CURRENT AFFAIRS — 06 OCTOBER 2026

Tuesday, 06 October 2026 • Asia/Kolkata (IST) • Prelims + Mains GS-wise digest

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DAILY CURRENT AFFAIRS FOR UPSC CSE

TODAY AT A GLANCE — 10 THINGS TO REMEMBER

- **Nobel Medicine 2026**: Deisseroth, Hegemann & Nagel for **optogenetics**.
- RBI MPC verdict on **7 Oct**; repo at **5.25%**, a **25 bps** hike widely expected.
- **CPI inflation** rose to **4.82%** in August; food inflation **5.95%**.
- **Services PMI 55.2** in September — a **3-month high**; composite **55.9**.
- FM: India–US trade talks have hit a **plateau**.
- SC: **Form 6** changes 'not approved by us'; notice to **EC**.
- SC lets **Calcutta HC** hear **Great Nicobar** PILs; hearing **25–26 Nov**.
- India–Switzerland sign **5 pacts**; defence & nuclear ties to deepen.
- Saudi–Türkiye–Pakistan **Mecca Alliance** activated against **Houthis**.
- SC orders **24×7 monitoring cells** in Delhi to curb sexual offences.

SECTION A • GS-III: SCIENCE & TECH | ECONOMY | SECURITY | ENVIRONMENT

HOW OPTOGENETICS WORKS — Nobel Medicine 2026

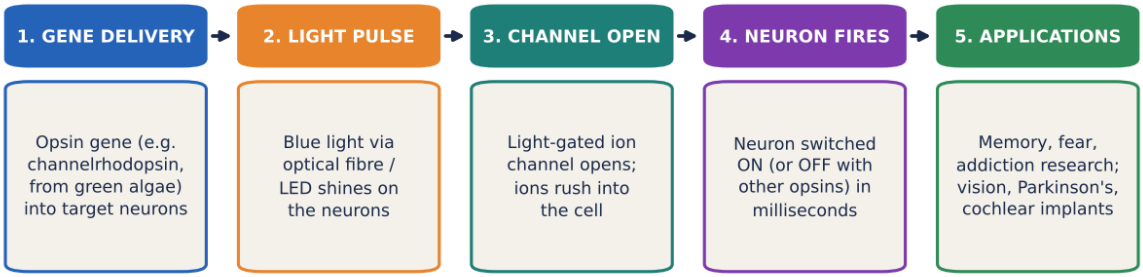


Fig. A1 — Optogenetics explained (linked to the Nobel Medicine item below)

Nobel Medicine 2026: optogenetics pioneers honoured for a 'light switch' for neurons

[SCI-TECH] COMMON: Prelims + Mains GS3 (Sci-Tech)

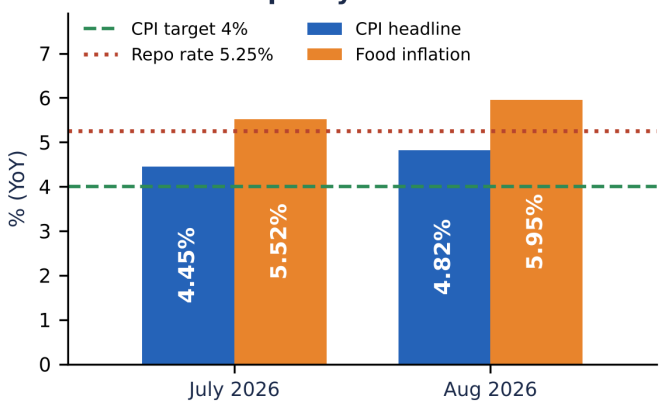
Syllabus Linkage	**GS-III**: S&T developments and their applications, biotechnology. **Prelims**: Nobel 2026, opsins, channelrhodopsin, neurons.
Context	The **2026 Nobel Prize in Physiology or Medicine** (announced **5 Oct 2026**) went to **Karl Deisseroth** (USA), **Peter Hegemann** and **Georg Nagel** (Germany) 'for their discovery of a **molecular switch for nerve cells**' — the foundation of **optogenetics**.
Key Facts	■ **Optogenetics** = inserting genes for **light-sensitive proteins (opsins)** into chosen neurons so that a flash of light switches them **ON or OFF** within milliseconds. ■ Key molecule **channelrhodopsin** — a **light-gated ion channel** first found in **green algae**; Hegemann & Nagel characterised it, Deisseroth used it in **mammalian brains**. ■ Used to study **memory, fear, addiction and movement**; clinical leads in **vision restoration**, **Parkinson's** and more precise **cochlear implants**. ■ Award ceremony on **10 December 2026** in **Stockholm**; prize shared **equally** by the three laureates.
Way Fwd	Scale **neurotechnology R&D** through **ANRF** and the **BioE3 policy**, with ethical guardrails for brain-interface research.
Concept	**Neuron signalling** works through **ion flow** (sodium/potassium) across the membrane — opsins let light open these channels. Linked: **gene therapy** vectors (viral delivery), **CRISPR** (Nobel Chemistry **2020**).

RBI MPC meets 5–7 Oct: first rate hike in nearly four years on the table

[ECONOMY] COMMON: Prelims + Mains GS3 (Economy)

Syllabus Linkage	**GS-III**: Monetary policy, inflation, growth. **Prelims**: Repo, SDF, MSF, MPC, flexible inflation targeting.
Context	The **Monetary Policy Committee** began its three-day meeting on **5 Oct**; Governor **Sanjay Malhotra** announces the decision on **7 Oct**. Most economists expect a **25 bps hike** amid a weak rupee and firming prices.
Key Facts	■ **Repo rate 5.25%** — held in the **last four reviews** after **125 bps** of cuts in **2025**; **SDF 5.00%**, **MSF/Bank Rate 5.50%**. ■ **CPI inflation** rose to **4.82% (Aug)** from **4.45% (Jul)**; **food inflation 5.95%** vs **5.52%**. ■ RBI projects **FY27 CPI around 5%**; **GDP growth ~6.7%** expected for **2026-27**. ■ A hike would be the **first since February 2023**, when repo was raised to **6.50%**.
Way Fwd	Calibrated tightening plus **supply-side food measures** (buffer stocks, timely imports) to anchor expectations without choking growth.
Concept	**Flexible Inflation Targeting**: **4% CPI ± 2%** (band **2–6%**) under **Sec 45ZA, RBI Act 1934**; **6-member MPC** (3 RBI + 3 Govt nominees); Governor has the **casting vote**.

Inflation vs policy rate ahead of MPC



India–US trade talks hit a 'plateau': FM says more concessions 'very, very difficult'

[ECONOMY] COMMON: Prelims + Mains GS2/GS3 (IR & Economy)

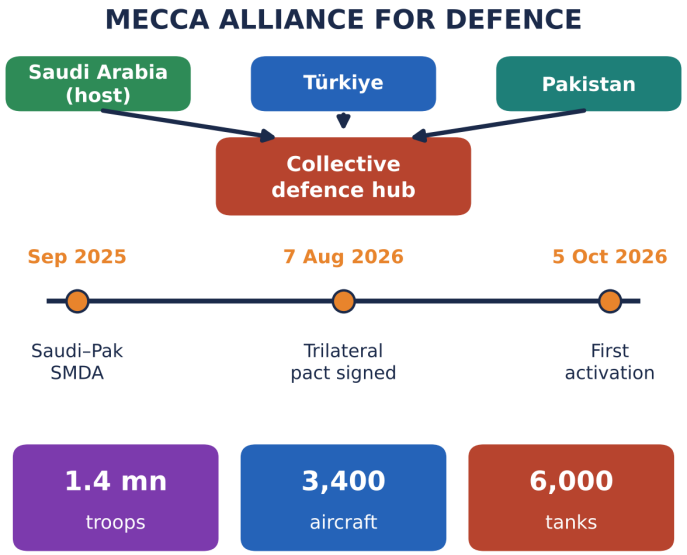
Syllabus Linkage	**GS-II**: Bilateral relations; **GS-III**: External sector, trade policy. **Prelims**: Section 301, trade deficit, BTA.
Context	Speaking in New Delhi on **5 Oct 2026**, Finance Minister **Nirmala Sitharaman** said negotiators have reached a stage where 'giving or taking' is very difficult; **no interim deal** is in place yet.

Key Facts	■ US has imposed a **10% additional duty** on Indian goods after a **Section 301** probe; a second probe on alleged **excess structural capacity** is pending. ■ US law empowers the President to levy tariffs of **up to 100%** linked to purchases of **Russian oil**. ■ US goods trade deficit with India of about **$34 billion (FY26)** is the 'predominant' US concern. ■ India's red lines: **agriculture, dairy** and livelihoods of **small farmers**.
Way Fwd	Ring-fence sensitive sectors, push for **services and mobility** gains, and diversify through **FTAs (EFTA, UK, EU)** to reduce tariff exposure.
Concept	**Section 301 (US Trade Act, 1974)** lets the USTR retaliate unilaterally against 'unfair' practices — unlike **WTO** dispute settlement (Appellate Body non-functional since **2019**). **MFN** principle = **Article I, GATT**.

Mecca Alliance activated: Pakistan, Türkiye to deploy forces in Saudi Arabia

[DEFENCE] COMMON: Prelims + Mains GS2/GS3 (IR & Security)

Syllabus Linkage	**GS-II**: Effect of other countries' policies on India; West Asia. **GS-III**: Security. **Prelims**: Houthis, Red Sea, Bab-el-Mandeb.
Context	After an emergency meeting in **Riyadh** on **5 Oct 2026**, **Saudi Arabia, Türkiye and Pakistan** invoked their **Mecca Alliance for Defence** for the **first time**, agreeing to 'swiftly deploy' forces against escalating **Houthi** attacks from Yemen.
Key Facts	■ Pact signed on **7 Aug 2026**; **collective-defence clause** — an attack on one is an attack on all (like **NATO Article 5**). ■ Trigger: Houthi strikes claimed on Riyadh's **King Khalid International Airport** and an **Aramco** refinery. ■ Lt Gen (retd) **Numan Mahmud** of Pakistan named the first **Secretary-General** for **3 years**. ■ Combined strength of about **1.4 million** active troops, **3,400 aircraft** and **6,000 tanks**.
Way Fwd	India must safeguard its **Gulf diaspora**, **energy imports** and **IMEC** plans, deepen ties with **Saudi Arabia and UAE**, and track Pakistan's expanding Gulf role.
Concept	**Collective defence** (alliance against outsiders) vs **collective security** (UN-style, all members). **Houthis (Ansar Allah)** — Iran-backed Zaydi Shia movement in Yemen; **Bab-el-Mandeb** links the **Red Sea** to the **Gulf of Aden**.



Buxa Tiger Reserve begins tiger reintroduction with a tigress from Valmiki

[ENVIRONMENT] COMMON: Prelims + Mains GS3 (Environment)

Syllabus Linkage	**GS-III**: Conservation, biodiversity. **Prelims**: Tiger reserves, NTCA, translocation, Project Tiger.
Context	A tigress (**T138**) translocated from Bihar's **Valmiki Tiger Reserve** was released into West Bengal's **Buxa Tiger Reserve** (Alipurduar) on **2 Oct 2026**; **three more** tigers are planned within **two months**.
Key Facts	■ Buxa had **no resident breeding tigers**; camera traps showed only **transient** tigers from **Bhutan** or Assam's **Manas NP**. ■ Part of a **5-year plan (2023-24 to 2027-28)**: habitat improvement, **prey-base augmentation** and conflict mitigation. ■ Released in the presence of Union Environment Minister **Bhupender Yadav**. ■ Buxa lies on the **India–Bhutan border**, adjoining Bhutan's **Phibsoo Wildlife Sanctuary** — a transboundary corridor.
Way Fwd	Secure the **prey base and corridors** (Buxa–Manas–Bhutan), pay compensation quickly and use **radio-collar monitoring** during soft release.
Concept	**Project Tiger (1973)**; **NTCA** is statutory under the **Wild Life (Protection) Act, 1972** (2006 amendment). India hosts about **75%** of the world's wild tigers (**3,682** in the 2022 estimate).

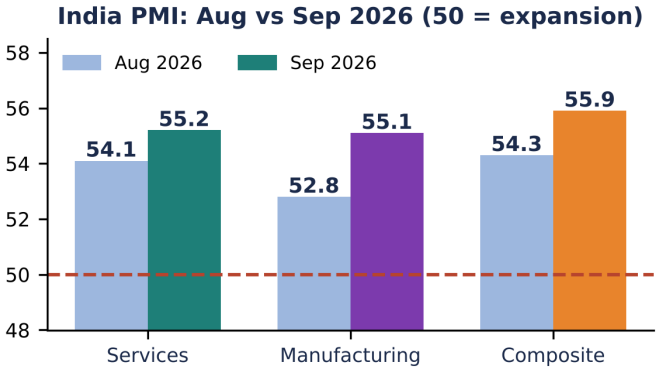
SECTION B • KEY ECONOMY DATA POINT OF THE DAY

DATA POINT OF THE DAY

HSBC India Services PMI (September 2026)

55.2

Up from 54.1 in August — a 3-month high; Composite 55.9 and Manufacturing 55.1, all above the 50 expansion mark.



Services PMI climbs to 55.2 in September — a three-month high

[ECONOMY] COMMON: Prelims + Mains GS3 (Economy)

Syllabus Linkage	**GS-III**: Growth and employment indicators. **Prelims**: PMI, composite index, the 50-mark threshold.
Context	Data released on **6 Oct 2026** show the **HSBC India Services PMI** rose to **55.2** in September from **54.1** in August, led by **financial, consumer and digital services**; the **Composite PMI** rose to **55.9**.
Key Facts	■ **Manufacturing PMI 55.1** — a **7-month high**; composite up from **54.3** in August. ■ **New export orders** grew at the **slowest pace in about 3 years**; the Jul–Sep quarterly average was the weakest since **2022**. ■ **Input-cost inflation** hit a **10-month low**; only **16%** of firms expect higher activity over the next year. ■ **GST collections** for September: **₹2.04 lakh crore**, up **14.7%** year-on-year.
Way Fwd	Use easing input costs to support demand; export weakness calls for **market diversification** and faster use of new **FTAs**.
Concept	**PMI** is a **diffusion index** from purchasing-manager surveys: **above 50 = expansion**, below 50 = contraction. It is survey-based, unlike the official **IIP**, which measures actual output volumes.

SECTION C • GS-II: GOVERNANCE | POLITY | INTERNATIONAL RELATIONS

VOTER ENROLMENT PIPELINE & THE FORM 6 DISPUTE

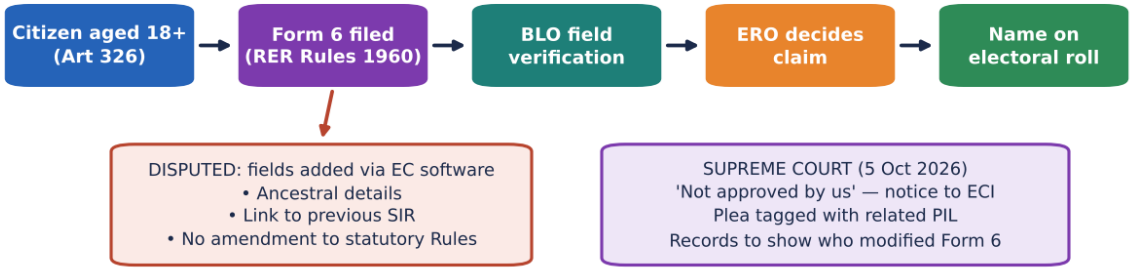


Fig. C1 — How voter enrolment works and where the Form 6 dispute lies

'Form 6 changes not approved by us': Supreme Court seeks Election Commission's reply

[POLITY] **COMMON: Prelims + Mains GS2 (Polity)**

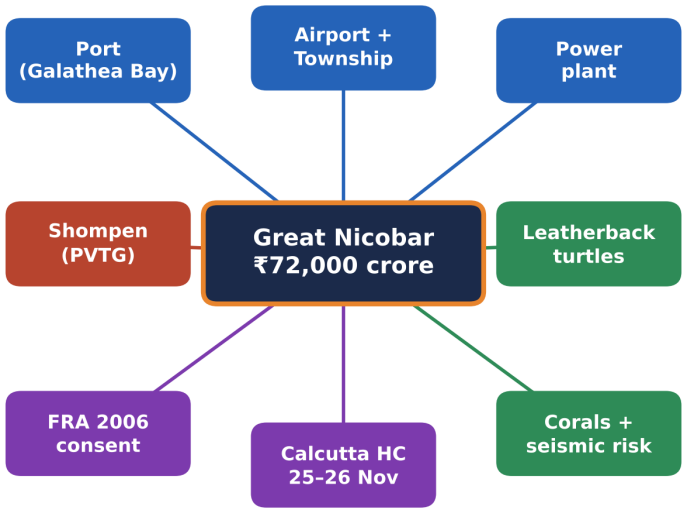
Syllabus Linkage	**GS-II**: Elections, constitutional bodies (ECI), RPA. **Prelims**: Form 6, Articles 324–326, SIR.
Context	On **5 Oct 2026**, a bench headed by **CJI Surya Kant** said 'any modification to **Form 6** has not been approved by us', issued **notice** to the **Election Commission** and tagged the plea with a related PIL.
Key Facts	■ **Form 6** = application for **new voter enrolment**, prescribed under the **Registration of Electors Rules, 1960**. ■ Petitioners allege new fields — **ancestral details** and a **link to the previous SIR** — were added via EC **software** without amending the Rules. ■ Plea claims CEC **Gyanesh Kumar** acted without the concurrence of the **two other Election Commissioners**. ■ Backdrop: **Special Intensive Revision (SIR)** of rolls and alleged mass deletions; software problems flagged in **Goa** and **West Bengal**.
Way Fwd	Changes to statutory forms should follow **rule amendment and public consultation**; strengthen **collective decision-making** within the ECI.
Concept	**Art 324** — superintendence of elections by ECI; **Art 325** — no exclusion from rolls on grounds of religion, race, caste or sex; **Art 326** — **adult suffrage (18 years)**. Rolls are prepared under the **RP Act, 1950**.

Great Nicobar project: SC refuses to entertain Centre's challenge; Calcutta HC to hear PILs

[ENVIRONMENT] **COMMON: Prelims + Mains GS2/GS3 (Judiciary, Env)**

Syllabus Linkage	**GS-II**: Judiciary, PIL, tribal rights; **GS-III**: EIA, conservation. **Prelims**: Shompen, Galathea Bay, FRA 2006.
Context	On **5 Oct 2026** the Supreme Court declined to interfere with the **Calcutta HC** ruling that PILs against the **₹72,000-crore** Great Nicobar project are **maintainable**, and urged the HC to decide quickly (hearings on **25–26 Nov**).
Key Facts	■ Components: **transhipment port (Galathea Bay)**, **international airport**, **township** and a **power plant**. ■ PILs allege violation of the **Forest Rights Act, 2006** in obtaining tribal consent, and dilution of eco-sensitive buffers. ■ HC (**6 May**): there is **no thumb rule** on locus standi in PILs concerning vulnerable communities. ■ Concerns: **Shompen (PVTG)** and Nicobarese, **leatherback turtle** nesting, coral reefs, high **seismic** risk.
Way Fwd	Balance the strategic need (near the **Malacca Strait**) with **FRA-compliant consent**, an independent EIA review and transparent compensatory afforestation.
Concept	**PIL** relaxed **locus standi** (**S.P. Gupta, 1981**); **FRA 2006** — Gram Sabha consent for forest diversion (**Niyamgiri, 2013**). Great Nicobar is a **UNESCO Biosphere Reserve (2013)**.

GREAT NICOBAR PROJECT — MIND MAP



Blue: components • Red/Green: concerns • Purple: legal track

India–Switzerland sign 5 pacts; defence and nuclear cooperation to deepen

[IR] **COMMON: Prelims + Mains GS2 (IR)**

Syllabus Linkage	**GS-II**: Bilateral and regional groupings, agreements involving India. **Prelims**: EFTA, TEPA, Migration & Mobility Partnership.
Context	PM **Narendra Modi** held talks with Swiss President **Guy Parmelin**, on a **state visit**, in New Delhi on **5 Oct 2026**; both sides identified new possibilities in **military exchanges, defence production** and **nuclear energy**.
Key Facts	■ **5 agreements**: **Migration & Mobility Partnership**, **Young Professionals** exchange, transport technologies & infrastructure, **DST-Swiss National Science Foundation** LoI, and an innovation & tech-transfer arrangement. ■ Built on the **India-EFTA TEPA**, in force since **1 Oct 2025** — India's **first FTA with a European bloc**. ■ TEPA target: **$100 billion** investment and **1 million direct jobs** in India over **15 years**. ■ **EFTA** = **Switzerland, Norway, Iceland, Liechtenstein**; Switzerland is India's largest EFTA partner.
Way Fwd	Leverage Swiss strengths in **precision engineering, tunnelling and pharma**; operationalise the mobility pact for skilled Indians.
Concept	**EFTA (1960)** — outside the EU. **TEPA** is India's first FTA with a **binding investment commitment** (**$50 bn in 10 years + $50 bn in next 5**). Switzerland is a **permanently neutral** state since **1815**.

SC directs 24×7 monitoring cells to curb sexual offences in Delhi

[SOCIETY] COMMON: Prelims + Mains GS1/GS2 (Society & Governance)

Syllabus Linkage	**GS-I**: Issues related to women; **GS-II**: Governance, police reforms. **Prelims**: BNS, suo motu, Nirbhaya Fund.
Context	Hearing a **suo motu** case on recent rape incidents in the capital, the Supreme Court on **5 Oct 2026** told **Delhi Police** to set up **round-the-clock monitoring cells** to watch CCTV feeds of vulnerable spots and 'create fear among criminals'.
Key Facts	■ Court: **cameras alone are not enough** without people actually watching them. ■ Focus on parks such as **Astha Kunj** (site of a recent gang-rape), areas near **schools** and public gathering spots. ■ More **patrolling** during the **festive season**; progress to be reviewed in **November**. ■ Builds on post-**Nirbhaya (2012)** reforms; offences now fall under the **Bharatiya Nyaya Sanhita, 2023**.
Way Fwd	Fund the cells through the **Nirbhaya Fund**, integrate with **ERSS-112**, raise the share of women in police and fast-track trials.
Concept	**Police** and public order are **State List** subjects, but **Delhi Police** reports to the **MHA** (**Art 239AA**). **Prakash Singh (2006)** laid down police-reform directions; **Safe City Project** runs under the Nirbhaya Fund.

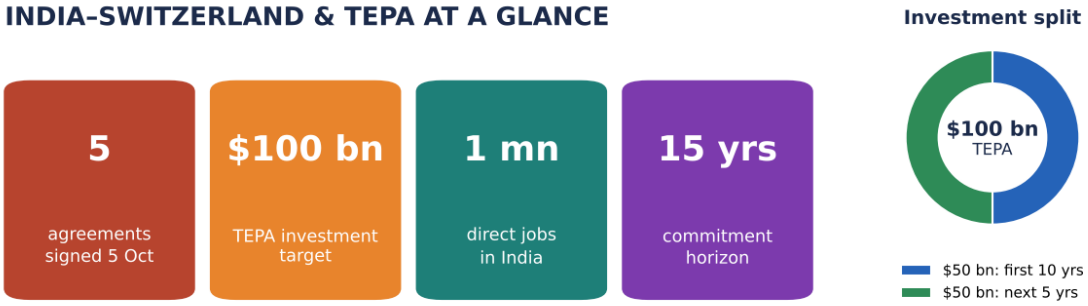


Fig. C3 — India–Switzerland visit and the India–EFTA TEPA in numbers

SECTION D • PRELIMS RAPID-FIRE

01 **GST** gross collections, September 2026: **₹2.04 lakh crore** (+**14.7%**) — third straight month above ₹2 lakh crore.	02 **Manufacturing PMI** for September: **55.1**, a **7-month high**.
03 The **GST Council** meets on **7 Oct** on '**GST 2.0**' process reforms (registration, returns).	04 **Dibrugarh** (Assam) sent its first overseas cargo since Independence — **methanol** to **Bangladesh** via the **Brahmaputra (NW-2)**.
05 **Nobel Medicine 2026** award ceremony: **10 December** in **Stockholm**.	06 **Mecca Alliance** first Secretary-General: Lt Gen (retd) **Numan Mahmud** of **Pakistan**.

SECTION E • PRACTICE CORNER

Q1. With reference to optogenetics, recently in news, consider the following statements:
1. It uses light-sensitive proteins to control the activity of specific neurons.
2. Channelrhodopsin, a key protein used in it, was originally discovered in green algae.
3. It permanently alters the DNA of every cell in the human body.
Which of the statements given above is/are correct?

(a) 1 only **(b)** 1 and 2 only **(c)** 2 and 3 only **(d)** 1, 2 and 3

Answer: (b) — Optogenetics inserts genes for **light-gated opsins** only into **targeted neurons**, so statement 3 is wrong. **Channelrhodopsin** came from **green algae**; the technique won the **2026 Nobel in Medicine**.

Q2. Consider the following statements about the Monetary Policy Committee (MPC) of the RBI:
1. It is a statutory body constituted under the RBI Act, 1934.
2. It has six members, three of whom are nominated by the Central Government.
3. The RBI Governor has a casting vote in case of a tie.
How many of the statements given above are correct?

(a) Only one **(b)** Only two **(c)** All three **(d)** None

Answer: (c) — The MPC is constituted under **Section 45ZB** of the **RBI Act, 1934** (amended 2016); it has **6 members** (3 from RBI, 3 Govt nominees) and the **Governor** has a **casting vote**.

MAINS PRACTICE (GS-III/GS-II): Strategic infrastructure on ecologically fragile islands such as Great Nicobar pits national security against ecology and tribal rights. Critically examine how the Forest Rights Act, 2006 and environmental impact assessment can help balance these goals. (15 marks, 250 words)

Hint: Intro: project and its location near the **Malacca Strait** → Strategic case (transhipment port, airport, Indo-Pacific presence) → Concerns (**Shompen PVTG**, leatherbacks, corals, seismicity) → **FRA 2006** Gram Sabha consent, **Niyamgiri 2013**, EIA gaps → Way forward: independent review, phased build, tribal council role → Conclude with sustainable security.

Revise: **Optogenetics = light-gated opsins (Nobel 2026)** | **Repo 5.25%, MPC verdict 7 Oct** | **CPI 4.82%** | **Services PMI 55.2** | **Form 6 – RER 1960** | **TEPA: $100 bn / 15 yrs** | **Buxa gets Valmiki tigress**

Compiled & simplified by the StudyForGS.com Research Team
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