PUBLIC SERVANTS LOSE IMMUNITY IN PRE-2014 CORRUPTION CASES

- A constitution bench of **Supreme Court (SC) declared that its 2014 judgment,** which **declared Section 6A** of the Delhi Special Police Establishment (DSPE) Act 1946 **as unconstitutional, will have retrospective effect.**

  - **Section 6A of DSPE Act** (inserted in 2003) required **CBI to obtain prior sanction from central government** to investigate **corruption cases against** an officer of the rank of **joint secretary and above.**

  - This provision was **struck down as unconstitutional** (violation of right to equality under Article 14) by SC in **Subramanian Swamy v. Union of India** case (2014).

- **Key highlights of SC judgment**

  - Once a law is **declared unconstitutional** on grounds of it **infringing any of the fundamental rights** guaranteed **under Part III of the Constitution,** it would be held to be an **unenforceable right from date of enactment** (Void Ab Initio).

  - **Article 20(1)** has **no bearing in the context** of declaration of Section 6A as unconstitutional as **Article 20 (1) doesn't bar retrospective application of procedural changes** in criminal trial.

    - **Article 20(1) lays** down that **no person shall be convicted of any offense** except for violation of a law in force **at the time of the commission of the alleged act.**

ABOUT DSPE ACT 1946

- Brought into force **to investigate cases of bribery and corruption by Central Government** employees.

- **CBI's power** to investigate cases is **derived from this Act.**

DRAFT INSTRUMENT FOR INTELLECTUAL PROPERTY, GENETIC RESOURCES (GR), TRADITIONAL KNOWLEDGE, AND FOLKLORE

- Released **by World Intellectual Property Organization (WIPO)** – global body for promotion and protection of IPRs.

- **About the draft:**

  - **Aim:** to enhance efficacy, transparency, and quality of the patent system about GR.

  - It is **mandatory** for patent applicants **to declare their use of GR** and any associated traditional knowledge.

  - **Prevents** granting of **patents** for inventions **that are not novel.**

- **Traditional Knowledge associated with Genetic Resources (TKGR)** is a pool of evolving, **collective knowledge** held by **indigenous people** and **communities** about **genetic resources** that are passed down through generations.

  - **GR** refer to any biological material that **contains genes and/or metabolic material** derived from genes.

- **Significance of TKGR:** Preserves the **spiritual identity of indigenous** people, Forms the **basis of modern inventions,** Preserves the GR in a sustainable manner, **Contributes to food security,** etc.

- **Challenges with TKGR:**

  - Significant **ambiguity regarding the meaning** of Traditional Knowledge.

  - **Problem of the biopiracy** of GR.

  - **Lack of ownership over GRs** by Indigenous or local communities.

  - **Misappropriation and misuse** by third parties.

  - Inadequate **equitable sharing of benefits.**

INITIATIVE FOR TKGR

- **International: Convention on Biological Diversity the Nagoya Protocol, International Treaty on Plant Genetic Resources for Food and Agriculture** (to reuse propagating material from the previous season), etc.

- **Biological Diversity Act of India** for fair and **equitable sharing of the benefits** arising out of biological resources.

- **Traditional Knowledge Digital Library** to **prevent exploitation** and to protect Indian traditional knowledge at **Patent Offices worldwide.**

G20 MEMBERS TO SET INDICATORS FOR MEASURING GLOBAL SKILLS GAPS

- G20 countries agreed to **indicators proposed by International Labour Organization (ILO) and Organisation for Economic Co-operation and Development (OECD)** for monitoring and measuring global skill gaps.
  - Also, **ILO and OECD would be responsible for implementing intervention** to monitor and measure global skill gap.
- **Technological advancement, globalization, climate change and demographic shifts,** against the backdrop of COVID-19 pandemic and cost-of-living crisis, are **impacting skill needs and exacerbating skill mismatches.**
  - **Types of skill mismatches** include skill shortages, qualification mismatch, skill gaps, skill obsolescence, and over/under skilling.
- **Consequences of Skills Mismatches:**
  - **Individual level:** Serious wage penalties, affect both work and life satisfaction.
  - **Enterprises:** Negative consequences for productivity and workforce turnover, undermining introduction of new products, services or technologies etc.
  - **Countries and regions:** Increase unemployment and weaken attractiveness for investors.
- **A G20 Employment Working Group,** under India's Presidency, **suggested following to bridge skill mismatch:**
  - **Develop a global skills taxonomy** broad enough to be applied across different countries.
  - **Create institutional platforms** and develop capacities to **generate, collect, use and disseminate data.**
  - **Use of big data analytics, machine learning** etc to develop and complement existing labour market information.

INITIATIVES TAKEN IN INDIA
- Pradhan Mantri Kaushal Vikas Yojana (PMKVY)
- Skill India Mission
- Skill Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) Program
- National Apprenticeship Promotion Scheme

DRAFT NATIONAL STRATEGY FOR ROBOTICS (NSR) RELEASED BY MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY (MEITY)

- Draft NSR aims to establish **India as a global robotics leader by 2030,** aligning with **Make in India 2.0** plans that identify **robotics as a key sub-sector.**
- **Robotic technology** includes **design, construction, operation,** and use of **robots,** that operate by sensing their environment, carrying out computations for decision-making, etc.
- **Classification** of robots as per NSR: **Industrial, Service and Medical Robots**
- MeitY will be the implementing **agency** with a **two-tier institutional framework.**
- **Four Core Areas identified for Strategy to prioritize robotics automation:**
  - **Manufacturing:** Logistics and **Warehousing automation,** Process Optimization etc.
  - **Healthcare:** Surgical Robots, telemedicine area, etc.
  - **Agriculture:** Crop scouting, spot Spraying, etc.
  - **National Security:** Combat robots, Mine Detection etc.
- **Current Challenges:** lack of adoption, inadequate skills, **absence of multidisciplinary** collaboration, **ethical considerations** (such as privacy), **absence of dedicated legislation** for robotics, etc.
- **Recommendations**
  - **Robust regulatory framework,** led by **Robotics Innovation Unit.**
  - **Implementing Centres of Excellence** enlisting **private sector** with **experimental prototyping.**
  - Ensuring **Regulatory Sandboxes** and development of **robotics industrial zones.**
  - Providing **advisory support to start-ups, harnessing the research** potential of higher education institutes.

STATUS OF ROBOTICS IN INDIA
- In terms of annual industrial installations, India ranks **10th globally** as per the **World Robotics Report, 2022.**
- Operational stock of industrial robots **in India** has more than **doubled between 2016 and 2021.**

FIRST MEETING OF THE INDIA - SAUDI STRATEGIC PARTNERSHIP COUNCIL (SPC) HELD

- SPC was set up in 2019 as a **high-level council to steer Indo-Saudi relationship.**
- **Key highlights of the meeting**
  - Set up a **task force to fast-track the** $50-billion **West Coast refinery project.**
    - It aims to set up **Asia's largest refinery** (60 Mn tonnes per annum capacity) in **Ratnagiri, Maharashtra.**
    - It is **a trilateral project** between ARAMCO (Saudi), ADNOC (UAE) and Indian companies.
  - Cooperation in **electricity and grid interconnection** and diversifying current **hydrocarbons relationship into a comprehensive energy partnership.**
  - **MoUs signed** in the fields of New and Renewable Energy, Digitization and Electronic manufacturing; Enhancing Bilateral Investment; Seawater Desalination etc.
- **Significance of India-Saudi Arabia Relations**
  - **Geostrategic:** Saudi Arabia's strategic location in West Asia makes it crucial to India's foreign policy priorities in the region.
  - **Economic:** India is the second largest trade partner of Saudi Arabia, while Saudi Arabia is fourth largest trade partner of India.
  - **Energy Security:** More than 18% of India's crude oil imports are sourced from Saudi Arabia.
  - **Cultural:** Indian community is largest expatriate community in Saudi Arabia. Also, Saudi is **home to holy cities of Mecca and Medina** known for annual Haj and Umrah pilgrimage.

INDIAN SCIENTISTS USE HYBRID NANOPARTICLES TO CURE CANCER

- A study used the **Hybrid Nanoparticles/ nanohybrids** made of **gold and copper sulphide,** to cure cancer cells **using heat,** and **enable their detection using sound waves.**
  - ➢ **Nanohybrids** usually of **less than 8 nm in size,** are made **by combining at least two different nanoparticles.**
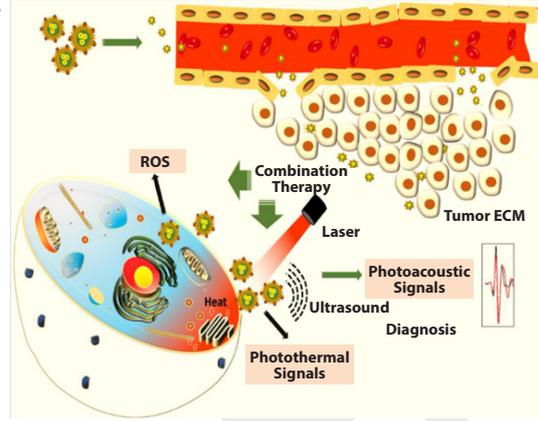 - ➢ Nanoparticles are **materials having sizes ranging from 1 to 100 nm (1nm** is equal to 10^{-9}m).
- Mechanism
  - ➢ **Diagnosis:** Photoacoustic properties of the **Nanohybrids allow them to absorb light** and **generate ultrasound waves,** which provides for better **resolution during the MRI and CT** scanning process.
  - ➢ **Treatment: Photothermal property of the nanoparticles** enables **them to produce heat,** kill tumour cells by absorbing lights directed at the cells.
    - ■ Nanohybrids **also produce Reactive Oxygen Species (ROS)** effects that are toxic to the tumor cells.
  - ➢ **Nanoparticles can be triggered to produce heat** by shining a **light on them using an endoscope** (typically used for cancer screening) making it a **combination therapy (refer to image).**
- **Significance:** Small size would **also allow them to leave** the human body naturally without accumulating.

ALSO IN NEWS

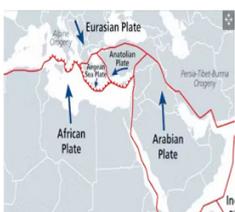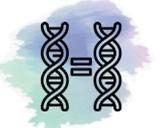|	
India-UK Infrastructure Finance Bridge	- It is a collaboration between the **Niti Aayog and the City of London Corporation.** **Objective:** Unlocking **infrastructure and leveraging** the City of London's expertise in structuring and **phasing major infrastructure projects.** **Significance:** ➢ Secure **long-term investment for the vital infrastructure sector in India.** ➢ Fortify the foundation for **economic growth, job creation, and shared prosperity** in both UK and India. ➢ Committed to **sustainable infrastructure development,** prioritizing environmentally friendly projects that are aligned with SDGs.
Gresham's law	- It states that, **in a fixed exchange rate system, "bad money drives out good".** - It comes into play **when exchange rate between two currencies is fixed** by government at a certain **ratio that is different from market exchange rate.** ➢ It **causes undervalued currency to go out of circulation.** ➢ **Overvalued currency** remains in circulation but it **does not find enough buyers.** **It applies** not just to paper currencies but **also to commodity currencies and other goods.** - Law, **named after English financier Thomas Gresham,** came into play recently during Sri Lanka crisis.
Overnight index swap (OIS)	- Indian OIS rates **rose to their highest levels** in last 10 months. - An OIS is an **interest rate derivative** contract in which **two entities agree to swap/ exchange a fixed interest rate payment** (OIS rate) **for a floating interest rate** payment. ➢ OIS is also considered a **measure of monetary policy** expectation. - Floating rate is **usually overnight interbank rate** {reference rate for Indian OIS contracts is Mumbai Interbank Outright Rate (MIBOR)}. **Benefits of OIS:** hedging interest rate risks, reduction of credit risk, effective management of debt portfolios by financial institutions etc.
Earthquake in Morocco	**Earthquake is caused** by to **release of energy** within the earth's lithosphere generating waves. **Epicentre:** located in the Atlas Mountains. **Reasons for the strongest earthquake in this region** ➢ **Northward convergence of the African plate** with respect to the Eurasian plate along a complex plate boundary. ➢ It was **attributed to oblique-reverse faulting** at shallow depth within the Moroccan High Atlas Mountain range. ➢ This type of **faulting is common in areas** of compression along the **convergent plate boundaries.**

Department of Empowerment of Persons with Disabilities (DEPwD's) Initiatives to Reshape Disability Rights Landscape	• DEPwD will launch 5 initiatives to **foster inclusivity, advance disability rights, and harness technology** to improve lives of PwD. • **Initiatives include:** ➤ **MOU with Council of Architecture:** To mandate universal accessibility courses in Bachelor of Architecture programs. ➤ **Releasing of Anonymous Data of UDID (Unique Disability ID):** To facilitate data-driven decision-making in disability sector. ➤ **PM Daksh Portal:** Comprehensive digital platform for PwDs seeking training and employment opportunities, etc. ➤ **Pathways to Access- Courts on Disability Rights:** Compilation of notable Supreme Court and High Courts judgments into a booklet. ➤ **Online Case Monitoring Portal by CCPD (Chief Commissioner for Persons with Disabilities):** To handle grievances filed by PwD.
Fiber-to-the-Home (FTTH)	• **Department of Telecommunications (DoT) has launched a scheme** to **recognize Internet Service Providers (ISPs) for expanding FTTH broadband** connections in rural areas. • FTTH is a **technology that uses optical fibre to deliver high-speed broadband internet** directly to individual buildings. ➤ Compared to traditional broadband networks, Fibres **can transmit data over long distances using light signals** that are **less prone to interference and signal loss** as their copper counterparts.
Dolly Sheep	• **Sir Ian Wilmut,** who led the team that c**reated Dolly, passed away recently.** • Dolly was the **first mammal to be cloned from an adult cell.** • Dolly was **created using** a cloning method called **Somatic Cell Nuclear Transfer** or SCNT. ➤ In SCNT, **nucleus of an egg cell is removed** and **replaced with nucleus of a donor** adult cell. ➤ Because **99.9% of cell's DNA is contained in nucleus** as chromosomal DNA, **resulting animal** will share almost **exactly same DNA as original donor** cell.
Sago	• SAGOSERVE (a cooperative society) received **GI tag for its Sago produced in Salem** (TN). • Sago is **derived from raw tapiocas** and is in the **form of small hard globules or pearls** and is pearl white in colour. ➤ **Tapioca is a horticultural crop,** that **grows in tropical, warm humid climate** with **rainfall of over 100 cm** per annum. • Sago comprises of **high carbohydrate content** and is **low in protein, fat, minerals, vitamins** etc. ➤ It is **easy to digest** and **provides rapid energy.**
Phanigiri artefacts	• **Belonging to 200 BCE-400 CE.** • Artefacts discovered in **1942 and rediscovered in 2003.** • **Phanigiri (meaning hillock of snake hood)** is a small village in the state of Telangana. • **Key findings** ➤ **Narrate an epoch-making change** in the history of Buddhism. ➤ **Provides evidence of the deification of Buddha** and a transition towards canonization and ritual in Buddhist practices. ➤ Image of the **Buddha wearing Roman toga** (a distinctive white garment) with folds carved in limestone. ➤ Thoranas discovered **shows both Mahayana and Hinayana schools of thought.**
Tribal Art and Artifacts for G20 Summit	• These includes ➤ **Pithora paintings** are done by Rathwa, Bhil, Nayak and Tadi **tribes of Gujarat,** parts of **Rajasthan** and **Madhya Pradesh.** ▪ It traditionally performed on **walls inside homes.** Motifs used in paintings include Lion, Elephant, Bhil women, palm tree etc. ➤ **Angora and Pashmina** shawls of **Leh-Ladakh and Himachal Pradesh,** woven by Bodh and Bhutia tribes. ➤ **Metal Ambabari craft** of Meena tribe of Rajasthan. ➤ **Gond painting** from Madhya Pradesh and **Saura painting** by artisans from Odisha.

AHMEDABAD   BHOPAL   CHANDIGARH   DELHI   JAIPUR   JODHPUR   GUWAHATI   HYDERABAD   LUCKNOW   PRAYAGRAJ   PUNE   RANCHI   SIKAR

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