

www.vishnuias.com



MAY

09.05.2021

CURRENT AFFAIRS

A MAGAZINE FOR CIVIL SERVICES PREPARATION

JOIN OUR TELEGRAM: <https://t.me/vishnuiasmentor>

**Articles of the day
THE HINDU & INDIAN EXPRESS**

UPSC

General Studies

Test Series

**Online &
Offline
classes**

**Free daily
materials**

**One-Stop
Solution**

GS 2 : Polity, Governance, International Relations

1. Probe into digging, construction activities in Kaziranga

- The authorities in Assam's Golaghat and Nagaon districts have begun probing cases of clearance of forest land, digging and construction activities on at least three animal corridors within the **eco-sensitive zone of the Kaziranga National Park and Tiger Reserve**.
- These activities if found true would be in violation of the Supreme Court's order which had noted that no new construction shall be permitted on private lands which form part of the nine identified animal corridors.
- The Kaziranga tiger reserve has **nine identified animal corridors**.
 - Amguri, Bagori, Chirang, Deosur, Harmati, Hatidandi, Kanchanjuri, Haldibari and Panbari corridors.
- These corridors are **crucial for the rhinos, elephants, tigers, deer and other animals that escape a flooded Kaziranga during the monsoon months** for the safety of the hills of Karbi Anglong district.

2. 'Immediate measures needed for welfare of children'

Context:

- **The Supreme Court Juvenile Justice Committee**, in coordination with UNICEF has highlighted the need to urgently provide care and protect children suddenly made vulnerable by the loss of one or both parents to the second wave of COVID-19.

Background:

- The Supreme Court has been nudging the Centre to prepare for the **third wave of the pandemic**.
- Recently, a Bench led by Justice D.Y. Chandrachud had highlighted reports that children **would be affected in the third wave**.

Details:

- The Juvenile Justice Committee has noted the need for concerted efforts to provide **interim care for children who have been orphaned, abandoned or even left unaccompanied in their own homes**.

Recommendations:

- Setting up of **State-level nodal officers and a district task force** for rapid response for the care and protection of such children.
- **Sponsorship for children** who had lost parent/s or bread-earners or were facing economic hardship.
- Clear guidance has to be published on steps to be taken in the event when such children in an extremely vulnerable state had been exposed to the virus or showed symptoms of infection. **Care measures for their isolation and treatment** needed to be stepped up.
- **Childcare institutions should be declared “essential services”**.
- The caregivers and employees of childcare institutions – both government and private – should be vaccinated as frontline professionals.
- The state should focus on ensuring heightened medical watch for children in institutional care.

3. Cleansing flashes

- A new research has found that discharges that accompany lightning bolts produce large amounts of the **hydroxyl radical**.
- This serves to **break up the green house gas methane** in the atmosphere.

4. E.U., India relaunch FTA talks, sign connectivity partnership

Context:

- **U.-India leaders virtual meeting.**
 - 27 European leaders had gathered in Porto, Portugal

Details:

Free trade agreement:

- India and the European Union have agreed to relaunch free trade negotiations by resuming talks on the **Bilateral Trade and Investment Agreement (BTIA)**.
 - The talks had begun in 2007, and stalled in 2013, over differences on issues like market access issues, and tariffs by India on products like wine, dairy and automotive parts, as well as E.U. resistance over visas for Indian professionals.
- India and the E.U. have agreed to work towards a **balanced, comprehensive and mutually beneficial trade agreement**.

- They would also launch negotiations for a **stand-alone investment protection agreement** and a **separate agreement on “geographical indications”** pertaining to intellectual property rights.
 - India had in 2015 scrapped all **Bilateral Investment Treaties (BITs)**. This has posed hurdles for new E.U. investments in India.
- The relaunched talks would be steered by the recently set up High-Level dialogue between Indian Commerce Minister and his counterpart, EU Trade Commissioner.
- The relaunch of free trade talks holds immense significance given the timing of the talks which comes as the **U.’s negotiations with China on their Comprehensive Agreement on Investment (CAI)** have run into trouble.

Connectivity partnership:

- The **India-E.U. connectivity partnership** has committed the two sides to work together on **digital, energy, transport, people to people connectivity** that was transparent, viable, inclusive, sustainable, comprehensive, with a rules-based approach.
- The Connectivity Partnership document outlines plans to cooperate on **digital and infrastructure projects**.
- The partnership is seen as a response to China’s Belt and Road Initiative.

COVID related talks:

- The meeting also discussed **COVID recovery plans and vaccine cooperation**.

Temporary waiver for TRIPS:

- India has failed to secure the support of the European leaders for its proposal at the World Trade Organisation for patent waivers for COVID vaccine.
 - The support of a major bloc like the E.U. is crucial to passing the resolution at the WTO by consensus.

5. Efficient drug delivery

- University of Amherst researchers have engineered a **nanoparticle** that has the potential to change the way diseases including cancer are being treated.
- The process uses **PACs or protein-antibody conjugates** to manage the delivery of the drug to the cancer cell.
 - Protein-antibody conjugates (PACs) are used for antibody-directed delivery of protein therapeutics to specific cells. PACs have the potential to judiciously combine the **merits of two prolific therapeutic approaches, viz. biologics and antibody-drug conjugates**.

- It ensures the **precise and effective deliver of drugs** to specific cancerous cells.

GS 3 : Economy, Science and Technology, Environment

6. Wildlife forensics helps cause of pangolins

Context:

- Researchers of **Zoological Survey of India (ZSI)**, Kolkata, have developed tools based on wildlife forensics that could help differentiate between the scales of Indian pangolin (*Manis crassicaudata*) and Chinese pangolin (*Manis pentadactyla*).

Background:

Threat to pangolins:

- **Pangolins are the world's most trafficked mammal.** The demand for its scales in the making of traditional East Asian medicines has fuelled its trade.
- Studies have shown that between 2000 and 2019, an estimate of about 8,95,000 pangolins was trafficked globally, which mainly involved Asian and African pangolins. This has led to a **drastic decline of the species.**
- The population of Chinese pangolins is limited as it has a limited geographical range, **low fecundity** with just one offspring a year. It is also facing pressure due to **habitat degradation** and is prone to local extinction.

Conservation status:

- According to the International Union for Conservation of Nature, **Indian pangolins are endangered and the Chinese pangolins are critically endangered.**
- Pangolins are listed in **Schedule I of Wildlife (Protection) Act, 1972.**

Significance:

- The new methodology by **helping identify species** and the number of individuals poached in seizures, could **help track the decline of the species.**

7. Anti-COVID-19 drug developed by DRDO gets emergency use nod

Context:

- **Drugs Controller General of India (DCGI) has granted permission for emergency use of an anti-COVID-19 therapeutic application of the 2-deoxy-D-glucose (2-DG)**

Details:

- The order allows for emergency use of the drug as adjunct therapy in moderate to severe COVID-19 patients.
- The drug comes in powder form in sachets and is taken orally by dissolving it in water.
- **It selectively accumulates in virally infected cells and prevents their growth by stopping viral synthesis and energy production.**
- The drug has been developed by the **Institute of Nuclear Medicine and Allied Sciences (INMAS)** in collaboration with Dr. Reddy's Laboratories, Hyderabad.
 - INMAS is a lab of the Defence Research and Development Organisation (DRDO).

Significance:

- Clinical trial results have shown that this drug helps in **faster recovery of hospitalised patients and reduces supplemental oxygen dependence**. This will help ease the acute bed shortage and also help reduce medical oxygen demand to a great extent.
- The drug being a **generic molecule and analogue of glucose**, it can be easily produced and made available in plenty in the country.

8. Hope soars as Second World War airport in Assam takes commercial wings

Context:

- **Rupsi airport** near Gauripur, about 15 km from district headquarters Dhubri has been re-opened for commercial flights under the subsidised **UDAAN scheme for regional connectivity**.
 - Rupsi is Assam's 7th airport and 15th in the northeast including Pakyong in Sikkim.

History of the airport:

- The airport was built for warplanes in 1939.
- It was one of South Asia's largest airports at that time and was **used by Allied aircraft** for supplying arms, manpower and ammunition to forces in Burma and China during World War II.

- India's Partition in 1947 began eroding the airport's importance. It has been out of use since 1983.
- **Gauripur near Dhubri** also lost its importance as the regional communication hub soon after Independence.
 - Dhubri used to be the gateway to the northeast during the British area. It was a **strategic river port (the Brahmaputra flows by Dhubri town)** and an important stop on the pre-1947 railway line.
 - The river port was closed after the **India-Pakistan war in 1965** and the railway service suspended in 1988.

Significance:

- **Regional connectivity** is set to improve in the western part of the State of Assam.
- Rupsi is vital not only for western Assam. It could also cater to the people of western Meghalaya, Cooch Behar and Alipurduar districts of West Bengal and south-western Bhutan, besides fuelling small-scale industries.

Other interventions with respect to infrastructure in the region:

- Railway service to Dhubri was resumed in 2011 after gauge conversion.
- The river port at **Free India Ghat (Dhubri town)** was revamped in 2018. This could help incentivize regular inland water service via Bangladesh which can ensure **significant economic and social benefits for the region.**

GS 2 : Polity, Governance, International Relations

1. Intellectual property waiver for Covid-19 vaccines

The United States announced support for **waiving intellectual property** protection for Covid-19 vaccines.

Major Highlights:

- US will pursue “**text-based negotiations**” on the waiver at the **World Trade Organization (WTO)**.
 - Text-based negotiations involve **negotiators exchanging texts** with their preferred wording and coming to a consensus.
- All **164** WTO members must agree on the draft, and **any one member** can veto it.

Background:

- **India and South Africa** are pushing for the IP waiver for Covid-19 vaccines in WTO since 2020.
- The countries had asked the WTO to waive certain conditions of the **Trade Related Aspects of Intellectual Property Rights (TRIPS)** Agreement that could impede timely access to affordable medical products to combat Covid-19.
- The countries had asked the **TRIPS Council** to recommend a waiver on the implementation, application and enforcement of four sections in the second part of the agreement.
 - These sections — 1, 4, 5, and 7 — **pertain to copyright and related rights**, industrial designs, patents, and the protection of undisclosed information.

Intellectual property waiver for Covid-19 vaccines:

- The IP waiver will allow production of Covid vaccines like Pfizer, Moderna, AstraZeneca, Novavax, Johnson & Johnson and Bharat Biotech on a larger scale in **middle-income countries**.
- Most production is currently concentrated in high-income countries; production by middle-income countries has been **happening through licensing or technology transfer agreements**.

- Countries including Canada, South Korea, and Bangladesh have **shown interest in making Covid vaccines** if they can get a patent waiver.
- The major deterrents for the waiver are the **pharma companies** who had **opposed** the proposed waiver.

Roadblocks to scaling up vaccine production:

- Trade barriers
- Bottlenecks in supply chains
- Scarcity of raw materials and ingredients in the supply chain
- Developed countries blocking exports of critical raw materials
- Unwillingness of rich countries to share doses with poorer nations.

2. Uranium

- Uranium **occurs naturally** in low concentrations in **soil, rock and water** and is commercially extracted from uranium-bearing minerals.
- Uranium that has a **silvery grey metallic appearance** is mainly **used in nuclear power plants** due to its unique nuclear properties.
- **Depleted uranium is also used as shield against radiation in medical processes** using radiation therapy and also while transporting radioactive materials. Though itself radioactive, **uranium's high density** makes it effective in halting radiation.
- Its high density also makes it useful as counterweights in aircraft and industrial machinery.

Why in news?

- The Maharashtra Anti-Terrorism Squad (ATS) arrested two persons with 7 kg natural uranium estimated to be worth around Rs 21 crore.
- The duo were placed under arrest under the Atomic Energy Act of 1962 for possessing uranium without licence.

3. Centre notifies 48.32 sq km around TCFS as eco sensitive zone

Recently, a 48.32 sq km area around the Thane creek Flamingo Sanctuary (TCFS) has been notified as an eco- sensitive zone (ESZ)

Key highlights:

- The ESZ is meant to **act as a buffer for protected areas** and reduces developmental pressures around a wildlife sanctuary or national park.

- TCFS is home to **12 mangrove species**, 39 categories of mangrove species, 167 species of birds like flamingos, **45 fish species**, **59 species of butterflies**, **67 insect species** and mammals like jackals among others.

Eco Sensitive Zones (ESZ):

- They are areas in India notified by the **Ministry of Environment**, Forests and Climate Change (MoEFCC) around **Protected Areas, National Parks and Wildlife Sanctuaries**.
- It derives its **power from the Environment (Protection) Act, 1986** which does not mention the word "**Eco-Sensitive Zones**".
- Purpose: They act as a **transition zone** from areas of **high protection to areas** involving lesser protection.
- Aim: Regulate certain **activities around National Parks and Wildlife Sanctuaries** so as to minimise the negative impacts of such activities on the fragile ecosystem encompassing the protected areas.

Extent of ESZ:

- An ESZ could go **up to 10 kilometers** around a **protected area** as provided in the **Wildlife Conservation Strategy, 2002**.
- The sensitive **corridors, connectivity and ecologically important patches**, crucial for landscape linkage, **beyond 10 kilometers** width, are included in the Eco-Sensitive Zones.
- The distribution of an **area of ESZ** and the **extent of regulation** may not be uniform all around and it **could be of variable width and extent**.

Declaration of ESA:

- Below **two clauses** have been **used by the government** to declare ESA.
- The **same criteria** have been used by the government to **declare No Development Zones**.
- Central Government can **restrict areas** in which any **industries, operations** or **processes** shall not be carried out or shall **be carried out subject** to certain safeguards.
- Central government can **prohibit or restrict** the **location of industries** and carrying on certain operations on the **basis of considerations** like:
 - The biological diversity of an area, maximum allowable limits of concentration of pollutants for an area, environmentally compatible land use, and proximity to protected areas.

Criteria:

- The Ministry of **Environment, Forest and Climate Change** has a set of guidelines laying down parameters and criteria for declaring ESAs.
- These include Species Based (Endemism, Rarity etc), Ecosystem Based (sacred groves, frontier forests etc) and **Geomorphologic feature based** (uninhabited islands, origins of rivers etc).

GS 3 :Economy, Science and Technology,Environment

4. NPCI refuses to ban cryptocurrency trades in India

National Payments Corporation of India (NPCI) has **refused to ban cryptocurrency transactions**.

- It has put the onus on banks whether to ban transactions of cryptocurrency trades or not.

Background:

- Many banks are **restricting payments** for cryptocurrency deals.
- Almost half-a-dozen banks have directed payment gateway operators to blacklist merchants involved in the **trade of cryptocurrencies**.
- These banks **restrict customers** from using online fund transfer methods such as net banking and UPI to trade cryptocurrencies.
- Users of banks which have **disallowed crypto trades** cannot use UPI, net banking or cards but trades continue as some banks still allow it.

Major Highlights:

- NPCI has told banks to take a decision **based on the advice** of their legal and compliance departments.
- NPCI's decision is based on the **Supreme Court's March 2020 ruling** which **lifted** the curb on cryptocurrency dealing legal in India.
- It allowed the banks and finance companies for "dealing in virtual currencies or providing services to facilitate" anyone trading in crypto.

National Payments Corporation of India (NPCI):

- **National Payments Corporation of India (NPCI)** is an umbrella organization for operating retail payments and settlement systems in India.

- It is an **initiative of Reserve Bank of India (RBI) and Indian Banks' Association (IBA)** under the provisions of the Payment and Settlement Systems Act, 2007.
- It is a **"Not for Profit" Company** under the provisions of Section 25 of **Companies Act 1956** (now Section 8 of Companies Act 2013).
- **Aim:** To **provide infrastructure to the entire Banking system** in India for physical as well as electronic payment and settlement systems.

5. SEBI technical group report: 'Political, religious, trade bodies not allowed on social bourses'

A technical group on social stock exchanges (SSEs), constituted by the Securities and Exchange Board of India (SEBI), has issued certain recommendations.

Who are SSEs?

- A social stock exchange (SSE) enables **Indian social enterprises** to list their securities or other financial instruments, providing them with an avenue for raising capital for their operations and growth, and reducing their dependency on ad hoc funding like grants or donations.
- This would operate as a **separate segment** under existing Indian stock exchanges, enabling socially minded investors to **diversify their investment portfolio and developing a strong social securities** market in the country.
- SSE are engaged in at least one of the 15 broad eligible activities.

Benefits of SSE:

- Help **improve visibility and knowledge**, among all stakeholders, especially funders, issuers and customers, about the contributions of social enterprises to the economy.
- They **target underserved or less privileged population segments or regions**; and should have at least 67 per cent of its activities qualifying as eligible activities to the target population.
- Establish procedures to **standardise social finance transactions**, build awareness about the needs and challenges of this sector and develop social capital.
- Bridge the funding gap for social enterprises and enable a growth of strong professional networks of investors and subject matter experts in order to guide social enterprises.
- Create the **necessary social investment ecosystem** for enterprises and investors, whose objective is to generate **maximum positive social impact and place environmental, social and governance (ESG) features within the pursuit of profits and growth**.

Recommendations of SEBI are:

- Political and religious organisations, trade organisations as well as corporate foundations should **not be allowed** to raise funds through SSEs.
- **Both For Profit Enterprise (FPE) and Not for Profit Organisation (NPO)** will be eligible to tap the SSE if they are able to show their **primary goals are social intent and impact**.
- For NPOs it has recommended fundraising through **equity, zero coupon zero principal bond, development impact bonds, social impact fund with 100 per cent grants-in grants out provision, and donations by investors through mutual funds**. And for FPEs it has recommended fundraising **through equity, debt, development impact bonds, and social venture funds**.
- Made a list of eligible activities that social enterprises can engage in such as eradicating hunger, poverty malnutrition and inequality; training to promote rural sports; promoting gender equality by empowerment of women and LGBTQIA+ communities; slum area development/ affordable housing; forest and wildlife conservation; promoting livelihoods for rural and urban poor; promotion of financial inclusion among others.
- **The report said that entities listed on SSE will have to disclose their social impact report on an annual basis covering aspects such as “strategic intent and planning, approach, impact score card”**.
- The expert panel has said FPEs, which wish to list their equity or debt, will first have to **demonstrate their track record through social performance**. This will allow investors to gain an insight into the FPE’s activities.

6. Reduce human-caused methane emissions by 45%: UN

A new United Nations report has said that human-caused **methane emissions must be cut by 45 per cent** to avoid the worst effects of climate change.

- Such a cut would **prevent a rise in global warming by up to 0.3 degrees Celsius by 2045**.
- It would also prevent 260,000 premature deaths, 775,000 asthma-related hospital visits annually, as well as 25 million tonnes of crop losses.

Highlights of the UN report:

- **Human-caused methane emissions are increasing faster** currently than at any other time since record keeping began in the 1980s.
- **Carbon dioxide levels have dropped** during the novel coronavirus disease (COVID-19) pandemic. However, methane in the atmosphere reached record levels last year,

- The report said this was a cause of concern as methane was an extremely powerful greenhouse gas. It was responsible for about **30 per cent of warming since pre-industrial times**.
- However, cutting methane emissions can rapidly reduce the rate of warming in the near-term as the gas broke down quickly.

Recommendations given by the report:

- **Three behavioural change could reduce methane emissions by 65–80 million tonnes per year over the next few decades:**
 1. Reducing food waste and loss
 2. Improving livestock management
 3. Adopting healthy diets (vegetarian or with a lower meat and dairy content)
- The most human-caused methane emissions came from three sectors: **Fossil fuels, waste and agriculture**.
 1. Oil and gas extraction, processing and distribution accounted for 23 per cent of methane emissions in the fossil fuel sector.
 2. Coal mining accounted for 12 per cent of emissions.
 3. Landfills and wastewater made up about 20 per cent of emissions in the waste sector.
 4. In the agricultural sector, livestock emissions from manure and enteric fermentation constituted for roughly 32 per cent and rice cultivation eight per cent of emissions.
- The assessment found that the **mitigation potential varied between countries and regions**. **Europe had the greatest potential to curb methane emissions** from farming, fossil fuel operations and waste management.
- **India had the greatest potential to reduce methane emissions in the waste sector**.
- **China's mitigation potential was best in coal production and livestock**.
- **Africa's was in livestock**, followed by oil and gas.
- The report said the fossil fuel industry had the greatest potential for low-cost methane cuts.
- According to the report, up to 80 per cent of measures in the oil and gas industry could be implemented at negative or low cost.
- About 60 per cent of methane cuts in this sector could make money as reducing leaks would make more gas available for sale, the report said.
- The waste sector could cut its methane emissions by improving the disposal of sewage around the world.

Prelims Practice Questions

1) M.G. Gaikwad commission, often seen in the news recently, is associated with?

- a. Criminal Justice Reform System
- b. Reservation to Maratha Community
- c. Study of COVID impact to captive animals
- d. Assessment of increasing Methane gas in India

Answer : b

Explanation:

- A five-judge Constitution Bench of the Supreme Court has unanimously declared a Maharashtra law which provides reservation benefits to the Maratha community, taking the quota limit in the State in excess of 50%, as **unconstitutional**.

Background

- In November 2018, the Maharashtra legislature unanimously passed the Bill giving 16% reservation to the Maratha community in jobs and education by according them the status of Socially and Economically Backward Class (SEBC).
- It was granted based on the report of M.G. Gaikwad commission submitted in 2018.
- The report concluded that the community had lost its self-esteem, which could be remedied by giving them reservation under the Socially and Economically Backward Classes category.

2) SATYABHAMA Portal was launched recently by which of the following Ministries?

- a. Ministry of Mines
- b. Ministry of Law and Justice
- c. Ministry of Science and Technology
- d. Ministry of Human Resources and Development

Answer: a

Explanation:

- **Ministry of Mines** has recently launched SATYABHAMA (Science and Technology Yojana for Aatmanirbhar Bharat in Mining Advancement) Portal for Science and Technology Programme Scheme of Ministry of Mines.

Science and Technology Yojana for Aatmanirbhar Bharat in Mining Advancement Portal

- The portal has been designed, developed and implemented by National Informatics Centre (NIC), Mines Informatics Division.
- In contrast to present system where research proposals are submitted physically by the Scientists / Researchers, SATYABHAMA Portal allows online submission of project proposals along with monitoring of the projects and utilization of funds / grants.
- The researchers can also submit progress reports and Final Technical Reports of the projects in the electronic format in the portal.
- A User Manual is also available on the Portal where the stepwise procedures for submission of project proposals have been highlighted.
- The Portal is integrated with NGO Darpan Portal of NITI Aayog.

3) Dahla Dam recently seen in news is in

- a. Iran
- b. Pakistan
- c. Tajikistan
- d. Afghanistan

Answer: d

Explanation:

- Dahla Dam is Afghanistan's second-biggest dam.
- The Taliban has captured Dahla Dam amidst clashes, shortly after the U.S. military formally began withdrawing its troops from Afghanistan.

4) Which of the following indices are compiled by the Central Statistics Office of Ministry of Statistics and Programme Implementation?

1. CPI - Rural
2. CPI - Urban
3. CPI - Rural Labourers
4. CPI - Industrial workers
5. CPI - Agricultural Labourers

Select the correct answer using the codes given below:

- a. All except 1 and 2
- b. All except 1 and 3
- c. All except 3, 4 and 5
- d. None

Answer: c

Explanation:

- The CPI - Industrial Workers and CPI - Agricultural & Rural Labourers are occupation specific and centre specific and are compiled by **Labour Bureau of Ministry of Labour and Employment**.
- Since these indices pertain to specific segment of population and does not cover all segments of population, it is difficult to ascertain the true variations in the price level.
- To overcome this problem, **CPI - Urban and CPI - Rural** is being computed with a wider coverage by **Central Statistics Office (CSO) under Ministry of Statistics and Programme Implementation**.

5) Which one of the following best describes the term “Rogue Planet”?

- a. A Planet orbiting two stars
- b. A Planet that does not orbit a star
- c. A Planet that has unpredictable orbits
- d. A Planet that disturbs the orbit of its neighbour in a star system

Answer : b

Explanation:

Rogue Planet

- A rogue planet (also termed an interstellar, nomad, free-floating, unbound, orphan, wandering, starless, or sunless planet) is a planetary-mass object that does not orbit a star directly.
- These interstellar nomads or starless planets were first sighted in 1998.
- OTS 44 with over 11 times Jupiter’s mass was the first rogue planet to be discovered.
- It is 554 light years away.

6) Which of the following corals can sustain high temperatures?

- a. Fiji Rainbow Reef
- b. Great Barrier Reef
- c. Red Sea Coral Reef
- d. New Caledonia Barrier Reef

Answer : c

Explanation:

Red Sea Corals

- The corals in the *Gulf of Aqaba*, at the northern tip of the *Red Sea*, have been known to be *resistant to higher temperatures*.
- By studying them at the laboratory, researchers have now decoded the full molecular mechanism behind this resistance.
- The coral *Stylophora pistillata* has a rapid gene expression response and recovery pattern when exposed to heat stress.
- The team noted that the algae and bacteria they live in symbiosis with the coral can also withstand average temperatures 5°C higher than what they typically experience.

Mains Practice Questions

1Q. India needs to harvest quantum technology for strategic and economic development. Discuss. (250 words)

Approach

- Briefly highlight what quantum technologies are.
- Highlight its strategic and economic advantage to India.
- Highlight challenges India could face in such endeavour
- Highlight some measures to overcome such challenges.

2Q. Discuss the contributions of Swami Vivekanand's philosophy in the evolution of ethics? (150 words)

Approach

- Start your answer by briefly describing the basic principles of Swami Vivekanand's philosophy.
- Discuss the ideas of Swami Vivekanand and their ethical dimensions.
- Conclude by summarizing your answer and highlighting the utility of Swami Vivekanand's philosophy in today's context.