

- **arribada** (Spanish term for mass nesting) of olive ridley turtles at the mouth of Rushikulya River, Ganjam district, Odisha. **Gahirmatha**, another major rookery in Odisha's Kendrapara district.
 - **Surveillance capitalism:**
 - It is an economic system in which personal data is collected, analysed, and sold by tech conglomerates to predict and manipulate human behaviour.
 - While industrial capitalism relies on labour and material production, surveillance capitalism profits from behavioural data extraction.
 - Instead of tangible goods, companies commodify human experience, making users both consumers and raw material for data-driven predictions.
 - Algorithms keep users engaged and guide them toward choices that benefit tech giants.
 - **Black plastic:**
 - It is generally used to make kitchen utensils.
 - is often made from recycled electronic waste such as computers, TVs, and appliances.
 - These electronics contain substances such as the flame-retardant bromine; antimony; and heavy metals such as lead, cadmium, and mercury. They are known to be toxic to humans at high levels of.
 - One such flame-retardant chemical called decabromodiphenyl ether (BDE-209) that had been linked to potential human health risks and was phased out in U.S. more than a decade ago.
 - **Battle of Karnal (1739):**
 - Nadir Shah, founder of Afsharid dynasty of Iran, defeated Mughal emperor Muhammad Shah 'Rangila'.
 - He subsequently captured and sacked Delhi, Mughal capital, and emptied royal treasury, taking home Peacock Throne & Koh-i-noor diamond embedded on it.
 - **Spinal muscular atrophy (SMA):**
 - Recently, for first time, scientists treated for disease while in womb. They used an oral drug called risdiplam, which is given to patients to slow progression of SMA.
 - SMA is a genetic condition which affects motor neurons that control movement and leads to progressive muscle weakening.
 - It is caused by mutations in survival motor neuron gene (SMN1) which causes a deficiency of a protein crucial for survival of motor neurons in spinal cord.
 - **Jhumoir Binandini 2025, a Mega Jhumoir programme in Guwahati, Assam:**
 - Jhumoir dance is a folk dance of Assam Tea Tribe and Adivasi Communities of Assam.
 - Mega Jhumoir event symbolises 200 years of tea industry, & also 200 years of industrialisation in Assam.
 - **International Conference on Carbon Markets – PRAKRITI 2025** (Promoting Resilience, Awareness, Knowledge, and Resources for Integrating Transformational Initiatives), was organised in February 2025 in New Delhi, by Bureau of Energy Efficiency (BEE) under Ministry of Power.
 - **Digital Sequence Information:**
 - It refers to genetic data such as nucleotide sequence, protein sequence of organisms.
 - It finds use in multiple areas, but its nonphysical nature complicates traditional methods of managing access and benefit-sharing established under Convention on Biological Diversity to handle tangible genetic resources.
 - COP16 will finalise mechanism for fair and equitable sharing of benefits derived from use of DSI.
 - **"Kota Cares" initiative:**
 - Launched in December 2024, to introduce changes in student housing, safety protocols, and support systems.
 - It brings together the district administration, coaching institutes, hostel associations and local communities to enhance student well-being.
 - **Tea Horse Road:** It does not refer to a single road but a network of branching paths that began in southwest China and ended in the Indian subcontinent (Kolkata).
 - **Deinococcus radiodurans** is a bacterium, an extremophile and one of the most radiation-resistant organisms known.
 - **World's second-most used material after water is concrete.**
- Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme:**

 - Central sector scheme launched in February 2019 to supplement financial needs of small & marginal farmers.
 - Financial benefit of Rs 6,000/- per year is transferred in three equal instalments, into Aadhaar seeded bank accounts of farmers through DBT mode.
 - PM-KISAN mobile app & PM-KISAN web portal.
 - An AI chatbot, Kisan-eMitra, launched in September 2023, provides instant query resolution in local languages (integrated with Bhashini).

Biotechnology in Agriculture:

 - New Superior Climate Smart Drought Tolerant High-Yielding Chickpea Variety "SAATVIK (NC 9)" with enhanced yield under drought stress is notified recently.
 - Genome editing was employed to generate loss of function mutations in several rice genes that negatively regulate crop productivity. e.g. MTU-1010.
 - First-ever 90K Pan-genome SNP genotyping array IndRA developed for rice has been commercialized for public use. Similarly, first-ever 90K Pan-genome SNP genotyping array IndCA for chickpea has been developed. Arrays will help DNA fingerprinting, variety identification, testing genetic purity of rice and chickpea varieties.
 - Department of biotechnology has developed an Amaranth Genomic Resource Database, Near Infrared Spectroscopy (NIRS) techniques for screening nutritional qualities of amaranth grain, and a 64K SNP chip. It has shown ability to counteract high fat diet induced obesity.
 - Stable fungal enzyme nano-formulation from Myrothecium verrucaria has been developed for eco-friendly biocontrol of powdery mildew in tomato & grape.
 - Kisan-Kavach: An anti-pesticide suit designed to combat pervasive threat of pesticide-induced toxicity in agricultural settings.

PRACTICE MCQs

Q1. Which of the following statements best describes the term “Surveillance Capitalism”?

- a) It is an economic system in which regulatory authorities keep surveillance on activities carried out in the economy by private sector.
- b) It is an economic system in which foreign companies collect the data and share with government in their host countries.
- c) It is an economic system in which State keeps an eye on activities of its citizen through collection and analysis of data.
- d) It is an economic system in which personal data is collected, analysed, and sold by companies to predict and manipulate human behaviour.

Answer: D

Q.2 “Battle of Karnal” was fought between –

- a) Nadir Shah of Iran and Muhammad Shah ‘Rangila’.
- b) Babur and Ibrahim Lodi
- c) Akbar and Hemu
- d) Maharana Pratap and Mughal forces led by Man Singh I of Amber

Answer: A

Q3. Consider the following statements about PRAKRITI 2025:

- 1. It is an International Conference on Carbon Markets held in New Delhi.
- 2. It is organised by Bureau of Energy Efficiency (BEE) under Ministry of Power.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: C

Q4. Consider the following statements about Pradhan Mantri Kisan Samman Nidhi Scheme:

- 1. It is Centrally Sponsored Scheme to supplement financial needs of small & marginal farmers.
- 2. Financial benefit of Rs 6,000/- per year is transferred in three equal instalments into bank accounts of farmers through DBT mode.

Which of the statements given above is/are incorrect?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: A

Q5. Gahirmatha beach in Odisha is very well known for –

- a) Water recedes back about 2 kilometres during low tide.
- b) Mass nesting of Olive Ridley Turtles.
- c) Mangroves forest
- d) Habitat of Saltwater Crocodile

Answer: B

Celebrating 13 years of its establishment