer: Kohima (39)

Comparison:

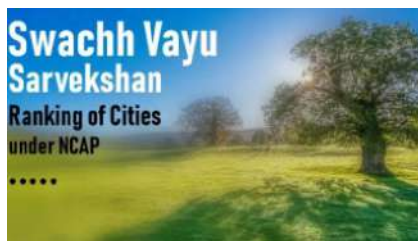
- In SVS 2022, the first three spots (million-plus category) were secured by cities in Uttar Pradesh — Lucknow (1),

Prayagraj (2) and Varanasi (3).

- All three cities have been ranked lower this year.

Note:

- In 2020, the Prime Minister of India announced the intent and plan to improve the air quality in more than 100 cities through a holistic approach.
- In the context, the MoEFCC has been implementing a National Clean Air Programme (NCAP) as a national-level strategy outlining the actions for reducing the levels of air pollution at city and regional scales in India since 2019.



What is the NCAP?

- About: The National Clean Air Programme (NCAP) aims to systematically address air pollution by engaging all stakeholders and ensuring necessary action.
 - 131 cities have been identified for the implementation of the city specific action plans under NCAP.
- Target: It is the first-ever effort in the country to frame a national framework for air quality management with a time-bound reduction target.
 - It seeks to cut the concentra-

tion of coarse (PM10) and fine particles (PM2.5) by at least 20% in the next five years (base year for comparison - 2017).

- Monitoring: The "PRANA" portal has also been launched by MoEFCC for:
 - Monitoring implementation of NCAP.
 - Monitoring the action plans and implementation status of cities.
 - Sharing best practices adopted by cities for others to emulate.

Other Initiatives to Ensure Cleaner Air:

- Air (Prevention and Control of Pollution) Act, 1981
- Statutory Commission for Air Quality Management for Delhi-NCR
- Graded Response Action Plan (Delhi)
- Polluter Pay principle
- Smog Tower
- BS-VI vehicles
- Air Quality and Weather Forecasting and Research (SAFAR)
- Dashboard for Monitoring Air Quality

Shanti SwarupBhatnagar Awards 2022

- Recently, at the inaugural session of the One Week One Lab (OWOL) program of the Council of Scientific and Industrial Research (CSIR)-National Institute

of Science Communication and Policy Research (CSIR-NIScPR), the CSIR announced the list of awardees for the Shanti SwarupBhatnagar (SSB) awards for 2022.

- There were no female scientists chosen for the SSB Awards 2022.

Note:

- OWOL, a theme-based campaign of the CSIR is being organized to ignite the minds of young innovators, students, start-ups, academia, and industry to look for opportunities through deep tech ventures.

- Under this program various Institutes of CSIR, one after the other in every successive week, will showcase their exclusive innovations and technological breakthroughs to the people of India.

About:

- The Shanti SwarupBhatnagar Awards are the highest multi-disciplinary science awards in India.
- They are named after Shanti SwarupBhatnagar, the founder and director of the CSIR, who was also a renowned chemist and visionary.

Purpose:

- Recognition of outstanding Indian work in science and technology.

Nature of the Prize:

- SSB Prizes, each of the value of Rs 5,00,000 (Rupees five lakh

only), are awarded annually for notable and outstanding research applied or fundamental, in the following disciplines: (i) Biological Sciences, (ii) Chemical Sciences, (iii) Earth, Atmosphere, Ocean and Planetary Sciences, (iv) Engineering Sciences, (v) Mathematical Sciences, (vi) Medical Sciences and (vii) Physical Sciences.

Eligibility:

- Any citizen of India engaged in research in any field of science and technology up to the age of 45 years as reckoned on 31st December of the year preceding the year of the Prize.
- Overseas citizens of India (OCI) and Persons of Indian Origin (PIO) working in India are also eligible.
- The Prize is awarded on the basis of contributions made through work done primarily in India during the five years preceding the year of the Prize.

Council of Scientific and Industrial Research (CSIR)

- CSIR is the largest research and development (R&D) organization in India, established in 1942, with its headquarters in New Delhi.
- CSIR has a dynamic network of 37 national laboratories, 39 outreach centers, 1 Innovation Complex, and three units with a pan-India presence.
- CSIR is funded by the Ministry

of Science and Technology and it operates as an autonomous body through the Societies Registration Act, 1860.

- CSIR's organizational structure includes the Prime Minister of India as President, the Union Minister of Science and Technology as Vice President, with the Director-General heading the governing body along with the finance secretary (expenditures).

Announcement of New Science Awards

- The Central Government has decided to introduce 56 prizes under the category of Rashtriya Vigyan Puraskar (3 Vigyan Ratna, 25 Vigyan Shri, 25 Yuva Vigyan Shanti Swarup Bhatnagar, 3 Vigyan Team Awards) to felicitate scientists.
- The awards will be announced annually on National Technology Day, May 11 and will be awarded on National Space Day, August 23 in 2024.

Note:

- Akin to prestigious Padma awards, these awards will not include any cash component.
- The Rashtriya Vigyan Puraskar shall be given in the 13 science-related domains.

Included Awards:

- Vigyan Ratna Awards: These awards will recognise lifetime achievements & contributions

made in any field of science and technology.

- Vigyan Shri Awards: These awards will recognise distinguished contributions to any field of science and technology.
- Vigyan Team Awards: These awards are to be given to a team comprising of three or more scientists/researchers/innovators who have made an exceptional contribution working in a team in any field of science and technology.
- Vigyan Yuva-Shanti Swarup Bhatnagar (VY-SSB): These awards are the highest multidisciplinary science awards in India for the young scientists (maximum 45 years).
- They are named after Shanti Swarup Bhatnagar, the founder and director of the Council of Scientific & Industrial Research (CSIR), who was also a renowned chemist and visionary.

Awards Open to PIOs:

- Persons of Indian origin (PIOs) will now be eligible for the new awards, but only one PIO may receive the Vigyan Ratna.
- Three PIOs each can be selected for the Vigyan Shri and the VY-SSB.
- However, PIOs will not be eligible for the Vigyan Team awards.

What is National Technology Day?

- About: The day, which was first observed in 1999, aims to commemorate the scientific and

technological achievements of Indian scientists, engineers.

- The day was named by the former Prime Minister Atal-Bihari Vajpayee.
- Every year, the Technology Development Board of India under the Ministry of Science and Technology celebrates the day by awarding individuals with the National Award for their contribution to science and technology.
- Significance: It is the day India successfully tested nuclear bombs in Pokhran on 11th May, 1998.
 - India successfully test-fired its Shakti-1 nuclear missile in operation called Pokhran-II, also codenamed as Operation Shakti.

DadasahebPhalke Award conferred on WaheedaRehman

- Renowned Indian veteran actor WaheedaRehman, celebrated for her legendary roles in Indian cinema classics, has been bestowed with the prestigious DadasahebPhalke Lifetime Achievement Award for 2021.
- The award will be presented during the 69th National Film Awards ceremony.
- The DadasahebPhalke Lifetime Achievement Award is India's highest recognition in cinema.

The award is presented annually at the National Films Awards ceremony by the Directorate of Film Festivals.

- The award is named after DadasahebPhalke, an Indian filmmaker who directed India's first full-length feature film, Raja Harishchandra (1913).
- She also received accolades such as the National Award for Best Female Actor, Padma Shri, and Padma Bhushan for her unwavering dedication, commitment, and professional excellence.



2018 - Everyone is a Hero

- 2018- Everyone is a Hero is a Malayalam survival drama that is India's official entry for the 96th Academy Awards. The film is based on the devastating Kerala floods of 2018.
- In August 2018, Kerala experienced its worst floods since 1924 due to torrential rainfall environmental factors like encroachment, sand mining, and

deforestation in the Western Ghats contributed to the disaster.

- The Academy Awards, also known as the Oscars, are given annually by the Academy of Motion Picture Arts and Sciences (AMPAS).
- The awards recognize and celebrate all aspects of the film industry and the diverse, talented people who make movies.
- India won two Oscars at the 95th Academy Awards in 2023. "NaatuNaatu" from RRR won Best Original Song, and "The Elephant Whisperers" secured Best Documentary Short.



PradhanMantriRashtriyaBalPuraskar

- The Ministry of Women & Child Development, Government of India, organises PradhanMantriRashtriyaBalPuraskar every year to celebrate the energy, determination, ability, zeal and enthusiasm of our children.

Pradhan Mantri Rashtriya Bal Puraskar

- Two Categories: The PradhanMantriRashtriyaBalPuraskar is given under two categories:

- o Bal Shakti Puraskar, and
- o BalKalyanPuraskar.

Bal Shakti Puraskar:

- Recognition:
 - o It is given by the Government of India every year to recognize exceptional achievements of children in various fields i.e., innovation, scholastic achievements, social service, arts & culture, sports and bravery.
- Eligibility:
 - o A child who is an Indian Citizen and residing in India and is between 5-18 years of age.
- Award:
 - o A medal, a cash prize of Rs. 1,00,000, book vouchers worth Rs.10,000, a certificate and citation.
- Background:
 - o It was instituted in 1996 as the National Child Award for Exceptional Achievement, renamed from 2018 as Bal Shakti Puraskar.

BalKalyanPuraskar:

- Recognition:
 - o It is given as recognition to Individuals and Institutions, who have made an outstanding contribution towards service for children in the field of child development, child protection and child welfare.

- Eligibility:
 - o An individual who is an Indian Citizen and residing in India and should have attained the age of 18 years or above (as on 31st August of respective year). She/he should have worked for the cause of children for not less than 7 years.
- The institution should not be entirely funded by the government and should have been in the field of child welfare for 10 years and performing consistently in the field.
- Award:
 - o Three awards are given in each of the two categories - Individual and Institution - along with cash prizes (Rs. 1,00, 000 and Rs. 5,00, 000 respectively).



- Background:
 - o It was instituted in 1979 as the National Child Welfare Awards, renamed from 2018 as BalKalyanPuraskar.

Kalaigmar Semmozhi award

- Tamil Nadu Chief Minister

handed over the Kalaigmar M. Karunanidhi Semmozhi Tamil Award to Tamil scholar K. Ramasamy.

- He is the former Deputy Director of Central Institute of Indian Languages.
- The award, given for the best contribution to classical Tamil studies by a researcher or a research institution in specified areas leading to the creation of new knowledge in Ancient Tamil Culture and Civilization .

Ig Nobel Prize 2023

- A team of scientists from India, China, Malaysia and the US has won this year's Ig Nobels.
- This prize is awarded for humorous scientific feats, in the mechanical engineering category for its study of repurposing dead spiders to be used in gripping tools.
- The Ig Nobel Prize is a parody of the Nobel Prize, awarded for unconventional and humorous scientific achievements.
- It aims to make people laugh and then think about the peculiar aspects of science.
- Unlike the Nobel Prize, which honor significant intellectual accomplishments, the Ig Nobel Prize celebrates the quirky and offbeat side of research.

IV. HISTORY - Historical Events

Nataraja Artistry of Lord Shiva

- Recently, The G20 Leaders' Summit at Bharat Mandapam, New Delhi, featured a stunning 27-foot Nataraja sculpture, the world's tallest representation of Lord Shiva in his dancing form.

Key Highlights of the Nataraja Statue in Bharat Mandapam

- This remarkable Nataraja statue, crafted from an ashtadhatu (eight-metal alloy) by artisans from Tamil Nadu, weighs 18 tonnes.
- The statue is sculpted by the renowned sculptor Radhakrishnan Sthapaty of Swami Malai in Tamil Nadu.



- The design of this Nataraja statue draws inspiration from three revered Nataraja idols: the Thillai Nataraja Temple in Chidambaram, the Uma Maheswarar Temple in Konerirajapuram, and the Brihadeeswara (Big) Temple, a UNESCO World Heritage Site, in Thanjavur. This offers a deep insight into the

history and religious symbolism of Lord Shiva's dancing form.

- The Nataraja sculpture at Bharat Mandapam is made using the lost wax method.

TRIFED Showcases India's Tribal Craftsmanship at G20 Summit

- The recent 18th G20 Summit witnessed a captivating display of India's rich tribal heritage and craftsmanship, curated and presented by the Tribal Cooperative Marketing Development Federation of India (TRIFED), Ministry of Tribal Affairs.

Tribal Cooperative Marketing Development Federation of India (TRIFED):

- TRIFED came into existence in 1987. It is a national-level apex organisation functioning under the administrative control of the Ministry of Tribal Affairs.
- TRIFED has its Head Office located in New Delhi and has a network of 13 Regional Offices located at various places in the country.

Santiniketan Becomes India's 41st World Heritage Site

- Recently, Santiniketan, which is a town located in Birbhum district of West Bengal, was included in the UNESCO's World Heritage List.
- The efforts to have Santiniketan recognized as a UNESCO World Heritage Site have been

ongoing since 2010. Santiniketan has been recognized by UNESCO as India's 41st World Heritage Site.

Santiniketan

- Historical Significance: In 1862, Rabindranath Tagore's father, Debendranath Tagore, spotted this scenic landscape and decided to establish an ashram, building a house called Santiniketan, meaning "abode of peace".
- UNESCO World Heritage Site: The Ministry of Culture proposed Santiniketan for inclusion in the UNESCO World Heritage List, emphasizing its importance in human values, architecture, arts, town planning, and landscape design.
- Archaeological Preservation: The Archaeological Survey of India (ASI) has been involved in the restoration of several structures in Santiniketan, preserving its historical and cultural heritage.

UNESCO's World Heritage Sites

- A World Heritage Site is a place that is listed by UNESCO for its special cultural or physical significance.
- This is embodied in an international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by UNESCO in 1972.



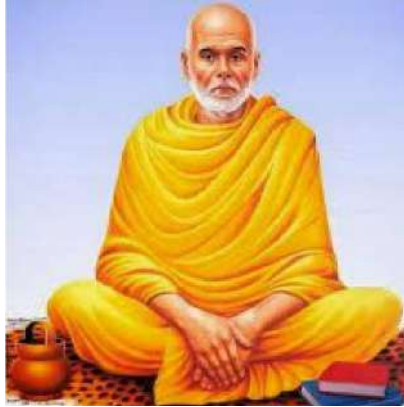
Hoysala Temples Now India's 42nd World Heritage Site

- The Sacred Ensembles of the Hoysala, the famed Hoysala temples of Belur, Halebid and Somanathapur in Karnataka have been added to the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage list. This inclusion marks the 42nd UNESCO World Heritage Site in India
- Recently, Santiniketan, which is a town located in the Birbhum district of West Bengal, was also included in UNESCO's World Heritage List.
- The 'Sacred Ensembles of the Hoysala' have been on UNESCO's Tentative list since April 15, 2014. The other heritage sites in Karnataka which got into the UNESCO list are Hampi (1986) and Pattadakal (1987).

SreeNarayana Guru Jayanti

- Recently, the Prime Minister paid tributes to SreeNarayana Guru on his Jayanti.
- SreeNarayana Guru (1856-1928) was a revered Indian

spiritual leader and social reformer born in Chempazhanthy, Kerala.



- He advocated for equality, education, and social upliftment regardless of caste. Guru's philosophy emphasized, "One Caste, One Religion, One God for All" (OruJathi, OruMatham, OruDaivam, Manushyanu) promoting harmony among different communities.
- He became one of the greatest proponents and re-evaluators of Advaita Vedanta, the principle of non-duality put forward by AdiShankara.
- He established a philanthropic society as the founder of the SreeNarayana Dharma ParipalanaYogam (SNDP).

ShaheedBhagat Singh Birth Anniversary

- Recently, the Prime Minister of India has paid tributes to ShaheedBhagat Singh on his birth anniversary
- Bhagat Singh, born on September 26, 1907 in the Jullundur Doab district of Punjab, played

a crucial role in India's freedom struggle.

- He was a member of the Hindustan Republican Association (HRA), later renamed the Hindustan Socialist Republican Association (HSRA).
- He started a militant youth organization called the Naujawan Bharat Sabha.
- In their quest for revenge for LalaLajpatRai's death, Bhagat Singh and his comrades mistakenly killed Police Officer J.P. Saunders, leading to their involvement in the Lahore Conspiracy Case.



- Bhagat Singh was later re-arrested, found guilty, and hanged on March 23, 1931, for Saunders' murder and a Central Legislative Assembly bombing protest.
- March 23 is observed as Martyrs' Day in their honor.
- Notable Works: "Why I Am an Atheist: An Autobiographical Discourse" and "The Jail Notebook and Other Writings."

V. Polity - Political Parties and Political system in India

Offspring of Void/voidable Marriages Entitled to Ancestral Property

- Context: The Supreme Court has ruled that children born from void or voidable marriages have the right to claim a share of their parents' ancestral property.
- However, this right is limited to their parents' share within the Hindu Undivided Family (HUF) governed by Mitakshara Law and does not extend to the entire HUF's property.
- It emphasized that these children would be considered legitimate and related by legitimate kinship under the Hindu Succession Act (HSA), 1956.
- Section 16(3) of the HMA, 1955 explicitly states that the conferment of legitimacy does not grant any rights to the property of anyone other than the parents.

About Mitakshara Law:

- The Mitakshara school of Hindu law is a well-known school of thought that specifies procedures for succession and inheritance. The Mitakshara school of thought states that a son, grandson, and great-grandson have a right to family property through birth.
- The Mitakshara School of Law

is followed in every state in India, except for West Bengal and Assam. The Hindu Succession Act of 1956 governs Hindu family law.

- Before the 2005 amendment of the Hindu Succession Act, a female could not be a coparcener and was not entitled to partition.

Simultaneous elections

- Context: The Government has formed a committee, headed by former President Ram Nath Kovind, to explore the possibility of "one nation, one election," which refers to holding simultaneous Lok Sabha (Parliament)

and state assembly elections.

One nation, one election (ONOE)

- The concept of "one nation, one election" refers to holding elections to Lok Sabha and State Legislative Assemblies simultaneously, once in five years.

Background:

- Simultaneous elections were held in the country during the first two decades after Independence up to 1967. The dissolution of certain Assemblies in 1968 and 1969 followed by the dissolution of the Lok Sabha led to the disruption of the conduct of simultaneous elections.

Benefits of "one nation, one election"

Benefit	Description
Reducing Election Expenditure	Conducting all elections simultaneously minimizes expenses on logistics, security, and campaigning.
Better Governance	Simultaneous elections allow elected governments to focus on governance rather than preparing for the next election. It will help in streamlining the election cycle to avoid policy disruptions due to the Model Code of Conduct
Voter Convenience	Ensures voters are not subjected to multiple rounds of voting, leading to better turnout and voter convenience.

Reduced Security Concerns	Conducting elections together reduces overall security concerns and enhances security setup across the country.
Level Playing Field	Provides a level playing field for all parties and candidates, promoting fairness and transparency in elections.
Reduced Impact on Education	Simultaneous elections reduce the impact on the education sector, as fewer teachers are involved in the electoral process.

Uncertainty of Andhra Pradesh students' Local Quota

- Andhra Pradesh students' 'local quota' in educational institutions, protected by Article 371 D, faces uncertainty as the Andhra Pradesh Reorganisation Act, 2014 expires in May 2024.
- Article 371 of the Constitution provides "special provisions" for 11 states, including six states of the Northeast (excluding Tripura and Meghalaya).
- Article 371 D was incorporated as the 32nd amendment to the Constitution in 1973.
- It particularly applies to the regions of Andhra Pradesh, addressing agitations in the early 1970s.
- Article 371 D was introduced to safeguard the rights of local students in education and employment.
- Under Article 371 D, 85% of seats in educational institutions are reserved for local students.
- The provision has played a crucial role in ensuring access

to education for students in specific regions.

India, that is Bharat: The Ongoing Debate

- Recently, invitations for the upcoming G-20 Summit in New Delhi have introduced a noteworthy alteration. Instead of the conventional "President of India," the invitations now bear the term "President of Bharat", renewing a broader conversation regarding the nation's nomenclature and its historical connotations.

Historical Perspectives on the Names "India" and "Bharat"

- Constitutionality:
 - Article 1 of the Indian Constitution already uses both "India" and "Bharat" interchangeably, stating, "India, that is Bharat, shall be a Union of States."
 - The preamble of the Indian Constitution begins with "We the People of India," but the Hindi version uses "Bharat" instead of India,

indicating interchangeability.

- Additionally, some government institutions, such as the Indian Railways, already have Hindi variants that include "Bharatiya."

Origin of the Name Bharat:

- The term "Bharat" has deep historical and cultural roots. It can be traced back to Puranic literature and the epic Mahabharata.
- Vishnu Purana describes "Bharata" as the land between the southern sea and the northern snowy Himalayan mountain.

Origin of the Name India:

- The name India is derived from the word Indus, which is the name of a river that flows through the northwestern part of the subcontinent.

Constitutional Assembly Deliberation Regarding India and Bharat:

- The debate surrounding the country's name is not new. When the Constituent Assembly was framing the Constitution in 1949, there was a division of opinions regarding the name.
- Some members felt that "India" was a reminder of colonial oppression and sought to prioritize "Bharat" in official documents.
- Seth Govind Das from Jabalpur

advocated for placing "Bharat" above "India," emphasizing that the latter was merely a translation of the former in English.

- Hari Vishnu Kamath cited the example of the Irish Constitution, which changed the name of the country upon achieving independence, as a precedent for using "Bharat."
- Hargovind Pant argued that the people wanted "Bharatvarsha" and rejected the term "India" imposed by foreign rulers.

Recent Development:

- In 2015, Centre opposed a name change, stating that the issue had been extensively deliberated upon during the Constitution's drafting.
- The Supreme Court has twice rejected pleas to rename 'India' to 'Bharat', once in 2016 and then in 2020, reaffirming that "Bharat" and "India" both find mention in the Constitution.

Forest Conservation and Tribal Rights in North-east India

- Recently, The Mizoram Assembly has passed a resolution opposing the Forest (Conservation) Amendment Act (FCA), 2023, highlighting the ongoing challenges in forest conservation and tribal rights in North-east India.

Concerns Raised by the North Eastern States Against FCA

- Amendment's Impact on North-east India:
 - The Forest (Conservation) Amendment Act of 2023 allows for forest land diversion for projects located within 100 km of India's international borders without requiring forest clearance under the Forest (Conservation) Act of 1980.

Forests Not Officially Classified are not Protected:

- Until 1996, the provisions of the FCA were only applied to forests that had been declared or notified as a forest, and to forests recorded in government records on or after 25th October 1980.
- The areas not officially classified as forests in a government record, even if they are standing forests, will not be protected from commercial exploitation or any other kind of diversion.
- This overturns a 1996 Supreme Court order in the Godavarman case which ruled that any area resembling a forest's dictionary meaning would be protected under conservation laws.

State Opposition:

- Mizoram and Tripura have passed resolutions opposing the amendment, expressing their commitment to protecting the rights and interests of their people.
- Nagaland faces demands to

follow suit, and Sikkim has also opposed the 100 km exemption clause.



Significant Area is Unclassed Forest:

- A huge portion of forests in the North East are privately owned: either by individuals, or clans or village councils, or communities, enabled by special privileges that the Constitution guarantees to tribal communities.
- More than 50% of the Recorded Forest Areas (RFA) in the North East falls under "unclassified forests"—forests which are not notified under any law.
- For example, 97.3% of RFA in Nagaland, 88.2% in Meghalaya, 76% in Manipur, 53% in Arunachal Pradesh, 43% in Tripura, 33% in Assam, and 15.5% of Mizoram fall under unclassified forests category.
- This means that these large areas of unclassified forests would be excluded from this Act unless they are included in government records.

Delhi High Court Orders on Service Charge

- Recently, the Delhi High Court has issued an interim order directing members of the

Federation of Hotel and Restaurant Association of India (FHRAI) to replace the term 'Service Charge' with 'staff contribution' while adding that the amount charged should not exceed 10% of the total bill.

Case About

- The order was passed on pleas filed by the National Restaurant Association of India (NRAI) and the FHRAI, challenging the July, 2022, guidelines issued by the Central Consumer Protection Authority (CCPA).
- The CCPA guidelines stipulated that service charges should not be collected from consumers under any other name, and they should be optional and voluntary.
- Alternatively, they could request that the eatery remove the service charge from the bill.
- A complaint against unfair trade practices could also be lodged electronically with the Consumer Commission through the eDaakhil portal for speedy redressal or otherwise.
- The guidelines also prohibited the addition of service charges to the bill automatically, without informing consumers.
- These guidelines were introduced in response to consumer grievances, as many restaurants and hotels were imposing service charges without clearly stating that payment was voluntary.

- The guidelines were issued by the CCPA under Section 18(2) (1) of the Consumer Protection Act, 2019.
- Note: Under Section 18(2)(1) of the Act, CCPA has issued guidelines to prevent unfair trade practices and protection of consumer interest with regard to levy of service charge in hotels and restaurants

Maratha Quota

- Recently, in Maharashtra, the demand for reservations in educational institutions and government jobs by the Maratha community has once again taken center stage.

History of the Maratha Reservation Demand

- The Marathas are a group of castes comprising peasants and landowners among others constituting nearly 33% of the state's population.
- While most Marathas are Marathi-speaking, not all Marathi-speaking people belong to the Maratha community.
- Historically, they have been identified as a 'warrior' caste with large land holdings.
- However, over the years, due to factors such as land fragmentation, agrarian distress, unemployment and lack of educational opportunities, many Marathas have faced social and economic backwardness. The community still plays an

important role in the rural economy.

- Therefore, they have been demanding reservation in government jobs and educational institutions under the category of Socially and Educationally Backward Classes (SEBC).

Status of the Maratha Reservation Demand 2021:

- Supreme Court struck down the Maratha reservation in 2021 citing the 50% cap on total reservations it had set in 1992.
- The Maratha reservation of 12% and 13% (in education and jobs) had increased the overall reservation ceiling to 64% and 65%, respectively.
- In the Indira Sawhney judgment 1992, SC had categorically said 50% shall be the rule, only in certain exceptional and extraordinary situations for bringing far-flung and remote areas' population into mainstream said 50% rule can be relaxed.
- The Supreme Court said that there were no "exceptional circumstances" or an "extraordinary situation" in Maharashtra for the state government to breach the limit.
- In addition, the court ruled that the state had no authority to accord socially and economically backward status to a community: only the president can tweak the central list of socially and backward classes, said the court. States can only make "suggestions".

- The Bench unanimously upheld the constitutional validity of the 102nd Constitution Amendment but differed on the question of whether it affected the power of states to identify SEBCs.
- The Supreme Court highlighted that a separate reservation for the Maratha community violates Articles 14 (right to equality) and 21 (due process of law).

Status of the Maratha Reservation Demand 2022:

- In November 2022, after the SC upheld the 10% quota for the Economically Weaker Sections, the state government said that until the issue of Maratha reservation is resolved, economically weaker members of the community can benefit from the EWS quota.

BIS Promoting Indian Standards at Village Level

- The Bureau of Indian Standards (BIS) launched an initiative aimed at promoting adherence to Indian standards at the grassroots level.
- Through this initiative, BIS has reached out to 2.4 lakh Gram Panchayats and embarked on a mission to sensitize Gram Panchayat Presidents and Secretaries across the country.
- Furthermore, BIS has developed the BIS Care App to empower consumers with information on

Indian Standards and product certification.

- BIS is the National Standard Body of India established under the BIS Act 2016 for the harmonious development of the activities of standardization, marking and quality certification of goods and for matters connected therewith or incidental thereto.

National Judicial Data Grid

- Recently, the Supreme Court has integrated its case data on the National Judicial Data Grid (NJDC).
- The integration with NJDG as part of an 'Open Data Policy (ODP)' to provide transparent case information to the public.
- ODP is increasingly a set of policies - that promotes transparency, accountability, and value creation by making government data available to all.

National Judicial Data Grid (NJDG)

- The NJDG portal is a national repository of data relating to cases instituted, pending, and disposed of by the courts across the country.
- It is a database of orders, judgments and case details of 18,735 District and subordinate Courts and High Courts created as an online platform under the e-Courts Project.
- Its key feature is that the data is updated in real-time and has

granular data up to the Taluka level.

- It was built as part of Phase II of the e-Courts project, which is a Centrally Sponsored Scheme.
- Currently, litigants can access case status information of 23.81 crore cases and more than 23.02 crore orders/judgments.

Developed By:

- The platform has been developed by the National Informatics Centre (NIC) in close coordination with the in-house software development team of the Computer Cell, Registry of the Supreme Court (SC) with an interactive interface and analytics dashboard.

Significance:

- NJDG works as a monitoring tool to identify, manage & reduce pendency of cases.
- It helps identify specific bottlenecks in judicial processes. For example, if the number of land disputes in a particular state shoots up, it helps policymakers look into whether the law needs to be strengthened.
- It also helps generate inputs related to particular areas of law. For example, to track cases related to land disputes, Land Records data of 26 States have been linked with NJDG.

Current Pendency Status of Cases

- For the year 2023, the total

pendency of registered cases in SC is 64,854.

- In SC, there are 5,412 cases filed and 5033 cases disposed in August 2023.
- There are 583 three-judge Bench matters, 288 five-judge Bench cases, 21 seven-judge Bench cases, and 135 nine-judge Bench cases, all of which are civil, pending in the Supreme Court.



Foreigners' Tribunals

- Recently, the Assam state government disclosed that since 2001, a total of 3,100 people have been declared and convicted as foreigners by tribunals in Assam and have been deported. These people were declared non-citizens by Foreigners' Tribunals (FTs).
- Steps against people with doubtful citizenship are taken according to the Foreigners' Act of 1946, the Foreigners (Tribunal) Order of 1964 and notifications issued by the Centre from time to time.
- FTs are quasi-judicial bodies to whom an individual can represent his/her case if their name does not figure in the final National Register of Citizens (NRC). Only FTs are

empowered to declare a person as a foreigner.

- The FTs judge their citizenship on the basis of documents provided or the lack of them.

President of India Inaugurates NeVA

- Recently, the President of India inaugurated the 'National e-Vidhan Application' (NeVA) and addressed the Gujarat Legislative Assembly in Gandhinagar.
- The President highlighted the significance of the E-Assembly, which transforms the legislative house into a digital entity, promoting speed and transparency.
- NeVA is one of the 44 Mission Mode Projects (MMPs) under the "Digital India Programme" which aims to make the functioning of all the State Legislatures paperless by transforming them into 'Digital House'ourt Portal for Assistance in Court's Efficiency

CJI Unveils Transparent Approach for SC Judge Appointments

- Recently, the Chief Justice of India (CJI) disclosed an initiative to enhance transparency in the appointment of judges to the Supreme Court.
- In addressing the imperative for objective assessments of potential judicial appointees, the CJI, has introduced a team comprising scholars, interns, and law researchers.

- Their core responsibility revolves around conducting a comprehensive evaluation of the top 50 judges in India who are being considered for appointments to the SC.
- This initiative, under the auspices of the Centre for Research and Planning, has been devised to establish transparent selection criteria while safeguarding the confidentiality of the process.
- Although the specific criteria for identifying the top 50 judges have not been explicitly elucidated yet.
- As of now, the appointments are made on the basis of several criteria, which include seniority, regional representation and merit while following a Memorandum of Procedure moulded through the Three Judges Cases.

Debate over the Words Socialist and Secular in Constitution

- Recently, some of the Members of the Lok Sabha have claimed that the words "Socialist" and "Secular" were omitted in the New Copies of the Preamble of the Constitution of India.
- These two words were originally not a part of the Preamble. They were added by The Constitution (42nd Amendment) Act, 1976 during the Emergency imposed by then Prime Minister Indira Gandhi.

Insertion of the words Socialist and Secular:

- The words "Socialist" and "Secular" were added to the Preamble through the Constitution (42nd Amendment) Act, 1976, during the period of Emergency under Prime Minister Indira Gandhi's government.
- Debate Over Removing Socialist and Secular Words from the Preamble

Political Ideology and Representation:

- Those advocating for the removal argue that the words "socialist" and "secular" were inserted during the Emergency in 1976.

Original Intent and Constitution's Philosophy:

- Critics argue that the original Preamble, as adopted in 1950, didn't include these words. They emphasize that the Constitution's philosophy already encompassed the ideas of justice, equality, liberty, and fraternity without explicitly mentioning socialism and secularism.

Concerns of Misinterpretation:

- Some critics express concerns that the words "socialist" and "secular" might be misinterpreted or misused, potentially leading to policies and actions that deviate from their original intent.

Social Implications:

- The presence or absence of these words can have implica-

tions for public policy, governance, and societal discourse.

Women's Reservation Bill 2023

- Recently, the Lok Sabha (LS) and Rajya Sabha (RS), both passed Women's Reservation Bill 2023 (128th Constitutional Amendment Bill) or Nari Shakti Vandan Adhiniyam.
- The bill reserves one-third of the seats in Lok Sabha, State legislative assemblies and the Delhi assembly. This will also apply to the seats reserved for SCs (Scheduled Castes) and STs (Scheduled Tribes) in Lok Sabha and State Legislatures.

Background and Need for this Bill

- The discussion upon the reservation of women reservation bill is prevalent since the tenure of Former Prime Minister Shri Atal Bihari Vajpayee in 1996.
- As the then Government lacked a majority, the Bill could not have been approved.

Earlier Attempts at Reserving Seats for Women:

- 1996: First Women Reservation Bill was introduced in the Parliament.
- 1998 – 2003: Government tabled the Bill on 4 occasions but failed.
- 2009: Government tables the bill amid protests.
- 2010: The Union Cabinet passes the Bill and RS passes it.
- 2014: The Bill was expected to be tabled in LS.



Need:

- There are 82 women Member of Parliaments in LS (15.2%) and 31 women in RS(13%).
- While the number has increased significantly since the 1st Lok Sabha (5%) but is still far lower than in many countries.
- According to recent UN Women data, Rwanda (61%), Cuba (53%), Nicaragua (52%) are the top three countries in women representation. Bangladesh (21%) and Pakistan (20%) as well are ahead of India in case of female representation.

Key Features of the Bill

- Reservation for Women in Lower House:
 - The Bill provided for inserting Article 330A to the constitution, which borrows from the provisions of Article 330, which provides for reservation of seats to SCs/STs in the Lok Sabha.
 - The Bill provided that reserved seats for women may be allotted by rotation to different constituencies in states or Union Territories.
 - In the seats reserved for SCs/STs, the Bill sought to provide one-third of the seats

- to be reserved for women on rotational basis.
- Reservation for Women in State Legislative Assemblies:
 - The Bill introduces Article 332A, which mandates the reservation of seats for women in every state Legislative Assembly. Additionally, one-third of the seats reserved for SCs and STs must be allocated for women, and one-third of the total seats filled through direct elections to the Legislative Assemblies shall also be reserved for women.
- Reservation for Women in NCT of Delhi (New clause in 239AA):
 - Article 239AA to the constitution grants special status to the Union Territory of Delhi as national capital with regards to its administrative and legislative functioning.
 - Article 239AA(2)(b) was amended by the bill accordingly to add that the laws framed by parliament shall apply to the National Capital territory of Delhi.
- Commencement of Reservation (New article - 334A):
 - The reservation will be effective after the census conducted after the commencement of this Bill has been published. Based on the census, delimitation will be undertaken to reserve seats for women.
 - The reservation will be provided for a period of 15 years. However, it shall continue till such date as determined by a law made by Parliament.
- Rotation of Seats:
 - Seats reserved for women will be rotated after each delimitation, as determined by a law made by Parliament.

Arguments Against the Bill

- The Bill merely reads that it shall come into effect "after an exercise of delimitation is undertaken for this purpose after the relevant figures for the first Census taken after commencement of the Bill is undertaken. It doesn't specify the cycle of elections from which women will get their due share.
- The current Bill does not provide women's reservation in the Rajya Sabha and State Legislative Councils. The Rajya Sabha currently has lower representation of women than the Lok Sabha. Representation is an ideal that must be reflected in both the Lower and Upper Houses.
- Note: - The Bill also borrowed from the provisions of Article 334 of the constitution which mandated the parliament to review the provisions of reservation after 70 years of the laws coming into existence. But in the case of the Women's reservation Bill, the Bill provided for the sunset clause of 15 years

for the reservation provisions for the women to get reviewed by the parliament.

Supreme Court to Revisit Legislative Immunity on Bribery

- The Supreme Court of India has referred the 1998, 5-judge Constitution Bench judgement P V NarasimhaRao case to a 7-judge Bench for reconsideration.
- The case deals with the interpretation of Articles 105(2) and 194(2) of the Constitution, which extends parliamentary privilege and immunity to members of Parliament and State Legislatures against criminal prosecution on bribery charges for any speech or vote in the House.
- The decision was taken in another case related to bribery charges against an MLA, who had relied on Article 194(2) for quashing the charge sheet and criminal proceedings.

Case of PV NarasimhaRao v/s State, 1998

- The P V NarasimhaRao case refers to the 1993 Jharkhand Mukti Morcha (JMM) bribery case. In this case, Shibu Soren and some of his party MPs were accused of taking bribes to vote against a no-confidence motion against the then P V NarasimhaRao government.
- No-confidence motions are significant political events that

usually occur when there is a perception of the government losing majority support.

- The Supreme Court had quashed the case against the JMM MPs, citing immunity under Article 105(2) of the Constitution.

Articles 105(2) and 194(2) of the Constitution:

- Article 105(2):
 - No member of Parliament shall be liable to any proceedings in any court in respect of anything said or any vote given by him in Parliament or any committee thereof, and no person shall be so liable in respect of the publication by or under the authority of either House of Parliament of any report, paper, votes or proceedings.
 - The purpose of Article 105(2) is to ensure that members of Parliament can perform their duties without fear of consequences.
- Article 194(2):
 - No member of the Legislature of a State shall be liable to any proceedings in any court in respect of anything said or any vote given by him in the Legislature or any committee thereof, and no person shall be so liable in respect of the publication by or under the authority of a House of such a Legislature of any report, paper, votes or proceedings

- Supreme Court Refer the Matter to a 7-Judge Bench

- The Supreme Court referred the matter to a 7-judge Bench because it recognized the need to reexamine the correctness of its previous 1998 constitution bench ruling in the PV NarasimhaRao case.
- The purpose of Articles 105(2) and 194(2) is to ensure that members of Parliament and the State Legislatures can discharge their duties freely, without fear of consequences for their speech or vote.
- The objective is not to give legislators higher privileges in terms of immunity from the general criminal law of the land.

SC Calls for Stronger Discipline Mechanism for TV News Channels

- The Supreme Court (SC) of India has expressed its concern over the lack of discipline and accountability among TV news channels and has called for stronger self-regulation.
- The SC has asked the two representative bodies of TV news channels, the News Broadcasters and Digital Association (NBDA) and the News Broadcasters Federation (NBF), to suggest ways to strengthen the mechanism for dealing with errant channels.

- This issue started with NBDA's petition against the Bombay High Court's decision not to give legal recognition to the self-regulatory mechanism used by news channel associations.

Problems with the Current Self-Regulation Mechanism of TV News Channels

- Balancing Freedom of Speech and Accountability:
- Ineffectiveness of Current Self-Regulation:
- Registration and Recognition:
- Monopolistic Concerns:

ECI Clarifies Aadhaar Linkage with Electoral Roll is Voluntary

- In a recent plea before the Supreme Court of India, the Election Commission of India (ECI) clarified that the linking of Aadhaar numbers with the Electoral roll is not mandatory.

Note:

- An electoral roll is a list of eligible voters in a specific jurisdiction, prepared and updated by the ECI.
- Concerns Regarding Aadhaar-Linkage with the Electoral Roll

The Plea:

- Background: A petitioner, filed a plea urging the court to direct the Centre and the ECI to amend the application forms for enrolment and update electoral rolls on amended provisions/

rules notified by the Union of India for the authentication of Aadhaar number with the electoral rolls on or before 1st April 2023.

- Concerns Raised: The Petitioner expressed concerns about voter privacy and alleged that the Centre and EC were compelling voters to submit their Aadhaar numbers without providing an alternative option.
- Legal Stand: This practice violated Articles 14 and 21 of the Constitution and could lead to the misuse of voters' personal data.
- Supreme Court's Decision: The Supreme Court recorded that the submission of Aadhaar numbers is not mandatory according to Rule 26-B of the Registration of Electors (Amendment) Rules 2022.
- Rule 26B, dealing with "special provision for providing Aadhaar number by existing electors", states that "every person whose name is listed in the roll may intimate his Aadhaar number to the registration officer in Form 6B in accordance with sub-section (5) of Section 23 of the Representation of the People Act, 1950.
- Form 6B is a letter of information that contains a person's Aadhaar number for the purpose of electoral roll authentication.

ECI's Response:

- The ECI's response was that

the submission of Aadhaar numbers is voluntary. The EC is considering making appropriate clarificatory changes to the forms related to the Aadhaar linkage, indicating its intent to clarify the voluntary nature of the Aadhaar submission.

- The poll body informed the Bench that "nearly 66.23 crore Aadhaar numbers have already been uploaded in the process of finalizing electoral rolls".

Delimitation Concerns in Women's Reservation Bill, 2023

- The recent passage of the Women's Reservation Bill, 2023 in the Indian Parliament has been hailed as a historic milestone towards gender equality in the country's political landscape.
- However, the fate of this landmark legislation is currently intertwined with the issue of delimitation, a move criticized by opposition parties.

Delimitation

- Delimitation is the process of redrawing parliamentary or assembly seat borders to ensure an equal number of voters in each constituency.
- It is done every few years after each census to ensure each constituency has one representative in both the Lok Sabha and state assembly across the nation.

- Delimitation links population increase to the number of elected legislators in a state, ensuring that no delegates are overrepresented or underrepresented.

Constitutional Provisions Related to Delimitation:

- Article 82:
 - The Parliament enacts a Delimitation Act after every census. This act allows the Parliament to readjust the allocation of seats in the Lok Sabha and the Legislative Assemblies of States.
- Article 170:
 - This article deals with the composition of state Legislative Assemblies, specifying a minimum of 60 members and a maximum of 500.
 - The size of the population, as determined by the most recent census, forms the basis for delimitation and seat distribution.
- Delimitation Commission:
 - The Delimitation Commission Act was enacted in 1952.
 - Once the Act is in force, the Union government sets up a Delimitation Commission.
 - Delimitation Commissions have been set up four times 1952, 1963, 1973 and 2002 under the Acts of 1952, 1962, 1972 and 2002.
 - The Delimitation Commission is appointed by the

President of India and works in collaboration with the Election Commission of India.

- The commission's main task is to redraw the boundaries based on a recent census.
- The current boundaries of the Lok Sabha and State Assembly constituencies were drawn on the basis of the 2001 Census by the Delimitation Commission of 2002.

Women's Reservation Bill, 2023 Linked to Delimitation

- The Indian government has stated that the Women's Reservation Bill, 2023 will come into effect only after the delimitation exercise is undertaken

based on the census data, which has been delayed due to the Covid-19 pandemic and several other reasons has been further pushed to 2024-25 until further orders.

- The government has argued that linking the reservation with delimitation will ensure a transparent and fair allocation of seats for women, and will also increase the total number of seats for both men and women, as the delimitation exercise is expected to raise the strength of the Lok Sabha and the state assemblies seats.

Linkage with Women's Reservation Bill:

- The government's decision to

link the implementation of the Women's Reservation Bill with delimitation is a major concern for opposition parties.

- Opposition argues that there is no apparent reason or requirement to connect the two issues, as there was no such linkage in previous discussions of the women's reservation Bill.
- They suggest that the government could have chosen to delink the women's quota from the census and delimitation. A simpler bill could have allowed all parties to ensure 33% reservation for women within the current architecture of the Lok Sabha.

VI. Public Awareness and General Administration

Adopt a Heritage 2.0 and e-Permission Portal

- Archaeological Survey of India (ASI) launched the "Adopt a Heritage 2.0" program to come forward and help in better upkeep and rejuvenation of India's rich cultural heritage, in line with the vision of 'Virasat-Bhi, VikasBhi'.
- An easy-to-use mobile application called 'Indian Heritage' has been introduced, alongside the launch of an e-permission portal.



Indian Heritage App:

- It will showcase the heritage monuments of India.
- The app will feature state-wise details of monuments along with photographs, a list of public amenities available, geo-tagged locations, and feedback mechanism for citizens.

e-Permission Portal:

- An e-permission portal is for obtaining permission for photography, filming, and developmental projects on monuments.
- The portal will fast-track the process of obtaining various permissions and solve operational and logistical bottlenecks.

Vidya Samiksha Kendras

- Under the National Digital Education Architecture (NDEAR), the Ministry of Education is pushing the establishment of Vidya Samiksha Kendras (VSKs) across states.

- This initiative aligns with the National Education Policy, 2020.
- Currently, at the Central level, a VSK centre is housed in the Central Institute of Educational Technology building in the National Council for Educational Research and Training (NCERT) campus.

VidyaSamikshaKendras (VSKs)

- VSK is aimed at leveraging data and technology to bring a big leap in learning outcomes.
- This will cover data of more than 15 Lakh schools, 96 Lakh teachers and 26 Crore students and analyze them meaningfully using big data analysis, Artificial Intelligence (AI) and machine learning in order to enhance the overall monitoring of the education system and thereby improving learning outcomes.

Objectives:

- To monitor the real-time status of various projects/ activities under the ambit of Samagra-Shiksha.



- To keep track of enrolled students including learning outcomes, Dropouts, support required by teachers and schools, etc.

Disability Certificate for Sickle Cell Patients

- A plan to issue permanent disability certificates for Sickle Cell Disease (SCD) patients above the age of 5 years has been stuck in a dilemma between three Union Ministries (Health, Social Justice and Empowerment, Tribal Affairs) for nearly three years.

Delays in Issuing Permanent Disability Certificates for SCD

- After SCD was included in the list of disabilities under the Rights of Persons with Disabilities Act, of 2016, the Department of Empowerment of Persons with Disabilities (DEPwD) increased the validity of disability certificates for SCD patients from one year to three years, but still required a minimum of 25% disability.
- The Ministry of Health and Family Welfare, which is in charge of setting the criteria and rules for the certificates.
- The Ministry of Social Justice and Empowerment issues the certificates, while the Ministry of Tribal Affairs advocates for the rights of SCD patients.
- The Parliamentary Standing Committee on Empowerment of Women noted that SCD is a "lifelong illness" with a blood and bone marrow transplant being the only cure, "which very few people, especially among the tribal population, can undertake."

- They urged the government to expedite the process of issuing permanent or longer-term certificates for SCD patients.
- The Ministry of Health and Family Welfare is expected to release a report on the issue by October 2023.

Sickle Cell Disease (SCD)

- SCD is a group of inherited red blood cell disorders. In SCD, the red blood cells become hard and sticky and look like a C-shaped farm tool called a "sickle."

Ayushman Bhav Campaign

- In a move towards achieving Universal Health Coverage (UHC) and ensuring healthcare for all, the President of India virtually launched the AyushmanBhav campaign and the AyushmanBhava portal.
- This initiative aims to deliver healthcare services to the last mile and consolidate access and affordability for underserved populations.
- The campaign also raises awareness about vital health schemes and diseases, leveraging India's digital inclusion efforts to extend healthcare accessibility.
- The 'AyushmanBhav' campaign will be implemented during the 'SevaPakhwada' embodying a whole-of-nation and whole-of-society approach.
- The SevaPakhwada is a two-

week initiative (running from September 17th to October 2nd, 2023) that aims to outreach essential health services programs at the state level.



Does Ayushman Bhava Transform India's Healthcare Landscape

- Universal Health Coverage (UHC) Goal:
 - The campaign adopts a collaborative, multi-ministerial approach.
 - Ayushman Bhava aligns with the motto of "Sabka Saa-th Sabka Vikas" (Together with All, Development for All).
- This philosophy underscores inclusivity, leaving no one behind in healthcare access.
- It contains Three Key Components of Ayushman Bhava

Operation Sajaag

- 'Operation Sajaag' was conducted on September 18, 2023, by the Indian Coast Guard (ICG) along the west coast.
- 'Operation Sajaag' is a monthly, day-long drill that serves as a continuous feedback loop. The drill's primary goals are to revalidate coastal security mechanisms and raise aware-

ness among sea-going fishermen.

- The drill involved extensive document verification and crew pass checks for all fishing boats, barges, and crafts at sea.
- ICG was established in August 1978 by the Coast Guard Act, 1978 as an independent Armed force of India.



- ICG is the fourth largest Coast Guard in the world, it has played a significant role in securing the Indian coasts and enforcing regulations in the maritime zones of India.
- To fortify coastal security, the ICG has introduced various measures, including the issuance of biometric cards for fishermen, implementation of colour coding for fishing boats based on state, coastal mapping, and training of marine police personnel

Expediting the Enrolment of Children in Schools

- Recently, 2023 Global Education Monitoring Report titled 'SDG 4 Mid-Term Progress Review' released by UNESCO, paints a grim picture across the underdeveloped and

developing countries with respect to enrolment of children at primary levels.

- There are now 250 million children not enrolled in school, up by six million since 2021, according to the report.
- 1.4 million children must be enrolled in preschool every year until 2030, and primary completion rates must be almost tripled, as per the report.

Key Highlights of the Report

- The 2023 Global Education Monitoring Report shows the progress made since 2015 against all SDG 4 targets based largely on the data of the UNESCO Institute for Statistics, which oversees 10 of the 12 global indicators.

India's Digital Public Infrastructure: A Global Model

- Union Minister of Electronics & IT, participated in the "South-South Knowledge Sharing Series" organized by the World Bank, focusing on India's Digital Public Infrastructure (DPI) and its potential as a model for African nations, particularly in light of the African Union's recent inclusion in the G20 during India's presidency.
- India's commitment to promoting technology for global empowerment aligns with its goal of making the internet an enabler of transformation, resilience, safety, and trust,

establishing India as a global case study in the profound impact of technology on people's lives.

Ministry of Tourism Launched 'Travel for Life'

- Ministry of Tourism, Government of India, organized the Global Launch of 'Travel for LiFE' program on World Tourism Day 2023 (27th September). The program is a part of Mission LiFE and aims to promote sustainable tourism.
- Partners include the Ministry of Environment, Forest and Climate Change (MoEFCC), United Nations World Tourism Organisation (UNWTO), and United Nations Environment Program (UNEP).



- The program includes two verticals: Travel for LiFE for Cleanliness and Travel for LiFE for Rural Tourism.
- It aligns with Sustainable Development Goals (SDGs) related to economic growth, sustainable cities, responsible consumption, climate action, and life below water.

FSSAI Prohibits Use of Newspapers for Food Storing

- Food Safety and Standards Authority of India (FSSAI) has notified the Food Safety and Standards (Packaging) Regulations, 2018 which strictly prohibits the use of newspapers or similar materials for storing and wrapping food.
- The ink used in newspapers contains various bioactive materials with known negative health effects, which can contaminate food and lead to health issues when ingested.
- Additionally, printing inks may contain chemicals including lead and heavy metal that can leach into the food, posing serious health risks over time.
- FSSAI is an autonomous statutory body established under the Food Safety and Standards Act, 2006 (FSS Act) under the Ministry of Health and Family Welfare.

President Calls for Protecting Farmers' Rights and Traditional Seed Varieties

- The President of India inaugurated the First Global Symposium on Farmers' Rights in New Delhi, organized by the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and the Food and Agriculture Organization (FAO) to address farmers' rights.
- The essential role of farmers as 'annadaatas' (providers of food)

was highlighted and called for the protection of their rights and future.



- India, with just 2.4% of the world's land area, accounts for 7-8% of all recorded plant and animal species, thanks to farmers' efforts in conserving local varieties, domesticating wild plants, and nurturing traditional crop varieties, which have ensured food and nutritional security for humans and animals.
- The President also presented the Plant Genome Saviour Farmer Reward 2021-22 to recognise the efforts of farmers who have bred and developed new plant varieties.
- The reward includes a citation, memento, and cash amount of Rs 1,50,000.

Sandes App

- Delhi Police's official communication on G20 security arrangements will now take place on an Indian instant messaging platform, Sandes.
- On this app Sandes, users can only access information and cannot forward it to anyone whose number is not registered on the app.



- Sandes is a secure and user-friendly messaging platform. It has been designed to provide a reliable and efficient means of communication among various government organizations.
- The first version of the app was released by the National Informatics Centre (NIC) in 2020.
- The launch of the app is also a part of the government's strategy to push for the use of India-made software so as to build an ecosystem of indigenously developed products

State of Food Security and Nutrition in the World (SOFI) 2023

- 'State of Food Security and Nutrition in the World' (SOFI) 2023, a report by the United Nations Food and Agriculture Organization (FAO), has shed light on a concerning issue in India.
- It highlights the growing disparity between the cost of a nutritious meal and the economic realities faced by a significant portion of the Indian population.

Key Highlights of the Report

- Global Hunger: While global hunger numbers have remained

stagnant between 2021 and 2022, the number of people facing hunger worldwide has increased by over 122 million since 2019 due to the pandemic, repeated weather shocks, and conflicts, including the war in Ukraine.

- Nutritional Access: Approximately 2.4 billion individuals, largely women, and residents of rural areas, did not have consistent access to nutritious, safe, and sufficient food in 2022.
- Child Malnutrition: Child malnutrition is still alarmingly high. In 2021, 22.3% (148.1 million) children were stunted, 6.8% (45 million) were wasted, and 5.6% (37 million) were overweight.
- Urbanization's Impact on Diet: As urbanization accelerates, there is a noticeable increase in the consumption of processed and convenience foods, leading to a spike in overweight and obesity rates across urban, peri-urban, and rural areas.
- Rural Dependence on Global Markets: Previously self-sustaining rural regions, especially in Africa and Asia, are now found to be increasingly dependent on national and global food markets.
- According to the Global Multi-dimensional Poverty Index MPI 2023, India still has more than 230 million people who are poor.

State of Working India 2023

- Recently, AzimPremji University's Centre for Sustainable Employment has released the Report titled- "State of Working India 2023" highlighting the State of Indian workforce.
- It covers unemployment rates, women's participation, intergenerational mobility, and caste-wise workforce dynamics.
- The report used various data sources like surveys conducted by the National Statistical Office including Employment-Unemployment Surveys and Periodic Labour Force Surveys along with the India Working Survey.

Highlights of the Report

- Faster Structural Change:
 - After stagnating since the 1980s, the share of workers with regular wage or salaried work started increasing in 2004, going from 18% to 25% for men and 10% to 25% for women.
 - Between 2004 and 2017, around 3 million regular wage jobs were created annually. Between 2017 and 2019 this jumped to 5 million per year.
 - Since 2019, the pace of regular wage jobs creation has decreased due to the growth slowdown and the pandemic.

- Gender-Based Earnings Disparities Reduced:
 - In 2004, salaried women workers earned 70% of what men earned.
 - By 2017 the gap had reduced and women earned 76% of what men did. Since then the gap has remained constant till 2021-22.
- Unemployment Rates and Education:
 - The overall unemployment rate reduced to 6.6% in 2021-22 from 8.7% in 2017-18.
 - However, for graduates under the age of 25, the unemployment rate was strikingly high at 42.3%.
 - In contrast, those completing higher secondary education had a lower unemployment rate of 21.4%.
- Women's Workforce Participation:
 - Post the Covid-19 Pandemic, 60% of women were self-employed compared to 50% before.
 - However, this increase in workforce participation was accompanied by a decline in self-employment earnings, reflecting the pandemic's distressing impact.
- Intergenerational Mobility:
 - Intergenerational upward mobility has shown an upward trend, indicating socio-economic progress.
- However, this trend is weaker for workers from Scheduled Castes and Scheduled Tribes compared to general castes.
- Caste-wise Workforce Dynamics:
 - There are changes in caste-wise workforce participation over the years.
 - The share of SC workers in casual wage work has significantly reduced, but this reduction is more pronounced in the general caste category.
- For instance, in 2021, 40% of SC workers were involved in casual employment as compared to 13% of general caste workers.
- Furthermore, around 22 % of SC workers were regular wage workers as opposed to 32% of general caste workers.
- Economic Growth vs. Employment Generation:
 - Economic growth has not proportionately translated into job creation, with the capacity to generate jobs declining as GDP (Gross Domestic Product) increases.
 - The transition from agriculture to other sectors has not ensured a shift to salaried employment.
- Informal Salaried Work:
 - Despite the aspiration for salaried employment, the majority of salaried work is informal, lacking contracts and benefits. Good salaried jobs with proper benefits are becoming less prominent.
- Factors Influencing Graduate Unemployment:
 - Graduate unemployment could be attributed to high aspirations and wage demands that the economy may not meet. Additionally, graduates from well-off households might have the luxury to remain unemployed.

India Ageing Report 2023

- Recently, the UNFPA (United Nations Population Fund) India, in collaboration with the International Institute for Population Sciences (IIPS) has unveiled the India Ageing Report 2023, highlighting the rapidly growing elderly population in India.

Key Highlights of the Report

- Demographic Trends:
 - India's elderly population is growing rapidly, with a decadal growth rate of 41%.
 - By 2050, over 20% of India's population will be elderly.
 - The elderly population in India will surpass the population of children (0 to 15 years old) by 2046.
 - The population of people aged 80+ years is expected to increase by around 279% between 2022 and 2050.

- Higher Life Expectancy of Women:
 - Women have a higher life expectancy at ages 60 and 80 compared to men, with variations across states and territories.
- Poverty and Well-being:
 - More than 40% of the elderly in India are in the poorest wealth quintile.
- Regional Variations:
 - There are significant inter-State variations in the elderly population and their growth rates.
- Sex Ratio of the Elderly Population:
 - The sex ratio among the elderly has been climbing steadily since 1991, with the ratio in the general population stagnating.
- Low Awareness of Social Security Schemes:
 - The elderly in India have low awareness about the various social security schemes designed for them.
- Concern and Challenges:
 - Poverty is inherently gendered in old age when older women are more likely to be widowed, living alone, with no income and with fewer assets of their own, and fully dependent on family for support.

Times Higher Education World University Rankings 2024

- Recently, 20th Edition of the Times Higher Education (THE) World University Rankings 2024 have been released, in which as many as 91 Indian institutes have secured a place.
- The 2024 rankings include 1,904 universities from 108 countries and regions.

Key Highlights of THE World University Rankings 2024

- Parameters:
 - The 2024 Rankings comprehensively assess research-intensive universities worldwide based on 18 key indicators across five areas: teaching (29.5%), research environment (29%), research quality (30%), industry (4%), and international outlook (7.5%).

Indian Universities' Performance:

- Ranking Details:
 - The top university in India, the Indian Institute of Science (IISc), has returned to the global top 250, coming in the 201-250 band, for the first time since 2017.
 - The second highest ranked universities in India are Anna University, Jamia Millia Islamia, Mahatma Gandhi

University, Shoolini University of Biotechnology and Management Sciences, which are all in the 501-600 band.

- Indian universities made significant gains this year, including five of the countries' top universities.

Status of Educational Empowerment Schemes for Religious Minorities in India

- Religious minorities in India, including Muslims, Christians, Sikhs, Buddhists, Jains, and Zoroastrians, constitute a substantial portion of the population, making up approximately 20%.
- The Sachar Committee's report in 2006 highlighted these disparities, placing Muslims behind several other groups in development indicators.
- To address the disparities, the government established the Ministry of Minority Affairs in 2006, focusing on educational empowerment, economic development, infrastructure improvement, and special needs of religious minorities.
- Scholarships for minority students became a pivotal component of this initiative, aimed at providing financial assistance and access to quality education.

Current Status of Welfare Schemes for Educational Empowerment of Minorities:

- Pre-Matric Scholarship Scheme: Initially awarded to minority students from class 1 to 10. Later, discontinued for classes 1 to 8, only covering class 9 and 10 in its revised form.
- Post-Matric Scholarship Scheme: For students of class 11 and above (till Ph.D.). Funds increased from Rs 515 crore to Rs 1,065 crore in 2023-24.
- Merit-cum-Means based Scholarship Scheme: Targeted professional and technical courses at undergraduate and post-graduate levels. However, it faced a significant reduction in funds in 2023-24.
- Maulana Azad National Fellowship (MANF): Provided financial assistance to research scholars pursuing M.Phil and Ph.D. However, it was discontinued in 2022.
- PadhoPardesh: Provided an interest subsidy on education loans for overseas studies. However, it was discontinued from 2022-23.
- Begum HazratMahal National Scholarship: Scholarship for meritorious girls for higher secondary education. However, no funds have been allocated in 2023-24.
 - NayaSavera: Provided

free coaching to minority students for competitive exams. However, it was discontinued in 2023-24.

- NaiUdaan: Supported minority students preparing for various examinations. However, no funds have been allocated in 2023-24.
- Scheme for Providing Education to Madrasas and Minorities (SPEMM): Aimed at modernizing madrasa education. Allocation reduced in 2023-24.

National Medical Commission

- The National Medical Commission (NMC), India has been awarded the World Federation for Medical Education (WFME) Recognition Status for 10 years, the highest standards in medical education and accreditation.
- This recognition is a testament to NMC's unwavering commitment to the highest standards in medical education and accreditation.
- WFME's accreditation program plays a pivotal role in ensuring that medical institutes meet and uphold the highest international standards of education and training.

World Federation for Medical Education (WFME)

- WFME was founded in 1972 by the World Medical Association,

the World Health Organization, the regional organizations of medical schools and academic teachers, and the International Federation of Medical Students Associations.

- WFME is a global organization dedicated to enhancing the quality of medical education worldwide.
- WFME has developed and published global standards for basic, postgraduate, and continuing medical education, as well as guidelines for distributed and distance learning in medical education.

Benefits of WFME Accreditation

- All the 706 existing medical colleges in India will become WFME accredited.
- The new medical colleges that will be set up in the coming 10 years will automatically become WFME accredited.
- It will also enable Indian medical graduates to pursue post-graduate training and practice in other countries that require WFME recognition, such as the US, Canada, Australia, and New Zealand.
- It will increase the international recognition and reputation of Indian medical schools and professionals.
- It facilitates academic collaborations and exchanges and promotes continuous improve-

ment and innovation in medical education.

- It will also make India an attractive destination for international students due to our globally recognized standards.

GI tag for Salem sago

- The Salem sago (Javvarisi)

received Geographical Indication (GI) tag recently.

- Sago, derived from raw tapiocas, is in the form of small hard globules or pearls and is pearl white in colour.
- Tapioca is a major horticulture crop cultivated on nearly 3 lakh hectares in Tamil Nadu.



- In Salem district, in 1943, Manickam Chettiar was the first person to manufacture sago.

VII. Welfare Oriented Schemes and their Utility (Central Government & State Government)

6th Rashtriya Poshan-Maah

- The Ministry of Women and Child Development (MoWCD) is celebrating the 6th Rashtriya PoshanMaah throughout September 2023.

Key Highlights About Poshan-Maah 2023

- Focus & Objective:
 - The focus is on comprehensively addressing malnutrition using a life-cycle approach, which is a key component of Mission Poshan 2.0.
 - The main objective is to raise awareness about critical life stages, including pregnancy, infancy, childhood, and adolescence, in order to promote better nutrition across India.
- Theme:
 - 'Suposhit Bharat, Sakshar Bharat, Sashakt Bharat' (Nu-

trition-rich India, Educated India, Empowered India), emphasising the importance of nutrition, education, and empowerment in building a healthier and stronger country.

- This Year's Initiatives:
 - During this month-long event, the MoWCD will lead nationwide efforts to raise awareness about nutrition, focusing on key themes such as Exclusive Breastfeeding and Complementary Feeding.
 - These efforts include activities like:



- SwasthBalakSpardha (Healthy Child Competition) to encour-

age healthy competition for better nutrition and overall well-being.

- PoshanBhiPadhaiBhi (Nutrition and Education), improving nutrition through Mission LiFE (Lifestyle for Environment), sensitising tribal communities about nutrition, and addressing anaemia through a Test, Treat, Talk approach.

Aatmanirbhar Bharat RozgarYojana (ABRY)

- The Aatmanirbhar Bharat RozgarYojana (ABRY) has surpassed its initial employment generation targets, demonstrating its effectiveness in promoting job creation and aiding the recovery efforts amidst the Covid-19 pandemic.

About & Aim:

- The ABRY came into effect on October 1, 2020, with the primary goal of stimulating the creation of new job opportunities.

- It achieved this by offering financial assistance to employers of enterprises registered with the Employees' Provident Fund Organisation (EPFO).
- The scheme specifically aimed to incentivise the employment of individuals, including those who had lost their jobs due to the pandemic.
- PMJDY creates a platform for universal access to banking facilities with at least one basic banking account for every household, financial literacy, and access to credit, insurance, and pension facilities.



- It covered both employee and employer contributions, equivalent to 24% of earnings, for businesses employing up to 1000 workers.
- For larger firms with over 1000 employees, the scheme covered only the employee's EPF payments, equivalent to 12% of salaries.

Nine Years of Pradhan-Mantri Jan DhanYojana

- The PradhanMantri Jan Dhan-Yojana (PMJDY) has successfully completed nine years of implementation.
- It was launched on August 28, 2014 and stands as one of the largest financial inclusion initiatives globally, led by the Ministry of Finance to provide affordable financial services to vulnerable and economically disadvantaged sections.
- The Union Minister for Education unveiled the Malaviya Mission - Teacher Training Programme initiated by the University Grants Commission (UGC) in collaboration with the Ministry of Education.
- The program aims to enhance the quality of education by providing customised training for teachers in higher educational institutions.
- It aspires to equip 15 lakh teachers across India with the skills needed to meet the goals of the National Education Policy (NEP).
- Renaming of Human Resource Development Centres (HRDCs) as Madan Mohan Malaviya Teachers' Training Centres was also announced.



Malaviya Mission: Teacher Training Program for Higher Education

Integrating Personalised Adaptive Learning into DIKSHA Platform

- The National eGovernance Division (NeGD), a branch of the Ministry of Electronics and Information Technology (MeitY), is embarking on a mission to integrate Personalised Adaptive Learning (PAL) into the Digital Infrastructure for Knowledge Sharing (DIKSHA) platform.
- DIKSHA, overseen by the Ministry of Education, serves as an online repository of educational content for schools, but it is currently static.
- PAL, on the other hand, employs AI to offer students personalised learning experiences tailored to their individual needs and abilities.

Viability Gap Funding Scheme for Battery Energy Storage Systems

- Recently, the Union Cabinet has approved the Scheme for Viability Gap Funding (VGF) for the development of Battery Energy Storage Systems (BESS), aiming to boost the adoption of renewable energy sources.
- Battery storage, or BESS, are devices that enable energy from renewables, like solar and wind, to be stored and then released when the power is needed most.

VGF Scheme for Battery Storage

- The government will provide

financial support of up to 40% of the capital cost as budgetary support through Viability Gap Funding (VGF) to substantially reduce the cost of battery storage systems, making them more economically viable.

- The scheme is strategically designed to harness the potential of renewable energy sources, such as solar and wind power, to provide clean, reliable, and affordable electricity to citizens.
- To ensure the benefits of the scheme reach consumers, a minimum of 85% of the BESS project capacity will be made available to Distribution Companies (Discoms).
- This strategic move not only strengthens the integration of renewable energy into the electricity grid but also minimizes waste and optimizes the utilization of transmission networks. Consequently, it reduces the need for costly infrastructure upgrades.

Objective:

- The primary objective is to facilitate the development of 4,000 megawatt hour (MWh) of BESS projects by 2030-31.
- By offering VGF support, the scheme targets achieving a Levelized Cost of Storage (LCoS) ranging from Rs. 5.50-6.60 per kilowatt-hour (kWh).
- This cost-effectiveness makes stored renewable energy a

practical choice for managing peak power demand nationwide.

National Ayush Mission

- Recently, the Regional Review meeting of the National Ayush Mission (NAM) was ceremonially inaugurated.
- At the meeting, following robust programmes of AYUSH were highlighted:
 - Ayurvediya: Promotion of healthy lifestyle through Ayush for school children
 - Supraja: Ayush for Maternal & Neonatal intervention
 - Vayomitra: Ayush based geriatric programme; prevention and management of Osteoarthritis and other Musculoskeletal disorders
- NAM is being implemented with the vision and objectives to provide Ayush health care services throughout the country by strengthening and improving facilities, to provide informed choice to the needy public.
- Under NAM, the Ministry of Ayush is working on operationalisation of 12,500 Ayush Health and Wellness Centres (AHWCs) through support of State/UT Governments by 2023-24.

New Education Policy in West Bengal

- Recently, the West Bengal government has announced its own State Education Policy

for 2023, declining some of the aspects of the NEP (National Education Policy) 2020.

- Many states such as Kerala, Karnataka, and Tamil Nadu have also declined to adopt the NEP 2020 in its entirety.

Continuation of 5+4+2+2 Pattern:

- The state will maintain the existing 5+4+2+2 pattern for school education.

Three-Language Formula:

- The policy recommends the introduction of a three-language formula for students in classes V to VIII.
- The first language, referred to as the "mother tongue," will be the medium of instruction.

Introduction of 'Bangla' as a Subject:

- Bangla will be introduced as a subject from Class I to Class XII for students in schools with languages other than Bangla as the medium of instruction.
- However, it is not recommended as a first language.

Semester System at Higher Secondary Level:

- In higher secondary education (Class XI and XII), it has introduced a semester system to facilitate a smoother transition from school to university.

Expansion of PM Ujjwala Yojana

- The Union Cabinet has recently approved the extension of

PradhanMantriUjjwalaYojana (PMUY) for release of 75 lakh LPG connections over 3 years from FY 23-24 to FY 25-26 increasing the total number of beneficiaries to 10.35 crore.

Initiatives to expand LPG coverage:

- PAHAL (PratyakshHastantarit-Labh): To reduce "ghost" accounts and illegal use of household cylinders for commercial purposes, the LPG cylinders were not sold at subsidised price and rather at market price.
- The applicable subsidy was directly transferred to the individual's bank account electronically.
- GIVE IT UP: Instead of removing subsidies forcefully, people were encouraged to voluntarily surrender their subsidies which helped redirect the funds to those who genuinely needed assistance in acquiring LPG cylinders.

Skill India Digital

- Recently, the Union Minister for Skill Development and Entrepreneurship, launched Skill India Digital (SID).
- This comprehensive digital platform aspires to provide every Indian with access to quality skill development, relevant opportunities, and entrepreneurial support.
- Skill India Digital (SID) is envisioned as the Digital Public Infrastructure (DPI) for skilling,

education, employment, and entrepreneurship in India.

- It aims to bring together various skilling initiatives and create a seamless ecosystem for skill development, aligning with the principles of the G20 framework for building DPIs.
- Note: Digital public infrastructure refers to blocks or platforms such as digital identification, payment infrastructure and data exchange solutions that help countries deliver essential services to their people, empowering citizens and improving lives by enabling digital inclusion.

PM Vishwakarma Scheme

- Prime Minister launched the 'PM Vishwakarma' scheme for the benefit of traditional artisans.
- Under the scheme, the government will provide up to Rs. 3 lakhs loan without any (bank) guarantee.
- It has also been ensured that the interest rate is also very low.
- The Govt has decided that Rs.1 lakh loan will be given in the beginning.



- Once it is repaid, govt will provide additional Rs. 2 lakhs loan to the Vishwakarma partners".

- The scheme will provide support to artisans and craftspeople in rural and urban areas across India.
- Initially, 18 traditional trades will be covered.
- The beneficiaries of the scheme will be provided recognition through a PM Vishwakarma certificate and ID card, and skill upgradation involving basic and advanced training.

AI Chatbot for PM-KISAN Scheme

- Recently, the Ministry of Agriculture and Farmers' Welfare launched an AI chatbot — the first of its kind to be integrated with a major flagship scheme of the central government — for the PradhanMantriKisanSammanNidhiYojana(PM-KISAN scheme).
- The Chatbot will provide the farmers with "prompt, clear and accurate" responses to their queries.

Key Features of the AI Chatbot for PM KISAN

- It has been developed and improved with the support of EkStep foundation and Bhashini.
- In the first phase of the development, the AI Chatbot will assist farmers in seeking information related to their application status, payment details, ineligibility status etc.
- The AI Chatbot, accessible through the PM-KISAN mobile

application, is integrated with Bhashini which offers multilingual support, catering to the linguistic and regional diversity of the PM-KISAN beneficiaries.

- This integration of advanced technology will not only enhance transparency but also empower farmers to make informed decisions.

PM KISAN Scheme

- It was launched on 24th February, 2019 to supplement financial needs of land holding farmers.

Objectives:

- To supplement the financial needs of the Small and Marginal Farmers in procuring various inputs to ensure proper crop health and appropriate yields, commensurate with the anticipated farm income at the end of each crop cycle.
- To protect them from falling in the clutches of moneylenders for meeting such expenses and ensure their continuance in the farming activities.

PM-KISAN Mobile App:

- It was developed and designed by the National Informatics Centre in collaboration with the Ministry of Electronics and Information Technology.

Tracking Newborn Immunization in U.P

- Recently, an immunization wheel, a job aid that helps

frontline health workers calculate dates for childhood vaccinations (for children under five), has been launched in Uttar Pradesh.



- The immunization wheel, called a teekakaran chakra in Hindi, is a simple plastic laminated cardboard construction developed and funded by the Clinton Foundation, under the Clinton Health Access Initiative (CHAI).
- It consists of two discs, placed one on top of the other, one bigger than the other, and attached with a rivet. The smaller one has details of the vaccines and arrows; the larger one has a calendar with days and months.

Scheme for Remission of Duties and Taxes on Exported Products

- The Scheme for Remission of Duties and Taxes on Exported Products (RoDTEP), initially notified until 30th September 2023, has been extended until 30th June 2024, with the same rates applicable to existing export items.

RoDTEP Scheme

- The Scheme for Remission of Duties and Taxes on Exported Products (RoDTEP) has emerged

as a critical tool in supporting India's exporters.

- It became operational on 1st January 2021 replacing the existing export incentive scheme, Merchandise Exports from India (MEIS).
- This change was prompted by a World Trade Organization (WTO) ruling that determined the MEIS scheme's violation of WTO regulations due to its provision of export subsidies for a broad spectrum of goods.
- The rebate under the scheme is allowed, based on the allowed percentage of FOB (Freight On Board) value of exports and issued in the form of a transferable duty credit/electronic scrip (e-scrip), the details of which are maintained in a digital ledger by the Central Board of Indirect Taxes and Customs (CBIC).
- The RoDTEP Committee operates within the Department of Revenue.
- Its primary responsibility is to review and recommend ceiling rates for different export sectors under the RoDTEP Scheme.

Objective:

- Its primary objective is to provide comprehensive support to exporters by remitting duties and taxes incurred during the production and distribution of exported products.
- Importantly, RoDTEP covers taxes, duties, and levies at the

central, state, and local levels, which are not refunded through any other existing mechanisms.

Rashtriya VayoshriYojana

- In a significant initiative to empower senior citizens and persons with disabilities across India, the Ministry of Social Justice and Empowerment, Government of India, organized 'SamajikAdhikaritaShivirs' camps at 72 locations simultaneously.
- These camps aim to distribute various types of aid and assistive devices to over 12000 persons with disabilities and senior citizens under the RashtriyaVayoshriYojana.
- It was launched in 2017 by the Ministry of Social Justice and Empowerment.

Rastriya Vyosree Yojana

Providing Assistance to Senior Citizens



- It is a central sector scheme

funded from the Senior Citizens' Welfare Fund.

- The Scheme is being implemented by the Artificial Limbs Manufacturing Corporation (ALIMCO), a PSU (Public Sector Undertaking) under the Ministry of Social Justice and Empowerment.

PMGatiShakti

- PM GatiShakti National Master Plan for Multi-modal Connectivity
- It is a Made in India initiative, a transformative 'whole-of-government' approach for integrated planning of multimodal infrastructure connectivity to economic nodes and social infrastructure, thereby improving logistics efficiency.
- PM Gati Shakti principles bring socio-economic area-based development as part of regional connectivity.
- PM GatiShakti was launched in October 2021.
- The Gati Shakti scheme subsumed Rs. 110 lakh crore National Infrastructure Pipeline launched in 2019.



- PM Gatishakti National Master Plan is a Geographic Information System (GIS) data-based digital platform with over 1400 data layers and 50+ tools.
- It provides visual representation of trunk and utility infrastructure, land use, existing structures, soil quality, habitation, tourism sites, forest sensitive areas etc.
- The initiative is also being implemented to enhance connectivity with regional partners as well. Some of the suitable examples are:
 - The Indo-Nepal Haldia Access Controlled Corridor project (eastern Indian states and Nepal)
 - Regional Waterways Grid (RWG) project for multimodal connectivity to growth centres and border points.

VIII. Geography - Geographical marks

Super Blue Moon

- On August 30, 2023, the night sky was illuminated by a rare phenomenon: a super blue moon. However, despite its name, this full moon was nei-

ther blue in colour nor super in size.

- The last blue supermoon was in 2009, according to the National Aeronautics and Space Administration (NASA), and the next is

not expected until 2037.

- A supermoon occurs when the moon aligns closely with Earth during its orbit, making it appear larger and brighter.



- A super blue moon combines a supermoon and a blue moon.
- This alignment, called perigee, contrasts with apogee, when the moon is farthest in its elliptical orbit around earth. While the difference is subtle, near the horizon, an optical illusion can make it seem larger.
- The term “supermoon” was coined in 1979 by astrologer Richard Nolle.
- A blue moon is the second full moon in a month. Despite its name, a blue moon isn't blue; it's the traditional name for the second full moon in a month.
- Sometimes, smoke or dust in the air can scatter red wavelengths of light, as a result of which the moon may, in certain places, appear more blue than usual, but this has nothing to do with the name “blue” moon.

Electricity's Surge in Indian Irrigation: MIC 6th Edition Report

- The recently published sixth edition of the Minor Irrigation Census (MIC) report offers significant insights into the power sources employed in Indian irrigation.
- The MIC highlights a noteworthy transformation in the

primary power source for irrigation in India, where electricity has taken center stage.

- In 2011, electricity was the predominant power source for 56% of irrigation, a figure that surged to 70% by 2017.
- However, these findings are specific to the 2017-18 period and do not provide an accurate representation of the present state of irrigation practices.

Climate Change and Food Security

- In 2023, India experienced a series of disruptive weather and climate phenomena, highlighting the intricacies of its precipitation system, impacting the Food Security.

Weather and Climate Phenomena

- Western Disturbance:
 - The Western Disturbance traditionally brings vital moisture from European seas to the western Himalayas and parts of northern India in the winter and spring.
 - In 2023, the Western disturbance persisted late into the summer, complicating the transition to the South-west Monsoon season. This unusual behavior raised concerns about its effects on precipitation patterns.
 - Climate-linked warming is likely to weaken winter precipitation from the Western

disturbance and shift it to more intense rain events.

- El Niño and IOD:
 - An El Niño phase of the El Niño Southern Oscillation (ENSO) was intensifying, which can adversely affect the southwest monsoon.
 - While not all El Niño events negatively impact the monsoon due to its complexity, the dynamics between El Niño and the monsoon are evolving.
 - The Indian Ocean Dipole (IOD) can balance the adverse impact of the El Niño on the South West Monsoon.
 - Dynamic regression models indicate that 65% of the inter-annual variability in the southwest monsoon is attributed to the combined effects of ENSO and the IOD.
 - Some Studies have found that 43% of heavy rainfall events in the Northeast Monsoon coincided with an El Niño.

Initiatives for Agriculture

- Recently, the Ministry of Agriculture (MoA&FW) has launched three initiatives, namely the KisanRin Portal (KRP), KCC GharGharAbhiyaan and a manual on Weather Information Network Data Systems (WINDS).
- These initiatives aim to revolutionize agriculture, enhance

financial inclusion, optimize data utilization, and improve the lives of farmers across the nation.

Key Points of these Schemes

- KisanRin Portal (KRP):
 - Developed through a collaborative effort involving MoA&FW, Ministry of Finance, RBI, and NABARD, the KRP aims to revolutionize access to credit services under the Kisan Credit Card (KCC) scheme.
 - It facilitates farmers in availing subsidized agriculture credit through the Modified Interest Subvention Scheme (MISS).
 - The portal offers an integrated hub, providing a comprehensive view of farmer data, loan disbursement specifics, interest subvention claims, and scheme utilization progress.
- Ghar-Ghar KCC Abhiyaan:
 - The "Ghar-Ghar KCC Abhiyaan" underscores government commitment to Universal Financial Inclusion, ensuring every farmer has unhindered access to credit facilities crucial for their agricultural pursuits.
 - This campaign, starting from 1st October 2023 to 31st December 2023, targets the saturation of KCC accounts among eligible PM KISAN beneficiary farmers.
- The ministry has verified existing KCC account holders' data against the PM KISAN database, identifying those with KCC accounts and those without.
- The campaign aims to reach out to non-KCC account holder PM KISAN beneficiaries and facilitate their seamless integration into the KCC scheme.
- Launch of WINDS Manual:
 - The WINDS initiative is an effort aimed at establishing a network of Automatic Weather Stations & Rain Gauges at taluk/block and gram panchayat levels.
 - This initiative creates a robust database of hyper-local weather data, supporting various agricultural services.
 - The comprehensive WINDS manual launched provides stakeholders with an in-depth understanding of the portal's functionalities, data interpretation, and effective utilization.
- It guides States and Union Territories in establishing and integrating with the WINDS platform.
- Additionally, it offers practical insights into leveraging weather data for improved crop management, resource allocation, and risk mitigation.

Mobile Application and Web Portal for General

Crop Estimation Survey (GCES)

- Recently, the Mobile Application and the Web Portal for GCES, developed by the Department of Agriculture and Farmers' Welfare, Ministry of Agriculture and Farmers Welfare was launched.

The aim is to transform agricultural practices across the nation.

- The portal and the app provide a comprehensive repository of yield estimation including village wise GCES plan and plot details where the crop cutting experiments are conducted.
- Geo referencing is one of the key features of the mobile application, which enables the primary worker to draw the boundary of the experimental plot and upload photos of the plot as well as of the crops through it

KaobalGali-Mushkoh Valley

- KaobalGali-Mushkoh Valley, once a battleground during the Kargil war, is now welcoming tourists. This transformation is attributed to the enduring ceasefire between India and Pakistan sparking hope that tourism-driven commerce will thrive in the region.
- The Gurez valley in north Kashmir, which was once prone to frequent shelling from Pakistan, is now all set to connect

with the Mushkoh valley in Kargil's Drass Sector, Ladakh.



- The 130-km road has been opened up for tourists and Kaobal Gali, the highest pass at a height of 4,166.9 meters in Gurez, connects the two valleys.
- The Gurez Valley is close to the Line of Control (LoC) with the Kishanganga River demarcating the line in several parts.
- The Gurez valley is one of few habitations in Kashmir where villages with only log houses exist, with no intervention of urban concrete materials.

Climate Change and Indian Dairy Sector

- In 2022, a study published in 'Lancet' estimated that increasing temperatures could reduce milk production in India's arid and semi-arid regions by 25% by end century in 2085.

- This estimation for arid and semi-arid areas is the second highest in India, after Pakistan (at 28.7%). In humid and sub-humid areas, this reduction was estimated at 10%.

Impact of Heat Stress on Cattles

- Elevated temperatures affect the cow's ability to display natural mating behaviour, as it reduces both the duration and intensity of oestrus (female animal's readiness to mate) expression.
- The decrease in conception rates during summer seasons can range between 20 and 30%, as per the study.
- Lancet Study also shows that lactating dairy cows have an increased sensitivity to heat stress compared with nonlactating (dry) cows.
- Moreover, because of the positive relationship between milk yield and heat production, higher yielding cows are more challenged by heat stress than lower yielding animals.
- The country's milk production has been steadily increasing.

However, the impact of rising temperatures, especially on cross-bred cows will make the task of meeting domestic demand difficult and could eventually lead to a decline in per capita consumption.

- The dairy sector is likely to be affected both directly and indirectly by climate change.

Direct Impact:

- Stress to animals caused by changes in temperature-humidity index would directly affect milk production.

Indirect Impact:

- Indirect effects include feed and water availability being impacted by adverse climate events.

Status of Milk Production in India

- According to 'Basic Animal Husbandry Statistics 2022, total milk production in India was 221.06 million tonnes in 2021-2022, keeping it the largest milk producing country in the world.

IX. Environment

State of the Rhino 2023

- Recently, the International Rhino Foundation (IRF) published the report, State of the Rhino, 2023 which documents

- current population estimates and trends for the five surviving rhino species in Africa and Asia.
- Every year, World Rhino Day is observed on 22th September

to spread awareness for all five species of rhino and work being done to save them.

- It was first announced by the World Wildlife Fund (WWF) - South Africa in 2010.



Flora Fauna and 'Funga'

- Recently, United Nations Biodiversity has urged people globally to use the word 'funga' whenever they say 'flora and fauna', in order to highlight the importance of fungi.

UN Biodiversity urged to use the word 'Funga'

- According to UN Biodiversity "It is time for fungi to be recognised and protected on an equal footing with animals and plants in legal conservation frameworks.
- This is not the first time when a request has been made to include fungi along with flora and fauna.
- Earlier, the Species Survival Commission (SSC) of the IUCN announced that it would use "mycologically inclusive" language in its internal and public-facing communications and to incorporate fungi in conservation strategies with rare and endangered plants and animals.
- There would be no life on Earth without fungi, the yeasts, molds and mushrooms as they are critical to decomposition and forest regeneration, mammalian digestion, carbon se-

questration, the global nutrient cycle and antibiotic medication.

Fungi

- Fungi or fungus are a diverse group of eukaryotic microorganisms or macroscopic organisms that belong to their own biological kingdom, distinct from plants, animals, and bacteria.

Red Sand Boa

- Recently, a report by the Wildlife Conservation Society (WCS)-India titled 'Illegal Trade of Red Sand Boa in India 2016-2021' has exposed the trade of red sand boa.
- This alarming revelation underscores the pressing concern about the illegal trade of Red Sand Boas and the urgency for conservation efforts.

Key Highlights of the Report

- The report documents a total of 172 incidents of seizures involving red sand boas between 2016 and 2021, revealing the alarming extent of illegal trade.
- Illegal trade spans 18 Indian states, 1 Union Territory, and 87 districts; Maharashtra and UP record the highest incidents.
- Maharashtra dominates with 59 cases, including urban areas like Pune, Thane, Mumbai Suburban.
- Social media, especially YouTube, aids illegal trade, with 200 sales-promoting videos in 2021.

- The report's findings underscore the urgent need for conservation efforts to prevent the further decline of the red sand boa population and protect India's biodiversity.



Status:

- IUCN Red List: Near Threatened
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): Appendix II.
- Indian Wildlife (Protection) Act of 1972: Schedule IV.

Marine Sand Extraction

- Recently, a newly launched data platform called "Marine Sand Watch" sheds light on this critical issue, revealing the scale of sand extraction and its far-reaching consequences.
- The relentless extraction of sand from the world's oceans is posing a severe threat to marine ecosystems and coastal communities.
- Marine sand extraction is the process of removing sand from the seabed or the coastal zone for various purposes, such as construction, land reclamation, beach nourishment, or mining.

Marine Sand Watch:

- It is a data platform developed by a Centre for Analytics within the United Nations Environment Programme (UNEP).
- The platform will track and monitor dredging (removal) activities of sand, clay, silt, gravel, and rock in the world's marine environment.
- It will provide information on areas used for sand extraction, areas of capital and maintenance dredging, sand trading ports/hubs, number of vessels and operators, and extraction of sediment and other types of activities by countries with Exclusive Economic Zones.

Bird-Like Dinosaur: Fujianvenatorprodigosus

- The recent discovery of fossils of a Jurassic Period bird-like dinosaur called Fujianvenatorprodigosus in southeastern China has captivated scientists and shed light on a critical evolutionary stage in the origin of birds.



- The dinosaur had elongated legs and arms built much like wings, suggesting it either was a fast runner or lived a lifestyle like a modern wading bird.
- It is classified as a member of a grouping called avialans that includes all birds and their closest non-avian dinosaur relatives.
- Its forelimb is generally built like a bird's wing, but with three claws on the fingers, which are absent from modern birds.

White Sambar in Cauvery Wildlife Sanctuary

- The first time a leucistic sambar has been observed in the Sangama range of Cauvery Wildlife Sanctuary.
- A White Sambar Deer was previously recorded in Bandipur Tiger Reserve in 2014.
- Leucism is a condition in which the pigmentation of an animal's skin is missing, causing white or pale skin.



- This condition can occur naturally from birth due to a phenotype (a trait of any living being) that may have formed from a defect in the animal's development.
- It is different from albinism which is a condition that arises

due to a lack of melatonin in the animal's skin and the animal will have pink or reddish eyes in albinism.

- The animal lacks the pink eyes in leucism.

E-Waste Management in India

- The Indian Cellular and Electronics Association (ICEA) has released a comprehensive report titled 'Pathways to Circular Economy in the Indian Electronics Sector.'
- This report highlights the urgent need to rethink e-waste management and explore opportunities to harness its potential.
- The report suggests that this transformation could unlock an additional USD 7 billion market opportunity.

Major Highlights of the Report

- The E-Waste Landscape in India:
 - According to the ICEA report, e-waste management in India is predominantly informal, with approximately 90% of e-waste collection and 70% of recycling being managed by a competitive informal sector.
- Circular Economy Principles:
 - The report emphasizes the need to shift the outlook on e-waste management towards establishing a circular economy.

- Proposed Strategies for a Circular Economy in E-Waste: The ICEA report outlines several key strategies to usher in a circular economy for e-waste in India:
 - Public-Private Partnerships (PPP): Collaboration between government bodies and private enterprises is essential to distribute the costs of setting up a reverse supply chain.

2nd Berlin Forum on Chemicals and Sustainability

- Recently, the Union Minister for Environment, Forest, and Climate Change participated in the virtual 'High Level Dialogue on Human Health and Environment' convened under the 2nd Berlin Forum on Chemicals and Sustainability- Just Transition Towards a Pollution-free Planet.
- The summit aims to foster a shared global understanding of critical issues in chemical and waste management while providing crucial political direction.

2nd Berlin Forum on Chemicals and Sustainability

- The 2nd Berlin Forum on Chemicals and Sustainability is a high-level event that aims to provide political guidance and momentum on key international issues and priorities regarding sound management of chemicals and waste.
- It was organized by the German Federal Ministry for the Nature,

Nature Conservation, Nuclear Safety, and Consumer Protection (BMU).

- It also aimed to garner support and ensure a high level of ambition of the 'SAICM Beyond 2020' during the upcoming 5th meeting of the International Conference on Chemicals Management (ICCM5).
- The First Berlin Forum on Chemicals and Sustainability highlighted the need for a science-policy interface (SPI) on chemicals and wastes.

Bhoj Wetland

- The National Green Tribunal (NGT) recently ordered the MP state govt to stop the operation of cruise vessels as well as other motor-propelled boats in the Bhoj wetland on account of the drastic damage being done to water bodies.
- The Bhoj Wetland, also known as Bhopal Lake is a designated Ramsar site and hence, a wetland of international importance (Ramsar Convention 1971).



- It consists of two contiguous human-made reservoirs -
 - "Upper Lake" - created in the 11th century by construction of an earthen dam

across the Kolans River.

- "Lower Lake" - constructed ~200 years ago, largely from leakage from the Upper lake. It is surrounded by the city of Bhopal.

Climate Change and Food Security

- In 2023, India experienced a series of disruptive weather and climate phenomena, highlighting the intricacies of its precipitation system, impacting the Food Security.

Weather and Climate Phenomena

Western Disturbance:

- The Western Disturbance traditionally brings vital moisture from European seas to the western Himalayas and parts of northern India in the winter and spring.
- In 2023, the Western disturbance persisted late into the summer, complicating the transition to the Southwest Monsoon season. This unusual behavior raised concerns about its effects on precipitation patterns.
- Climate-linked warming is likely to weaken winter precipitation from the Western disturbance and shift it to more intense rain events.

El Niño and IOD:

- An El Niño phase of the El Niño Southern Oscillation (ENSO)

was intensifying, which can adversely affect the southwest monsoon.

- While not all El Niño events negatively impact the monsoon due to its complexity, the dynamics between El Niño and the monsoon are evolving.
- The Indian Ocean Dipole (IOD) can balance the adverse impact of the El Niño on the South West Monsoon.
- Dynamic regression models indicate that 65% of the inter-annual variability in the southwest monsoon is attributed to the combined effects of ENSO and the IOD.
- Some Studies have found that 43% of heavy rainfall events in the Northeast Monsoon coincided with an El Niño.

Global Stocktake Report

- Recently, the synthesis report of the first Global Stocktake released by the United Nations Framework Convention on Climate Change (UNFCCC) ahead of the 18thG-20 summit in New Delhi.
- The synthesis report presents 17 key findings, painting a concerning picture of the world's progress towards Paris Agreement targets. While there is a limited window for corrective action, the report echoes previous warnings that global efforts are falling short.
- The Global Stocktake is a periodic review mechanism established under the Paris Agreement in 2015.
- The stocktake takes place every five years, with the first-ever stocktake scheduled to conclude at the UN Climate Change Conference (COP28) at the end of 2023.
- Its primary objectives are to assess individual countries' efforts to reduce Greenhouse Gas (GHG) emissions and transition to renewable energy sources.
- The stocktake is designed to keep countries accountable and encourage them to increase their climate ambitions over time.
- In 2015, when countries committed in Paris to keep global temperatures from rising beyond 2 degrees Celsius by the end of the century and "as far as possible" below 1.5 degrees Celsius, they also agreed to periodically review, or take stock of efforts, made by individual countries in containing greenhouse gasses.
- While countries have laid out their Nationally Determined Contributions (NDC), they are expected to — but not obliged to — increase their ambitions every five years.
- While the latest NDC were submitted in 2020, a stocktake also aims to push countries to set higher targets before the next NDCs are published in 2025.

Marine Light Pollution

- The impact of artificial lighting on land-based life (humans, fireflies, and birds) has been known for quite some time.
- However, a recent US-based study has argued to consider light pollution's influence on coastal marine organisms as well which affects everything from whales to fish, corals, and plankton.



Artificial Lighting in the Marine Environment

- Artificial lighting refers to the light that is produced from artificial sources such as candles, fire, electricity, etc.
- Recent research is showing that marine life is also sensitive to artificial light, including extremely low levels and certain wavelengths, particularly blue and green light.
- Marine Light Pollution: When this artificial light is used excessively or poorly, it becomes light pollution and disrupts the natural patterns of wildlife, contributing to the increase in carbon dioxide (CO₂) in the atmosphere.

- The scientists found that 1.9 million km² of the ocean experience biologically significant amounts of artificial light pollution to a depth of 1 metre.
- Significant areas of the ocean are seeing light exposures to depths of 10 metres, 20 metres, or more.
- The Bhuj earthquake (magnitude - 7.6), as it is commonly known, is considered to be the deadliest as it killed over 20,000 people.
- However, the Bhuj earthquake was not the strongest; the 1941 earthquake in Andaman (poorly recorded due to WW-II), and the 1897 earthquake in Assam, were both considered the strongest with a magnitude of 8.

Strongest Earthquakes in History

- Recently, a powerful 6.8 magnitude earthquake struck Morocco killing over 2,900 people.
- According to the Significant Earthquake Events (SEE) database, this is the strongest quake to hit Morocco.
- The SEE database maintains some of the oldest earthquake records that fulfil certain criteria.

NCEI's Data on Earthquakes

- Global Highest Earthquakes: As per NCEI, in the last 200 years, China has suffered the highest number of quakes — 428.
- Most Severe Earthquakes: In the past 200 years, there have been four quakes with a magnitude of 9+.
- India: As per NCEI, India has recorded 85 quakes in the last 200 years and ranks 16 on the list of countries with highest earthquakes.
- The deadliest earthquake to hit India (either in the last 200 years or since 2150 BCE), occurred in 2001 in Gujarat.

Leopard Sterilisation

- Recently, the Maharashtra Government has decided to sterilize Leopards for the sustainable management of population for leopards in the State.
- Gujarat's forest department has also proposed sterilisation of leopards, especially in and around Gir National Park.

Need for Sterilizing Leopards

- In 2019-20 alone, Maharashtra saw 58 human deaths due to leopards—over half the 97 casualties in 2010-18.
- Maharashtra has decided to sterilize leopards as a response to the increasing leopard-human conflicts, rising leopard population, and the need to protect both leopards and human communities.
- The proposed sterilisation program aims to address these challenges while complying with environmental conservation laws and regulations.



Conservation Status:

- IUCN Red List: Vulnerable
- CITES: Appendix-I
- Indian Wildlife (Protection) Act, 1972: Schedule-I

Yashobhoomi

- The Indian Prime Minister recently inaugurated the first phase of the India International Convention and Expo Centre (IICC) called 'Yashobhoomi', at Dwarka, New Delhi.



- With a total project area of over 8.9 lakh square metres and total built up area of more than 1.8 lakh square metres, 'Yashobhoomi' will find its place among the world's largest MICE (Meetings, Incentives, Conferences, and Exhibitions) facilities.
- It also demonstrates a strong commitment to sustainability as it is equipped with a state-of-the-art wastewater treatment system with 100% wastewater reuse, provisions of rainwater harvesting, and its campus has received Platinum certification

from Confederation of Indian Industry's Indian Green Building Council (IGBC).

29th World Ozone Day

- The Ministry of Environment, Forest and Climate Change (MoEF&CC) recently marked the 29th World Ozone Day, an annual event dedicated to raising awareness about the critical issue of ozone layer depletion and the global efforts to combat it.

About Ozone and Related Convention:

- The ozone layer, located in the stratosphere between 10 and 40 kilometers above Earth's surface, shields us from harmful UV radiation.



World Ozone Day:

- World Ozone Day is observed on the 16th of September each year, commemorates the signing of the Montreal Protocol in 1987, a significant international treaty aimed at phasing out the production and consumption of Ozone Depleting Substances (ODS).
- Theme 2023: "Montreal Protocol: Fixing the Ozone Layer and Reducing Climate Change"

Samudra Prahari's Deployment to ASEAN

- The Indian Coast Guard Ship SamudraPrahari, a specialized Pollution Control Vessel, has embarked on an overseas deployment to ASEAN countries from 11th September 2023 to 14th October, 2023.
- The initiative was announced during the ASEAN Defence Minister Meeting Plus meeting in Cambodia in November 2022.
- During this deployment, the ship is scheduled to make port calls in Bangkok(Thailand), Ho Chi Minh (Vietnam), and Jakarta(Indonesia).

Features of SamudraPrahari

- The Indian Coast Guard Ship SamudraPrahari boasts state-of-the-art pollution response. It was commissioned at Mumbai on October 9, 2010.

Elephant Corridors

- Recently, the Indian government identified 62 new elephant corridors, marking a significant milestone in the nation's commitment to wildlife conservation. This brings the total number of such corridors to 150, a remarkable increase from the 88 registered in 2010.
- Elephant corridors can be described as a strip of land that enables elephant movement between two or more friendly habitats.
- The corridors were reported by

respective state governments and ground validation methods were used to verify them.



State Wise Distribution:

- According to the report, West Bengal leads with 26 corridors, constituting 17% of the total.
- East central India contributes 35% (52 corridors), while the North East region has 32% (48 corridors).
- Southern India has 21% (32 corridors), and northern India has the lowest with 12% (18 corridors).

Status of Corridor Use:

- Elephant corridor report released by the central government showed a 40% increase in elephant corridors across 15 elephant range states in India.
- 19% of corridors (29) show a decrease in use, and 10 require restoration due to impairment.
- Decreased use is attributed to habitat fragmentation and destruction.
- Elephants are keystone species as well as the Natural Heritage Animal of India.

Joint Call to Action for Forests Towards 2030

- The Collaborative Partnership on Forests (CPF), consisting of 16 global organisations chaired

by the United Nations Food and Agriculture Organization (FAO), has introduced the Joint Call to Action for Forests towards 2030.



- Their objective is to emphasise the urgent need for increased action and political commitment in implementing forest solutions to align with the UN mandated Sustainable Development Goals (SDGs).
- The initiative encompasses four key areas: Implementation and action; data, science, and innovation; finance for forests; and communication and awareness-raising

Agumbe's Rainfall Dominance Wanes as New Rain Gauges Emerge

- Agumbe Rainforest Complex (ARC), in Karnataka long renowned for its exceptional rainfall and often referred to as the 'Cherrapunji of the South,' is losing its historical status due to the installation of new rain gauges in the region.
- While Agumbe has been a rain gauge site for over a century, recent installations in areas like Nadpal and Mudradi have revealed higher rainfall levels, pushing Agumbe down the ranking.

- A rain gauge is a meteorological instrument used to measure the amount of precipitation, typically rainfall, that falls over a specific period of time in a particular location
- These new gauges, operational since 2022, show that Agumbe received 6,251.5 mm of rain in 2022-2023, making it the third-highest in Karnataka.
- Despite these changes, Agumbe's rainfall data remains valuable for researchers studying biodiversity, hydrology, and the unique habitat of the King Cobra.

New Fish Species Discovered

- Recently, the scientists of the Zoological Survey of India (ZSI) have discovered a new species of a vibrant orange coloured deep water marine fish from DighaMohana in West Bengal.
- The new species, commonly known as gurnards or sea-robins, belongs to the family Triglidae.



- Fish is named *Pterygotrigla intermedica*, it has characters quite similar to species like *Pterygotrigla hemistictus*. There are a total 178 species of the Triglidae family worldwide.

Combing Operations held in Mukurthi National Park

- In recent times, the Forest Department has been conducting combing operations in the Mukurthi National Park in Tamil Nadu and adjoining forest areas to ensure that there was no illegal movement of people and poachers.
- Mukurthi National Park is located in the northwest corner of Tamil Nadu in the Western Ghats.
- It is a part of Nilgiri Biosphere Reserve (UNESCO World Heritage Site) along with Mudumalai Wildlife Sanctuary, Bandipur National Park, Nagarhole National Park, Wayanad Wildlife Sanctuary and Silent Valley.
- Keystone Species : The park was created to protect its keystone species, the NilgiriTahr.
- Forest Type: The park is characterized by montane grasslands and shrublands interspersed with sholas in a high altitude area of high rainfall, near-freezing temperatures and high winds.
- Peaks: The Park is also home to Mukurthi Peak, one of the highest peaks in the Nilgiri Hills.
- Tribes Living Inside: Todas (a pastoral tribe of the Nilgiri Hills).Prev Next

First Green Hydrogen Fuel Cell Bus

- Recently, the Union Minister of Petroleum & Natural Gas flagged off the country's first Green Hydrogen Fuel Cell Bus in New Delhi, marking a revolutionary step in the transition to clean energy.

Green Hydrogen Fuel Cell

- Green Hydrogen Fuel Cells are a clean, reliable, quiet, and efficient source of high-quality electric power.
- They use Green Hydrogen as a fuel to drive an electrochemical process that produces electricity, with water and heat as the only by-products.

Green Hydrogen:

- Green hydrogen is a type of hydrogen produced through a process called electrolysis, using renewable energy sources like wind or solar power.
- It involves splitting water (H₂O) into its constituent elements, hydrogen (H₂) and oxygen (O₂), with zero greenhouse gas emissions.

Bolson Tortoise

- Biologists are engaged in a slow but determined effort to protect North America's Bolson Tortoise (*Gopherus flavomarginatus*).
- Bolson Tortoise are North America's largest and rarest tortoise species.
- Their habitat is a semi-hot desert climate with winter temperatures around 2.8°C and

summer temperatures ranging to 36.3°C.

- The base color of the plastron is yellowish, and that of the carapace ranges from darker shades of straw yellow to brown.

Conservation Status:

- International Union for Conservation of Nature (IUCN) Red List: Vulnerable.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): Appendix I.

Gujarat Bans Conocarpus Plants

- The Gujarat government has banned the planting of Conocarpus trees, a non-indigenous species, in both forested and non-forested areas. The government cited the trees' adverse impacts on the environment and human health. Earlier, Telangana too had banned the plant species.
- Conocarpus trees, a fast-growing mangrove shrub found in tropical and subtropical coastal areas globally, have been planted to boost green cover in certain regions.
- However, their small winter flowers produce pollen that can cause health issues like colds, coughs, asthma, and allergies. Moreover, their deep root systems can harm infrastructure, particularly drainage systems.

Pangolin's Hidden Diversity

- The Pangolin, an elusive and highly endangered creature often touted as the world's most trafficked mammal, has unveiled a hidden secret.
- Previously thought to consist of eight species—four Asian and four African varieties—research has revealed the existence of a ninth pangolin species, provisionally named *Manismystera*.
- This discovery was made through the analysis of scales confiscated from traffickers in China's Yunnan province in 2015 and 2019.
- Despite a ban on international trade since 2016, the newly discovered pangolin species is already under pressure, showing signs of declining population, low genetic diversity, inbreeding, and genetic load.

Fish resistant to marine heatwaves

- Context: A recent study conducted by researchers from Canada, Europe, and the United States reveals that fish are surprisingly resilient to marine heatwaves.



Key Findings:

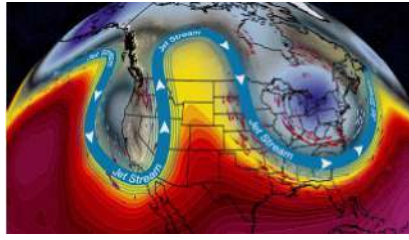
- The study found no substantial

evidence that marine heatwaves have a significant impact on regional fish communities.

- The study also investigated whether marine heatwaves caused changes in fish community composition, such as shifts from cold-water species to warm-water species (known as "tropicalisation"). However, no consistent pattern of such changes was observed due to marine heat waves.
- Marine heatwaves, characterized by prolonged periods of warm ocean temperatures, can have devastating effects on marine ecosystems, including coral bleaching, seabird deaths, harmful algal blooms, and more.

Omega Blocking

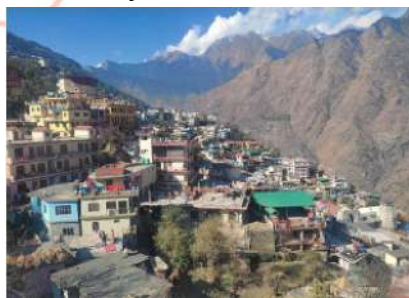
- The recent devastating floods in Libya can be attributed to the occurrence of an Omega atmospheric blocking event.
- Omega blocking is a meteorological phenomenon that occurs when a high-pressure system gets trapped between two low-pressure systems, creating a pattern that resembles the Greek letter omega (Ω).
- It can cause extreme weather events, such as heat waves, droughts, and floods, depending on the location and season.
- These events are difficult to predict and can cause significant damage and loss of life.



- They have been linked to past extreme weather events, including the Pakistan floods in 2011, extreme rainfall in northwestern Iran in 2008, and heatwaves in France and Germany in 2019.

Study on Joshimath Sinking

- Recently, separate studies were conducted by eight premier institutions of India including the Indian Space Research Organisation (ISRO) to know the cause of land subsidence in Joshimath town of Uttarakhand and provided independent reasons for the sinking of the Himalayan town.



Reports by Institutions about Joshimath Sinking

- Central Building Research Institute (CBRI):
 - In its report, the CBRI stated that Joshimath town has 44%, 42%, 14% of masonry, RCC and other (traditional,

hybrid) construction typologies, respectively, among which 99% are non-engineered.

- These structures are not in compliance with the National Building Code of India, 2016.
- Other Findings:
 - Joshimath town is situated on Vaikrita groups of rocks (made up of coarse mica-garnet-kyanite and sillimanite-bearing psammitic metamorphics) overlain by morainic deposits which are composed of irregular boulders and clay of varying thicknesses.
 - Such deposits are less cohesive and susceptible to slow subsidence and landslide subsidence.
- National Institute of Hydrology (NIH) Report:
 - It mapped various springs, drainage networks and areas of subsidence inferring that land subsidence and subsurface water in Joshimath might have some connections.
 - The institution recommended the safe disposal of the water coming from the upper reaches and waste disposal as the top priority.
- Wadia Institute of Himalayan Geology (WIHG) Report:
 - Institution mentioned earthquakes as a reason for slow and gradual land subsidence.

- The main reason for the subsidence appears to be internal erosion caused by the subsurface drainage, which may be due to infiltration of rainwater/melting of ice/wastewater discharge from households and hotels.
- ISRO's stand:
 - The subsidence in the Joshimath region may be due to the toe-cutting phenomenon.
 - Also due to slope instability as a result of seepage of local drainage water in the soil.
 - Terrain and edaphic characteristics are also responsible for subsidence.
- Loose and unconsolidated moraine materials of the slope (due to old landslides) and flash flood events in and around the area in the recent past, also contributed to land sinking.

Joshimath Located

- Joshimath is a hilly town located on the Rishikesh-Badrinath National Highway (NH-7) in Chamoli district of Uttarakhand.
- The city serves as a tourist town as it acts as an overnight rest stop for people visiting Badrinath, Auli, Valley of Flowers, and Hemkund Sahib, among other important religious and tourist locations in the state.
- Joshimath is also of great strategic importance to the Indian armed forces and is home to one of the Army's most important cantonments.
- The town (falls in high-risk seismic Zone-V) is traversed by running streams with a high gradient from Vishnuprayag, a confluence of the Dhauliganga and the Alaknanda rivers.
- It is home to one of the four cardinal Maths or monasteries established by AdiShankara - Sringeri in Karnataka, Dwarka in Gujarat, Puri in Odisha and Joshimath near Badrinath in Uttarakhand.

X. Economy - Economy, Socio Economic Issues)

1. Economy

Green Ammonia Import through VOC Port

- Recently, V.O. Chidambaranar Port in Tamil Nadu imported Green Ammonia for the first time, as part of its 'Go Green' initiative.
- Green Ammonia will be used to produce green soda ash on a trial basis, moving away from conventional Grey Ammonia usage.
- The port has been a leader in 'Green Port' initiatives, promoting eco-friendly practices.



- Green ammonia production is where the process of making ammonia is 100% renewable and carbon-free.
- Green Ammonia is produced by using hydrogen from water electrolysis and nitrogen separation from the air. These are then fed into the Haber process (Also known as Haber-Bosch), all powered by sustainable electricity.

Role of UPI in Shaping Foreign Policy

- India's digital strength has reached new heights with the United Payments Interface (UPI) surpassing 10 billion transactions, signifying not only domestic success but also its vital role in foreign policy.

- Transactions on UPI have grown by over 50% year-on-year. UPI crossed 1 billion monthly transactions for the first time in October 2019.



UPI Contribute to India's Foreign Policy

- Digital Diplomacy:
 - India aims to assume a leadership role in the Global South by pioneering digital governance.
 - India's digital public infrastructure (DPI) push is a differentiator from China's focus on physical infrastructure development in developing countries.
- Similarly, UPI has also been taken to international markets such as France, UAE, Singapore and Sri Lanka, with countries like Japan, Mauritius, and Saudi Arabia having shown an interest in adopting the payment system.

India's Fiscal Deficit

- Recently, the Centre's fiscal deficit in the first four months of 2023-24 touched 33.9% of the full-year target.
- In the Union Budget, the government projected to bring down the fiscal deficit to 5.9% of the gross domestic product

(GDP) in the current FY.

- The deficit was 6.4% of the GDP in 2022-23 against the earlier estimate of 6.71%.

Fiscal Deficit

- Fiscal deficit is the difference between the government's total expenditure and its total revenue (excluding borrowings).

Indian Economy and Impossible Trinity

- The Reserve Bank of India (RBI) and Indian investors are facing a challenge in overcoming the "impossible trinity".

Impossible Trinity

- The impossible trinity, or the trilemma, refers to the idea that an economy cannot pursue independent monetary policy, maintain a fixed exchange rate, and allow the free flow of capital across its borders all at the same time.
- An able policymaker can, at best, achieve two of these three objectives at any given time.
- The idea was proposed independently by Canadian economist Robert Mundell and British economist Marcus Fleming in the early 1960s.
- The Impossible Trinity is a fundamental concept in international economics and monetary policy.
- It describes the inherent challenges countries face when trying to simultaneously achieve

three specific policy objectives related to their exchange rate and capital flows.

Examples of the Impossible Trinity in Action:

- Various countries have faced the challenges of the Impossible Trinity, with some notable examples being the Asian Financial Crisis in 1997 and the European Exchange Rate Mechanism crisis in 1992.
- These crises were partly attributed to the inability of affected countries to maintain fixed exchange rates, independent monetary policies, and free capital flows simultaneously.

Central Bank Digital Currency

- Recently, the Reserve Bank of India (RBI) Governor has highlighted the potential of Central Bank Digital Currency (CBDC) or E-rupee in improving cross-border payments' efficiency.
- RBI is gradually expanding its CBDC pilots to include more banks, cities, diverse use cases, and a broader audience.
- The RBI launched pilots for digital rupee in the wholesale in November 2022 and in the retail segment in December 2022.
- CBDCs are a digital form of a paper currency and unlike cryptocurrencies that operate in a regulatory vacuum, these are legal tenders issued and backed by a central bank.

- It is the same as a fiat currency and is exchangeable one-to-one with the fiat currency.



- The digital fiat currency or CBDC can be transacted using wallets backed by blockchain.
- Though the concept of CBDCs was directly inspired by Bitcoin, it is different from decentralised virtual currencies and crypto assets, which are not issued by the state and lack the 'legal tender' status.

Objectives:

- The main objective is to mitigate the risks and trim costs in handling physical currency, costs of phasing out soiled notes, transportation, insurance and logistics.
- It will also wean people away from cryptocurrencies as a means for money transfer.

One-Hour Trade Settlement

- Recently, the Securities and Exchange Board of India (SEBI) has announced that it is aiming to launch One-Hour Settlement of trades by March 2024 in order to enhance the efficiency of trade settlement processes.
- The SEBI will launch Application Supported by Blocked Amount

(ASBA)-like facility for trading in the Secondary Market by January 2024.

T+1 Settlement Cycle:

- In January 2023, India adopted the T+1 settlement cycle, where T represents the trade date.
- This means that trade-related settlements occur within one business day or 24 hours of the actual transaction.
- India became the second country, after China, to implement the T+1 settlement cycle in top-listed securities.
- This transition brought several advantages, including increased operational efficiency, faster fund transfers, prompt share delivery, and improved convenience for participants in the stock market.

SEBI's New Plan for Real Time Trade Settlement

- One-Hour Trade Settlement:
 - Under this scheme, when an investor sells a share, the money from the sale will be credited to their account within one hour, and the buyer will receive the purchased shares in their demat account within the same time frame.
 - This represents a significant reduction in settlement time compared to the existing T+1 cycle.

India's first ever UPI-ATM

- India's first UPI-ATM was launched on 5th September 2023, by Hitachi Payment Services.
- The ATM is a White Label ATM (WLA) developed in collaboration with the National Payments Corporation of India (NPCI).
- The ATM was designed to enable "seamless cash withdrawals" and eliminate the need to carry physical ATM cards. It also aims to drive financial inclusion by making banking services more accessible in areas with limited traditional banking infrastructure.

Measurement of Unemployment In India

- In 2021-22, India's Unemployment rate dropped to 4.1% according to Periodic Labour Force Survey (PLFS) of 2021-22, but higher than the US (Fluctuating between 3.5% and 3.7%), highlighting the contrasting economic landscapes between the two countries and thus are differing methods to measure unemployment.



Unemployment

- ILO's Definition:
 - Unemployment, as per the International Labour Organization (ILO), involves being out of a job, being available for work, and actively seeking employment.
 - A crucial aspect is that those not actively searching for work are not considered unemployed.
- The Labour Force:
 - It comprises the employed and the unemployed. Those not in these categories (e.g., students, unpaid domestic workers) are categorized as out of the labour force.
 - The unemployment rate is calculated as the ratio of the unemployed to the labour force.
 - The unemployment rate could also fall if an economy is not generating enough jobs, or if people decide not to search for work.

Safeguarding the Global Financial Ecosystem

- Recently, the Union Finance & Corporate Affairs Minister addressed the Global Fintech Fest 2023 in Mumbai.
- The importance of global cooperation in addressing threats to the Global Financial Ecosystem is highlighted.
- India Under the G20 Presidency has sought for global cooperation and collaboration in the areas where we have continued

challenges.

Global Fintech Fest (GFF)

- It is the largest fintech conference, jointly organized by the National Payments Corporation of India (NPCI), the Payments Council of India (PCI), and the Fintech Convergence Council (FCC).
- Aim is to provide a singular platform for fintech leaders to foster collaborations and develop a blueprint for the future of the industry.

GFF'23 Theme:

- Global Collaboration for a Responsible Financial Ecosystem.
- The theme of GFF 2023 highlights the critical need for global collaboration to build a financial ecosystem that is inclusive, resilient, and sustainable.

Fintech

- Fintech (Financial technology) is used to describe new technology that seeks to improve and automate the delivery and use of financial services.
- FinTech spans various sectors, including education, retail banking, fundraising, nonprofit, and investment management, making it a rapidly growing industry with significant business expansion and job creation.

India to Enable Cross-Border Bill Payments for UK NRIs

- India's Bharat Bill Payment

System (BBPS) is extending its reach to the UK after successful operations in Middle Eastern countries like Oman, Kuwait, UAE, and Bahrain.

- Non-Resident Indians (NRIs) in the UK will benefit from this system, enabling them to pay bills conveniently through multiple payment methods.
- BBPS serves as an interoperable and accessible one-stop ecosystem for various bill payments, including electricity, water, gas, telephone, DTH, and insurance.
- The BBPS is a Reserve Bank of India conceptualised system driven by National Payments Corporation of India (NPCI).
- India is showcasing its digital payment infrastructure (DPI) to attract international delegates' attention.

Economic Insights Beyond GDP: ICOR

- India's latest Gross Domestic Product (GDP) data is making headlines with a remarkable 7.8% growth during the April to June quarter of 2023, solidifying its position as one of the world's fastest-growing major economies.



- However, India's economic narrative extends beyond the numerical figures. Incremental Capital Output Ratio (ICOR) is also gaining traction, offering insights into capital efficiency and resource allocation.

GDP and ICOR

- GDP is one of the most widely used indicators of economic performance and development. It measures the total value of goods and services produced within a country in a given period of time.
- One such indicator is the ICOR; it has evolved from the Harrod-Domar Growth Theory and examines the relationship between fresh investments and economic growth, indicating how much additional capital is required to generate a 1% higher output.
 - A lower ICOR signifies greater efficiency and productive use of capital.
 - According to an SBI report, India is experiencing an upward trend in savings and investments, which is accompanied by a simultaneous decrease in the ICOR.
- The current ICOR in India stands at 3.5 (as of FY22), however, this was 7.5 in FY12.
- Note: The Harrod-Domar model, created by economists Roy Harrod and Evsey Domar, asserts that economic growth relies on the availability of capital for investment, and the rate of

capital accumulation is directly linked to the rate of savings.

Cotton Production in India

- Cotton is a versatile crop that provides food, feed, and fiber for various uses, including textiles, cooking oil, and livestock feed. It is also a major source of income and employment for millions of farmers in India.
- However, in recent years, cotton production and yields have declined significantly, posing a challenge for the country's agriculture and textile sectors.

Subsequent Decline in Cotton Production in India

- Decline:
 - The primary factor responsible for decline was the emergence of the pink bollworm (*Pectinophora gossypiella*).
- Current Methods Employed to Manage the PBW Pest:
 - Traditional insecticides had limited success in controlling PBW larvae. Instead, a different method called "mating disruption" has been used.
- It entails the use of Gossyplure, a pheromone signaling chemical that is secreted by female PBW moths to attract male adults. In this case, the pheromone is artificially synthesised and filled into pipes or lures.
- This method hinders male

moths from locating females and engaging in mating, thereby causing disruption in their reproductive cycle.

RBI to Discontinue I-CRR

- Recently, the Reserve Bank of India (RBI) announced that it would discontinue the Incremental Cash Reserve Ratio (I-CRR) in a phased manner.
- The central bank will release the amount that banks have maintained under I-CRR in stages.

I-CRR

- On 10th August 2023, following the announcement of the monetary policy and the demonetization of Rs 2000 notes, the RBI declared that banks would be required to maintain an Incremental Cash Reserve Ratio (I-CRR) of 10% on the increase in their Net Demand and Time Liabilities (NDTL).
- NDTL is the difference between the sum of demand and time liabilities (deposits) of a bank (with the public or the other bank) and the deposits in the form of assets held by the other banks.
- Stated that it would review it in September 2023, or earlier.

Purpose of Introducing I-CRR:

- The RBI introduced the I-CRR as a temporary measure to manage excess Liquidity in the banking system.
- Several factors contributed to

the Surplus Liquidity, including the demonetisation of Rs 2,000 banknotes.

- RBI's surplus transfer to the government, increased government spending, and capital inflows.
- This liquidity surge had the potential to disrupt price stability and financial stability, necessitating efficient liquidity management.

Gresham's Law and Currency Exchange Rate

- Gresham's law, attributed to English financier Thomas Gresham, was a significant factor in the 2022 economic crisis in Sri Lanka. The crisis was characterized by the Central Bank of Sri Lanka's implementation of a fixed exchange rate between the Sri Lankan Rupee and the U.S. Dollar.

Gresham's Law

- Gresham's law is a monetary principle that states that "bad money drives out good". Bad money is a currency with equal or less value than its face value. Good money has the potential for a greater value than its face value.
- This means that if there are two types of money in circulation, one with a higher intrinsic value and one with a lower intrinsic value, people will tend to hoard the more valuable money and spend the less valuable money.
- As a result, the less valuable

money will dominate the market, while the more valuable money will disappear from circulation.

- This law comes into play when the government fixes the exchange rate between two currencies, creating a disparity between the official rate and the market rate.
- It applies not just to paper currencies but also to commodity currencies and other goods.

Ponzi Scheme

- An actor faces scrutiny over his alleged involvement in a Rs.1,000crore Ponzi scheme with 2 lakh investors.
- A Ponzi scheme is a type of investment fraud that promises high returns with little or no risk to investors.
- These are investment operations that pay returns to old investors from the money garnered from new investors.



- It is named after Charles Ponzi, an Italian businessman who ran such a scheme in the 1920s.
- Ponzi schemes do not fall under the regulatory purview of Securities and Exchange Board of India (SEBI).
- In India, Ponzi schemes are banned under the Banning of

Unregulated Deposit Schemes Act, 2019 and Prize Chit and Money Circulation Schemes (Banning) Act, 1978 .

RBI Directs Banks to Return Documents Within 30 Days of Loan Repayment

- The Reserve Bank of India (RBI) has issued new directives to Regulated Entities (banks and non-banking financial companies) regarding the return of original property documents after the full repayment or settlement of loans.
- These norms will apply to all cases in which the return of original documents becomes due on or after 1st December 2023.
- In cases where borrowers are no longer alive, lenders must establish a clear procedure for returning the original property documents to the legal heirs.
- Applicable to personal loans, including consumer credit, education loans, housing loans, and financial asset loans.
- If original property documents are lost or damaged, the lender will help the borrower get duplicate or certified copies, covering the costs and compensating at Rs 5,000 per day for delays exceeding 30 days.
- The aim is to standardise document release practices and promote responsible

India's Outward and Inward Investment Trends

- In the fiscal year 2023, India saw a significant increase in Outward Direct Investment (ODI) by Indian firms, as well as a surge in inward Foreign Direct Investment (FDI), according to a census conducted by the Reserve Bank of India (RBI).

Key Highlights of the Outward Direct Investment Trends

- Singapore Leads in ODI:
 - Singapore emerged as the largest beneficiary of Indian ODI in FY2023, receiving Rs 2.03 lakh crore, representing 22.3% of the total ODI, indicating the growing interest of Indian firms in the Singaporean market.
 - Singapore serves as a crucial hub for Indian businesses expanding internationally.
 - Singapore, the US, the UK, and the Netherlands were among the top destinations, receiving 60% of the total Rs 9.1 lakh crore invested during FY23.
- Overall ODI Growth:
 - Indian firms' total ODI rose by an impressive 19.46%, reaching Rs 9.11 lakh crore in FY2023, compared to Rs 7.62 lakh crore in 2022.

Key Highlights of Inward Foreign Direct Investment Trends

- Total FDI Growth:
 - India witnessed a

notable increase in FDI flows, with the total FDI inflow in FY2023 reaching Rs 49.93 lakh crore, compared to Rs 46.72 lakh crore in 2022.

- US Tops Inward FDI:
 - The United States was the largest source of inward FDI in India in FY2023, bringing in Rs 8.58 lakh crore, accounting for 17.2% of the total share.
- Other Major FDI Contributors:
 - Mauritius, the UK, and Singapore followed the US in contributing to India's FDI. The top ten countries were responsible for over 90% of the total FDI inflows.

Funding Challenges for Indian Space Start-Ups

- There have been rising concerns and issues with respect to funding mechanisms of space start-ups, marring the growth of a prospective sector.
- The Space sector can grow up to 44 Billion dollars over the next 10 years from the current value of 8 billion dollars, as per the Director of INSPACE.
- Government should consider setting up soft funds and additional incentives to propel the growth of the space sector, along the lines of Start Up India Scheme etc.
- Another concern that arises is that 95% of the equipment required for space sector manu-

facturing needs to be imported and it may take India another 10 years to attain self-sufficiency.

- India's Space Sector has already been witnessing rapid growth as the IN-SPACe portal has registered around 420 start-ups until now.
- India's Draft Space Activities Bill, 2017 and Indian Space Policy, 2023 is slated to provide much needed push and vigour to the burgeoning sector in the near time, if implemented effectively.

BimaSugam

- Recently, the Insurance Regulatory and Development Authority of India (IRDAI) has formed a steering committee to act as the apex decision-making body for the creation of its ambitious 'BimaSugam' online platform.
- IRDAI says BimaSugam is an electronic marketplace protocol which would universalise and democratize insurance. This protocol will be connected with India Stack.
- It's an online platform where customers can choose a suitable scheme from multiple options given by various companies.
- All insurance requirements, including those for life, health, and general insurance (including motor and travel) will be met by BimaSugam.



Utility:

- It will facilitate insurance companies to access the validated and authentic data from various touch points on a real-time basis.
- The platform will interface for the intermediaries and agents to sell policies and provide ser-

vices to policyholders, among others, and reduce paperwork.

Government Grants OverRs. 256 Crore in Relief to MSMEs Amid Pandemic

- The Indian government has provided significant relief to Micro, Small, and Medium Enterprises (MSMEs) by accepting more than 10,000 claims under the Vivad se Vishwas - I scheme, aimed at supporting these businesses during the Covid-19 pandemic.
- The Vivad se Vishwas I – Relief for MSMEs scheme was introduced by the Union Finance Minister during the 2023-24 Budget Speech and was launched through the Government e-Marketplace (GeM) portal.
- It allowed MSMEs to submit claims for relief, including the refund of 95% of deducted performance security, bid security, and liquidated damages, as well as assistance for MSMEs facing debarment due to contract execution defaults.

2. Socio Economic Issues

Shifting Trends in Online News Consumption

- The Reuters Institute's recently published 2023 Digital News Report has unveiled significant shifts in online news consumption patterns across the globe.
- The Reuters Institute for the Study of Journalism is dedicated to exploring the future of journalism worldwide through debate, engagement, and research.

Key Highlights of the Report

- Shifting Patterns in Online News Consumption in India:
 - Indians are increasingly turning to search engines and mobile news aggregators(43%) (online platforms or software devices that collect news stories) as their

primary sources of online news, moving away from traditional news websites.

- Only 12% prefer reading news from direct sources, i.e. newspapers, while 28% prefer social media for news reading.

National Mission for Clean Ganga

- In the last seven years, while some progress has been made by India's National Mission for Clean Ganga (NMCG), there are still significant challenges ahead in achieving the mission's goals.



Progress of Sewage Treatment under the NMCG

- The NMCG has installed treatment plants capable of treating just 20% of the sewage estimated to be generated in the five major States that lie along the Ganga River.
- These states are Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, and West Bengal.
- The NMCG has projected that the treatment capacity for sewage will increase to 33% of the estimated amount generated by 2024, and further increase to 60% by 2026.
- The NMCG plans to set up Sewage Treatment Plants (STPs) capable of treating about 7,000 MLD of sewage by 2026.
- As of July 2023, STPs with a total capacity of 2,665 MLD

have been commissioned and are operational. The progress has picked up significantly in recent years, with 1,455 MLD capacity completed in the last financial year (2022-23).

- STPs and sewerage networks are at the heart of the Namami Ganga Mission and account

for about 80% of the overall project outlay.

National Mission for Clean Ganga (NMCG)

- On 12th August 2011, the NMCG was listed as a society under the Societies Registration Act, 1860.

Objective:

- The objective of the NMCG is to reduce pollution and ensure the rejuvenation of the Ganga River.
- NamamiGange is one of the Coveted Programmes of NMCG to clean Ganga.

XI. 1. Science & Technology

Electrified Flex Fuel Vehicle

- Recently, the Prototype of the world's 1st Bharat Stage-6 (BS6) Stage-II, Electrified Flex fuel vehicle, developed by Toyota Kirloskar Motor was unveiled.
- This vehicle is capable of running on up to 85% ethanol blended petrol and features an electric powertrain.
- The Ministry of Petroleum & Natural Gas has also highlighted flex-fuel vehicles' potential to substitute petrol with higher ethanol blends beyond 20%.

Note:

- Flex-fuel vehicles (FFV): They have engines that can run on flexible fuel - a combination of Petrol/Diesel/Electric and ethanol, which can include up to 100% ethanol.
- Electrified Flex Fuel Vehicle integrates both a Flex Fuel engine and an electric powertrain, of-

fering the dual benefit of higher ethanol use and improved fuel efficiency.

Flex Fuel Strong Hybrid Electric Vehicles (FFV-SHEV):

- When FFV is integrated along with strong hybrid electric technology, it is referred as FFV-SHEVs.
- Strong hybrid is another term for full hybrid vehicles, which have the capability to run solely on either electric or petrol modes.
- In contrast, mild hybrids cannot run purely on one of these modes and use the secondary mode merely as a supplement to the main mode of propulsion.

Significance:

- The integration of an electric powertrain reduces reliance on conventional fuels, contributing towards sustainable transportation and India's 'Aatmnirbhar Bharat' initiative as production

of ethanol increases.

- Similar to SHEVs, this vehicle can achieve significantly higher fuel efficiency, optimizing the use of ethanol and electricity.
- By promoting the use of FFVs, India can capitalize on its abundant ethanol potential, reducing petrol consumption.
- The vehicle represents a significant stride towards decarbonization and greener mobility, aligning with global efforts to combat climate change.

CSIR PRIMA ET11 and Simplified Tractor Testing Process

- Recently, CSIR's Central Mechanical Engineering Research Institute (CSIR-CMERI) has indigenously designed and developed compact 100% Pure Electric Tractor named CSIR PRIMA ET11 mainly to cater small and marginal farmers of India.
- Additionally, in a major step

towards encouraging Ease of Doing Business and promoting trust-based governance, the Government has simplified the process of testing tractors for performance evaluation.

Important Features of CSIR PRIMA ET11

- About: The introduction of the CSIR PRIMA ET11, a 100% Pure Electric Tractor, underscores India's commitment to sustainable agriculture.
 - The entire tractor has been designed and manufactured with indigenous components and technologies and to cater the demand of agriculture field application.
- Features: The developed technology is designed to be user-friendly, with particular consideration for the convenience and ease of use by women.
 - The tractor is provided with a port called V2L i.e. vehicle to load, This means when the tractor is not in operation, its battery power can be utilised for other secondary applications like pump and irrigation etc.

Significance:

- Traditionally tractors use diesel, thus contributing significantly to the environmental pollution.
- According to an estimate they consume about 7.4% of our country's annual diesel usage and account for 60% of total agricultural fuel usage.

- Also their PM2.5 and NOx emissions are likely to increase 4-5 times the current level in next two decades.
- Global carbon footprint reduction strategy necessitates rapid transition of this sector towards electrification.
- Therefore, electrification of tractors is a necessary step that aids our country in achieving climate related targets.

Indigenously Developed Electric Nuclear Power Reactor

- The indigenously developed 700 MWe nuclear reactor at Gujarat's Kakrapar Atomic Power Project (KAPP-3) is now operating at full capacity.
- KAPP-3 is India's largest indigenously developed Pressurised Heavy Water Reactor (PHWR), using natural uranium as fuel and heavy water as a moderator.



- It features an advanced safety system called the 'Passive Decay Heat Removal System,' capable of removing decay heat (the heat released as a result of radioactive decay) from the reactor core without requiring

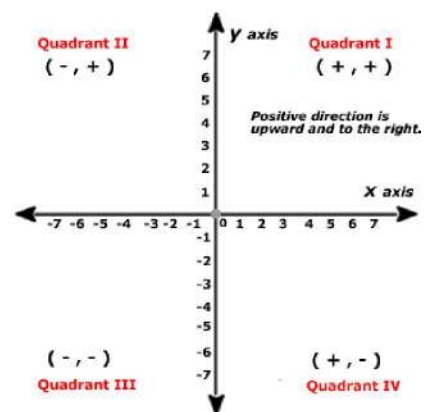
any operator actions.

- India aims to increase its nuclear power capacity from 7,480 MWe to 22,480 MWe by 2031.

Prayan Rover Completes Tasks and Enters Sleep Mode

- Pragyan, part of Chandrayaan-3, has entered sleep mode for the lunar night, scheduled to awaken on September 22, 2023.
- One lunar day is equivalent to about 14 days on Earth.
- If the rover doesn't awaken, it will remain on the Moon as India's lunar ambassador.
- The ISRO indicated that the process of putting the rover to sleep is to ensure its survival during the lunar night when temperatures can plummet below -200°C.
- The lander and rover rely on a solar panel to generate power and charge the battery during the lunar day, while they must endure the harsh lunar night conditions.

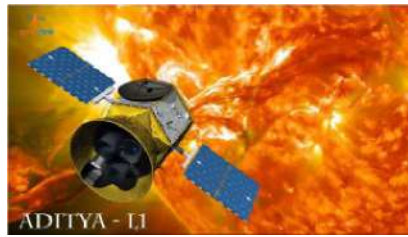
Significance of Cartesian Coordinates in Modern Geometry



- The Cartesian coordinate system, introduced by the French philosopher and mathematician Rene Descartes, revolutionized the way we represent points in space.
- This system utilizes sets of numbers to specify the location of a point in relation to perpendicular planes.
 - In two dimensions, it relies on a pair of numbers (x and y) to pinpoint a specific location on a plane, akin to how latitude and longitude locate a city on Google Maps.
 - For three-dimensional spaces, a third number (z) is added to determine the point's exact position.
- It has not only bridged the gap between algebra and geometry but also gave birth to analytic geometry and found widespread applications in fields like astronomy, engineering, computer graphics, and spatial data representation.

Aditya-L1 Mission

- Recently, the Indian Space Research Organisation (ISRO) has accomplished the launch of Aditya-L1, its inaugural Solar Mission.
- The launch was conducted using the PSLV-C57 rocket. The PSLV's fourth stage was fired twice, a first in ISRO's history, to precisely insert the spacecraft into its elliptical orbit.



- Aditya-L1 is the first space based observatory class Indian solar mission to study the Sun from a substantial distance of 1.5 million kilometers. It will take approximately 125 days to reach the L1 point.
- Aditya-L1 is also ISRO's second astronomy observatory-class mission after AstroSat (2015).
- The mission's journey is notably shorter than India's previous Mars orbiter mission, Mangalyaan.
- The spacecraft is planned to be placed in a halo orbit around the Lagrangian point 1 (L1) of the Sun-Earth system.

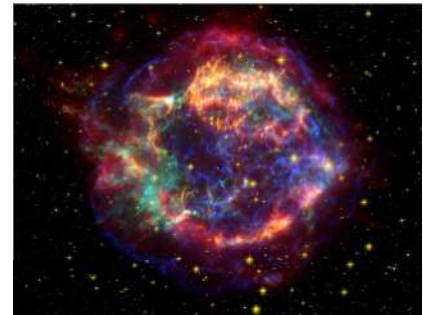
New Method to Determine Hubble Constant

- Recently, some researchers from India and the US have proposed a novel method to determine the Hubble constant and the Rate of Expansion of the Universe.

Hubble Constant

- In 1929, Edwin Hubble formulated Hubble's law, providing the first mathematical description of the universe's expansion.
- The precise rate of this expansion, termed the Hubble

constant, remains a contentious issue in cosmology.



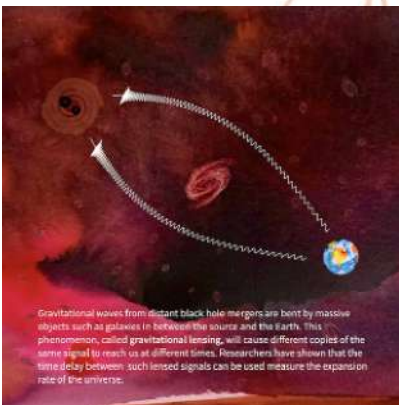
Measurement:

- Two details are required to calculate the value of the Hubble constant:
- The distance between the observer and astronomical objects,
- The velocity at which these objects are moving away from the observer as a result of the expansion of the universe.
- So far, scientists have used three methods to get these details:
- They compare the observed brightness of a stellar explosion, called a supernova, with its expected brightness to figure how far away it could be.
- Then they measure how much the wavelength of the light from the star has been stretched by the expansion of the universe – i.e. the redshift – to figure how much it's moving away.
- They use changes to the Cosmic Microwave Background (CMB) – radiation leftover from the Big Bang event – to estimate the Hubble constant.
- The CMB is a faint, nearly

uniform glow of microwave radiation that fills the observable universe. It is often referred to as the "afterglow" of the Big Bang.

- They use gravitational waves, ripples in spacetime produced when massive astronomical objects – like neutron stars or black holes – collide with each other. Detectors that observe gravitational waves record the data in the form of curves.
- Using the shape of these curves, astronomers can calculate the amount of energy that the collision released. Comparing this with the amount of energy the waves had when they reached earth allows researchers to estimate the distance between these objects and earth.

New Approach for Estimation of Hubble Constant?



UIDAI Drives Aadhaar Innovation at Global Fintech Festival

- At the Global Fintech Festival in Mumbai, Unique Identification Authority of India (UIDAI) unveiled its enhanced Face Authentication feature, utiliz-

ing in-house Artificial Intelligence and Machine Learning technologies, embodying the theme "reimagining Aadhaar authentication."

- Under the Volunteer Guideline 2022 initiative, UIDAI has fostered collaborations with industry and fintech partners to accelerate technology adoption and develop innovative solutions for residents.
- Collaborative efforts with Airtel Payments Bank have enhanced face authentication, optimizing low-light conditions and bolstering fraud prevention measures.

The Bottleneck in Human Evolution

- Recently, a study published in Science sheds light on a crucial period in human evolution marked by a population bottleneck, providing insights into the challenges our early ancestors faced and the genetic changes that shaped modern humans.
- Researchers from China, Italy, and the U.S. used a novel genomic analysis technique called Fast Infinitesimal Time Coalescent Process (FitCoal) to examine this bottleneck.

Key Highlights of the Study

- Population Bottleneck:
 - A population bottleneck is a sharp reduction in the size of a population due to environmental events or

human activities that kill or prevent the reproduction of a large percentage of the population.

- This reduces the genetic diversity and the ability to adapt to changing conditions of the remaining population.
- The study reveals that a severe population bottleneck occurred between 800,000 to 900,000 years ago, nearly driving the human species to the brink of extinction.
 - During this bottleneck, only approximately 1,280 breeding individuals sustained the entire human population, and this situation persisted for about 117,000 years.

Causes of Bottleneck:

- Environmental Factors:
- Loss of Genetic Diversity:

Advanced Biodegradable Nanocomposite Film

- Recently, researchers from the Institute of Advanced Study in Science and Technology (IASST), Guwahati, have successfully fabricated a biodegradable nanocomposite film with optical and mechanical properties.

Major Highlights of the Research

- The research encompasses the utilization of polymers, which have become essential in various industries due to their adaptability and versatility, spanning from packaging to medical equipment.

- However, advanced applications like flexible displays and organic LED technology necessitate highly flexible and optically active polymers.
- To attain these desired properties, researchers have delved into the incorporation of nanomaterials.
- Among the selection of synthetic biodegradable polymers, polyvinyl alcohol (PVA) has emerged as a standout choice. PVA boasts exceptional film-forming capabilities and robust mechanical properties.
 - Furthermore, it can be tailored for optical and mechanical attributes by introducing suitable nanomaterials.
 - The research team successfully created a biodegradable PVA-CuO nanocomposite film using a straightforward solution casting technique, where copper salt served as a precursor for the in-situ formation of CuO nanoparticles under varying heat treatment conditions.
- This nanocomposite film demonstrated superior optical, mechanical, and antimicrobial features when compared to pure PVA films.
 - The existence of CuO nanoparticles within the polymer matrix was verified through a range of spectroscopic and microscopic techniques.

String of Pearls Supernova

- The James Webb Space Telescope (JWST) captured an image of SN1987A, a supernova that exploded decades ago, offering new insights into its history and evolution.

SN1987A Supernova

- SN1987A exploded in 1987, becoming the nearest and brightest supernova visible from earth in nearly four centuries.
- SN1987A is situated 170,000 light-years away from Earth in the Large Magellanic Cloud.
- Now, the JWST is revealing intricate details of this cosmic event that have remained hidden until now.



Alias 'String of Pearls':

- ○ SN1987A is often referred to as a "string of pearls" as it showcases a series of luminous rings composed of gases and dust expelled by the dying star in its various phases of collapse and explosion.
- This string of pearls comprises material ejected about 20,000 years before the supernova

event, offering insights into the star's history and evolution.

Unusual Facts about SN1987A:

- The star exploded when it was a blue supergiant (contrary to the theories as per which only red supergiant stars could explode).
- Emission of molecular hydrogen in the ring was not necessarily expected (also it couldn't have been revealed without JWST).

Lab Grown Human Embryo Model

- Recently, Scientists have achieved a remarkable feat by creating a lab-grown "human embryo" model using stem cells and chemicals, without using an egg or sperm shedding light on early embryo development.



Embryo Model Created

- Researchers from Israel utilized a combination of stem cells and chemicals to create a model of a 14-day-old human embryo.
- This mix of stem cells and chemicals was a crucial starting point for creating an embryo-like structure.
- The Israeli researchers' model was able to spontaneously

assemble into different types of cells that form the fetus, provide nutrients to the fetus, lay out the plan for body development, and create structures like the placenta and umbilical cord to support the fetus.

- A challenge faced was that only 1% of the mixture came together on its own, showing a need for better efficiency.

These Models Revealed About Early Development

- Models help uncover errors in Deoxyribonucleic acid (DNA) duplication and chromosome distribution.

Embryo Models and Research Important

- Studying early embryo development is ethically challenging once implantation in the uterus occurs.
- Research during these initial stages is vital as most miscarriages and birth defects happen in this period.
- Understanding normal embryo development and genetic factors can improve in vitro fertilization outcomes.
- It helps researchers grasp genetic, epigenetic, and environmental influences on embryonic development.

Can Lab-Grown Embryos Be Used for Pregnancy

- No, these models are intended solely for studying early fetal development.

- They are generally destroyed after 14 days, and implantation is not permitted.

Enhancing Mosquito Control through Genetic Engineering

- The rapid urbanization of the world's populations, especially in many large and economically developing countries like India, has led to annual surges in mosquito-borne illnesses.
- One of the emerging innovative methods of mosquito control is genetic engineering, which involves altering the traits or behavior of mosquitoes.

Need for Innovative Mosquito Control Approaches

- Mosquitoes are small, flying insects belonging to the family Culicidae.
- They are known for their distinctive buzzing sound and are notorious for their role in transmitting diseases to humans and animals.
- They can transmit deadly diseases such as Malaria, Dengue, Zika, and Yellow fever, affecting millions of people every year.

Changing Landscape of Mosquito-Borne Diseases:

- Urbanization and Climate Change: The rapid urbanization of the global population, particularly in developing countries like India, has contributed to annual surges in mosquito-borne diseases like dengue.

- Additionally, climate change has expanded the territories where these diseases are prevalent, exemplified by indigenous cases of dengue in France.

- Current Control Measures: In the ongoing battle against mosquitoes, a range of tools has been employed, including mosquito nets, insecticides, and the use of symbionts like Wolbachia.
- Despite the availability of a first-generation malaria vaccine, insecticide resistance in mosquitoes is a growing concern, necessitating the exploration of new control approaches.

How can Genetic Engineering be Harnessed for Mosquito Control

- Genome Sequencing: Recent advancements in next-generation sequencing techniques have enabled researchers to obtain whole genome sequences for various mosquito species.
- Notably, research institutions like the University of California and institutes in Bengaluru, India, have contributed to high-quality reference genomes for *Anopheles stephensi*, a major malaria vector.
- The availability of mosquito genome sequences and our capacity to genetically manipulate them offer unprecedented opportunities for mosquito control.
- Gene Drive Technology: Gene drive technology, developed by Austin Burt (Professor at

Imperial College London) in 2003, aims to manage mosquito populations by changing how they inherit certain genes, breaking the usual genetic rules explained by Mendel.

- This technology uses special proteins to edit mosquito DNA. When these proteins cut the mosquito's DNA, the cell fixes it by adding a specific genetic sequence.
- This change affects the mosquito's ability to have offspring and stops the malaria parasite from multiplying inside them, making the mosquitoes unable to spread the disease.
- Researchers at Imperial College London genetically enhanced a gene in mosquitoes to secrete antimicrobial substances, disrupting the Plasmodium parasite's development and reducing mosquito lifespan.

Nipah Virus

- The Nipah Virus has made a resurgence in Kerala, India, with two fatalities.
- This marks the first Nipah Virus outbreak in India since 2021 when a case was reported in Kozhikode during the Covid-19 pandemic.

About:

- It is a zoonotic virus (it is transmitted from animals to humans).
- The organism that causes Nipah

Virus encephalitis is an RNA or Ribonucleic acid virus of the family Paramyxoviridae, genus Henipavirus, and is closely related to Hendra virus.

- Hendra virus (HeV) infection is a rare emerging zoonosis that causes severe and often fatal diseases in both infected horses and humans.
- It first broke out in Malaysia and Singapore in 1998 and 1999.
- The disease is named after a village in Malaysia, Sungai Nipah, where it was first detected.
- It first appeared in domestic pigs and has been found among several species of domestic animals including dogs, cats, goats, horses and sheep.



Transmission:

- The disease spreads through fruit bats or 'flying foxes,' of the genus Pteropus, who are natural reservoir hosts of the Nipah and Hendra viruses.
- The virus is present in bat urine and potentially, bat faeces, saliva, and birthing fluids.

Symptoms:

- The human infection presents as an encephalitic syndrome marked by fever, headache, drowsiness, disorientation,

mental confusion, coma, and potentially death.

Prevention:

- Currently, there are no vaccines for both humans and animals. Intensive supportive care is given to humans infected by the Nipah virus.

Natural Polyphenols to Combat Alzheimer's Disease

- Researchers at Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), an autonomous institute of the Department of Science and Technology (DST) have discovered that naturally occurring plant-based polyphenols (beneficial plant compounds with antioxidant properties), like tannic acid found in Chestnut and Oak twigs, can modulate the ferroptosis-AD axis to yield a safe, cost-effective strategy for combating Alzheimer's disease (AD).
- AD is a progressive neurodegenerative disorder characterized by memory and cognitive decline.
 - Ferroptosis is a type of programmed cell death that is dependent on iron and is linked to the development of AD.
- AD aligns with characteristics of ferroptosis, including abnormal iron build-up, and reduced activity of the antioxidant enzyme glutathione peroxidase 4 (GPX4).

- Tannic acid activates and enhances GPX4, offering a comprehensive approach to combat AD.
- To bolster NavIC's adoption, ISRO had launched second-generation Navigation satellites in May 2023 that will enhance interoperability with other satellite-based navigation systems and expand usage.

NavIC Integration in Smartphones

- The Ministry of Electronics and Information Technology, Government of India, is planning on making it mandatory for all devices to support the homegrown Navigation System NavIC (Navigation with Indian Constellation).
- This comes at a time when the newly launched Apple iPhone 15 has integrated the navigation system developed by the Indian Space Research Organisation (ISRO) into its hardware.
- India's NavIC is not intended to replace other global navigation systems but rather complement them.

Government's Plans for NavIC Integration on Smartphones

- The Union government is considering mandating NavIC integration in all smartphones sold in India by 2025, particularly targeting 5G phones.
- Manufacturers could receive additional incentives through Production-Linked Incentive (PLI) schemes for using chips that support NavIC technology, fostering domestic chip design and production.

Roadmap and Future Prospects for NavIC Adoption

- The second-generation satellites will send signals in a third frequency, L1, besides the L5 and S frequency signals that the existing satellites provide.
- The L1 frequency is among the most commonly used in the Global Positioning System (GPS) and will increase the use of the regional navigation system in wearable devices and personal trackers that use low-power, single-frequency chips.
- This strategic move aligns with India's aspirations to establish technological sovereignty and emerge as a dominant space-faring nation.

Biohacking

- Biohacking has gained more attention and popularity in recent years, it is the practice of modifying or enhancing one's own body or biology using various methods, such as diet, supplements, devices, implants, or genetic engineering.
- Biohacking can have different goals, such as improving health, performance, well-being, or appearance, or exploring the limits and possibilities of human nature.



- The most well-known type of biohacking is genetic engineering, where individuals experiment with new technologies to enhance their physical appearance or capabilities.
- However, biohacking also raises ethical and safety concerns, particularly when individuals engage in risky or unproven procedures.

String Technology and its Impact on Lithium Production

- A new technology called "String" has emerged, with the potential to streamline the extraction of lithium, a crucial component in batteries used in smartphones and electric vehicles.
- Lithium production is a resource intensive and time-consuming process as most of the Lithium produced in the world is extracted from Brine Reservoirs, located in Salt flats.
- String Technology involves the use of porous fibres twisted into strings, which have been meticulously engineered.
- These strings possess a water-loving (hydrophilic) core and a water-repelling surface.

- When one end of the string is immersed in a saltwater solution, capillary action is initiated, mimicking the way trees transport water from their roots to their leaves.
- As the water evaporates from the string's surface, it leaves behind salt ions, including sodium and lithium. Over time, as the salts become increasingly concentrated, they form sodium chloride and lithium chloride crystals, which can be easily harvested.
- Thus, completing the process of Lithium production by String Technology.

Fostering Ethical AI

- Recently, some business leaders emphasized the Imperative of collaboration among governments, industry, and ecosystem players to develop Ethical Artificial Intelligence (AI).

Artificial Intelligence (AI)

- AI is the ability of a computer, or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment.
- Although there is no AI that can perform the wide variety of tasks an ordinary human can do, some AI can match humans in specific tasks.

Ethical AI

- Ethical AI, also known as Moral or Responsible AI, refers to the

development and deployment of AI systems in a manner that aligns with ethical principles, societal values, and human rights.

- It emphasizes the responsible use of AI technology to ensure that it benefits individuals, communities, and society as a whole, while minimizing potential harms and biases.
- AI systems should be designed and implemented in a way that their operations and decision-making processes are understandable and explainable to users and stakeholders.
- Ethical AI aims to mitigate biases and ensure fairness in AI algorithms and models to prevent discrimination against certain individuals or groups based on factors like race, gender, ethnicity, or socioeconomic status.
- Ethical AI upholds individuals' right to privacy and advocates for the secure and responsible handling of personal data, ensuring consent and compliance with relevant privacy laws and regulations.

DNA Nanoball Strategy

- In a remarkable scientific development, the Deoxyribonucleic Acid (DNA) nanoball strategy has emerged as a groundbreaking, cost-effective technology for the rapid detection of pathogens in the field.
- Pathogens are microorganisms that can cause disease in their

host. They can be viruses, bacteria, protozoans, or fungi.

- The DNA nanoball strategy combines nucleic acids-based diagnostics and loop-mediated isothermal amplification (LAMP) technology for rapid pathogen detection.
- LAMP is a process that amplifies circular DNA molecules into long strands that contain multiple copies of DNA. These strands then fold into spherical structures called DNA nanoballs, which can be easily observed by a microscope or an electrical device.
- The design does not need laboratory techniques to support diagnosis. It is a low-cost technology that can be widely deployed and scalable.

First Green Hydrogen Fuel Cell Bus

- Recently, the Union Minister of Petroleum & Natural Gas flagged off the country's first Green Hydrogen Fuel Cell Bus in New Delhi, marking a revolutionary step in the transition to clean energy.
- Green Hydrogen Fuel Cells are a clean, reliable, quiet, and efficient source of high-quality electric power.
- They use Green Hydrogen as a fuel to drive an electrochemical process that produces electricity, with water and heat as the only by-products.



Green Hydrogen:

- Green hydrogen is a type of hydrogen produced through a process called electrolysis, using renewable energy sources like wind or solar power.
- It involves splitting water (H₂O) into its constituent elements, hydrogen (H₂) and oxygen (O₂), with zero greenhouse gas emissions.

Hybrid Seeds

- Popularity of Hybrid Seeds has been increasing among farmers in India over a decades due to their quicker harvesting as compared to traditional or Open-Pollinated Variety (OPV) seeds.
- OPV are usually more genetically diverse, causing an amazing variation within plant populations, which ultimately allows them to adapt to local growing conditions and climates every year.
- A hybrid seed is produced by controlled Cross-Pollination between different varieties of the same plant.
- The transfer of pollen grains from the anther of one plant to the stigma of another different plant is called cross-pollination.
- These are chosen to enhance the characteristics of the result-

ing plants including – better yield, greater uniformity, and disease resistance.

- Since all hybrid seeds in a packet have the same parent plants, which means they will all grow into uniform plants.
- These are often easier and faster to grow than Heirloom Seeds.
- Heirloom Seeds come from open-pollinated plants, meaning the plants were pollinated by natural mechanisms like wind, insects, or birds, rather than through controlled cross-breeding or hybridization.

Geospatial Intelligence

- The summer of 2023 has witnessed a series of unprecedented natural disasters across the United States, including record-breaking temperatures, Canadian wildfires, historic flooding, and a powerful hurricane where usage of geospatial intelligence can mitigate such crises.
- Geospatial technology uses tools like GIS (Geographic Information System), GPS (Global Positioning System) and Remote Sensing for geographic mapping and analysis.
- These tools capture spatial information about objects, events and phenomena (indexed to their geographical location on earth, geotag). The location data may be Static or Dynamic.
- Static location data include position of a road, an earthquake event or malnutrition among children in a particular region while dynamic location data

include data related to a moving vehicle or pedestrian, the spread of an infectious disease etc.

- The technology may be used to create intelligent maps to help identify spatial patterns in large volumes of data.
- The technology facilitates decision making based on the importance and priority of scarce resources.

Juno

- Juno is a solar-powered NASA spacecraft that makes long, looping orbits around giant planet Jupiter.
- Juno was launched on 5th August, 2011. The spacecraft traveled roughly 3 billion kilometers before arriving at Jupiter in 2016.
- Juno conducted its 53rd close flyby of Jupiter, capturing a remarkable image of Jupiter and its volcanic moon Io, on 31st July 31, 2023.



- It is known for its intense volcanic activity, with hundreds of erupting volcanoes spewing molten lava and sulfurous gases.
- It is slightly larger than Earth's Moon, and is tidally locked to Jupiter and completes both its rotation on its axis and orbit around Jupiter in approximately 1.8 Earth days.

2. Diseases

Karnataka Takes Steps to Address Dementia

- Karnataka is committed to prioritizing dementia as a health concern.
- Dementia is an umbrella term encompassing diseases that affect memory, cognitive abilities, and behaviour, hindering daily activities. Alzheimer's disease is the most common type of dementia.
- Recent estimates indicate a 7.4% dementia prevalence rate among Indians aged 60 and above, totaling approximately 9 lakh individuals. This number is expected to surge from 88 lakh in 2016 to 1.7 crore by 2036.



- Risk factors for dementia include smoking, excessive alcohol consumption, physical inactivity, social isolation, head injuries, and conditions like diabetes, hearing loss, depression, obesity, and hypertension.

Natural Polyphenols to Combat Alzheimer's Disease

- Researchers at Jawaharlal Nehru Centre for Advanced

Scientific Research (JNCASR), an autonomous institute of the Department of Science and Technology (DST) have discovered that naturally occurring plant-based polyphenols (beneficial plant compounds with antioxidant properties), like tannic acid found in Chestnut and Oak twigs, can modulate the ferroptosis-AD axis to yield a safe, cost-effective strategy for combating Alzheimer's disease (AD).

- AD is a progressive neurodegenerative disorder characterized by memory and cognitive decline.
- Ferroptosis is a type of programmed cell death that is dependent on iron and is linked to the development of AD.
- AD aligns with characteristics of ferroptosis, including abnormal iron build-up, and reduced activity of the antioxidant enzyme glutathione peroxidase 4 (GPX4).
- Tannic acid activates and enhances GPX4, offering a comprehensive approach to combat AD.

Global Impact of Lead Exposure on Cardiovascular Health

- A recent study published in The Lancet Planetary Health journal reveals that lead exposure had a significant role in causing car-

diovascular deaths worldwide.

- In 2019, approximately 5.5 million people succumbed to cardiovascular diseases linked to lead exposure, comprising 30% of all global cardiovascular deaths.
- Low- and middle-income countries (LMICs) bore the brunt of lead exposure-related health impacts, with about 95% of the affected population residing in these regions.
- Despite the elimination of leaded petrol, LMICs witnessed six times more deaths from cardiovascular diseases than high-income countries.
- Nations with the highest lead exposure burdens include Iran, Afghanistan, Yemen, Peru, Vietnam, the Philippines, and parts of Central Africa.
- Apart from cardiovascular disease, lead exposure is associated with chronic kidney disease and developmental intellectual disabilities.
- Lead exposure resulted in the loss of 765 million Intelligence quotient(IQ) points among children under five, with an 80% higher loss in LMICs compared to previous estimates.
- The economic costs of lead exposure, including IQ loss in children and cardiovascular disease deaths, amounted to USD 6 trillion globally in 2019,

or 7% of the global GDP.

Global Report on Hypertension

- Recently, during the United Nations General Assembly's (UNGA) 78th session, the World Health Organization (WHO) released a report titled "Global report on hypertension: The race against a silent killer."
- It is the first-ever report by the WHO on the worldwide implications of hypertension, commonly referred to as high blood pressure.

Key Highlights of the Report

- A Global Epidemic:
 - One in three adults across the world suffers from hypertension.
 - The number of hypertension cases has doubled from 650 million to a staggering 1.3 billion between 1990 and 2019.
 - Hypertension affects approximately 33% of adults aged 30-79 worldwide.
- India's Hypertension Burden:
 - India alone has an estimated 188.3 million adults aged 30–79 years grappling with hypertension.
 - The prevalence of high blood pressure in India is slightly lower than the global average of 31%.
 - To reach a 50% control rate, India needs to ensure that an additional 67 million

people with hypertension receive effective treatment.

- If the progress scenario were achieved, 4.6 million deaths due to high blood pressure would be averted by 2040.

The report also contains

- Inadequate Treatment:
- Disparities in Treatment Coverage:
- The Urgency of Timely Treatment:
- The WHO's Call to Action:
 - The WHO calls for prioritising the prevention, early detection, and effective management of hypertension as part of national health benefit packages.

Vibrio Vulnificus Infection

- In recent years, India has been grappling with a growing concern related to *Vibrio vulnificus* infections, a deadly bacteria found in marine environments.
- Despite its potential threat, this pathogen remains largely underreported in India.
- *Vibrio vulnificus* is a bacterium that can cause severe infections in humans. It can result from eating undercooked seafood, especially oysters, which may contain the bacteria.

Carriers:

- It is typically contracted through two main routes: consuming infected raw shellfish and

exposing wounds to contaminated waters.

- It spreads through marine organisms like fish like eel, derbio, tilapia, trout, and shrimp.
- The first case in marine organisms was documented in Japanese eel in 1975. The first case of *V. vulnificus* in humans was recorded in 1976 in the US.
- The pathogen arrived in Spain through imported eels in 1985.
- In 2018, India documented an outbreak of *V. vulnificus* in a tilapia farm in Kerala.
- Originally from Africa and West Asia, tilapia is one of the most traded food fish globally.

Symptoms:

- Symptoms of *V. vulnificus* infection include diarrhea, vomiting, fever, and, in severe cases, flesh-eating diseases that can be fatal within days.

Environmental Factors Favoring *V. vulnificus* in India:

- This bacterium thrives in warm waters above 20°C. India's average sea surface temperature of 28°C provides a perfect habitat.
- Climate change, with increased rainfall and reduced coastal salinity, further supports the growth of *V. vulnificus*.

Consequences:

- *V. vulnificus* infections have a high mortality rate, ranging from 15% to 50%, even with prompt diagnosis and treatment.

- Vulnerable populations, such as those with chronic liver disease, cancer, chronic kidney disease, and diabetes, are at increased risk.
- Infections can lead to limb amputations (surgical removal of part of the body, such as an arm or leg), making them a significant health concern.

Women, Power and Cancer: Lancet

- Recently, The Lancet Global Health has released a report titled-"Women, Power and Cancer", which highlights how societal apathy towards women's health has delayed their access to Cancer prevention.
- This study estimated premature deaths at ages 30–69 years and distinguished these as deaths that are preventable or treatable in 185 countries worldwide.
- For this population-based

Diving Support Craft (DSC) Project

- Recently, the first ship of the Diving Support Craft (DSC) project, 'DSC A 20' (Yard 325), was launched in Kolkata (Hooghly River).
- In 2021, a contract was signed between the Ministry of Defence (MoD) and M/s Titagarh Wagons Ltd (TWL) for the construction of 5 DSC.

study, estimated Cancer deaths by country, cancer, sex, and age groups were retrieved from the International Agency for Research on Cancer's GLOBOCAN 2020 database.

- Crude and age-adjusted cancer-specific Years of Life Lost (YLLs) were calculated for 36 cancer types.

The Findings of the Report:

- Cancer-Related Mortality and Burden:
- Preventable and Treatable Deaths:
- Gender Disparities:
- Human Development Index (HDI) and Mortality:

Monoclonal Antibodies

- In recent times, Monoclonal antibodies being considered for compassionate use in India amidst the Nipah virus outbreak in Kerala's Kozhikode district.
- This option is being explored

XII. Defence

- These specialized vessels are designed to perform operational and training diving operations in harbors and coastal waters.
- The project aims to deliver all five DSC to the Indian Navy during FY 2024-25.
- The majority of equipment used are sourced from indigenous manufacturers, making them a source for the "Make in India"

due to the absence of effective treatments for Nipah, a virus with a high mortality rate and also far more severe than Covid-19.

- The antibody binds to a part of the viral envelope, neutralizing the Nipah virus.
- The monoclonal antibody has also been used against the Hendra virus, a related virus from the same family.
- Antibodies are proteins produced naturally by the immune system that target a specific foreign object (antigen). They are called monoclonal Antibodies (mAbs) when they are produced by clones derived from a single parent cell.
- Monoclonal Antibodies are man-made proteins that act like a human antibody in the immune system. They are made by cloning a unique white blood cell.

and "Make for the World" initiatives of the GoI and MoD.

IAF's Trishul Exercise Tests Western Air Command's Readiness

- The Indian Air Force (IAF) has launched its annual mega training exercise, Trishul, with the activation of all combat assets under the Western Air Command (WAC).
- This internal exercise encom-

passes a wide range of frontline assets, including fighter jets, transport aircraft, and helicopters, deployed from Leh in Kashmir to Nal in Rajasthan.

- Trishul serves as a crucial test of the command's operational preparedness, requiring a high level of coordination and readiness due to its scale and complexity

BRIGHT STAR-23

- INS Sumedha, a Saryu class Naval Offshore Patrol Vessel (NOPV), arrived in Port Alexandria, Egypt for 'Exercise BRIGHT STAR-23.'
- It is a multinational Tri-Services military exercise taking place in Port Alexandria, Egypt.
- 34 countries are participating, making it the largest joint military exercise ever conducted in the Middle East & North Africa region.



- The exercise is divided into two phases: the Harbour Phase and the Sea Phase.
- The Harbour Phase includes cross-deck visits, professional exchanges, sports fixtures, and planning interactions.
- The Sea Phase includes complex and high-intensity exercises

such as cross-deck flying, anti-surface and anti-air exercises, and live weapon firing drills.

- The Indian Navy is participating for the first time in Exercise BRIGHT STAR.

21st Edition of India-France Bilateral Naval Exercise 'VARUNA'

- The Phase II of Varuna-23, the bilateral naval exercise between the Indian and French Navies, took place in the Arabian Sea.
- This exercise involved guided missile frigates, tankers, Maritime Patrol Aircraft, and integral helicopters from both sides.



- Varuna, which began in 1993 and was officially named in 2001, has evolved over the years into a symbol of the strong strategic relationship between India and France.

Defence Minister Inaugurates 90 Border Infrastructure Projects Across India

- The Defence Minister inaugurated a total of 90 border infrastructure projects to enhance all-weather connectivity and military readiness along the Line of Actual Control (LAC).

- Notable among them is the Nechipu tunnel in Arunachal Pradesh, which will provide year-round connectivity to the strategically vital Tawang sector.
- Additionally, the construction of the Shinku La tunnel, the world's highest tunnel, will provide all-weather connectivity to the Lahaul-Spiti region in Himachal Pradesh.

Operation Polo

- On 13th September, 1948, India's military action known as "Operation Polo" was launched to integrate the princely state of Hyderabad, a significant event in Indian history.
- The Nizam of Hyderabad, Mir Osman Ali Shah, had hesitated to join India or Pakistan after Independence, capitalizing on the Indian government's pre-occupation with the Kashmir conflict.
- A standstill agreement signed in November 1947 maintained the status quo between Hyderabad and India for a year, allowing the Nizam to continue governing independently.
- However, escalating tensions, cross-border raids, and intentions to establish an independent state, prompted India to act.
- The operation saw well-planned military thrusts from multiple directions, ultimately leading to the surrender of the Hyderabad state forces.



- This pivotal campaign, carried out under the watchful eye of Sardar Vallabhbhai Patel, culminated in a ceasefire declaration on 17th September, 1948 effectively placing Hyderabad under Indian control by 18th September, 1948.

India-Malaysia Defence Cooperation Committee Meeting

- The 12th meeting of the Malaysia-India Defence Cooperation Committee (MIDCOM) took place in New Delhi on 19th September 2023.
- The meeting reviewed the outcomes of two sub-committee meetings, namely the Sub-Committee on Military Cooperation (27th July 2023) and the Joint Sub-Committee on Defence Science Technology and Industry Cooperation (18th September 2023).
- The Defence Secretary of India shared an 8-point proposal with the Malaysian side to expand cooperation between India

and Malaysia on a wide range of areas such as Government to government-level engagement, Tri-Service cooperation, Training, UN Peacekeeping, Bilateral Services Engagement, Defence Industrial Cooperation, Research & Development and Regional/ Sub-Regional Engagements.

- Both countries reaffirmed their commitment to fully implement the Enhanced Strategic Partnership, emphasizing mutual trust, common interests, and shared values of democracy and the rule of law.

SIMBEX 2023

- Indian Naval Ships Ranvijay and Kavaratti and submarine INS Sindhukesari arrived in Singapore to participate in the Singapore-India Maritime Bilateral Exercise (SIMBEX), 2023.
- This exercise has been conducted since 1994 and holds the distinction of being the longest naval exercise that the Indian Navy has conducted with another country.
- In addition to naval vessels, the exercise also includes the participation of the Long-Range Maritime Patrol Aircraft P8I.
- Other Exercises between the two countries include exercise Bold Kurukshetra, Trilateral

Maritime Exercise SIMTEX (With Thailand) and exercise Agni Warrior (Army).

Maiden India, Indonesia, and Australia Trilateral Maritime Exercise

- The Indian Navy's warship, INS Sahyadri, participated in the first trilateral Maritime Partnership Exercise with the Royal Australian Navy (RAN) and Indonesian Navy from September 20-21, 2023.
- The exercise allowed the three nations to strengthen their partnership and improve their collective capability to support a stable, peaceful, and secure Indo-Pacific region.
- INS Sahyadri, the third ship of the indigenously designed and built Project-17 class multirole stealth frigates was built at Mazagon Dock Ltd, Mumbai.
- The Project 17 class, also known as the Shivalik class. These frigates were the first stealth warships built in India.



- Shivalik is fitted with a mix of indigenous Russian, Indian, and Western weaponry and sensor systems.

XIII. InterNational

India's Interests in Africa's RE Potential

- Recently, the International Solar Alliance (ISA) held its 5th regional meeting in Kigali, Rwanda. Nine solar power demonstration projects across three countries: 4 in Uganda, 2 in Comoros and 3 in Mali, were virtually inaugurated in the meeting.
- During the meeting, a report titled "Roadmap of Solar Energy for Universal Energy Access", was unveiled.

Key Highlights of the Report

- The report outlines a strategic approach to effectively and economically tackle the global energy access challenge using solar-powered solutions. It encompasses case studies, real-world examples, and innovative policies aimed at bringing about a transformative shift in the implementation of solar mini-grids.
- The report's conclusions hold significant relevance for Africa, especially the Sub-Saharan region and rural areas. It identifies a range of electrification strategies centred on solar energy, particularly focusing on solar mini-grids and Decentralised Renewable Energy solutions.
- These approaches offer effective solutions to address

diverse energy access challenges.

- Promoting these solutions could encourage the emergence of local innovations and business models, thereby advancing the adoption of solar energy generation within the country.

Coup in Gabon

- Gabon, a Central African nation, rich in oil but plagued by poverty and political instability, has witnessed another coup attempt by a group of mutinous soldiers who claimed to have seized power and placed the President of the country under house arrest.
- Coup attempt took place due to allegations of election fraud and corruption against Gabon's President Ali Bongo Ondimba, reflecting the growing discontent within the nation.

Gabon's Economy:

- Gabon is the 4th largest oil producer in Sub-Saharan Africa.
- Strong economic growth over the past decade was driven mainly by oil and manganese production.
- In 2020, the oil sector accounted for 38.5% of Gross Domestic Product (GDP) and 70.5% of exports despite efforts to diversify the economy.
- Gabon is a member of the Organization of the Petroleum

Exporting Countries (OPEC), but its oil wealth is concentrated in the hands of a few — and nearly 40% of Gabonese aged 15 to 24 were out of work in 2020, according to the World Bank.

Israeli PM Proposes Fiber Optic Link from Asia and the Middle East to Europe

- Israel's Prime Minister has put forward the idea of a fibre optic cable project, to connect Asia and the Arabian Peninsula with Europe through Israel and Cyprus.



- It highlights that the fibre optic connection serves as a cost-effective and secure route for international communication.
- This proposal extends Israel's collaboration with Cyprus and Greece on energy projects, such as the EurAsia Interconnector, a 2,000-megawatt undersea electricity cable.
- Additionally, there are plans for energy diversification, including gas pipelines and liquefied natural gas processing plants, to strengthen the East Mediterranean basin's link to Europe.

Ministry of Tourism and UNWTO Unveil G20 Tourism and SDG Dashboard

- The Ministry of Tourism in collaboration with the United Nations World Tourism Organization (UNWTO), unveiled the G20 Tourism and Sustainable Development Goals (SDGs) Dashboard
- It showcases the best practices, case studies, and insights from G20 countries for achieving the SDGs.
- The UNWTO is an intergovernmental organization based in Madrid, Spain, and has 159 Member States.
- UNWTO promotes tourism as a driver of economic growth, inclusive development, and environmental sustainability and offers leadership and support to the sector in advancing knowledge and tourism policies worldwide

Hong Kong's Top Court Rules to Recognise Same-Sex Partnerships

- Hong Kong's top court has ruled in favour of recognising same-sex partnerships but stopped short of granting full marriage rights to the city's LGBTQ community.
- The court gave the government two years to come up with a legal framework for legal recognition of same-sex partnerships.
- In 133 countries homosexuality decriminalised, but only in 32

of them same-sex marriage is legal.

ASEAN Denies Myanmar's Chairmanship for 2026

- Association of Southeast Asian Nations (ASEAN) leaders have decided to deny Myanmar the opportunity to assume the rotating leadership of their regional bloc in 2026.
- This decision comes as a setback to Myanmar's ruling generals, who have been seeking international recognition after seizing power violently in 2021.
- Philippines agreed to take over the regional bloc's chairmanship in 2026 at the ASEAN summit hosted by Indonesia.

Reasons for Myanmar's Exclusion from the ASEAN Leadership

- ASEAN diplomats have suggested that Myanmar's exclusion is related to ongoing civil strife within the country.
- Additionally, there are concerns that ASEAN's relations with the United States and the European Union, among other international actors, might be negatively impacted due to their non-recognition of Myanmar's military-led government.



Background and Concerns in Myanmar

- In 2021, the Myanmar Army ousted Aung San Suu Kyi's democratically elected government, leading to widespread condemnation and calls for her immediate release from detention.
- Western governments, led by the US, have been vocal in their opposition to the military-led government in Myanmar.

Issues:

- Since the military takeover in Myanmar, security forces have been accused of killing approximately 4,000 civilians and arresting over 24,000 others.
- Myanmar's economy has collapsed with nearly half of the population now living below the poverty line.
- Despite clear legal obligations for the military to protect civilians in the conduct of hostilities, there has been consistent disregard for the related rules of international law.

Indonesia Seeks US Trade Talks for Critical Minerals

- Indonesia has requested the United States to begin trade talks for critical minerals.
- Indonesia has ambitions to become a major player in the manufacturing of electric vehicles (EVs) and their batteries, leveraging its vast nickel reserves.

- Indonesia is a producer and holder of the world's biggest nickel reserves amounting to 21 million metric tons.
 - Critical minerals are minerals and metals that have specific industrial, technological, and strategic applications.
 - They are the building blocks for the green and digital economy and many clean energy technologies, such as solar panels, electric vehicles, wind turbines, and electricity networks.
 - Cobalt, Copper, Gallium, Germanium, Graphite, Hafnium, Indium, Lithium, and Nickel are some examples of critical minerals.
- The NHRC came into existence on 12th October 1993, as established by the Protection of Human Rights Act (PHRA) of 1993, later amended by the Protection of Human Rights (Amendment) Act in 2006.

ADB Regional Conference

- Recently, the 2023 Regional Cooperation and Integration (RCI) Conference was organised by the Asian Development Bank (ADB) at Tbilisi, Georgia where India showcased its PM Gatishakti National Master Plan.

Asian Development Bank

- ADB is a regional development bank established in 1966 with the objective of promoting social and economic development in Asia and the Pacific.

Theme for 2023 Conference:

- Strengthening Regional Cooperation and Integration through Economic Corridor Development (ECD).

Objective:

- Explore ways to integrate spatial transformation/area-centric approach with the ECD and strengthen regional cooperation through a broader approach.
- Knowledge sharing on application of the ECD framework and operational guidelines for investable projects.

Participation:

- The conference saw participation from more than 30 member countries.

India's Role:

- At the RCI Conference, India offered its indigenously developed GIS-based technology through knowledge sharing to ADB and South Asia Subregional Economic Cooperation (SASEC) countries for enhancing socio-economic planning and regional cooperation.

20th ASEAN-India Summit

- Recently, the Prime Minister (PM) of India attended the 20th Association of Southeast Asian Nations(ASEAN)-India Summit and the 18th East Asia Summit (EAS) in Jakarta, Indonesia.
- The two summits were an opportunity for India to strengthen its relationships with ASEAN countries and reaffirm its commitment to a free, open, and rules-based Indo-Pacific.

Key Highlights of the 20th ASEAN-India Summit

- The PM of India presented a 12-point proposal for strengthening India – ASEAN cooperation covering connectivity, digital transformation, trade and economic engagement, addressing contemporary challenges, people-to-people contacts, and deepening strategic engagement.

Indian President to Inaugurate Asia Pacific Human Rights Conference

- The President of India is set to inaugurate the biennial conference of National Human Rights Institutions (NHRIs) of Asia Pacific on 20th September 2023 at Delhi.
- Organized by the National Human Rights Commission (NHRC) in partnership with the Asia Pacific Forum (APF), the event will also feature the 28th Annual General Meeting of APF.
- The conference will mark the 75th anniversary of the Universal Declaration on Human Rights and will also celebrate 30 years of National Human Rights Institutions and the Paris Principles.

The 12-point proposal included the following:

- Establishing multi-modal connectivity and economic corridor that links South-East Asia-India-West Asia-Europe.
- Offered to share India's Digital Public Infrastructure Stack with ASEAN partners.
- Announced an ASEAN-India fund for Digital Future focusing on cooperation in digital transformation and financial connectivity.
- Announced renewal of support to the Economic and Research Institute of ASEAN and East Asia (ERIA) to act as a knowledge partner for enhancing our engagement.
- Called for collectively raising issues being faced by Global South in multilateral fora
- Invited ASEAN countries to join the Global Centre for Traditional Medicine being established by WHO in India.
- Called for working together on Mission LiFE (Lifestyle for the Environment).
- Offered to share India's experience in providing affordable and quality medicines to people through Jan-Aushadhi Kendras.
- Called for a collective fight against terrorism, terror financing, and cyber-disinformation.
- Invited ASEAN countries to join the Coalition for Disaster Resilient Infrastructure. Called for cooperation in disaster management.

- Called for enhanced cooperation on maritime safety, security, and domain awareness.

18th East Asia Summit

Reaffirming Commitment to East Asia Summit:

- The PM of India emphasized the significance of the EAS mechanism and reaffirmed India's support for further strengthening it.
- India's strong support for ASEAN centrality and called for ensuring a free, open and rules-based Indo-Pacific.

Quad's Vision and Global Challenges:

- Insights into the PM's discussion on the Quad's vision and the cooperative approach to address global challenges like terrorism, climate change, and resilient supply chains.

India's Initiatives in Climate Change:

- India's initiatives in climate change, including ISA (International Solar Alliance), CDRI (Coalition for Disaster Resilient Infrastructure), LiFE (Mission LiFE), and OSOWOG (One Sun One World One Grid) was highlighted.

Konark Wheel Shines at G-20 Summit Venue

- The 18th G20 Summit was held in New Delhi, for the first time on 9th -10th September 2023, under the theme 'One Earth,

One Family, One Future'.

- The venue of the summit was the Bharat Mandapam Convention Centre in Pragati Maidan, New Delhi. As part of showcasing India's cultural diversity and heritage, a wall depicting the mural of the historic Konark Wheel of Odisha's Sun Temple is placed as the backdrop for welcoming world leaders at the summit venue.



Key Facts About Konark Sun Temple

- The Konark Sun Temple is a 13th-century CE Sun temple at Konark, on the coastline in Puri district, Odisha, India.
- The temple is attributed to King Narasimhadeva I of the Eastern Ganga dynasty about 1250 CE.
- Dedicated to the Hindu Sun God Surya, the temple complex has the appearance of a 100-foot-high chariot with immense wheels and horses, all carved from stone.
- The temple is also a UNESCO World Heritage Site and a major pilgrimage site for Hindus and is depicted on the reverse side of the Indian currency note of 10 rupees.
- The Sun Temple is the culmination of Kalinga temple architecture.

- The temple was also called the "Black Pagoda" by European sailors as early as 1676 because it looked like a great tiered tower that appeared black. Similarly, the Jagannath Temple in Puri was called the "White Pagoda."

Key Features:

- The temple represents a chariot of the Sun God, with twelve pairs of wheels drawn by seven horses evoking its movement across the heavens.
- The wheels have 24 spokes that symbolize the 24 hours in a day. The wheels also function as sundials, as the shadows cast by the spokes indicate the time of the day.
- The temple comprises several distinct and well-organized spatial units.
- The vimana (principal sanctuary) was surmounted by a high tower with a shikhara (crowning cap) also known as Rekhadeul, which was razed in the 19th century.
- To the east, the jahamogana (audience hall or Mandap) dominates the ruins with its pyramidal mass.
- Farther to the east, the natmandir (dance hall), today unroofed, rises on a high platform.

Strengthening India-Saudi Arabia Strategic Partnership

- Recently, after the launch of

the India-Middle East-Europe Economic Corridor, the Prime Minister (PM) of India welcomed the Crown Prince of Saudi Arabia on a state visit.

- During this significant visit, the two nations discussed various aspects of their strategic partnership and agreed to set up a joint task force to expedite the West Coast refinery project.
- The PM of India highlighted Saudi Arabia's pivotal role as "one of the most important strategic partners of India."
- Both leaders emphasized the importance of their partnership, particularly as two rapidly growing nations contributing to regional stability.
- The PM of India and the Crown Prince of Saudi Arabia co-chaired the inaugural meeting of the India-Saudi Strategic Partnership Council (SPC).
- Discussions covered a wide range of areas, including defence, energy, security, education, technology, transportation, healthcare, tourism, culture, space, and semiconductors.
- This reflects the comprehensive nature of the economic cooperation between India and Saudi Arabia.

West Coast Refinery Project Acceleration:

- This trilateral project, involving ARAMCO (oil company of Saudi Arabia), ADNOC (oil company of

the United Arab Emirates) and Indian Companies, is set to receive a USD 50 billion investment.

- The project is located in Ratnagiri, Maharashtra
- The project encompasses various critical facilities, including marine storage and port infrastructure, crude oil terminals, storage and blending plants, desalination plants, utilities, and more.

Bilateral Agreements and Cooperation:

- Eight agreements were signed during the visit, strengthening cooperation across various sectors.

Assurance of Crude Oil Supply:

- Saudi Arabia affirmed its commitment to being a "reliable partner and exporter of crude oil supplies" to India, ensuring energy security.

Defence and Anti-Terror Cooperation:

- Both nations pledged to enhance cooperation in defence and anti-terrorism efforts.
- A special emphasis was placed on preventing access to "missiles and drones" for terrorist activities.
- Plans were discussed to strengthen the tourism segment of bilateral relations, aligning with Saudi Arabia's ongoing reforms.

Geopolitical Significance:

- The visit holds geopolitical significance as it occurred after Saudi Arabia ended hostilities with Iran through a deal negotiated by China.
- Saudi Arabia's recent membership in the BRICS (Brazil, Russia, India, China, and South Africa) further underscores its global engagement.

South Korea and Quad

- South Korea has expressed its will to join the Quad grouping and now the decision of expansion rests with the latter.
- Currently, Quad is a grouping of India, Australia, the US, and Japan formed on a common ground of democratic values of the countries. It aims to ensure and support a "free, open and prosperous" Indo-Pacific region.
- On the bilateral front, India and South Korea are negotiating expansion of the Comprehensive Economic Partnership Agreement (CEPA) (in place since 2010).



India-Middle East-Europe Corridor

- Recently, the India-Middle

East-Europe Economic Corridor (IMEC) Project was signed at the G20 Summit in New Delhi, which holds significant geopolitical and economic implications for India.

- The project forms part of the Partnership for Global Infrastructure and Investment (PGII). PGII is a values-driven, high-impact, and transparent infrastructure partnership to meet the enormous infrastructure needs of low and middle-income countries.
- The proposed IMEC will consist of Railroad, Ship-to-Rail networks and Road transport routes extending across two corridors, that is,
 - The East Corridor – connecting India to the Arabian Gulf,
 - The Northern Corridor – connecting the Gulf to Europe.
- The IMEC corridor will also include an electricity cable, a hydrogen pipeline and a high-speed data cable.

Signatories:

- India, the US, Saudi Arabia, UAE, the European Union, Italy, France, and Germany.

Ports to be Connected:

- India: Mundra (Gujarat), Kandla (Gujarat), and Jawaharlal Nehru Port Trust (Navi Mumbai).
- Middle East: Fujairah, Jebel Ali, and Abu Dhabi in the UAE as well as Dammam and Ras Al Khair ports in Saudi Arabia.

- Railway line will connect Fujairah port (UAE) to Haifa port (Israel) via: Saudi Arabia (Ghuwaifat and Haradh) and Jordan.
- Israel: Haifa port.
- Europe: Piraeus port in Greece, Messina in South Italy, and Marseille in France.



Objective:

- It aims to create a comprehensive transportation network, comprising rail, road, and sea routes, connecting India, the Middle East, and Europe.
- It aims to enhance transportation efficiency, reduce costs, increase economic unity, generate employment, and lower Greenhouse Gas (GHG) emissions.
- It is expected to transform the integration of Asia, Europe, and the Middle East by facilitating trade and connectivity.

The Khalistan shadow on India-Canada Ties

- Recently, the tensions between India and Canada escalated when the Canadian Prime Minister alleged Indian involvement in the killing of a Khalistani Leader designated as a terrorist by India, in Surrey in June 2023.

- India rejected these allegations and accused Canada of sheltering Khalistani Extremists.

Khalistan Movement

- The Khalistan movement is a fight for a separate, sovereign Sikh state in present day Punjab (both India and Pakistan).
- The demand has resurfaced many times, most prominently during a violent insurgency in the 1970s and 1980s which paralysed Punjab for over a decade.
- The movement was crushed in India following Operation Blue Star (1984) and Operation Black Thunder (1986 and 1988), but it continues to evoke sympathy and support among sections of the Sikh population, especially in the Sikh diaspora in countries such as Canada, the UK, and Australia.

Indian Visa Service Suspended in Canada

- As diplomatic tensions between India and Canada escalate, the Indian government has suspended visa services in Canada, affecting a range of travelers and sparking questions about the future of diplomatic relations.
- Indian-origin Canadians with valid Overseas Citizen of India (OCI) cards or valid long-term Indian visas are not affected by the visa service suspension.

- OCI cardholders have lifetime entry privileges into India, allowing them to live and work in the country indefinitely.
- Canadians who possess valid Indian visas will not be impacted by the suspension. Their visas remain valid until further notice.
- Canada has not yet imposed restrictions on Indian visa applicants but may consider reciprocal measures in response to the current situation.

Asia Pacific Forum on Human Rights

- President of India inaugurated the annual general meeting and Biennial Conference of the Asia Pacific Forum on Human Rights in New Delhi celebrating the landmark 75th anniversary of the Universal Declaration on Human Rights (UDHR).

Human Rights

- Protection of Individual Dignity: Ensures the preservation of the inherent dignity and worth of every human being.
- Social Justice and Equality: Promotes social justice and equality by safeguarding the rights of marginalized and vulnerable populations.
- Rule of Law: Fosters the rule of law by establishing a framework for accountability and justice.

China's Geopolitical Initiatives in Nepal

- Recently, China and Nepal have signed 12 agreements to enhance Bilateral Cooperation in sectors including trade, road connectivity, and information technology.



Agreements Signed between Nepal and China

- The agreements include MoUs for:
 - Cooperation between The National Planning Commission of Nepal and China's National Development and Reform Commission
 - Enhancing digital economy corporation,
 - Cooperation on green and low-carbon development
 - Cooperation in the fields of agriculture, livestock and fisheries,
 - Cooperation in the field of science, technology and innovation; and in the field of Human Resources Development.
 - Mechanism to review the Nepal-China trade and payment agreement.
- They also signed a protocol of phytosanitary requirements

for the export of plant-derived medicinal materials for Chinese medicine from Nepal to China.

- Nepal declined China's invitation to join China's Global Security Initiative (GSI), advocating that joint security is not in the interest of Nepal to maintain a strategic balance between India, China and the US.

ity Initiative (GSI), advocating that joint security is not in the interest of Nepal to maintain a strategic balance between India, China and the US.

- The summit explored the role of digital health technologies, including AI, in traditional medicine.

World EV Day

- World EV Day celebrated on 9th September, is an annual event dedicated to raising global awareness about the numerous benefits of electric vehicles (EVs).
- The Sustainability Media Company GreenTV initiated World Electrical Vehicle Day, and the inaugural World EV Day was observed in the year 2020.

XIV. Miscellaneous

World Organ Donation Day

- World Organ Donation Day is observed on 13th August to spread awareness around the importance of organ donation and bust myths around it.



- India's National Organ Donation Day was celebrated annually on November 27, however, from 2023 the day has been shifted to 3rd August to commemorate the first successful deceased heart transplant in India on 3rd August 1994.
- Organ donation involves the surgical extraction of an organ from a living donor or, in the case of a deceased donor, their next of kin's consent, for the purpose of transplantation into another individual.
- Organs which can be donated include liver, kidney, pancreas,

lung, heart intestine, cornea, bone, tissues and many more.

- Organ donation in India is regulated by Transplantation of Human Organs Act 1994.

WHO's Gujarat Declaration

- The World Health Organization (WHO) has released the outcome document of the first WHO Traditional Medicine Global Summit 2023 in the form of the "Gujarat Declaration".
- India hosted the first WHO Global Traditional Medicine Centre in Gujarat.
- The declaration reaffirmed global commitments towards indigenous knowledge, biodiversity and traditional, complementary and integrative medicine.
- The Gujarat Declaration aims to advance evidence-based traditional medicine interventions for universal health coverage and health-related Sustainable Development Goals (SDGs).
- It calls for standardized documentation and data collection on traditional medicine.



- This day serves as a platform to emphasize the importance of sustainable transportation, reduced emissions, and the pivotal role EVs play in combating climate change and improving air quality. Quad Leaders Invited on India's Republic Day
- India is discussing the possibility of inviting leaders of the Quad grouping to the Republic Day parade on January 26, 2024.
- January 26 is also observed as Australia Day - the anniversary of the arrival of the First Fleet of 11 convict ships from Great Britain, and the raising of the Union Jack at Sydney Cove by

its commander Captain Arthur Phillip, in 1788.

- Quad is the grouping of four democracies – India, Australia, the US, and Japan which aims to ensure and support a “free, open and prosperous” Indo-Pacific region.
- The idea of Quad was first mooted by Japanese Prime Minister Shinzo Abe in 2007. However, it came into being in 2017.

World Duchenne Muscular Dystrophy Day

- World Duchenne Muscular Dystrophy (DMD) Day observed annually on 7th September, aims to raise awareness about DMD and improve the lives of individuals affected by this rare degenerative illness.
- The theme for this year’s World DMD Day is “Duchenne: Breaking Barriers.”
- DMD is a rare genetic condition that weakens muscles progressively and affects approximately one in every five thousand boys.
- The condition results from an X-chromosome mutation and leads to difficulties in walking, followed by the impairment of other motor functions.
- Ultimately, DMD affects vital functions like breathing and heart function since the heart is a muscle too.

- Currently, there is no known cure for DMD. Treatment aims to control symptoms to improve quality of life.
- The Department of Empowerment of Persons with Disabilities (DEPWD) under the Ministry of Social Justice and Empowerment, is actively involved in creating awareness about DMD.

Hindi Diwas

- Hindi Diwas, celebrated annually on 14th September, holds immense historical significance as it commemorates the adoption of Hindi as one of India’s official languages.
- Its roots extend back to the early days of India’s struggle for independence when a group of committed Hindi scholars and activists formed the Hindi SahityaSammelan (Hindi Literary Conference) in 1918 to champion Hindi as a national language.
- The turning point arrived on 14th September, 1949, when the Constituent Assembly of India officially embraced Hindi as the nation’s official language, envisioning it as a unifying element among India’s diverse linguistic and cultural regions.
- Today, Hindi stands as one of the two official languages of the Union government along with English and is one of the

22 scheduled languages of India.



- World Hindi Day is observed on 10 January. It commemorates the anniversary of the first World Hindi Conference held in Nagpur on 10th January, 1975.

Hyderabad Liberation Day

- In 2022, 17th September was declared to be celebrated annually as the Hyderabad Liberation Day. The day signifies the merger of the erstwhile Hyderabad State under Nizam rule with the Indian Union.
- Hyderabad, a significant princely state ruled by the Nizams, acknowledged British sovereignty.
- Like Junagadh and Kashmir, Hyderabad did not join India before or even after gaining independence on August 15, 1947; its Nizam aimed to remain independent and bolster his military.
- However, internal turmoil led to the Indian Army’s entry into Hyderabad on September 13, 1948, under Operation Polo to prevent regional instability and

integrate Hyderabad into India.

- After integration, the Nizam retained his position as head of state, similar to other princely rulers who joined India.
- He withdrew complaints to the UN, despite protests from Pakistan and international criticism, resulting in Hyderabad becoming part of India without further UN involvement.

International Coastal Clean-up (ICC) Day, 2023

- On 16 September 2023, the Indian Coast Guard (ICG) conducted International Coastal Clean-up (ICC) Day, 2023 across all Coastal States and UTs.
- Since 2006, the day has been held worldwide on the 3rd Saturday of September, annually, under the aegis of the UNEP and South Asia Co-operative Environment Programme (SACEP) (in South Asian Region).



- This year, Maharashtra witnessed the highest participation of volunteers followed by Tamil Nadu.
- The ICG was established in

August 1978 by the Coast Guard Act, 1978 as an independent Armed force of India.

- The concept of forming ICG came into being after the 1971 war and the blueprint for a multidimensional Coast Guard was conceived by the visionary Rustamji Committee (1974).
- It is the 4th largest Coast Guard in the world and is headquartered in New Delhi. It functions under the Ministry of Defence.

Patient Safety Rights Charter of WHO

- Ahead of World Patient Safety Day (17th September, 2023), the World Health Organization (WHO) released the first-ever Patient Safety Rights Charter, focusing on safeguarding patients in healthcare contexts.
- WHO advocates transitioning from a blame-oriented approach to a system-based perspective, focusing on understanding the underlying systemic errors in medical care.
- The theme for World Patient Safety Day 2023 is 'Engaging patients for patient safety'.

Patient Safety

- Patient safety encompasses efforts to prevent unintended harm during healthcare provision, a critical aspect of global healthcare.

Patient Safety Rights Charter

- The charter outlines the core rights of all patients in the context of safety of health care and seeks to assist governments and other stakeholders to ensure that the voices of patients are heard and their right to safe health care is protected.
- A 2023 survey of WHO Member States revealed gaps in implementing the Global Patient Safety Action Plan 2021-2030, emphasizing the need for patient representation and addressing income-based disparities in implementation.
- Interim results of the survey showed only 13% of responding countries have a patient representative on the governing board or an equivalent mechanism in the majority of their hospitals.

Paryushan Parv, A Jain Festival

- Paryushan 2023, a significant festival for the Jain community. It is a time for spiritual growth, with fasting, meditation, and purification rituals. Devotees attend speeches, practice non-violence, and seek forgiveness for their sins.
- The festival is believed to have originated in the 6th century BC when the Jain teacher Mahavira taught his followers to abstain

from violence and to focus on spiritual purity.



- For both Shvetambara, who observe the ritual over eight days, and Digambara, for whom the festival lasts 10 days, this is a time for introspection, reflection and purification. It takes place in the middle of the rainy season.
- They also do svadhyaya, self-study. Paryushan makes one stay close to one's soul, reflect on one's shortcomings, seek punishment for wrong-doings and vow to minimize one's mistakes.

International Day of Sign Languages 2023

- On the occasion of International Day of Sign Languages (23rd September), the Government of India has introduced several initiatives to improve communication and accessibility for the hearing-impaired.
- Initiatives for the hearing-impaired include online Indian Sign Language (ISL) courses, introduction of 267 signs for financial terms in ISL, a compre-

hensive ISL dictionary, tailored courses for special schools, and a WhatsApp-based video relay service for improved communication.

- International Day of Sign Languages is an annual event that promotes the linguistic and cultural diversity of deaf communities around the world.
- In 2017, the United Nations General Assembly proclaimed 23rd September as the official day to celebrate the International Day of Sign Languages.
- Theme of 2023: A World Where Deaf People Can Sign Anywhere.



World Coffee Conference 2023

- The World Coffee Conference (WCC) & Expo 2023 arrived for the first time in Asia in the Indian city of Bengaluru.



- The 5th edition of the WCC was organized by the International Coffee Organization (ICO) in collaboration with the Coffee Board of India, the Ministry of Commerce and Industry, the Government of India, and the Government of Karnataka.

Highlights of the World Coffee Conference 2023

- The WCC is a biennial event organized by the ICO, a United Nation-affiliated body that represents the global coffee sector.
- The WCC unites coffee stakeholders worldwide for dialogue, knowledge exchange, networking, and collaboration on industry challenges and opportunities.

Theme for 2023:

- Sustainability through Circular Economy and Regenerative Agriculture.

Biodiversity Ambassadors of the WCC 2023:

- From the coffee farms of India, 5 flora and 5 fauna ambassadors for the conference and expo.

The Mascot for WCC 2023:

- Coffee Swami, the official mascot of the 5th WCC, seamlessly connects Indian tradition with contemporary appeal.

முதன்மைத் தேர்வுக்கான உத்தி

1. முதன்மைத் தேர்வுக்குப் படிப்பதற்கு முறையானத் திட்டத்தை வகுத்து அதை முழுமையாகப் பின்பற்ற வேண்டும்.
2. நாட்டு நடப்புகள் குறித்த விவரங்களை தினமும் தயார் செய்ய வேண்டும். புதிய தகவல்களைத் தொடர்ந்து தெரிந்து கொள்ள வேண்டும்.
3. தேர்வுக்குத் தயாராவதில் உறுதியாக இருக்க வேண்டும்.
4. ஒவ்வொரு பாடத்திற்கும் ஒதுக்கப்பட்டுள்ள மதிப்பெண்களைக் கருத்தில் கொண்டு அனைத்துப் பாடங்களுக்கும் தயாராவதற்கு போதிய நேரத்தை ஒதுக்க வேண்டும்.
5. தேர்வுக்குத் தயாராவது அலுப்பூட்டும் வகையில் இல்லாமல் இருப்பதை உறுதி செய்யும் வகையில் கால அட்டவணை தயாரிக்கப்பட வேண்டும்.
6. திருப்புதலின் போது நேரத்தை மிச்சப்படுத்துவதற்காக, முதல் முறை அல்லது இரண்டாவது முறை பயிலும் போது முக்கிய அம்சங்களை அடிக்கோடிட்டு வைத்திருக்க வேண்டும் / முன்னிலைப்படுத்த வேண்டும். நாம் முதன்முறை படிப்பதன் நோக்கம் தேவையற்ற விசயங்களை விலக்கி, நாம் படிக்க வேண்டிய பாடங்களின் அளவைப் பாதியாகக் குறைப்பதுதான். இரண்டாவது முறை பயிலும் போது, நாம் படிக்க வேண்டிய பகுதிகளை, தேர்வுக்கு முன் உள்ள இரண்டு நாட்களில் திருப்புதல் செய்யும் வகையில், மேலும் குறைக்க வேண்டும்.
7. முந்தைய ஆண்டு வினாத்தாள்களின் அடிப்படையில் விடைகளை எழுதிப் பயிற்சி செய்ய வேண்டும்.
8. தேர்வை எதிர்கொள்வதற்கு ஒரு விண்ணப்பதாரர் எந்த அளவுக்குத் தயாராகியிருக்கிறார் என்பதைப் புரிந்துகொள்வதற்காக அடிக்கடி மாதிரித் தேர்வுகளை எதிர்கொள்ள வேண்டும்.
9. பயிற்சியே ஒருவனை முழுமையாக்குகிறது என்பதே முதன்மைத் தேர்வுக்கான மந்திரமாக இருக்க வேண்டும்.
10. எந்தவொரு பாடத்திற்குமான பயிற்சியில் சேரும் தேர்வர்கள், அதற்கான மாதிரித் தேர்வுகளில் முழு ஈடுபாட்டுடன் பங்கேற்க வேண்டும். முதன்மைத் தேர்வுக்கும், முதல்நிலைத் தேர்வுகளுக்கும் இடையிலான முக்கியமான வேறுபாடு என்னவென்றால், முதல்நிலை தேர்வுக்கான மாதிரித் தேர்வுகளை மூன்றாவது நபரின் துணை இல்லாமல் ஆன்லைனிலோ, ஆஃப்லைனிலோ தனித்தே எழுதலாம். ஆனால் முதன்மைத் தேர்வைப் பொறுத்தவரை மூன்றாவது நபரைக் கொண்டு மதிப்பீடு செய்வது மிகவும் அவசியமாகும். மதிப்பீடு செய்யும் மூன்றாவது நபர் ஒரு வல்லுநராகவோ, அல்லது சிறந்த ஒரு பயிற்சி நிறுவனமாகவோ இருக்கலாம்.
11. முதன்மைத் தேர்வு என்பது தேர்வர் அறிந்துள்ள தகவல்களையும் அவரது நினைவுத் திறனையும் மட்டுமே சோதிப்பதாக இல்லாமல், அவர்களின் புரிதலின் ஆழம், அறிவுசார் திறன்கள் ஆகியவற்றை மதிப்பிடுவதை நோக்கமாகக் கொண்டது ஆகும். பொதுபாடத் தாள்களில் அனைத்து வினாக்களுக்கும் விடை அளிக்க வேண்டும். வினாக்களின் தன்மை ஒவ்வொரு தாளுக்கும் மாறுபடும். ஆனால், அதிக வினாக்கள் இருக்கும் என்பதால் தேர்வர் விடைகளை வேகமாக எழுத வேண்டும். விடையளிக்க வேண்டிய வார்த்தைகளின் வரம்பும் அதிகமாக இருக்கக் கூடும்.
12. முதன்மைத் தேர்வைப் பொறுத்தவரை, வார்த்தைகளின் எண்ணிக்கையை கவனத்தில் கொள்ளப்பட வேண்டிய மிக முக்கியமான அம்சமாகும்.
13. முதன்மைத் தேர்வுகளை எழுதுவதற்கான அணுகுமுறையில் தேர்வர்கள் மிகவும் தெளிவாக இருக்க வேண்டும். தேர்வு அறையில், வினாத்தாளைப் பெற்ற பிறகு, விடைகளை வேகமாக எழுத வேண்டி இருக்கும் என்பதால், சிந்திப்பதற்கு நேரம் இருக்காது. எனவே, வினாக்களை புத்திசாலித்தனமாகத் தேர்வு செய்து விடை அளிக்க வேண்டும்.
14. வினாக்களில் தரப்பட்டுள்ள கருத்துரை கொடு, கருத்து தெரிவி, விரிவாகச் சொல், காட்சிப்படுத்து, தெளிவுப்படுத்து போன்ற வார்த்தைகளின் பொருளைப் புரிந்துகொண்டு, அதற்கேற்ற வகையில் உங்கள் எழுத்துத் திறனை வெளிப்படுத்த வேண்டும்.



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