

THINK IAS

JOIN SAMYAK

Samyak
An Institute For Civil Services

DAILY

CURRENT **गामा**

For UPSC CSE

1-2 September 2024

 **9875170111**

 **SAMYAK IAS, NEAR RIDDHI-SIDDHI, JAIPUR**

Art and Culture

1. ASI copying old stone inscriptions on temple walls in Tiruchi district - The Hindu
2. International Buddhist Confederation to organize a Two-day Conference at Nalanda, Bihar on the Life and Legacy of Guru Padmasambhava - PIB

Society

3. Are lie-detector tests legally valid? - The Hindu
4. Why did the Centre alter its pension plan? - The Hindu

Polity

5. RULE 170 OF DRUGS ACT, OVER WHICH AYUSH MINISTRY WAS PULLED UP - Indian Express

World Affairs

6. How will morality law hit Afghan women? - The Hindu

Economy

7. Centre plans to boost '2G ethanol' production, set up enzyme-manufacturing facilities to reduce imports - The Hindu
8. CBDT rolls out Dispute Resolution Scheme (e-DRS), 2022, to minimise litigation - PIB
9. WGC raises India's gold consumption projection to 850 tonnes in 2024 - Indian Express
10. Trade ministry proposes anti-dumping duty on Chinese aluminium foil imports - The Hindu
11. Mastercard chooses India for world debut of Payment Passkey Service - The Hindu

Environment

12. Guppy fish - Indian Express
13. Why Namibia plans to kill hundreds of its majestic wild animals for meat - Indian Express
14. Poba Reserve Forest - Indian Express
15. International Whale Shark Day - The Hindu
16. Odisha plans to bring 12 tigers to Satkosia with National Tiger Conservation Authority approval - Indian Express

Sci and Tech

17. Will an extended space stay affect astronauts? - The Hindu
18. IACS scientists discover a new target for cancer treatment - The Hindu
19. C. elegans (Caenorhabditis elegans) worms - The Hindu
20. Novel nano polymers pave way for low-cost, efficient sensors - PIB
21. Centre to establish foot-and-mouth disease-free zones in eight States - The Hindu
22. Five hospitalised after inhaling some chemical compound in Andhra Pradesh's Vizag - The Hindu

Defence

23. INDIAN ARMY LAUNCHES PROJECT NAMAN - PIB

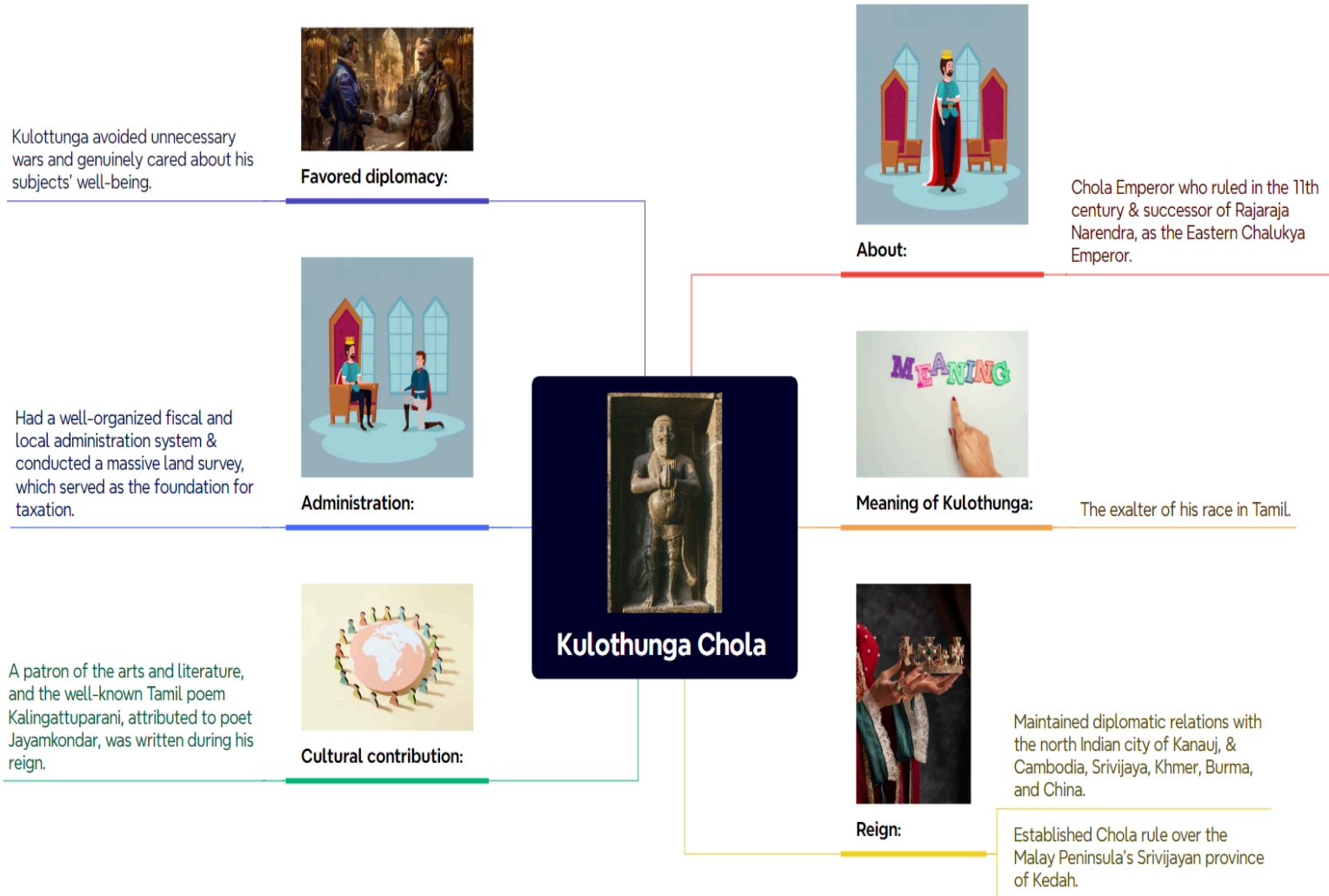
Art and Culture

1. ASI copying old stone inscriptions on temple walls in Tiruchi district - The Hindu

Context

The Archaeological Survey of India (ASI) has been involved in copying important stone inscriptions on the walls of two temples at Srirangam and Manachanallur taluks in Tiruchi district. It has also recently completed a similar exercise at two temples at Periyakulam taluk in Theni district. The preliminary reading of the inscription at Thiruvasi temple revealed that it belonged to Kulothunga Chola period.

Kulothunga Chola



Archaeological Survey of India (ASI)



Union Ministry of Culture.

Nodal Ministry:



About:

The premier organization for the archaeological researches and protection of the cultural heritage of the country.



Regulates all archaeological activities as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958.

Function:

Regulates Antiquities and Art Treasure Act, 1972.



Archaeological Survey of India (ASI)



Aim:

To maintain the archaeological sites, ancient monuments, and remains of national importance.



1861 by Alexander Cunningham.

Establishment:



Headquarters:

New Delhi

2. International Buddhist Confederation to organize a Two-day Conference at Nalanda, Bihar on the Life and Legacy of Guru Padmasambhava - PIB

Context

International Buddhist Confederation, in collaboration with the Nava Nalanda Mahavihara organised a two-day International Conference on the Life and Living Legacy of Guru Padmasambhava Conference recently

International Buddhist Confederation

- **About:** A Buddhist umbrella body with its headquarters in New Delhi that is a common platform for Buddhists worldwide.
- **Members:** Comprises more than 320 organisations, both monastic and lay, in 39 countries.

Guru Padmasambhava/ Guru Rinpoche

- **About:** He lived in the 8th century in ancient India and is one of the most-revered figures in Buddha Dhamma.
- **Role:**

- Considered one of the founding fathers of Tibetan Buddhism, who appeared in Tibet in 749 A.D.
- Spread the message of Lord Buddha to the countries and regions located in India, Nepal, Pakistan, Bhutan, Bangladesh and Tibet.
- A Tantrist and a member of the Yogācāra sect
- Taught at Nalanda, a centre of Buddhist studies in India.
- Consolidated Yogic and Tantric practices to meditation, art, music, dance, magic, folklore and religious teachings.



Society

3. Are lie-detector tests legally valid? - The Hindu

Context

The Central Bureau of Investigation (CBI) recently conducted a second round of polygraph tests on seven people, in connection with the rape and murder of a resident doctor at the R.G. Kar Medical College and Hospital in Kolkata.

Polygraph test

Do polygraphs detect lies?

Polygraph or "lie detector" exams continue to be used by law enforcement and government agencies for various screenings even though most criminal courts ban polygraph evidence.

How reliable?

Supporters claim an 85-95 percent accuracy rate

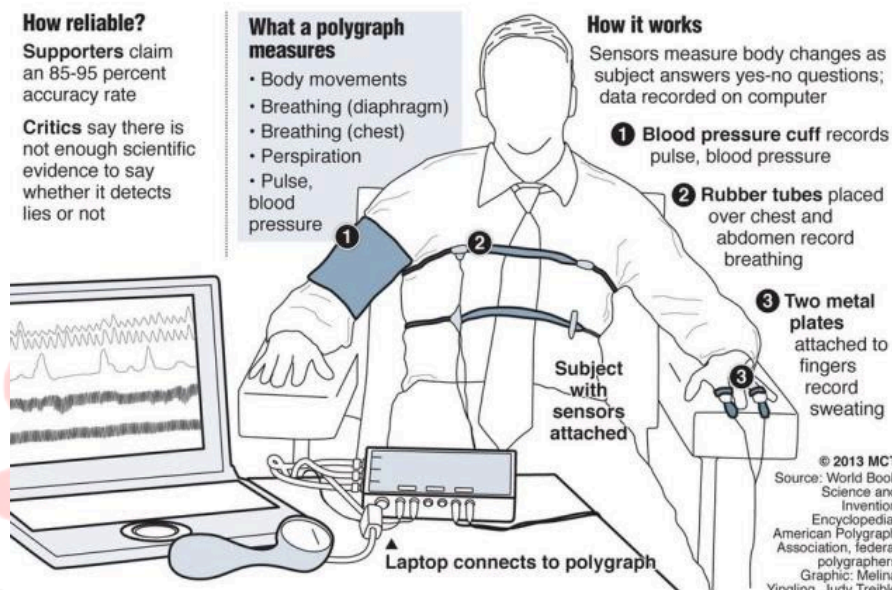
Critics say there is not enough scientific evidence to say whether it detects lies or not

What a polygraph measures

- Body movements
- Breathing (diaphragm)
- Breathing (chest)
- Perspiration
- Pulse, blood pressure

How it works

Sensors measure body changes as subject answers yes-no questions; data recorded on computer



- **Principle:** It operates on the premise that physiological responses triggered when a person is lying differ from their responses when they are being truthful.
- **Mechanism:** Instruments like cardio-cuffs or sensitive electrodes are attached to the suspect to measure variables such as BP, pulse rate, respiration, sweat gland activity, and blood flow as questions are asked.
- **Outcome based on response:** Each response is given a numerical value to determine whether the individual is telling the truth, being deceptive, or uncertain.

Guidelines for Polygraph Test

- **In Selvi & Ors vs State of Karnataka & Anr (2010), SC held that:**
 - polygraph tests can only be administered with the accused's consent.
 - the accused must have access to legal counsel and a thorough explanation of the test's physical, emotional, and legal implications.
 - National Human Rights Commission's Guidelines for polygraph tests, issued in 2000, must be followed.
 - The accused's consent should be documented before a Judicial Magistrate.




- Any evidence or information obtained through a voluntarily consented polygraph test can be admitted in court.

4. Why did the Centre alter its pension plan? - The Hindu

Recently, the Union Cabinet signed off on a major shift in the approach for providing old age income security to Central government employees, setting the stage for a new Unified Pension Scheme (UPS) to be launched on April 1, 2025. About 23 lakh Central government employees are expected to benefit from the new scheme.

TO ENTAIL TOTAL SPEND OF ₹7,050CR

<ul style="list-style-type: none"> > Under UPS, 50% of average basic pay drawn over last 12 months guaranteed for those completing 25 yrs of service > On death of employee, family pension of 60% (of employee's pension) to be paid to spouse > Min pension of ₹10,000 a month for 10 years of service > Lump-sum payment for every year of service. > Periodic inflation adjustment 	<ul style="list-style-type: none"> > Rollout from Apr 1, 2025, but will extend to past retirees > Will result in addl outgo of ₹6,250cr. Another ₹800cr to be spent in clearing arrears > Employees to get one-time option to switch from National Pension Scheme (NPS) to UPS > In NPS, pension based on returns from contribution invested in debt & equity. Not a guaranteed amount
--	--

OPS	UPS	NPS
<p>"Guaranteed 50% of Last Drawn Salary" and "Dearness Allowance Adjustments."</p> <ul style="list-style-type: none"> ● Gratuity ● No Contribution ● Fixed Pension 	<p>"50% of Average Basic Pay + Inflation Indexation" and "Guaranteed Pension, Family Benefits."</p> <ul style="list-style-type: none"> ● Assured Family Pension ● Inflation Protection ● Minimum Pension 	<p>"Market-Linked Returns" and "No Guaranteed Pension."</p> <ul style="list-style-type: none"> ● Tax Benefits ● Employee Contribution ● Flexible Withdrawals 

Polity

5. RULE 170 OF DRUGS ACT, OVER WHICH AYUSH MINISTRY WAS PULLED UP - Indian Express

Context

Justices Hima Kohli and Sandeep Mehta, while hearing the ongoing Supreme Court case against Patanjali Ayurved, pulled up the AYUSH ministry for its July 1 notification asking state licensing authorities “not to initiate/take any action under” Rule 170 of the Drugs and Cosmetics Act.

Licensing issues: Trials for approval are not necessary for AYUSH drugs & they can be approved simply based on the rationale provided in authoritative texts of that particular stream.

Safety trials: Conducted only for formulations that use around 60 specific ingredients listed in the act, such as snake venom, snake head, heavy metals such as arsenic, mercury, copper sulphate etc. Proof of effectiveness has to be provided as per the Act.

Challenges to regulate AYUSH drugs

DRUGS ACT

Rule 170

Conditions for rejection of application:

- ← If the manufacturer does not provide their contact details
- ← If the contents of the advertisement are obscene or vulgar,
- ← For products for enhancement of male or female sexual organs,
- ← If it depicts photographs or testimonials from celebrities or government officials, refers to any government organisation,
- ← If it gives false impression or makes misleading or exaggerated claims.

About:

Brought in 2018, to govern the manufacture, storage, and sale of medicines in the country, specifically for controlling inappropriate advertisements of Ayurvedic, Siddha and Unani medicines.

Provisions:

Prohibits AYUSH drug manufacturers from advertising their products without approval and allotment of a unique identification number from the state licensing authority.

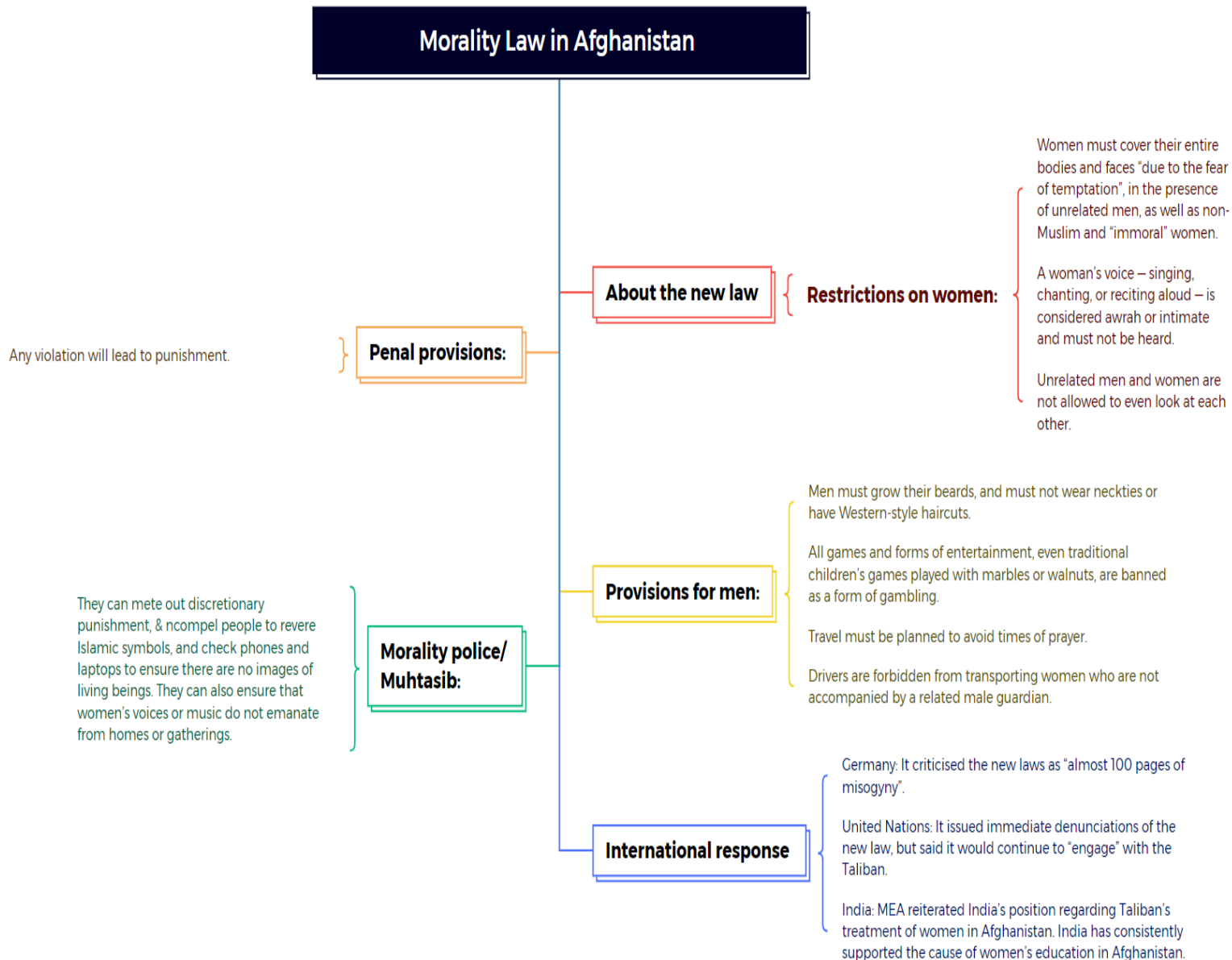
The manufacturers have to submit details such as textual references and rationale for the medicine from authoritative books, indication for use, evidence of safety, effectiveness, and quality of drugs.

World Affairs

6. How will morality law hit Afghan women? - The Hindu

Context

The Taliban recently announced a new law on the “Propagation of Virtue and Prevention of Vice”.



Economy

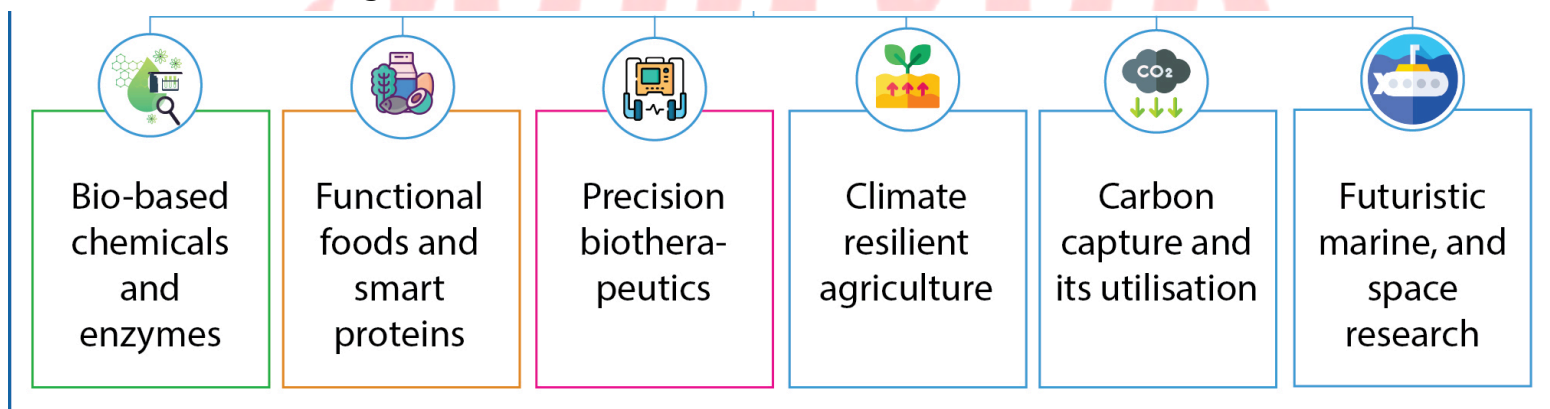
7. Centre plans to boost '2G ethanol' production, set up enzyme-manufacturing facilities to reduce imports - The Hindu

Context

Days after the Centre unveiled its BioE3 policy to boost bio-technology-centric manufacturing in India, the Department of Biotechnology – as part of first steps – is contemplating setting up enzyme-manufacturing facilities to bolster ethanol production., according to scientists and officials with the Department of Biotechnology. The first such plant may come up in Manesar, Haryana.

BioE3 (Biotechnology for Economy, Environment and Employment) Policy

- **Nodal department:** Department of Biotechnology
- **Aim:**
 - To foster high-performance biomanufacturing.
 - To include innovation-driven support for research and development and entrepreneurship across thematic sectors.
 - Technology development and commercialization by establishing biomanufacturing and bio-AI hubs and biofoundry.
 - To facilitate the expansion of India's skilled workforce and provide a surge in job creation.
- **Strategic/thematic sectors:**



8. CBDT rolls out Dispute Resolution Scheme (e-DRS), 2022, to minimise litigation - PIB

Context

In pursuance of section 245MA in the Income-tax Act, 1961 (hereinafter referred to as "the Act"), the Central Board of Direct Taxes (CBDT) had notified the e-Dispute Resolution Scheme, 2022 (e-DRS).

Dispute Resolution Scheme

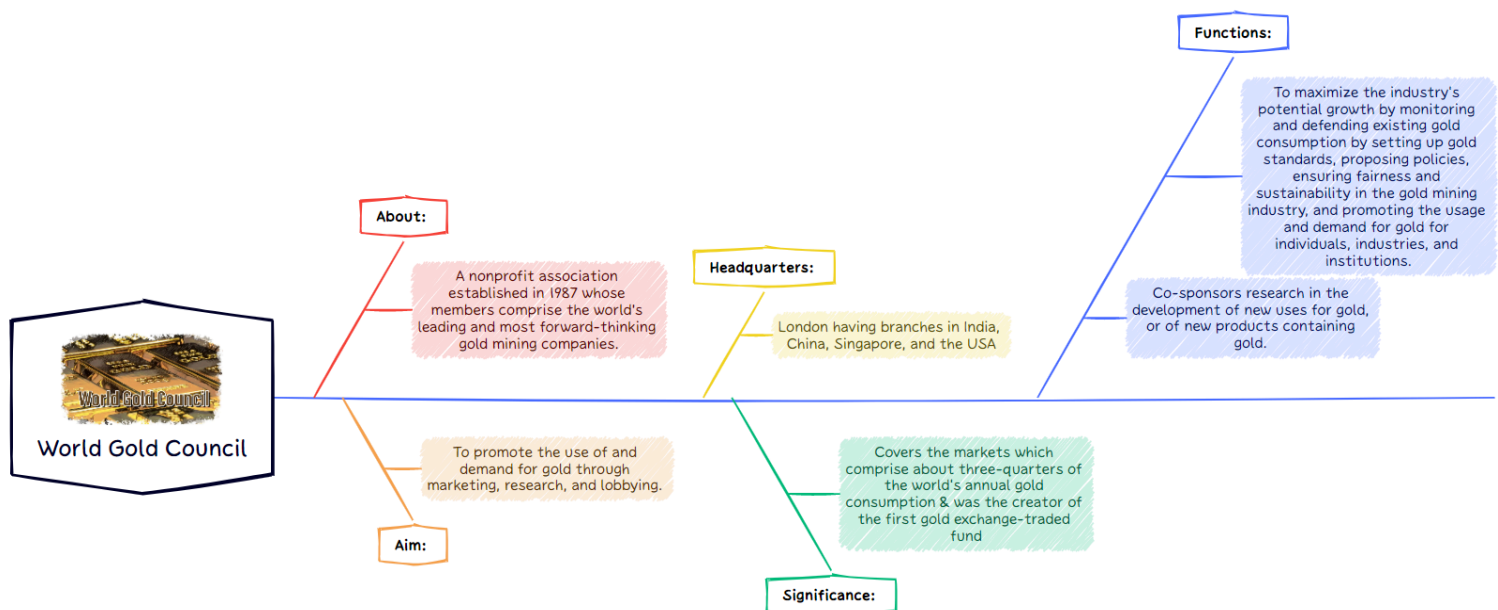
- **Aim:** To reduce litigation and provide a faster and more cost-effective resolution for taxpayers.

- **Establishment:** Established under section 245MA of the Income-tax Act, 1961.
- **Provision:** It will allow taxpayers to resolve disputes electronically through Dispute Resolution Committees (DRCs).
- **Eligibility:** Taxpayers who meet certain conditions specified in section 245MA can apply for dispute resolution which includes cases where the disputed amount does not exceed 10 lakh and the taxpayer's income is below Rs. 50 lakh.
- **Elimination:** The dispute must not involve information from searches or international agreements.
- **DRC:** Established in all 18 regions across the country, they can modify orders, reduce penalties, or waive prosecution & are required to decide within six months of receiving the application.

9. WGC raises India's gold consumption projection to 850 tonnes in 2024 - Indian Express

Context

The World Gold Council (WGC) has raised its projection for India's gold consumption in 2024 to 850 tonnes from 750 tonnes. A good monsoon coupled with a duty cut on gold will drive the demand, said John Reade, market strategist-Europe and Asia, World Gold Council.



10. Trade ministry proposes anti-dumping duty on Chinese aluminium foil imports - The Hindu

Context

The Ministry of Commerce and Industry has recommended imposing an anti-dumping duty on aluminium foil imported from China after surging

shipments from the neighbouring country captured nearly a third of India's market share despite ample local production capacity.

Anti-Dumping Duty

ANTI-DUMPING DUTY



EXAMPLE



- **About:** A protectionist tariff imposed by a domestic government on foreign imports that it believes are priced below fair market value.
- **Dumping:** A process in which a company exports a product at a price that is significantly lower than the price it normally charges in its home (or its domestic) market.
- **Significance:**
 - Imposed to protect local businesses and markets from unfair competition by foreign imports.
 - To rectify the trade distortive effect of dumping and re-establish fair trade.
 - An instrument of fair competition is permitted by the World Trade Organization (WTO).
- **Negative impact:** Can also lead to higher prices for domestic consumers.

11. Mastercard chooses India for world debut of Payment Passkey Service - The Hindu

Context

Mastercard, a global technology in the payments industry, on Thursday announced the worldwide launch of its new Payment Passkey Service to make online shopping more secure and easier than ever.

Payment Passkey Service

- **About:** It uses device-based biometric authentication methods such as fingerprints or facial scans & provides customers with a non-OTP-based solution for transaction management.
- **Working:** When users first sign into an account, their device creates a pair of keys:
 - Public key: Shared with the website to validate the passkey
 - Private Key: On the device to unlock the passkey to access your account.
- **Advantages:**
 - Makes transactions faster, more secure against fraud and scams by replacing traditional passwords and OTPs.
 - Offer a secure & easier way for cardholders to authenticate themselves during e-commerce transactions.

Environment

12. International Whale Shark Day - The Hindu

Whale shark:

Whale Shark

www.enotefours.com
Created by Isa Dominguez
©www.Design4Diving.com

Scientific name:
Rhincodon typus

Lifespan:
70 - 100 years

21 TN = 4 African Elephants

18.8 m

Whale or Shark?

5 Gills IN FRONT OF the pectoral fins

Same amount and position of fins

The Skin

Thick (10cm).
Each shark is covered with it's own unique pattern of yellow/white dots and stripes.

It's a SHARK (so it is a FISH), but the biggest one, that's why it is called Whale Shark.

Mouth width: 1.5m

With 300 to 350 rows of tiny teeth.

20 filter pads to filter food from the water.

Caudal Fin: 2.5m

But it is a slow swimmer!
Migrating around the planet at just 5kmp/h.

Reproduction

SEXUAL MATURITY
when they reach 9 m long.

25 Years-old approx

OVOVIVIPAROUS
Baby Whale Sharks: 40-60cm.
A single female can grow up to 300 embryos inside before hatching their young live.

MENU

Plankton

- COPEPODS
- KRILL
- FISH EGGS
- RED CRAB EGGS

Nekton

- SMALL FISH
- SQUID

FEEDING

Active Feeders

TARGET THE FOOD

How do they feed?

RAM FILTER FEED GULP IN STATIONARY POSITION

Habitat

PELAGIC

Often seen offshore.
Dive to 2000m.
Thought to be highly migratory.

Distribution

Found in all tropical and warm waters (21°-30°C) except the Mediterranean.

PROTECTING THE WHALE SHARKS

Hazards

WHALE SHARKS ARE HIGHLY VALUED IN ASIAN MARKETS AS:

MEAT - KNOWN AS "TOFU SHARK"

FINS USED FOR FIN SOUP

FINS AS PRIZE DISPLAYS

In, 2016, whale sharks were classified on the IUCN Red List as: **ENDANGERED**

Solutions

- ENHANCE ECO-TOURISM Eco-Tourism protects the species & helps local economies.
- BAN SHARK FINNING
- CREATE SHARK SANCTUARIES

13. Guppy fish - Indian Express

Context

A recent study has revealed that long-term exposure to fluoxetine (Prozac), a common antidepressant medication, can significantly disrupt the behaviour and reproductive traits of the male guppy fish.

Guppy Fish

- **About:** Small tropical freshwater species of fish popular for home aquariums.
- **Reproduction:** Sexually dimorphic, meaning there are distinct differences between males and females of the species.
- **Appearance:** Brightly colored in shades of black, green, orange, red, white, and yellow and have patterns like speckles, spots, and stripes.
- **Distribution:** Native to certain countries and islands in South America: Antigua and Barbuda, Barbados, Brazil, Guyana, Suriname, Trinidad and Tobago, and Venezuela.



14. Why Namibia plans to kill hundreds of its majestic wild animals for meat - Indian Express

Context

Namibia plans to cull hundreds of its most majestic wild animals, including dozens of elephants and hippopotamuses, to provide meat for its 1.4 million people — nearly half the southern African nation's population — who are reeling under the worst drought in a century.

Drought in Namibia

- **Location of Namibia:** It is located in drought-prone southern Africa, and frequently witnesses such events.
- **Beginning:** The drought began in Botswana in October 2023, spread and intensified across Angola, Zambia, Zimbabwe, and Namibia.
- **Factors responsible:** El Niño, a weather pattern associated with extreme heat and dry spells in many parts of the world and the ocean. Severe soil moisture deficits and vegetation stress followed, resulting in drought.
- **Impact of climate change:** Rising temperatures due to climate change, extreme weather events such as droughts and floods have become more frequent and intense.

Impact of drought

- **Low food availability:** Staple crops such as maize have dried up, large numbers of livestock have died, and almost 84% of the country's food reserves are exhausted.

- **Inflation:** As stocks have diminished, prices have skyrocketed, curtailing access to food for a large number of people.
- **Severe acute malnutrition among children under five:** Deaths have been reported in some areas.
- **Increased vulnerability of women due to the drought:** As women and girls are required to walk longer distances to collect food and water, their risk of being subjected to gender-based violence also increases.

Impact of culling of wild animals

- **Drought to force the animals to migrate in search of food and water:** It could bring them into conflict with human populations.
- **Could reduce the effect of the drought on wildlife:** It would help in managing the current grazing pressure and water availability.

15. Poba Reserve Forest - Indian Express

Context

The Poba Reserve Forest in Assam's Dhemaji district will soon be notified as a wildlife sanctuary, a major boost to conservation efforts in the state.

Poba Reserve Forest

- **About:** A rainforest located in the northeastern part of Assam created in 1924.
- **Area:** ~ 10,221 hectares.
- **Boundaries:**
 - **North:** Foothills of the Himalayan range in Arunachal Pradesh;
 - **East and south:** Siang, Dibang, and Lohit River systems confluencing into the mighty Brahmaputra and the Dibru-Saikhowa National Park;
 - **West:** Revenue villages of the Jonai Sub-division of the Dhemaji district of Assam.
- **Tribes:** Mising, Bodo, Sonowal Kachari, and Hajong (Rabha).
- **Significance:**
 - One of the richest rain forests of North-East India in terms of the flora and fauna.
 - Home to various arboreal species, including the slow loris, capped langur & wild boar.
 - Habitat for about 45 species of birds and reptiles



- Place of confluence of the Siang and Lohit rivers supports a diverse range of fish species.
- Second significant elephant migration route from the north to the south bank of the Brahmaputra River, the other being the Panpur-Kaziranga route.

16. Odisha plans to bring 12 tigers to Satkosia with National Tiger Conservation Authority approval - Indian Express

Context

Four-and-half years after suspending the country's first big cat relocation project in Satkosia Tiger Reserve, the National Tiger Conservation Authority (NTCA) has finally given a green signal to the state government to resume the programme.

Satkosia Tiger Reserve

- **Location:** Odisha spreading over Angul, Cuttack, Boudh, and Nayagarh districts.
- **2 adjoining sanctuaries:** Baisipalli Sanctuary and Satkosia Gorge Sanctuary.
- **Area:** 1136.70 sq.km (523.61 sq.km. as a core area). T
- **Meeting point of 2 biogeographic regions:** Deccan Peninsula and the Eastern Ghats.
- **Topography:** Hilly, with moderate to steep slopes and narrow valleys.
- **River:** Mahanadi flows through the valleys in the middle of the reserve.
- **Average elevation:** 37 m - 932 m, with the lowest point being at Katrang and the highest point being at Sunakhania.
- **Vegetation:** North Indian tropical moist deciduous forests and Moist peninsular low-level sal.
- **Flora:** Asan (*Terminalia alata*), Dhaura (*Anogeissus latifolia*), Bamboo (*Dendrocalamus strictus*), and Simal (*Bombax ceiba*).
- **Fauna:** Tiger, leopard, elephant, spotted deer, sambar, chowsingha, barking deer, bison, wild dog, sloth bear, jackal, giant squirrel, porcupine, freshwater crocodile and the gharial.

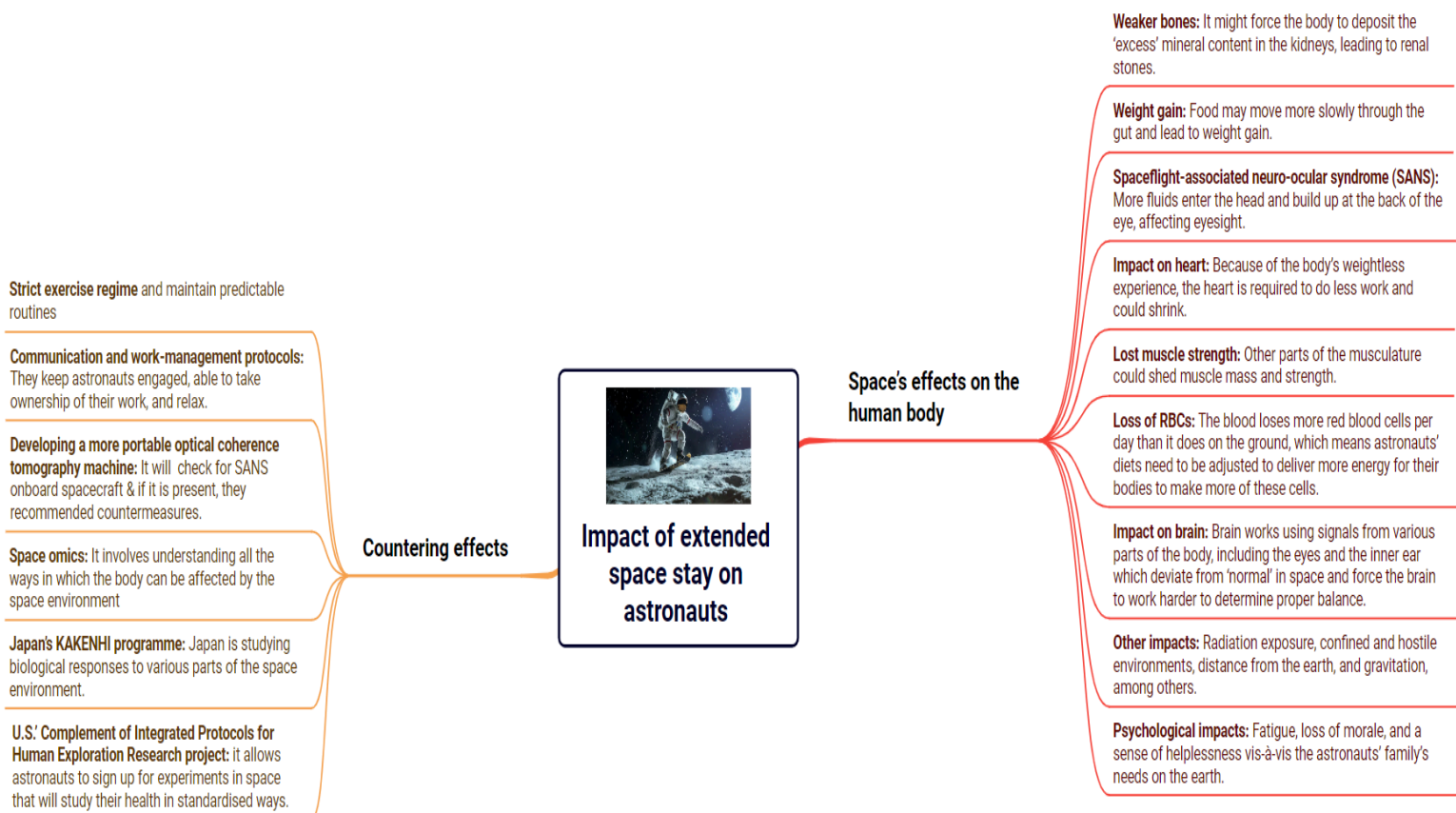


Sci and Tech

17. Will an extended space stay affect astronauts? - The Hindu

Context

Recently, NASA said Boeing's Starliner crew capsule that took astronauts Sunita Williams and Barry Wilmore to the ISS, as part of its first crewed test flight, wasn't safe enough to transport them back. Instead, NASA extended Williams's and Wilmore's stay onboard the ISS until February 2025.



18. IACS scientists discover a new target for cancer treatment - The Hindu

Context

Using human breast cancer cells, a team of scientists at the Kolkata-based Indian Association for the Cultivation of Science (IACS) has discovered a new target for killing cancer cells, which can potentially lead to new therapies. This target is used by cancer cells to regulate DNA repair during cell division. Results of the study were published recently in The EMBO Journal.

The first step towards targeted chemotherapy

IACS researchers have discovered a new target for killing cancer cells

■ The new target that has been discovered is used by cancer cells to regulate DNA repair during cell division

■ Cancer cells can develop resistance to treatment by using intrinsic DNA repair mechanism

■ A combinatorial targeting of two key molecules — the CDK1 protein and the TDP1 enzyme — may lead to novel anti-cancer therapeutics

■ Currently, anti-cancer drugs target a molecule (Top1) involved in DNA replication and transcription

■ While drugs that target Top1 can disrupt its activity leading to the death of cancer cells, cancer cells can activate their repair mechanisms to counteract the drug effects

■ Targeting another protein (CDK1) that disrupts the Top1-mediated repair process can potentially kill the cancer cells

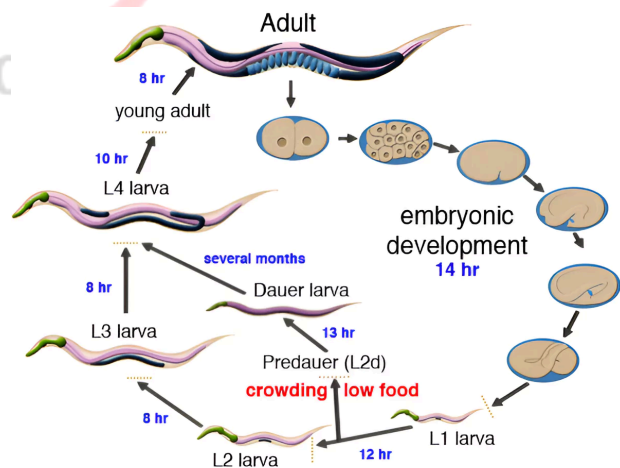


IACS researchers are currently using mouse models to test the combination drug therapies using in vivo tumours

■ Combining CDK1 inhibitors with Top1 inhibitors can prove lethal for cancer cells

19.C. elegans (Caenorhabditis elegans) worms - The Hindu

- **About:** A nematode worm which is a small, relatively simple, and precisely structured organism.
- **Gestation:** Grows within 3-5 days from a fertilised egg to a millimetre-long adult.
- **Significance:** Used in research to understand neuronal and molecular biology & the first multicellular organism to have its full genome sequenced and neural wiring mapped.
- **Characteristics:** A hermaphrodite (two sexes).



20. Novel nano polymers pave way for low-cost, efficient sensors - PIB

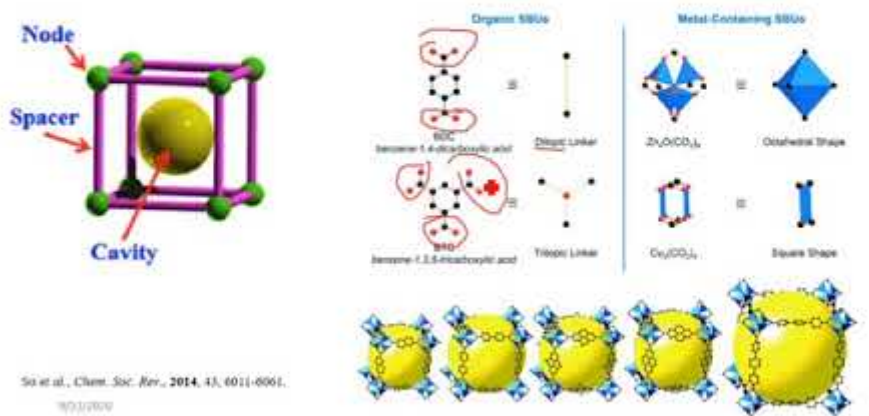
Context

Novel electrochemical and optical sensors developed with the help of a new group of nano polymer materials called Metal-organic frameworks (MOF) and

2-dimensional (2D) materials, can be used for rapid and convenient detection of several health, food quality, and environmental parameters.

Metal-organic framework

Metal Organic Frameworks (MOFs)



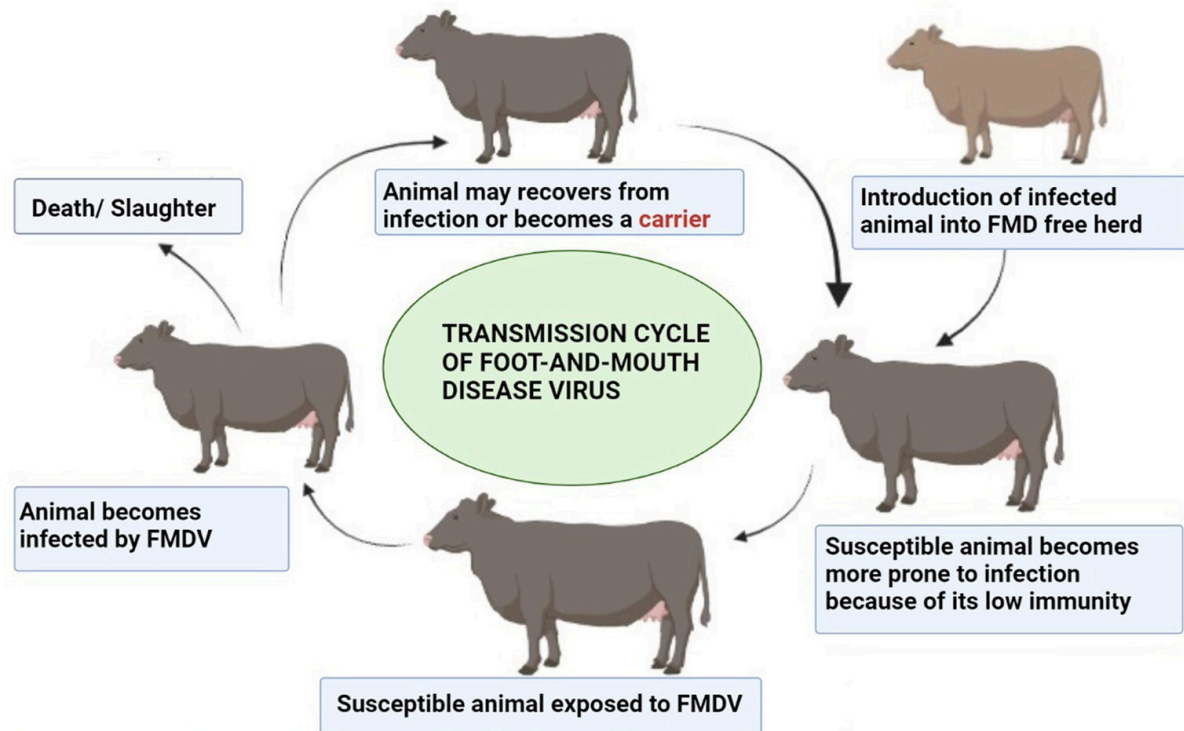
- **About:** Uniform structured porous materials suitable for solid-phase extraction.
- **2-dimensional (2D) materials:** A class of nanomaterials defined by their typical and unique property of being hardly one- or two-atom thick.
- **Characteristics of MOFs and 2D materials:**
 - Have large surface area, functionality, and optoelectronic properties.
 - They have a wide range of synthesis methods
 - They can be developed into disposable electrodes, optical kits, fiber optic sensors, colorimetric strips, etc.
- **Applications:**
 - To develop electrochemical and optical sensors for bacteria, Aflatoxins, and heavy metals.
 - Rapid detection of several health, food quality, and environmental parameters.
 - Analyzing food toxins like Aflatoxins and Zearaloene in water, milk and staple food samples.

21. Centre to establish foot-and-mouth disease-free zones in eight States - The Hindu

Context

The Union government has decided to establish foot-and-mouth disease-free zones in eight States - Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Uttarakhand, Punjab, Haryana, Maharashtra, and Gujarat to expand export opportunities for Indian animal products, and enhance the country's global market presence.

Foot-and-Mouth Disease (FMD)



- **About:** A severe, highly contagious viral disease of livestock that has a significant economic impact which affects cattle, swine, sheep, goats, and other cloven-hoofed ruminants but does not affect horses, dogs, or cats.
- **A transboundary animal disease (TAD):** Affects the production of livestock and disrupts regional and international trade in animals and animal products.
- **Impact on humans:** It is not a human health or food safety threat & not related to hand, foot, and mouth disease, a common childhood illness caused by a different virus.
- **Cause:** An aphthovirus of the family Picornaviridae.
- **Strains:** 7 strains (A, O, C, SAT1, SAT2, SAT3, and Asia1) endemic in different countries worldwide.
- **Transmission:** Found in all excretions and secretions from infected animals which breathe out a large amount of aerosolised virus, which can infect other animals via the respiratory or oral routes.
- **Mortality:** Rarely fatal in adult animals, but has high mortality in young animals.
- **Symptoms:** Fever and blister-like sores on the tongue and lips, in the mouth, on the teats, and between the hooves, depression, hypersalivation, loss of appetite, weight loss, growth retardation, and a drop in milk production, which can persist even after recovery.
- **Specification:** It was the first disease for which the World Organisation for Animal Health (WOAH, founded as OIE) established official status recognition.
- **Treatment:** Vaccines for FMD are available but must be matched to the specific type and subtype of virus causing the outbreak.

22. Five hospitalised after inhaling some chemical compound in Andhra Pradesh's Vizag - The Hindu

Context

Five persons fell unconscious and were hospitalised when they were engaged in shifting acetanilide bags (a crystalline powder) from one container to another in the godown of Shravan Shippings recently.

Acetanilide/ N-phenylacetamide/ Acetanil

- **About:** A synthetic organic compound with a designated molecular formula of C_8H_9NO .
- **State of matter:** A white, odorless solid introduced in therapy in 1886 as a fever-reducing drug.
- **Usage:** Relieving pain, treating such common complaints as headache, menstrual cramps, and rheumatism.
- **Side effects:** It interferes with the function of hemoglobin, the oxygen-carrying pigment of the blood.
- **Applications:** An intermediate in the production of dyes, rubber, and other chemicals.

Defence

23. INDIAN ARMY LAUNCHES PROJECT NAMAN - PIB

Context

The Indian Army launched the first phase of Project NAMAN.

Project NAMAN

