

1

ENVIRONMENT & ECOLOGY

GS1

GS3

Climate Change • Marine Ecosystems • Monsoon

01 July 2026 • Source: Down to Earth / Copernicus C3S

Global Sea Surface Temperature Hits Record 20.98°C in June 2026 — Marine Heatwaves Signal Monsoon and Ecosystem Disruption

What happened: According to the European Union's Copernicus Climate Change Service (C3S), global average daily sea surface temperatures (SST) broke the all-time record for June in 2026, reaching 20.98°C — the highest ever recorded for any June. Since the start of 2026, marine heatwaves have been detected across 82% of the world's ocean surface, with nearly half experiencing strong-to-extreme conditions. The Indian Ocean — warming faster than any other tropical ocean — is showing anomalies up to 0.73°C above average, as a strengthening El Niño in the equatorial Pacific amplifies the effect.

Why it matters for UPSC: This story integrates GS1 (climate change, monsoon, ocean currents) and GS3 (disaster management, ecology). Marine heatwaves directly alter monsoon behaviour, affect fisheries, bleach coral reefs, and intensify cyclones. India's southwest monsoon 2026 — expected to reach Delhi by July 3-4 — is already showing delayed northward advancement possibly linked to anomalous Indian Ocean temperatures. This is the intersection of climate science and national security (food, water, fisheries).

KEY FACTS — MARINE HEATWAVE ALERT

- **Record SST (June 2026):** 20.98°C — highest ever recorded June global ocean average (previous record: 2024)
- **El Niño 2026:** Strengthening in equatorial Pacific; NOAA projects further intensification into Northern Hemisphere winter 2026-27
- **Ocean surface under heatwave:** 82% of global ocean since Jan 2026; 50% under strong-extreme conditions
- **Indian Ocean anomaly:** Up to +0.73°C above average — faster warming than any other tropical ocean
- **Impact on monsoon:** Marine heatwaves alter sea-surface pressure gradients → weakened or disrupted southwest monsoon circulation
- **Impact on fisheries:** Oxygen depletion, coral bleaching, migration of fish stocks → threat to 16 million Indian fisherfolk
- **Indian Monsoon 2026:** IMD expects Delhi onset by July 3-4; normal overall, but distribution patterns uncertain

TEACHING HOOK

"Ocean as India's Weather Engine" — 3-Part Framework: (1) SST rises → more evaporation → stronger low-pressure system over land → drives monsoon inland normally. BUT (2) El Niño diverts moisture away from India toward the central Pacific, weakening the monsoon. AND (3) Marine heatwaves create unpredictability — some areas get excess rain, others drought. Use the analogy: ocean is the engine, El Niño is fuel theft, and marine heatwaves are the engine overheating. India is the car — it can stall. For Mains: "Discuss how climate change is increasing monsoon volatility and its socio-economic impacts on India."

PYQ LINKAGE

"The frequency of extreme weather events has increased significantly over the last few decades. Discuss the causes and suggest adaptation measures." — UPSC Mains GS1, 2020. Also: "Discuss the impact of El Niño on the Indian monsoon and

Great Indian Bustard (GIB): India's Heaviest Flying Bird on the Edge of Extinction — Critically Endangered

What happened (context): The Great Indian Bustard (*Ardeotis nigriceps*) — India's heaviest flying bird and one of the world's most endangered birds — continues its slide toward extinction, with an estimated wild population of only 100–150 individuals. A 2021 Supreme Court order directed the underground laying of power lines in GIB habitat areas in Rajasthan and Gujarat to prevent collision deaths. Progress has been slow, with renewable energy developers objecting to costs. A Conservation Breeding Centre operates in Sudasari (Jaisalmer, Rajasthan) under Wildlife Institute of India and Rajasthan Forest Department. The GIB is classified as *Critically Endangered* on the IUCN Red List.

Why it matters for UPSC: The GIB is a perpetual UPSC species — tested multiple times in Prelims, Mains, and essay questions. The species links to key themes: biodiversity conservation (CBD, CITES), India's renewable energy vs. wildlife conflict, Supreme Court and environmental justice, and grassland ecosystem management. The tension between solar energy expansion in Rajasthan and GIB habitat is a live case study in environmental law and governance.

KEY FACTS — GREAT INDIAN BUSTARD

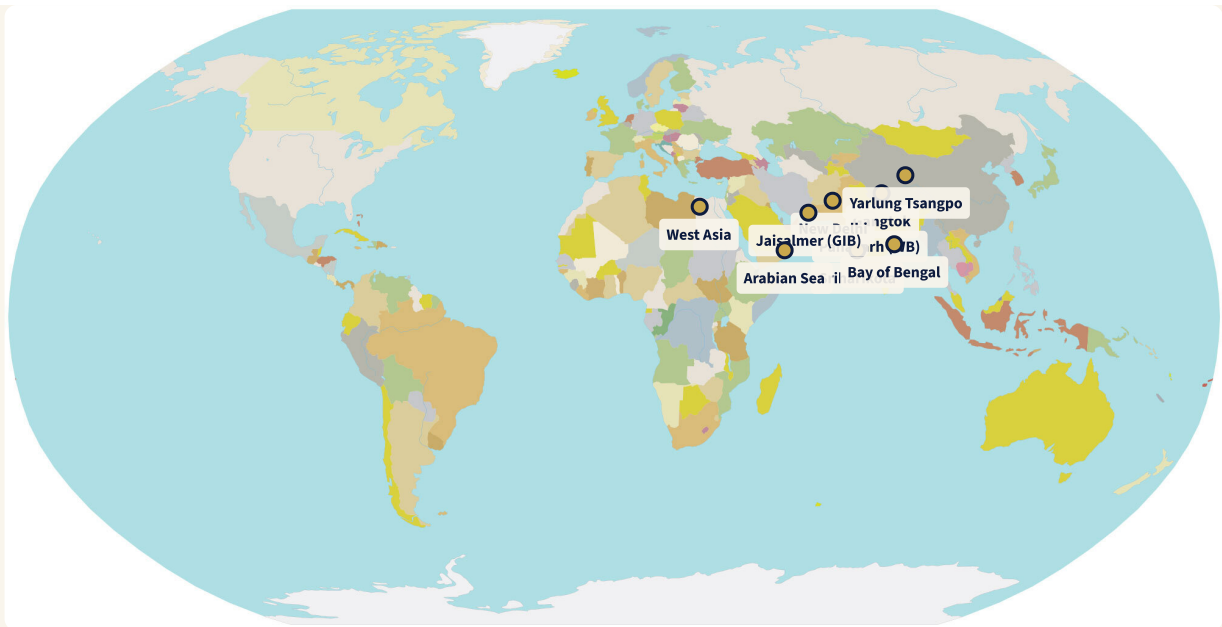
- **Scientific name:** *Ardeotis nigriceps*
- **IUCN Status:** Critically Endangered (upgraded from Endangered in 2011)
- **Wild population:** ~100–150 individuals (most concentrated in Rajasthan)
- **Weight:** ~15–18 kg — heaviest flying bird in India; among heaviest in the world
- **Primary habitat:** Arid and semi-arid grasslands — Thar Desert (Rajasthan), Kutch (Gujarat), Deccan Plateau (remnant)
- **Protected areas:** Desert National Park (Jaisalmer-Barmer), Rolapadu Wildlife Sanctuary (AP)
- **Main threats:** Power line collision deaths (highest mortality cause), habitat loss to agriculture/solar farms, hunting, human disturbance
- **SC Order (2021):** Underground power lines in GIB habitat — partially implemented; solar developers appealing
- **Conservation breeding:** In-situ breeding at Sam, Jaisalmer — chicks being raised under captive programme
- **Legal protection:** Schedule I, Wildlife (Protection) Act, 1972 (highest protection); Appendix I, CITES

TEACHING HOOK

The GIB Dilemma — "Solar Power vs. Solar Bird": GIB's primary killer is overhead power lines from the very solar panels India is building in its habitat to achieve renewable energy targets. So: *India's climate solution (solar) is destroying a species (GIB) that depends on the grassland ecosystem India is converting.* For UPSC, this is the perfect example of "trade-offs in sustainable development." Use this tension in Mains GS3: "Is India's renewable energy expansion compatible with its biodiversity conservation commitments?" Answer: Yes, if proper EIA, underground cables, and wildlife corridors are mandated. This is the "green economy paradox."

PYQ LINKAGE

"What are the key threats to the biodiversity of India? Explain the role of the government in protecting biodiversity." — UPSC Mains GS3, 2021. Also (Prelims-style): "Which of the following animals is listed as Critically Endangered on the IUCN Red List? (a) Indian Wild Ass (b) Snow Leopard (c) Great Indian Bustard (d) Red Panda" — Direct Prelims fact.



Panagarh, West Bengal

INDIA · EASTERN REGION

Home of XVII Corps (Mountain Strike Corps) — India's first Integrated Battle Groups (IBGs) operationalised here on 1 July 2026 for China-border deployment.

GS3 · Defence

Sriharikota, Andhra Pradesh

INDIA · SATISH DHAWAN SPACE CENTRE

ISRO's primary launch site — GISAT-1A (EOS-05) to be launched aboard GSLV-F18 on 31 July 2026 from here for geostationary Earth observation.

GS3 · Space Technology

Gangtok, Sikkim

INDIA · NORTHEAST

Declared India's first fully paperless judiciary state during a national judiciary conclave presided over by Justice Surya Kant, CJI.

GS2 · Governance

Yarlung Tsangpo / Tibet, China

CHINA-CONTROLLED TIBET

Site of China's proposed mega-dam (60 GW) — the world's largest hydropower project — raising India's downstream water security concerns on the Brahmaputra.

GS2 · India-China · GS1 Water

New Delhi

INDIA · CAPITAL TERRITORY

Monsoon Session of Parliament confirmed for July 21–August 21, 2026. Also, Supreme Court issued ruling on Governors' bill assent powers (no court-imposed deadlines).

GS2 · Polity

Jaisalmer, Rajasthan

INDIA · THAR DESERT

Last stronghold of the Critically Endangered Great Indian Bustard (GIB); Desert National Park and Conservation Breeding Centre are located here.

GS3 · Biodiversity

West Asia / Persian Gulf

MIDDLE EAST

Ongoing West Asia conflict is the primary downside risk cited by RBI for India's growth outlook — driving up crude oil prices, freight costs, and supply chain disruptions.

GS2 · IR · GS3 Economy

Arabian Sea

INDIAN OCEAN REGION

Currently experiencing marine heatwave conditions as part of global SST records; affects monsoon onset and intensity. Southwest Monsoon 2026 advancing northward.

GS1 · Climate · Monsoon

Bay of Bengal

EASTERN INDIAN OCEAN

Key area for GISAT-1A real-time cyclone monitoring. Also under marine heatwave watch — higher SST can intensify Bay of Bengal cyclones. Monsoon tracks northward through here.

GS1 · Disaster Mgmt · GS3 S&T

3 ETHICS & CASE STUDIES (GS4)

CASE STUDY 1 · ENVIRONMENTAL CLEARANCE ETHICS

The Solar Farm vs. the Bustard

You are a District Environment Officer in Jaisalmer. A large solar energy company has applied for land clearance for a 2,000 MW solar park in a zone adjacent to the Desert National Park — the last known stronghold of the Critically Endangered Great Indian Bustard. The company offers to install 100 community solar pumps in drought-hit villages as CSR. State

government is under political pressure to boost renewable energy capacity. Your field survey indicates the proposed site overlaps with a migratory GIB corridor. You must submit a recommendation.

Stakeholders:	GIB (nature), rural villagers (electricity), solar company (profit), state government (targets), central MoEFCC (law), future generations (biodiversity)
Ethical tensions:	Development vs. Conservation · Short-term utility vs. Long-term ecological security · Corporate pressure vs. official duty · Political expediency vs. legal mandate
Values at stake:	Integrity, Impartiality, Compassion for nature, Rule of Law, Intergenerational equity, Non-maleficence
Framework to apply:	Precautionary Principle (if in doubt, protect) · UPSC's "Courage of Conviction" principle · Dharma of the office (protect the species per WPA 1972 Sch I duty)
Recommended action:	Recommend denial or significant relocation away from GIB corridor; propose alternative site analysis; escalate to State Wildlife Board; document field survey findings transparently. CSR offer cannot override statutory duty.
UPSC keywords:	Probity in governance, Impartial advice, Scientific temper, Intergenerational justice, Sustainable development

CASE STUDY 2 · WELFARE SCHEME ETHICS

Ghost Workers in the Job Guarantee Scheme

As a newly appointed Block Development Officer (BDO), you discover during a random audit that 30% of the job-card holders under the newly implemented VB-G RAM G scheme in your block are "ghost workers" — their AADHAAR-linked accounts receive wage payments but no actual work has been done. The local panchayat head, a politically connected person, is complicit. A senior colleague privately advises you to "let it go" to avoid creating administrative friction. The funds diverted amount to ₹1.8 crore in one quarter.

Stakeholders:	Genuine poor workers (deprived), state exchequer (defrauded), panchayat head (corrupt beneficiary), your senior (complicit), you (integrity at stake), the scheme's intent
Ethical tensions:	Loyalty to senior vs. Duty to law · Career risk vs. Probity · Systemic inertia vs. Moral courage · Whistleblowing vs. Institutional harmony
Values at stake:	Integrity, Courage, Justice, Accountability, Public Trust, Empathy for the genuinely poor
Recommended action:	Conduct a full verification with Social Audit team; suspend fraudulent payments; file a formal complaint to the district collector and state rural development secretary; document everything; invoke the RTI-SC linkage if needed. Do NOT comply with senior's suggestion to suppress.
UPSC keywords:	Emotional intelligence (managing pressure from above), Moral courage, Whistleblower protection, Accountability in governance

CASE STUDY 3 · SURVEILLANCE AND CIVIL LIBERTIES

The Aerostat Over the Village

You are an Additional Secretary in the Ministry of Home Affairs. The Army requests permission to deploy a tactical aerostat surveillance system — originally designed for border security in Ladakh — over a restive civilian area in the Northeast, following an uptick in insurgent activity. The aerostat will provide 24/7 video surveillance of the area including normal civilian homes, markets, and places of worship. Local civil society and a state minister object, citing privacy rights. The Army assures the footage will be used only for anti-insurgency and not shared with state police.

Stakeholders:	Civilians (privacy, dignity), Army (security mandate), insurgents (deterred but may escalate), civil society (accountability), state government (federal balance), Constitution (Arts 19, 21)
Ethical tensions:	National security vs. Individual liberty · Effectiveness vs. Proportionality · AFSPA powers vs. Constitutional rights · Military secrecy vs. Democratic accountability
Framework:	Proportionality Test (Puttaswamy judgment, 2017 — privacy is fundamental right; any restriction must be proportionate, necessary, and have legislative backing) · Doctrine of minimal invasion

Recommended action: Seek legal opinion on AFSPA coverage for such surveillance; insist on time-bound deployment with judicial oversight; propose a data-retention and access policy; ensure civilian review mechanism; escalate to Cabinet Committee on Security with dissenting civil society views on record.

UPSC keywords: Right to Privacy (Art 21), Proportionality, Doctrine of necessity, Conflict between security and liberty, Federalism

CASE STUDY 4 · GOVERNOR'S CONSTITUTIONAL DILEMMA

The Bill the Governor Won't Touch

You are the Chief Secretary advising the Governor of a state. The state legislature passed a Bill (expanding SARAS-type SHG marketing networks) four months ago. The Governor — who belongs to a different political persuasion than the state government — has not acted on the Bill. The Chief Minister is pressing you to advise the Governor to take a decision. The Governor privately tells you he "has reservations" but cannot articulate them on record. The Supreme Court has just ruled (July 2026) that courts cannot impose timelines, but the Governor's inaction is creating a governance vacuum.

Ethical tensions: Constitutional neutrality vs. Political partisanship · Advisory duty to Governor vs. Loyalty to elected government · Judicial guidance vs. Constitutional silence on timelines

Values at stake: Constitutional morality, Impartiality, Integrity, Respect for democratic mandate, Duty of frank and fearless advice

Recommended action: Advise the Governor in writing that continued inaction without a substantiated constitutional reason amounts to a violation of the spirit of Article 200. Recommend three options: assent, withhold with reasoned objection (returnable), or reserve for President. Document advice. Remind him that the SC ruled indefinite inaction is not protected by the absence of a timeline.

UPSC keywords: Constitutional morality (Dr. Ambedkar), Impartial advice, Centre-State relations, Rule of Law, Accountability of constitutional functionaries

4

15 MCQS — PRELIMS PRACTICE

QUESTION 1 · GS2 · WELFARE SCHEMES

With reference to the VB-G RAM G Act, 2025, which of the following statements is/are correct?

1. It replaces the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005.
2. It guarantees 150 days of employment per rural household per year.
3. The national daily base wage has been set at ₹300.

Select the correct answer using the code below:

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

✓ Answer: (b) 1 and 3 only

Statement 2 is incorrect — the employment guarantee is 125 days, not 150. Statements 1 (replaces MGNREGA from 1 July 2026) and 3 (₹300 national floor wage) are correct.

QUESTION 2 · GS3 · DEFENCE

Integrated Battle Groups (IBGs), recently operationalised by the Indian Army from Panagarh, West Bengal, are best described as formations that are:

- (a) Larger than a division but smaller than a corps
- (b) Larger than a brigade but smaller than a division

- (c) Multi-service joint theatre command units integrating Army, Navy and Air Force
- (d) Special forces units for counter-terrorism operations only

✓ Answer: (b) Larger than a brigade but smaller than a division

An IBG has ~5,000 personnel — larger than a brigade (3,000–3,500) but smaller than a division (10,000–12,000). They are Army-only (not joint tri-service), commanded by a Major General.

QUESTION 3 • GS3 • SCIENCE & TECHNOLOGY

GISAT-1A (EOS-05), scheduled for launch in July 2026, is primarily designed to provide:

- (a) Global positioning and navigation services as part of the NavIC constellation
- (b) Deep-sea resource monitoring and ocean floor mapping
- (c) Near-real-time continuous imaging of the Indian subcontinent from geostationary orbit
- (d) Lunar surface mapping as part of the Chandrayaan-4 programme

✓ Answer: (c)

GISAT-1A is a Geo Imaging Satellite operating from geostationary orbit (36,000 km), providing full India coverage every 30 min and field-specific images every 5 min at 42m spatial resolution.

QUESTION 4 • GS3 • ECONOMY / MONETARY POLICY

Which of the following correctly represents the RBI policy corridor rates as of June 2026?

- (a) SDF: 4.75% | Repo: 5.00% | MSF: 5.25%
- (b) SDF: 5.00% | Repo: 5.25% | MSF: 5.50%
- (c) SDF: 5.25% | Repo: 5.50% | MSF: 5.75%
- (d) SDF: 4.50% | Repo: 4.75% | MSF: 5.00%

✓ Answer: (b)

RBI MPC June 2026: SDF = 5.00%, Repo Rate = 5.25% (held unchanged), MSF/Bank Rate = 5.50%. The corridor is 50 basis points wide on each side of the repo rate.

QUESTION 5 • GS2 • POLITY — GOVERNORS

Under Article 200 of the Constitution of India, which of the following actions can a Governor take on a Bill passed by the state legislature?

1. Grant assent to the Bill.
2. Withhold assent from the Bill.
3. Reserve the Bill for the consideration of the President.
4. Must assent within 30 days of passage.

- (a) 1, 2 and 3 only
- (b) 1 and 3 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

✓ Answer: (a) 1, 2 and 3 only

Statement 4 is incorrect — Article 200 does NOT prescribe any time limit. The Supreme Court (July 2026) explicitly ruled that courts cannot impose timelines. Governors have three options: assent, withhold/return for reconsideration, or reserve for President.

QUESTION 6 • GS1 • GEOGRAPHY — RIVERS

The Yarlung Tsangpo River, on which China is constructing a mega-hydropower dam, enters India and flows through Arunachal Pradesh under which name before becoming the Brahmaputra?

- (a) Teesta
- (b) Barak
- (c) Siang
- (d) Subansiri

✓ Answer: (c) Siang

The Yarlung Tsangpo (Tibet) enters India as the Siang in Arunachal Pradesh, then merges with other rivers and becomes the Brahmaputra in Assam. The Teesta and Subansiri are tributaries; Barak is a separate river system.

QUESTION 7 · GS3 · SCIENCE & TECHNOLOGY — SPACE

Consider the following statements about Axiom Mission 4 (Ax-4) in which Indian astronaut Shubhanshu Shukla participated:

1. He was the first Indian to visit the International Space Station (ISS).
2. The mission was launched aboard a GSLV rocket from Sriharikota.
3. He was the second Indian citizen to travel to space.

Which of the above statements are correct?

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

✓ Answer: (a) 1 and 3 only

Statement 2 is INCORRECT — Ax-4 used a SpaceX Falcon 9 / Dragon spacecraft, not GSLV. Statements 1 (first Indian on ISS) and 3 (second Indian in space after Wing Commander Rakesh Sharma in 1984) are correct.

QUESTION 8 · GS3 · BIODIVERSITY

The Great Indian Bustard (*Ardeotis nigriceps*) is classified under which IUCN Red List category?

- (a) Vulnerable
- (b) Endangered
- (c) Critically Endangered
- (d) Near Threatened

✓ Answer: (c) Critically Endangered

The GIB was upgraded from Endangered to Critically Endangered in 2011 on the IUCN Red List. Population ~100–150 in the wild. It is also listed on CITES Appendix I and Schedule I of India's Wildlife (Protection) Act, 1972.

QUESTION 9 · GS2 · WELFARE SCHEMES

The Deendayal Antyodaya Yojana–National Rural Livelihoods Mission (DAY-NRLM), under which the SARAS Shakti brand initiative operates, is implemented by which Ministry?

- (a) Ministry of Women and Child Development
- (b) Ministry of Labour and Employment
- (c) Ministry of Rural Development
- (d) Ministry of Panchayati Raj

✓ Answer: (c) Ministry of Rural Development

DAY-NRLM is a flagship programme of the Ministry of Rural Development. It is the world's largest rural microfinance and SHG programme, covering 90+ lakh SHGs and ~12 crore rural women.

QUESTION 10 • GS3 • DEFENCE & TECHNOLOGY

With reference to the Delegation of Financial Powers to DRDO (DFP-2026), released by Defence Minister Rajnath Singh in June 2026, which of the following is correct?

- (a) It places DRDO under direct Parliamentary oversight for all R&D expenditures
- (b) It streamlines and enhances the financial autonomy of DRDO for faster R&D and procurement decisions
- (c) It transfers DRDO's commercial division to the private sector under DPIIT
- (d) It merges DRDO with the Defence Acquisition Council (DAC)

✓ Answer: (b)

DFP-2026 grants DRDO enhanced financial powers to make faster decisions in research, development, and procurement — a key step toward Atmanirbhar Bharat in defence without requiring multiple layers of approval for every expenditure.

QUESTION 11 • GS1 • CLIMATE SCIENCE

Marine heatwaves in the Indian Ocean influence India's Southwest Monsoon by:

1. Altering sea surface pressure gradients that drive monsoon circulation winds.
2. Increasing evaporation, which can disrupt moisture distribution over India.
3. Cooling the Bay of Bengal, thereby reducing cyclone frequency.

Which of the above statements are correct?

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

✓ Answer: (b) 1 and 2 only

Statement 3 is incorrect — warmer seas (marine heatwaves) generally INCREASE, not decrease, cyclone frequency and intensity over the Bay of Bengal. Statements 1 and 2 correctly describe mechanisms by which anomalous ocean heating disrupts monsoon circulation.

QUESTION 12 • GS3 • DEFENCE

The XVII Corps of the Indian Army, from which India's first Integrated Battle Groups (IBGs) were raised in July 2026, is based at:

- (a) Jaipur, Rajasthan
- (b) Ambala, Haryana
- (c) Panagarh, West Bengal
- (d) Dimapur, Nagaland

✓ Answer: (c) Panagarh, West Bengal

XVII Corps (Mountain Strike Corps) is based at Panagarh, West Bengal, and is India's dedicated offensive formation along the China border. The first IBGs were raised from this Corps on 1 July 2026.

QUESTION 13 • GS2 • WELFARE SCHEMES

SARAS Shakti, launched at the Rashtriya Gramin Vikas Sammelan (RGVS) 2026, is a branding and marketing initiative under which parent scheme?

- (a) PM-KISAN (Pradhan Mantri Kisan Samman Nidhi)

- (b) Deendayal Antyodaya Yojana–National Rural Livelihoods Mission (DAY-NRLM)
(c) National Social Assistance Programme (NSAP)
(d) Pradhan Mantri Gram Sadak Yojana (PMGSY)

✓ Answer: (b) DAY-NRLM

SARAS Shakti is a premium branding initiative under the Deendayal Antyodaya Yojana–National Rural Livelihoods Mission (DAY-NRLM) of the Ministry of Rural Development, designed to connect women SHG products to national and export markets.

QUESTION 14 • GS2 • GOVERNANCE

Which Indian state was recently declared the first fully paperless judiciary state during a national judiciary conclave presided over by Chief Justice Surya Kant in Gangtok?

- (a) Kerala
(b) Maharashtra
(c) Sikkim
(d) Meghalaya

✓ Answer: (c) Sikkim

Sikkim was declared India's first fully paperless judiciary state at a national judiciary conclave held in Gangtok, Sikkim's capital. This milestone marks the complete digitisation of judicial processes including filing, hearings, and orders.

QUESTION 15 • GS1 • CLIMATE — ENSO

With reference to El Niño Southern Oscillation (ENSO) and its impact on India, consider the following statements:

1. El Niño is associated with warmer-than-average sea surface temperatures in the central and eastern Pacific Ocean.
2. El Niño typically causes below-normal rainfall over most of India during the Southwest Monsoon.
3. La Niña is generally associated with above-normal monsoon rainfall over India.

Which of the above are correct?

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

✓ Answer: (d) 1, 2 and 3

All three statements are generally correct. El Niño (warm Pacific) weakens the Indian monsoon; La Niña (cool Pacific) tends to strengthen it. Note: these are probabilistic tendencies, not certainties — important qualifier in Mains answers.

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5

MAINS QUESTIONS — ANSWER WRITING

GS1 • Geography & Climate

15 Marks • 250 Words

Q1. "The Brahmaputra river system is as much a geopolitical challenge as it is a geographical phenomenon." Examine India's downstream vulnerability to China's hydropower ambitions and suggest a diplomatic and technical framework for India's water security.

Framework: Introduction (river importance to NE India: 30% of India's river flows, 40 million people) → River system facts (Yarlung→Siang→Brahmaputra) → China's dam (60 GW, world's largest, no treaty) → Risks: artificial floods, sediment blockage,

flow reduction → Existing mechanisms: bilateral MoU 2008 (data sharing, weak) → India's options: legal (international water law, ICJ), diplomatic (SCO, bilateral), technical (upstream storage, early warning, Brahmaputra Board) → Conclusion: water diplomacy as a strategic priority. *PYQ echo: "India's water resources are unevenly distributed — critically examine."* (GS1, 2016)

GS1 · Climate Change · Disaster Management

15 Marks · 250 Words

Q2. Record-breaking global sea surface temperatures in 2026 and the phenomenon of marine heatwaves are increasingly being identified as a driver of India's monsoon volatility. Analyse the mechanisms involved and discuss the implications for India's food security and disaster preparedness.

Framework: Define marine heatwave (SST > 90th percentile for at least 5 days) → Mechanism: warmer SST → altered pressure gradients → disrupted Walker Circulation → weakened monsoon OR excess rainfall in pockets → 2026 data: 20.98°C record, 82% ocean surface affected → India-specific impact: delayed monsoon, erratic rainfall distribution, cyclone intensification, fisheries collapse → Food security: Kharif sowing disruption → Disaster prep: NDRF pre-positioning, GISAT-1A for real-time monitoring → Way forward: IOC-India treaty on ocean monitoring, IMD integration with CMEMS. *Refer: IPCC AR6 — Indian Ocean warming 3× faster than global average.*

GS2 · Indian Polity · Constitutional Law

15 Marks · 250 Words

Q3. The constitutional position of the Governor in the Indian federal structure has been a recurring point of tension between state governments and the Centre. In light of the Supreme Court's recent ruling that courts cannot impose timelines for Governors to assent to Bills, critically examine the safeguards and gaps in the constitutional framework governing gubernatorial powers.

Framework: Governor's role under Article 153-161 → Bill assent under Art 200-201 → Historical controversies (Tamil Nadu, Kerala, Telangana — Governors withholding assent for years) → SC ruling June 2026: no deemed assent, no court-imposed timeline → Analysis: creates void — indefinite delay possible without political cost → Sarkaria Commission recommendations → Punchhi Commission: codify timeline → Way forward: constitutional amendment or legislation prescribing "reasonable time" + mechanism for judicial referral → Conclusion: Constitutional morality must fill where explicit text is silent.

GS3 · Defence & Security

15 Marks · 250 Words

Q4. "India's operationalisation of Integrated Battle Groups (IBGs) represents a strategic shift from mass warfare to manoeuvre warfare." Discuss the concept, rationale, and challenges associated with this military restructuring, and assess its strategic significance vis-à-vis India's northern border challenges.

Framework: Define IBG (5,000 troops, multi-domain under one MG) → Rationale: China's PLA modernisation (combined-arms, rapid deployment) → Old problem with divisions: slow mobilisation, siloed arms → IBG solution: self-contained, day-1 ready → Panagarh XVII Corps: mountain terrain, China-border specific → Challenges: inter-arms coordination, training timelines, equipment procurement under Atmanirbhar Bharat, integration with air assets → Theatre commands: IBGs are stepping stone → Strategic significance: faster response time, better deterrence → Conclusion: doctrine shift necessary but requires budgetary and inter-services coordination commitment.

GS4 · Ethics · Welfare Administration

10 Marks · 150 Words

Q5. As a Block Development Officer, you discover widespread ghost worker fraud in the newly implemented VB-G RAM G scheme amounting to ₹1.8 crore. Your senior officer privately advises you to overlook it. Identify the ethical issues, the values at stake, and the course of action you would take.

Framework: Ethical issues: corruption, betrayal of public trust, defrauding intended beneficiaries, complicity pressure → Values: Integrity, Moral courage, Accountability, Justice, Empathy for the genuine poor → Course of action: (1) Conduct full verification with social audit; (2) Document findings officially; (3) Suspend fraudulent payments pending inquiry; (4) Report formally to District Collector and State RD Secretary; (5) Politely decline senior's suggestion in writing, citing legal and ethical obligations; (6) Seek whistleblower protection if threatened → Outcome expected: systemic correction, not career comfort. "Integrity is doing the right thing when no one is watching." — C.S. Lewis.

Q6. "Sustainable development requires making difficult trade-offs between present human welfare and the survival of endangered species." As a District Environment Officer, how would you resolve the ethical conflict between approving a solar park in a Great Indian Bustard habitat and fulfilling your duty toward biodiversity conservation?

Framework: Identify conflict: national renewable energy targets vs. Schedule I species under WPA 1972 → Ethical principles: Precautionary principle (environmental ethics), Intergenerational equity, Non-maleficence → Legal framework: WPA 1972, EIA Notification 2006, SC 2021 order (underground cables in GIB habitat) → Decision: Recommend denial OR site relocation to non-GIB corridor → Mitigation if allowed: underground transmission, habitat compensation, real-time bird monitoring → Key insight: the duty of an environmental officer is to the law first, political convenience second. The GIB cannot speak for itself — the officer must. → Conclude: Sustainability is not just solar panels; it includes the species that will outlive us if we let them.

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Philosophy Target 300+: Q5 and Q6 today involve deep ethical reasoning — the kind that separates 130-mark GS4 scorers from 90-mark ones. Philosophy Target 300+ gives you the vocabulary and frameworks (Kantian, Utilitarian, virtue ethics) to write nuanced answers. Enrol at theiasakademia.com.

6 VALUE ADDITION — QUOTES, DATA & ARTICLES

"Water is the oil of the 21st century. "

— **Andrew Liveris, CEO, Dow Chemical**

Use in: GS1 — Yarlung Tsangpo / Brahmaputra water security; GS2 — India-China transboundary water diplomacy

"In questions of science, the authority of a thousand is not worth the humble reasoning of a single individual. "

— **Galileo Galilei**

Use in: GS4 — Scientific temper; Ethics Case 1 (standing by environmental science over political pressure); GS3 — ISRO / DRDO independence in R&D

"The world is not a problem to be solved; it is a living being to which we belong. "

— **Lanza del Vasto, Philosopher**

Use in: Environment Essay; GS4 — Biodiversity conservation ethics; GIB case study; Marine heatwave discussions

"Poverty is not an accident. Like slavery and apartheid, it is man-made and can be removed by the actions of human beings. "

— **Nelson Mandela**

Use in: GS2 — VB-G RAM G welfare scheme analysis; GS4 — Ethics of rural employment fraud (Case Study 2); Social justice essay

"A people that values its privileges above its principles soon loses both. "

— **Dwight D. Eisenhower**

Use in: GS4 — Ethics Case 2 (reporting welfare fraud despite career risk); Probity in governance answers; Constitutional morality questions

RBI Policy Rate Corridor — Snapshot (June 2026)

INDICATOR	RATE / VALUE	NOTES FOR UPSC
Repo Rate	5.25% (Unchanged)	Rate at which commercial banks borrow from RBI overnight

INDICATOR	RATE / VALUE	NOTES FOR UPSC
Standing Deposit Facility (SDF)	5.00%	Replaced Reverse Repo in 2022; rate at which banks park funds with RBI
Marginal Standing Facility (MSF)	5.50%	Emergency overnight borrowing rate for banks (above repo)
Bank Rate	5.50%	Long-term borrowing rate from RBI; same as MSF
GDP Growth (FY2026-27)	6.9% (projected)	Down from 7.6% in FY2025-26
CPI Inflation (FY2026-27)	4.6% (projected)	Within tolerance band (4% ± 2%)
MPC Stance	Neutral	Can move either way; data-dependent

 Key Constitutional Articles on Governor's Bill Assent (Articles 200–201)

ARTICLE	SUBJECT	KEY PROVISION	UPSC ANGLE
Art. 200	Assent to Bills — State Level	Governor may assent, withhold, or reserve for President; if returned and re-passed, must give assent	Core Polity — repeated in Mains 2016, 2022
Art. 201	Bills reserved for President	President may assent, withhold, or direct reconsideration; no timeline specified	Complements Art 200; President's discretion also unlimited
Art. 111	Assent to Bills — Central Level	President may assent or return (not withhold permanently) Bills of Parliament	Compare with Art 200 — President has fewer options than Governor
SC Ruling (2026)	No court-imposed timeline	Overturns "deemed assent" doctrine; indefinite delay is still constitutionally problematic	Current affairs + Polity GS2 integration

7 DIRECT HIT TRACKER — EXAM PROBABILITY

#1 — HIGHEST PROBABILITY VB-G RAM G vs MGNREGA GS2 & GS3 New law replacing 20-year-old MGNREGA; 125 days, ₹300 floor wage, ₹95,692 cr budget. Compare & contrast ready. ★★★★★	#2 — HIGHEST PROBABILITY RBI MPC June 2026 — Rates & Stance GS3 · Economy Repo 5.25%, SDF 5.00%, MSF 5.50%, Neutral stance, GDP 6.9%, CPI 4.6%. West Asia risk flagged. ★★★★★	#3 — HIGHEST PROBABILITY Integrated Battle Groups (IBGs) GS3 · Defence India's first IBGs at Panagarh (XVII Corps). 5,000 troops, Maj Gen led. Leaner, faster combat doctrine. China-border focus. ★★★★★
#4 — HIGH PROBABILITY Governor's Bill Assent — SC Ruling GS2 · Polity No court-imposed timelines (Article 200). "Deemed assent" overturned. Governor has 3 options: assent, withhold, reserve for President. ★★★★★	#5 — HIGH PROBABILITY GISAT-1A / GSLV-F18 Launch GS3 · S&T · Space Geostationary Earth observation satellite; 42m resolution, 30-min full India image, 5-min field image. Real-time disaster monitoring. ★★★★★	#6 — HIGH PROBABILITY India-China Water Diplomacy GS2 · IR · GS1 Geography Yarlung Tsangpo → Siang → Brahmaputra. No bilateral water treaty. China's 60 GW dam. India's downstream vulnerability. IWT comparison. ★★★★★
#7 — HIGH PROBABILITY Marine Heatwaves & Monsoon GS1 · Climate & Disaster Record SST 20.98°C June 2026. 82% ocean surface heatwave. El Niño strengthening.	#8 — HIGH PROBABILITY Gaganyaan / Axiom-4 Legacy GS3 · Space Technology Shubhanshu Shukla = 1st Indian on ISS, 2nd Indian in space. Ax-4 on Falcon 9.	#9 — MODERATE PROBABILITY Great Indian Bustard (GIB) GS3 · Biodiversity Ardeotis nigriceps. Critically Endangered. ~100–150 wild. Desert NP, Jaisalmer. SC

Indian Ocean fastest-warming tropical ocean. Monsoon impact.

★★★★★

Gaganyaan = 4th nation to independently send humans to space.

★★★★★

2021: underground power lines. Solar vs. GIB conflict.

★★★★★

#10 — HIGH PROBABILITY

India's Foreign Policy 2026

GS2 · IR

Multi-alignment: BRICS chairmanship, SCO, QUAD. "Strategic indifference" toward Pakistan. West Asia conflict impact. India as Global South bridge.

★★★★★

#11 — MODERATE PROBABILITY

SARAS Shakti / DAY-NRLM

GS2 · Welfare Schemes

Women SHG branding initiative under MoRD. DAY-NRLM: 90+ lakh SHGs, ~12 crore women. SARAS fair → SARAS Shakti brand → e-commerce markets.

★★★★★

#12 — MODERATE PROBABILITY

Sikkim — Paperless Judiciary

GS2 · Governance · E-governance

India's first fully paperless judiciary state. CJI Surya Kant presided. Digital filing, hearings, orders. Links to National e-Court Mission.

★★★★★

VERIFIED · PART II

Proof of Precision

Every item mapped. Every claim verified.

2

ENV. NEWS
CARDS

4

ETHICS CASES

15

MCQS
GENERATED

6

MAINS
QUESTIONS

9

PLACES
MAPPED

0

REPEATED TOPICS

Environment & Ecology

Places in News

Ethics GS4

Prelims MCQs

Mains Questions

Value Addition

Direct Hit Tracker

✓ Environment Card 1: Current news — global SST record, Down to Earth / Copernicus C3S (July 1, 2026)

✓ Environment Card 2: Static topic — Great Indian Bustard, sourced from IUCN Red List / Wildlife Institute of India

✓ 9 Places in News: all linked to current news events of 1–2 July 2026 with CSS map pins placed

✓ 4 Ethics Cases: realistic civil servant dilemmas linked to today's news (GIB, VB-G RAM G, Aerostat, Governor's assent)

✓ 15 MCQs: statement-based, single correct answer, explanation provided for all; covers GS1, GS2, GS3

✓ 6 Mains Questions: 2 GS1, 1 GS2, 1 GS3, 2 GS4 — with frameworks for exam-hall use

✓ News Freshness Rule applied — all environment topics fresh; SOE 2026 report excluded (already widely covered)

✓ GoDaddy Compliance: No external JS · All CSS embedded · No server-side includes

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